





PAST, PRESENT, AND FUTURE: RHETORICAL STRATEGIES IN THE USE OF CLAUSEWITZIAN THEORY IN CANADIAN MILITARY WRITING, 1989-2011

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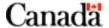
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By Lieutenant-Colonel T.G. Weatherbee

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ABSTRACT

This paper argues that a significant influence upon Western military thought stems from both the form and content of historical representations of theory of war and their use as intellectual resources passed between military communities of practice. The first section of this paper draws upon the theoretical debates underway in the discipline of History to demonstrate that realist or empirical 'fact' based forms of historical representation affect the use of theory in Military Studies. The second section of the paper shows how Clausewitzian Theory, used as an exemplar of an intellectual resource in the development of theorization of war, was mediated and changed by post-Clausewitzian intellectuals, theoreticians, and professional practitioners. The third section then identifies the relationship(s) in the developments and use of Clausewitzian Theory in relation to specific and identifiable shifts in its intellectual usage and the sociopolitical contexts within which these shifts took place. The fourth section identifies how domain and sub-domain level theory of war is used when employed in selected Canadian professional military journal articles through the study of how Clausewitzian Theory and Operational Level concepts are used as intellectual resources. In the final section of the paper, the results of the study will be used to highlight the problematic nature of doctrine development within the CF from the perspectives of military communities of practice and the sociology of professional knowledge. The paper concludes with the observations that there is no coherent paradigmatic consensus with regard to Clausewitzian Theory and that the Operational Level of war and constructs primarily associated with the doctrinal elements of OPP tend to dominate professional military writing in the Canadian Context.

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INTRODUCTION

History teaches us that the *character* of each individual war is always different and most certainly will change, but the enduring *nature* of war as a human endeavor will remain largely unchanged. ¹

General James N. Mattis, USMC Commander, United States Joint Forces Command March 24, 2009

In broad terms domain level theory, such as Clausewitz's theory of war, consists of a set of propositions and conceptual inter-relationships used to describe and explain observable phenomenon in the world. The normative ideal of such a theory is to provide a framework within which to locate causal explanation of the phenomenon of interest.² In epistemological terms, theory is normatively domain specific where concepts used to explain one set of phenomenon are unlikely to provide appropriate causal explanation for a different set of phenomenon. However, while theory should generally be applied to the whole of a given domain, it is possible that concepts within a theoretical framework may also be more narrowly applied, bounded to specific segments, within the same domain. For example, in Military Studies, theory(ies) of war are those sets of propositions or concepts used to describe and explain the phenomenon of war and warfare.³ These include general theory used to explain the domain

¹ "Statement of General James N. Mattis, USMC Commander, United States Joint Forces Command," in *House Armed Services Committee* (Washington, DC: 2009), 4.

² See the discussion in C. Hempel, *Aspects of Scientific Explanation: And Other Essays in the Philosophy of Science* (London: Collier-MacMillan Imited, 1965).

³ Modern Military Studies uses "an interdisciplinary approach, educating students about the role of the military in society and world affairs in the past, present and future" and which are "closely related to programs such

of war as a whole, e.g., Clausewitzian Theory, or theory or concepts that are more limited in scope and used to explain or understand one form, element, or facet of war, e.g., counterinsurgency.⁴

However, since the industrial revolution there has been an increasing epistemological overlap in the intersection of general domain theory(ies) of war and those conceptualizations of war that should be applied to more narrow aspects of the domain. This conceptual overlap has served to mask critical epistemological differences between the use of theory to understand the general domain of war and theory used to explain elements within the domain; i.e., the material or technical phenomenon found in the practices of warfare. Increasingly it has become the case that scientific or technological-based theory has come to be conflated within domain level theory of war. ⁵ The primary exemplar of this form of epistemological confusion can be found in the most recent theoretical foray in military thought, the Revolution in Military Affairs (RMA). ⁶

as history, political science, peace and conflict resolution studies, and globalization studies." See "http://www.canadian-universities.net/Universities/Programs/Military and Strategic Studies html.

⁴ Clausewitz and Counterinsurgency, as examples, are used for illustrative purposes only. It is recognized that there is a significant debate concerning the domain to which Clausewitzian Theory applies and whether Clausewitzian Theory can explain the phenomenon of counterinsurgency or low-intensity conflict. There are arguments for inclusion espoused by P. Melshen, "Mapping out a Counterinsurgency Campaign Plan: Critical Considerations in Counterinsurgency Campaigning," *Small Wars & Insurgencies* 18, no. 4 (2007), as well as contrary views, for example see T. Adams, "Lic (Low-Intensity Clausewitz)," *Small Wars & Insurgencies* 1, no. 3 (1990), or M. Van Creveld, *The Transformation of War* (New York: The Free Press, 1991).

⁵ Western forms of War have always been strongly technologically determinate. See the discussion in D. Ihde, "Philosophy of Technology," *Philosophical Problems Today* 3, (2005), and M. Roe Smith, "Technological Determinism in American Culture," in *Does Technology Drive History: The Dilemma of Technological Determinism*, ed. M. Roe Smith and L. Marx(Cambridge, MA: The MIT Press, 1998). For detailed discussion of the historical emergence and intersection of military engineering, technology, and science and the influence on militaries in the late nineteenth and early twentieth-century see B. Hacker, "Engineering a New Order: Military Institutions, Technical Education, and the Rise of the Industrial State," *Technology and Culture* 34, no. 1 (1993). For a full and detailed description of the institutional growth and interchange between science, technology, and the influence on military thought in the United States following the Second World War see P. Galison and B. Hevly, eds., *Big Science: The Growth of Large-Scale Research* (Stanford: Stanford University Press, 1992).

⁶ For a thorough discussion on the emergence of RMA in the latter part of the twentieth-century, with a particular focus on implications for Western military thought, see the discussions in E. Sloan, *The Revolution in Military Affairs: Implications for Canada and Nato* (Montreal, QC: McGill-Queen's University Press, 2002).

The body of thought concerning the RMA; which is broadly inclusive of concepts such as Fourth Generation War (4GW), Network Enabled Warfare (NEW), Effects Based Operations (EBO), or Information Warfare (IW), tends to center on either the changes to the nature of modern warfare brought about by a scientific or technological capability, e.g. the collapsing of the levels of war or the potential capabilities rendered available to adversaries through consumergrade technologies, e.g. proliferation of network forms based upon modern cellular or Internet technologies; or the ease of development of various WMDs using industrial-level bio-chemical technologies. Finally, when taken in the aggregate, concerns center on the synergistic changes and emergence of conflict and force asymmetries which run contrary to conventional twentieth-century theory and experience. Regardless of the perspective employed, each theoretical perspective within the RMA tends to conflate domain level theory of war with sub-domain theory more properly associated with capability or effects achievable through technology in the practice of warfare.

From an epistemological perspective, the central concern remains with the inherent and growing tension between the purpose and utility of theories of war and the domain(s) to which they are applied.⁷ Put differently, the epistemological divide which had previously served to demark the social conceptualization of the domain of war from the scientific and technological sub-domains, what is in effect the practice of war, has become blurred. The blurring of domain theory of war with bounded elements within the domain, domain *praxis* or doctrine, has important implications for how we conceptualize war and warfare in the twenty-first-century.⁸

⁷ A key focus of the discussion in R. Matthews, "Managing the Revolution in Military Affairs," in *Introduction: Managing the Revolution in Military Affairs*, ed. R. Matthews and J. Treddenick (Chippenham, UK: Antony Rowe Ltd, 2001).

⁸ For a more comprehensive treatment of the intersections; e.g., role, nature, and conceptualization of theory, doctrine and practice of warfare, see the discussions in D. Avant, "The Institutional Sources of Military

From a scientific perspective, theorists are encouraged to contest other theorists and their theory. This is done under the belief that contestation will lead to a 'better' theory; the equivalent of Darwinian survival of the 'fittest'. However, for the practice of warfare it is consensus rather than contestation which is sought. It is coherency in effort and consistency of behavior which are valued as these outcomes are deemed necessary for the coordination and employment of masses of persons and material in time and space needed to achieve success in war. In effect, the conceptual linkage or translation point between domain level theory of war and the practice of warfare within sub-domains is doctrine.

As a mid-level construct, doctrine is both derivative of theory, e.g., operational level concepts, as well as influenced by emergent practices, e.g., tactical innovation. The Canadian Army's Lessons Learned process is an example of how emergent practices, such as Counter-Improvised Explosive Device (CIED) drills, may inform or cause changes to doctrine. This bidirectional relationship only becomes problematic when the domain level theory to which doctrine forms the bridge with the various sub-domains of practice can no longer effectively account for new elements. The inability for prior theory to account for the changes brought about by technology, both positive and negative, is one of the underlying premises of RMA theorists and proponents.

Doctrine: Hegemons in Peripheral Wars," International Studies Quarterly 37, no. 4 (1993); M. Howard, "Military Science in an Age of Peace," RUSI Journal 119, no. 1 (1974); J. Kipp and L. Grau, "Military Theory, Strategy, and Praxis," Military Review 91, no. 2 (2011); M. Vego, "On Military Theory," Joint Force Quarterly 62, no. 3 (2011) and in H. Winton, "On the Nature of Military Theory," in Toward a Theory of Spacepower: Selected Essays, ed. C.

Lutes et al., (Washington: DC: National Defense University Press, 2011).

⁹ This relationship is reflected in the Canadian Forces definition of doctrine as a "... body of knowledge and thought that provides direction and aids understanding ..." where the purpose of doctrine is to provide for "... a common approach to the conduct of military arts and science based upon methodical thinking ..." which is designed to lead to "... consistent behaviour, mutual confidence and effective collective action." Canadian Forces Joint Publication 01, Canadian Military Doctrine, 2009, 1-1.

Thus, one of the reasons why theory and doctrine become conflated is due to the complex recursive nature of the theory-doctrine linkage. In particular, as mediated by the relationship with historical empirics used for either theory development, e.g., the manner in which Clausewitz or Jomini ideationally derived their theoretical works; or in doctrine development, e.g., lessons learned processes based upon actual experiences of war. So it can be seen that the development of theory and the development of doctrine are epistemologically separate processes; each representing two conceptually different approaches to the generation of knowledge and understanding of war. Domain level theory is largely ideational in orientation with doctrine having a technical and technological orientation.

Thus, if the domain of war itself is ideational, it must be considered as first and foremost socially constructed. Since the domain of war itself is a social construction, then epistemological separation of domain level theory from sub-domain theory or effects becomes possible. From this standpoint, development of theories of contemporary war, as opposed to the practices associated with modern warfare, should follow neither the general principles of scientific or technological development found within the Natural Sciences nor their associated methodologies. Rather, the investigation and study of theory of war needs to be founded upon

¹⁰ Social Constructivism, as an epistemological orientation, assumes that ideational constructs are brought into existence as a function of social agreement. That is, when sufficient social consensus produces normative conceptions, expectations, and beliefs concerning a social phenomenon it becomes part of social reality. In turn, if social conventions are strong enough, this aspect of social reality will be re-produced across generations of persons. For a full explanation see P.L. Berger and T. Luckmann, *The Social Construction of Reality* (Middlesex: Penquin Books Ltd, 1967).

¹¹ As the bases of scientific and technological development are located primarily in the Natural Sciences it is acknowledged that the theory and methods of the Natural Sciences are present within the study and conceptualization of war and warfare; including Military Studies. However, it is also argued that the relative presence of the Natural Sciences, technology, and method are differentially present by level of war. That is, they are strongly present at the tactical level due to material, physical, and technological expressions of the physics of practices of warfare. They are less so at the strategic level where non-material issues such as governance and politics are more significant factors. Hence at the domain level of war the Social Sciences have a more dominant or determinate explanatory role.

alternate epistemological and methodological bases from the Natural Sciences; upon the understanding of the social world rather than a technical one. Therefore, the study of the domain of war is best done using approaches and methods focusing on the social world rather than the natural one.

As a consequence, the foundations for the understanding and practice of war must first be grounded upon the twin social pillars of intellectual conceptualization and historical experience, rather than any scientific form or technology of practice. ¹² However, as both the practices of war and intellectual or theoretical ideation are themselves both subject to the social mediation of historical experience, understanding the role and interplay of history and method becomes critical. Whether it is History, as comprised of both the discipline and its accompanying theoretical tenets, or and history defined as the interpretation of the events of the past world. In both cases History/history provides the first-order epistemological domain and body of knowledge at the conceptual core of theory of war. ¹³ A case which is just as true for the

¹² While the study of war prior to the practices associated with twentieth-century Natural and Social Sciences was possible and without resort to modern methodological or theoretical norms, the emergence of modern sciences also shows us that the study of war and warfare; how we conceptualize war, is just as emergent and historically contingent as the phenomenon of warfare itself. So the declaration that war is dominantly social in nature also takes as self-evident that the Social Sciences are themselves a recent conceptualization found within the broader realm of Western science *qua* Science. For a brief history and discussion concerning the emergence of modern social theory and the differences between theory developments in the Natural versus the Social Sciences see the explanation in R. Merton, L. Broom, and L. Cottrell, eds., *Sociology Today: Problems and Prospects* (New York: Basic Books, Inc., 1959).

¹³ In reference to the differences between the ideational or intellectual study of a phenomenon and experience of that phenomenon; and/or the differences between collective and individual experiences, see K. Mannheim, *Ideology and Utopia: An Introduction to the Sociology of Knowledge* (New York: Harcourt Brace, 1985). Alternatively, the role of ideational processes, that is the development of the concepts underlying theoretical development within a scientific community, has been shown to be the result of the history of social interchange between individuals and groups. For a detailed and extensive treatment of the development of Western knowledge, see the two volume work of P. Burke in *A Social History of Knowledge: From Guttenberg to Diderot* (Cambridge, UK: Polity Press, 2000) and *A Social History of Knowledge: From the Encyclopedie to Wikipedia* (Cambridge, UK: Polity Press, 2012). This process is described explicitly, in terms of the way in which changes to either metaphysical worldviews, or the accrual of empirical evidence, cause paradigm shifts on a social basis. For example, see the work of T. S. Khun, *The Structure of Scientific Revolutions* (Chicago, IL: University of Chicago Press, 1962).

development of theory of war in Military Studies of today as it was for the ancients in their own studies of war.¹⁴

Unlike our ancient intellectual predecessors the modern forms of historical writing which treat with war and warfare tend to be dominated by epistemologically and historically realist explanations and descriptions.¹⁵ Historical realism, whether found in the conceptual work of military theoreticians or in the practical application of theory as written by professional practitioners of war, has significant influence upon modern military intellectualism. Thus, the ideational content of military thought tends to be grounded upon concepts arising out of the Enlightenment foundations of present day modern Western society including the ideals of science, scientific method, and rationalism.¹⁶ When taken in combination, the reliance of realist History/history as informed by scientific rationalism has a significant and active role in the acceptance, dissemination, or development of military theory.¹⁷

¹⁴ See the studies by Thucydides or Xenophon for ancient warfare or Van Creveld for modern ones. Thucydides, *History of the Peloponnesian War*, trans., S. Lattimore (Indianapolis: Hackett Publishing Company, 1998). M. Van Creveld, *The Changing Face of War: Lessons of Combat, from the Marne to Iraq* (New York: Presidio Press: Ballentine Books, 2006). Xenophon, *Hellenica*, trans., G. E. Underhill, vol. I-II (Oxford: Claredon Press, 1988).

¹⁵ This is not an unusual circumstance as on a global basis, the majority of theorists and writers on theory(ies) of war are written within the Western tradition where realism is dominant. See M. Van Creveld, *The Art of War: War and Military Thought*, ed. J. Keegan, Cassell History of Warfare (New York: Smithsonian Books, 2005). Vego.

¹⁶ This was also a period in time when modern historiographical methods and approaches, historical realism or scientific historiography, were developed; roughly simultaneous with the developments underlying Clausewitzian Theory of War. See F. R. Ankersmit, "Historical Representation," *History and Theory* 27, no. 3 (1998). It is also acknowledged that some of the philosophical and epistemological foundations of modern military thought were also bound up in, and heavily influenced by, the Counter-Enlightenment models of knowledge development in Western Society. See A. Gat, *The Origins of Military Thought: From the Enlightenment to Clausewitz* (Oxford: Clarendon Press, 1989).

¹⁷ As use of the word 'history' can lead to ambiguity; e.g., history as a discipline, history as a formal outcome of historical research, or history as referring to a past practice, for the purposes of clarity and to delineate between the concepts of history as a subject of study versus history as an object or outcome of an historical enquiry or research, the following convention will be employed in this paper: History with a capital 'H' will be used to refer to the discipline of History as a recognized field of academic study. The term history with a little 'h' will be used to refer to the object of an historical study or enquiry, e.g., Strachan's presentation of the life and work of Clausewitz,

It is from this position that this paper will argue that a significant influence upon Western military thought, including the unique development and application of theory(ies) of war and warfare in the Canadian context, stems from both the form and content of historical representations of theory of war and in their use as intellectual resources. Particularly as represented in the practices found in the professional canon of the Canadian military community of practice.

The first section of this paper draws upon the theoretical debates underway in the discipline of History to demonstrate that realist or empirical 'fact' based forms of historical representation, Historical Realism or Scientific historiography, may actually serve to constrain theorizing in the Social Sciences more broadly speaking and in Military Studies in particular. Using arguments stemming from post-structural and postmodern critiques of modernist historical practices, in combination with concepts drawn from the Sociology of Knowledge, the relationship of history and the past will first be re-conceptualized. ¹⁸ Removing the constraints of realist forms of understanding history will then provide the analytic basis for identifying the various ways in which theory can be used as an intellectual resource. A resource used for the purposes of further conceptualization of extant theory of war or for developing new theories of warfare within a military community.

or the normative social use of the term referring to the past, e.g., accepting that the Second World War was a conflict which took place in the middle of the twentieth century.

¹⁸ Sociology of Knowledge is the umbrella term for a multi-disciplinary, but heavily sociologically weighted, approach to the study of the interactions and interrelations between ideas and social reality. The term was first introduced by Mannheim. The subject of study tends to be centered on the effects of theory and conceptualization upon society or how the socio-political context within which theory is developed affects that development of theory itself. While this paper will employ concepts drawn from Mannheim, there are alternative perspectives on the relationships of social knowledge formation, for example, see Foucault and his concept of episteme in M. Foucault, Power/Knowledge: Selected Interviews and Other Writings 1972-1977, ed. C. Gordon (London: Tavistock, 1980).

The second section of the paper will briefly show how Clausewitzian Theory, used as an exemplar of an intellectual resource in the development of theorization of war in the twentieth century, was employed by post-Clausewitzian intellectuals, theoreticians, and professional practitioners of Military Studies. Specifically, it will investigate the manner in which it was used for theorization of warfare in post-Napoleonic contexts. With discussion then attempting to surface the various mechanisms through which prior theory, when drawn upon and used as an intellectual resource, is itself subject to processes of socio-political influence and are imbued by the historical context in which they are employed. To achieve this, the entry and dissemination of Clausewitzian Theory in the Canadian historical context will be described.

The third section will then focus on identifying the relationship(s) in the developments and use of Clausewitzian Theory in its relation to specific and identifiable shifts in its intellectual usage and the socio-political contexts within which these shifts took place. Specifically, this section will look at the period of 1998 through 2012 as the transition from a post-Cold War through a post-9/11 security environment. A period which has seen much intellectual ferment in Western military thought; also very much simultaneous with the formal introduction of Clausewitzian concepts into the CF professional military education system, Canadian military doctrine, and finally professional practitioner writing.

The intent in the fourth section is to determine how domain and sub-domain level theory of war is used when employed in selected Canadian professional military journal articles. This will be done through the study of how Clausewitzian Theory and Operational Level concepts are used as intellectual resources in CF practitioner writing. More specifically, the study of how this theory and constructs are rhetorically deployed as intellectual resources used in professional

articles in two journal publications, the *Canadian Army Journal* and the *Canadian Military Journal*.

In the final section of the paper, the results of the study will be used to highlight the nature and problematics of theory and doctrine development within the CF from the perspective of military communities of practice and the sociology of professional knowledge. Conclusions and implications for the understanding of the effects of historical processes will also be discussed.

HISTORICAL REPRESENTATIONS IN WESTERN HISTORIOGRAPHY

While the desire for understanding our lived experience in the world may be seen as the "anthropological constant" of humanity's quest to query the past in order to give meaning to, or make sense of, contemporary events; the manner in which we interpret the past, the philosophy and methodology of producing history, has itself never been constant. ¹⁹ Approaches used for studying the past to further human understanding have changed over time as the study of the past has itself been subject to the forces of history. ²⁰

As theories of war draw largely upon the social experience of past war, the changes in how history is viewed, practiced, and written in society affects the way in which past war is analyzed, portrayed, or positioned as a social practice. Therefore, understanding how the practices of history have changed or evolved over time may provide insight into related changes in the historic influences upon the theorizing of war; practices to be found in both the intellectual

¹⁹ For one description of the historical changes to History see Z. Vasicek, "Philosophy of History," in *A Companion to the Philosophy of History and Historiography*, ed. A. Tucker(Oxford: Wiley-Balckwell, 2011), 39.

²⁰ For descriptions of the major schools of thought and practice associated with the academic study of history see the sections in A Green and K. Troup, eds., *The Houses of History: A Critical Reader in Twentieth-Century History and Theory* (New York: New York University Press, 1999).

and professional domains.²¹ Since Clausewitz's work was published there have been multiple shifts in how history has been viewed by society, both as an academic discipline and as an outcome or product of the work of either amateurs or professionally trained and educated historians.²² As will be discussed, these changes have also affected the dissemination, reception, and use of Clausewitzian theory since its inception. However, despite the significant epistemological and theoretical tumult during the last century, which resulted from numerous philosophically or metaphysically oriented debates concerning the tenets and practices of History in Western cultures, the dominant methodology found in the contemporary presentation of the past; history as the crafting and expression of the past world in textual form, has remained realist in its philosophical assumptions.²³ This has significant implications for not only the trajectory of Clausewitzian theory, but theories of war in the twentieth century more widely.

Even as Clausewitz lived, worked, and developed his conceptualization of war he did so contemporaneously with what the most important shift in the practice of history in modern times;

²¹ For the purposes of this paper, the intellectual domain consists of theorist of warfare whose intellectual output is focused on theory building while the professional domain consists of practitioners of warfare who normally refer to theory in terms of its application.

While the practice of research and writing history is ancient, history was usually an endeavour undertaken by those persons with an interest in some aspect of the past. History's entry into the academy and the professionalization of historical practice as found in method is a relatively recent phenomenon. For a detailed description of the professionalization of history as an academic discipline see Green and Troup, eds; G. Iggers, *Historiography in the Twentieth Century: From Scientific Objectivity to the Postmodern Challenge* (Hanover, NH: Wesleyan University Press, 1997).

For a detailed presentation and discussion of the ongoing debates between the various schools within the discipline and the effects this has had on the actual writing of history(ies) see Iggers *Historiography in the Twentieth Century*. 'Realism' as used here is not meant to imply a static or rigidly held epistemological position, nor does it assume homogeneity within historical approaches to the past. Rather, realism should be viewed as an epistemological continuum with both strong and weak poles, wherein a particular school of disciplinary thought or a particular historical project may be relatively positioned as closer to one pole or the other. Additionally, a distinction between discipline-based realism and naïve realism needs to be made. While there are schools of thought within History with shared realist epistemological beliefs or assumptions, e.g., the empirical school, the Marxist school, or the Annales, naïve realism as used in this paper refers to the 'common-sense' or everyday perceptions of the relation of the past and history in Western society as held by individuals who are themselves not historians. Naïve realism in this respect will be shown to have implications for theorizing and theory development which may be considered as a problematic constraint for theory development in Military Studies.

the rise of scientific methods used in History. For the purposes of this paper, this represents a logical starting point from which to trace the historical practices in Western Historiography with the aim of identifying how changes in these practices are related to the development, understanding, and use of Clausewitzian and other theories of war.²⁴

Scientific Historiography, which is considered a strong form of the realist tradition in historical practice, was first given prevalence in the work of Leopold von Ranke (1795-1886); particularly that work undertaken during his tenure at the University of Berlin in the middle of the nineteenth century. What has become largely known as the Rankean formulation of historical empiricism, Scientific Historiography, is grounded in a specific epistemological stance or theory of knowledge as well as a methodological stance or how knowledge is produced. This formulation represented a significant break with previous ways a history was produced and written.

Epistemologically, Ranke's approach to history pre-supposed that the past world exists as an *a priori* world. A world variously comprised of events, persons, and activities related to the present but whose existence in the past is independent of the historian. Given the ontologically independent status of this past world, it was seen as a separable entity; an entity about which, similar to the positioning of natural scientist in relation to their own phenomenon of study, the historian could acquire objective knowledge. ²⁷ The belief in an ontologically *a priori* past

Not coincidently, the other major theorist of modern war, Henri Jomini, was also Clausewitz's contemporary. One of the significant differences between Clausewitzian and Jominian concepts of war may be found in the different approaches to their use of history and historical examples.

²⁵ Iggers, *Historiography in the Twentieth Century*.

²⁶ C. Lorenz, "Scientific Historiography," in *A Companion to the Philosophy of History and Historiography*, ed. A. Tucker(Oxford: WIley-Blackwell, 2011).

²⁷ E. Ermarth, *Sequel to History, Postmoderism and the Crisis of Representational Time* (Princeton: Princeton University Press, 1992).

independent of the historian was firmly tied to methodological practice. A practice which assumed that traces of the independent past can be discovered or found, collected and systematized, and finally analytically organized and conceptually interrogated.²⁸ When evidence had been sufficiently accrued, historians would use this process to re-construct the facts into a logical whole and truthful representation of what had taken place.²⁹

It was the development of this novel methodological and analytic process which heralded the modern historiographical practice of the search for archival traces; traces to be found primarily in the form of source documents. These traces were then treated as the independent facts discoverable by the historian and were accepted as the evidence upon which substantiated claims about the persons, activities and events of the past world could be made.³⁰

Another basic tenet, which further differentiated the professional practice of scientific historiography from that of the contemporary lay historian, hinged on the intellectual basis from which the historian viewed history and the past in their crafting. For von Ranke, and the school which arose following his work, truthful representations of the past could only be achieved when the historian approached their study of subjects of interest in the absence of *a priori* beliefs. In other words, it was necessary for the historian to distance themselves from their subject and to study them objectively; just as scientists studied natural phenomenon in the physical world. To achieve this, the historian was expected to first rigorously select, then collect, and finally analyze

²⁸ The term trace as used here follows the practice of Bruno Latour and refers to natural, material (or manmade), and social (ideational) elements of the past available in the present. See B. Latour, *Reassembling the Social: An Introduction to Actor-Network-Theory* (Oxford: Blackwell Publishing, 2005).

²⁹ Iggers, *Historiography in the Twentieth Century*.

³⁰ While the Rankean use of the term Archive refers specifically to State Archives, government sponsored collections of documentation, archive and archival, as a term used in this paper, refers to the total possible universe of documentary or physical evidence associated with the past world regardless of source or provenance of origin. This is a wider conceptualization of the Rankean form of archive and one that would become prevalent in twentieth-century historiographic practice.

verifiable primary sources; those being limited to original documents or material artefacts they had discovered or located. The historian would then, without judgment or bias, assemble the facts drawn from these documents in order to accurately and truthfully describe the people, events, and activities of the past world as they had happened.³¹ History was to be constructed by the application of an historian's inductive reasoning from the facts, logically moving from the particular to the general case, as justified by the relations existing between the facts collected and interpreted.³²

By following the methodology employed in the Natural Sciences, the study of the past world in this way was believed to be able to identify historical processes, such as causation, as revealed through rigorous, objective, and independent study.³³ Thus, paralleling the trend of the Social Science movement to model themselves after the Natural Sciences, empirically-based Scientific Historiographical practice rapidly became the norm within the emergent professional academy of History.³⁴ This form of historical knowledge creation would endure without significant intellectual critique for over half of a century and even then would remain as an orientation and practice still present in the military professional domain of today.

³¹ The imperative of Rankean empiricism was to describe the past as "wie es eigentlich gewesen" or as it really was. See Iggers.

³² Green and Troup, eds, *The Houses of History*.

³³ M. Gilderhaus, *History and Historians: A Historiographical Introduction*, 7th ed. (Upper Saddle River, NJ: Prentice Hall, 2010).

³⁴ J. Tosh, *The Pursuit of History: Aims, Methods and New Directions in the Study of Modern History*, 3rd ed. (New York: Pearson Education, 2002).

Critiques of the Rankean formulation of history would first arise amongst other historians in the middle of the twentieth-century. These critiques were spurred by a growing sense of skepticism in the ability of the historian to approach their subject of study as would a scientist - in a purportedly objective fashion. A similar epistemological shift was also being experienced in the Natural Sciences originating with Thomas Khun's historical work on science and his refutation of normative beliefs in scientific progress and his re-conceptualization of how scientific progress actually occurred over time. These first chinks in the intellectual foundations of both science and Scientific Historiography would be widened even further with the arrival of the influences stemming from the *linguistic turn*. Additional extra-disciplinary critique would follow slightly later stemming from developments in literary theory.

³⁵ One of the staunchest critiques of the strong form of Rankean empiricism is to be found in E.H. Carr, What Is History? The George Macaulay Trevelyan Lectures Delivered in the University of Cambridge (London: Macmillan, 1961). His argument is based upon the realization that since there is a wealth of facts in the past, and that historians cannot know all the facts, that facts are selected rather than discovered by the historian. Once a past fact been chosen and written into a history, it becomes an historical fact – an entity that is viewed differently from the actual source fact associated with the past. However, since the potential universe of past facts would always be greater than selected or historical facts, an historian could never re-construct the past as it happened because of the differences inherent in the known actual versus historical facts. Additionally, Carr argued that it is the historian's own personal interests, beliefs, values, and biases which influence the facts they choose to select and interpret. In this sense, history can never be objective and must be viewed as a never ending dialogue between the historians located in the present and the past of which they are studying and writing about.

³⁶ Khun, The Structure of Scientific Revolutions.

³⁷ The *linguistic turn* is a general term used to describe a series of metaphysical and philosophical positions or movements which argue to one extent or another that the concepts we use to understand the 'real' world, are mediated by language.

These new perspectives would further undermine the realist proposition that the past world was independent of the historian. In particular, they would begin to surface the linkages between an historian's re-presentation of the past in linguistic form and how these representations could not be independent of the narrative employed in the act of writing history. In what became generically referred to as the 'post' movements, further critiques were invoked against literary, cultural, and historical studies. These critiques increasingly challenged the tenets and methodologies accepted by the proponents of philosophical and historical realism; as found in the extant forms expressed in the Social Sciences. ³⁹

Relatedly, the issues first engendered by these movements would become the subject of debate and discussion within the academy of History, debates which have been ongoing for the past several decades. The issues are largely centered on the core differences found between realist conceptualizations of history on the one hand and the postmodern view on the other. The argumentation focuses primarily upon the acceptance of philosophical interpretations concerning the metaphysics of ontology, epistemology, and their relationships viz. methodology in history. Specifically, two of the major realist propositions which underpin Scientific Historiography in

³⁸ These critiques would eventually be categorized variously as post-structuralism or postmodernism, and would draw the entire modern historical project into question and debate. See, for example, the positions of White, Foucault or more recently Jenkins and Munslow. A seminal influence for the practice of history and historiography was the work of Hayden White, whose analysis highlighted the role of language and narrative in the structuring of historical writing. See H. White, *Metahistory: The Historical Imagination in Nineteenth-Century Europe* (London, UK: The Johns Hopkins University Press, 1973); H. White, *Tropics of Discourse: Essays in Cultural Criticism* (London, UK: The Johns Hopkins University Press, 1978); Michel Foucault, *The Archaeology of Knowledge* (London: Routledge, 1972); K. Jenkins, *Refiguring History. New Thoughts on an Old Discipline* (London: Routledge, 2003), and A. Munslow, *The Routledge Companion to Historical Studies* (London: Routledge, 2000).

³⁹ This includes; poststructuralism, postmodernism, and latterly postcolonialism. Critique would also focus upon what the movement termed the Western Modernist Project, e.g., grand narratives or the social themes of reason, rationality, and science (including the natural sciences). However, that discussion lies outside the focus of this paper.

⁴⁰ For an excellent exploration of the debate as well as detailed analysis, from both traditional and 'post' perspectives, see Iggers, *Historiography in the Twentieth Century* and and Munslow, *The Future of History*.

particular; first, the questioning of the possibility of accurately and truthfully reconstructing a past world and second, the viability of being able to do so in any objective manner?

In the first case, postmodern historians highlight the problematic with the logic that there can be referential correspondence between the facts a historian uses to represent the past and the past world; especially given that they are each of a different ontological status.⁴¹ While this contention is similar in form to the earlier argument; viz. that there is a difference between the past facts and historical facts by E.H. Carr, the post perspective extends this line of critique even further in its movement away from a realist viewpoint; exploring the epistemological implications of realism and representation in ontological terms.

The argument is based upon the status of the persons, events and activities of the past as being separable from the facts of the past concerning those persons, events, and activities as used by historians. Facts in history, which are only representations of the past, are located in the present projects of historians. Thus, the ontological differences between the persons, events, and activities of a then-world and their representations in a now-world cannot be overcome by treating them as epistemologically equivalent. That is, what happened in the past is gone and unobservable in the present.

From this perspective, the inherent danger in realist history is the conflation of the actual past with its representation in the present. This form of conflation leads to referential illusion and epistemic fallacy, conditions where the reality of the past world is given equivalent status to their present day representations.⁴² When this occurs there is no separation of the past, in

⁴¹ K. Jenkins, *Re-Thinking History* (London; New York: Routledge, 1991); Jenkins, *Refiguring History*.

⁴² See R. Berkhofer, *Beyond the Great Story: History as Text and Discourse* (Cambridge, MA: Harvard University Press, 1997), and R. Bhaskar, *A Realist Theory of Science*, 2nd ed. (London: Verso, 1997); R. Bhaskar, *Scientific Realism and Human Emancipation*, 2nd ed. (New York: Routledge, 2009).

ontological terms, from the past when recorded as history. In epistemological terms this empirical knowledge of the past, the crafted history, becomes mistaken for the actuality of the past. While traces of the past world may exist in the present the actual world of the past does not. Once the past and history are separated in this manner the ontological differences undercuts the logical grounds for attributing or describing any particular history as a singular rendition of the past. Consequently, while traces can be used by historians for the purposes of re-presentation of the past, a history is always partial and incomplete; as all representations must be. This is why histories are always the situated effects of the historians who write them.⁴³

The ontological and epistemological separation of the past from history should not be mistaken for the acceptance of either a fully relativistic stance on history or to justify the dissolution of the fact-fictive boundaries classically distinguishing historical representation from fictional writing. 44 Nor is the argument intended to imply that the past did not happen! Indeed, it is taken as a given that the world as an aggregate of real persons, events, and activities occurred in the past. 45 However, while the past did happen; and there is evidence of natural, material, and social traces of the past located in the present and available to historians to support this contention, the act of writing history remains an ideational project. As an ideational project a history is always crafted in a later present. By logical necessity therefore, the outcomes of work in History are given their specific form by the efforts of the historians in the conduct of their craft and need to be treated on a conceptually different basis from a past and now unobservable world.

⁴³ For a more complete discussion see Munslow, *The Future of History*.

⁴⁴ Vasicek, *Philosophy of History*.

⁴⁵ C. G. Brown, *Postmodernism for Historians* (London: Pearson, 2005); Jenkins, *Refiguring History. New Thoughts on an Old Discipline*.

As history is a the ideational outcome of the efforts of a historian located in a particular present, the act of crafting history also incorporates, to one degree or another, the ideological assumptions, philosophical orientations, or moralistic perspectives of the historian's present day context. In other words, historical or contemporary socio-political influences may serve to frame or influence the historian's ideational interpretation, and hence, understanding of the interrelations of traces or *past facts* of one ontological order as they are transformed into *historical facts* of a different ontological order. Naturally, this process is repeated often as the products of a historian's efforts in their present may subsequently become the traces used by an even later historian in their present time. In the context of the products of a historian in their present time.

As can be seen, the arguments put forward by the 'posts' has meant that the relationship between history and the past, as treated under the realist propositions of Scientific Historiography, is untenable. Or, if not untenable, it can be argued that the relationship between the empirical past, history, and how theory of war is produced is not a simple and unproblematic relationship. This problematic is particularly salient in Military Studies as both theoreticians and practitioners are forced to use history and historical fact as foundational evidence whether for an academic engaging in the conceptualization or development of theory of war or for the professional practitioner when applying such theory in a conflict.

For our understanding of the evolution of the theory of war the past-history problematic manifests itself in three manners. First, we cannot professionally separate ourselves from either

⁴⁶ See H. White, *The Content of the Form: Narrative Discourse and Historical Representation.*

⁴⁷ For example the modern use of Clausewitz's theory while drawing upon post-Clausewitz historical events, given that, as Bassford argues Clausewitz himself drew upon historical examples in at least four ways to develop his theory. These included the use of historical examples to give life to and explain abstract concepts, to show or demonstrate the application of theoretical concepts in war, to demonstrate that concepts are possible using actual historical evidence as exemplars, and finally, to support the logic of a doctrine of war deduced from within a theoretical framework. See Bassford, *Clausewitz in English*. This will be addressed during the discussion on theory building within scientific communities or communities of practice later in the paper.

the historical impacts of war, for example the development of NATO in years following the Second World War, or of the extant theories of war which inform the military profession and from which are our knowledge base is formed. This is the knowledge which provides the foundation and basis for training and which continuously informs the professionalization and education of our military.⁴⁸ In this respect professions are firmly part of the history they study.

Second, in the absence of a purely intellectual awareness of the pitfalls of Historical Realism, we may fail to recognize the nature of the historical contexts embedded within theories of war as we learn about, think of, or practice our craft. Failure to understand the differences in contextualized theory may affect the practice of war even as contexts or contextual variables change. There are two implications of this; first, the implications associated with the expression that 'generals are always fighting the last war', and second, the limitations or constraints that this may impose on theorization or thinking about future war(s). The debates and discussions of what is or is not a Revolution in Military Affairs, or the rise of the non-state combatants within the context of inter-state theories of war, are both examples.

Finally, as premised on the first two problematics, it becomes axiomatic that in the absence of universal laws to guide the study of war, failure to recognize the situated nature of theory and the ideational effects arising from either the socio-political context(s) of the past, or those in the present, also serve as a barrier to the application of theory in practice. This represents a theory-practice knowledge gap; a gap which may then prevent or constrain theory or practice into the future.

⁴⁸ Within knowledge based professional communities, new entrants are socialized into the profession by exposure to what is considered foundational knowledge within the profession or domain. Once this basic knowledge has been learned, professional development and advancement continues with the learning of more advanced domain knowledge and practice. Normatively, once an individual has mastered both the foundational and advanced materials held within the domain, they may then contribute to the knowledge domain through the development of new knowledge; thus, a process of progression from new entrant to intellectual contributor. See Khun, *The Structure of Scientifc Revolutions*.

The mutually constitutive nature between theory and context is, arguably, the most problematic at the operational level of war.⁴⁹ This is because the operational level of war is where theory of war and the practices of war first meet.⁵⁰ It is the domain where the ideational or ideographic approaches to war, i.e., those found at the strategic level, are combined with the nomothetic approaches, i.e., the practice of war, used to fight engagements at the tactical level. Recognition that the operational level is where theory is transformed into practice is manifest in the term "operational art".⁵¹

As one of the major aims of Military Studies is to understand the nature of war, the study of the interactions between the processes of theorization and generation of knowledge of warfare and the historical context(s) within which these practices take place offers significant potential to further inform our understanding of both. While this has been a challenging issue that was identified early in the academic professionalization of Military Studies, the following section

⁴⁹ Canadian Forces Operations, 2005. B-GJ-005-300/FP-000. Defines the Operational Level of war as "the level at which campaigns and major operations are planned, conducted and sustained to accomplish strategic objectives within theatres or areas of operations. Activities at this level link tactics and strategy by establishing operational objectives needed to accomplish the strategic objectives, sequencing events to achieve the operational objectives, and initiating actions and applying resources to bring about and sustain those events.", 1-5.

⁵⁰ It is, however, important to acknowledge that the levels of war are only conceptualizations of warfare. As opposed to being reflective of any underlying universal characteristic of warfare itself these conceptualizations are situated historical constructs related to the evolution and practices associated with war over time;. For a more detailed look at the historically situated nature of levels of war see H. Strachan, "The Lost Meaning of Strategy," *Survival: Global Politics and Strategy* 47, no. 3 (2005). It is possible to separate strategy from tactics along a dimension anchored by the modern concepts of theory versus practice. For example, the ideational and descriptive work of Clausewitz tends to be more theoretical versus the more prescriptive and principles based approach of Jomini which tends to focus on the more practical nature of war.

⁵¹ The current definition used by the Canadian Forces states that "operational art exists in the ability to translate strategic direction into tactical action." See *The Canadian Forces Operational Planning Process (Opp)*, 2008. B-GJ-005-500/FP-000, 1-3. The conceptual positioning of the operational level of warfare between strategy and tactics invokes contestation between the premises upon which the shoulder levels themselves are characterized. Specifically, the practical tension between the dualisms of ideographic versus nomothetic approaches to understanding how the art in war interfaces with the science in war. Alternatively these may also be described as the tensions between the social 'psychics' and the scientific or technological 'physics' of the nature of war. It is also at the operational level where academic intellectual focus, i.e., theorization, may be considered to marry-up with the professional concerns on military thought, i.e., the practice or conduct of war.

will attempt to identify the ways in which theorization and historical context mutually interact and influence the understanding and practice of warfare.⁵²

THEORY AS A HISTORICAL AND INTELECTUAL RESOURCE

The historiographic study of theory or a related body of theoretical body of work, that is theory as a historically situated knowledge object located in written traces of the past, is a very recent and still emerging topic/sub-branch of History. Whether conceptualized under the various rubrics of Intellectual History or History of Ideas, a shared feature is that each approach takes as its focus of study the origin, dissemination, evolution, or change of ideas manifest in theory and concepts over time. Despite the absence of normative principles, and even while contemporary proponents of this form of historical specialization continue to attempt to define the philosophical, intellectual, and academic principles for the field; many authors continue to

⁵² One of the major problematics of Military Studies has been its relation as a sub-field or sister discipline to others such as International Relations, Strategic Studies, Security Studies, and Military Science. From a purely Academic perspective the conduct of war has been considered "epiphenomenal or intellectually puerile" and as a consequence it has been the causes of war or the aftermath of war which has received the most intellectual study and not the analysis of its conduct. The conduct of war has, until very recently, been the intellectual purview of Military History and Historians. See the discussion in R. Betts, "Should Strategic Studies Survive?," *World Politics* 50, no. 1 (1997): 10.

⁵³ Iggers, *Historiography in the Twentieth Century*.

discipline or professional body, and includes those intellectual concepts classified as formal theory. The general study of the origin, dispersion, translation, adoption and acceptance or refutation of knowledge instantiated as theory *qua* theory has been investigated and treated in a variety of fashions. See, for example, the debates in M. Mandelbaum, "The History of Ideas, Intellectual History, and the History of Philosophy," *History and Theory* 5, (1965). As the exact description of the discipline/domain still remains both a nascent and a contested issue, disciplinary approaches vary; approaches include, for example; the Sociology of Knowledge, Intellectual History, History of Ideas, Philosophical Historiography, or historical works produced within disciplinary orientations such as those in a specific natural or hard science and within the Social Sciences. See for example, Fleck's conceptualization of thought collectives in professional disciplines in *Genesis and Development of a Scientific Fact*, ed. T. J. Trenn and R. K. Merton, trans., F. Bradely and T. J. Trenn (Chicago, IL: The University of Chicago Press, 1979) or Kuhn's paradigmatic view of the progress of theory in science in *The Structure of Scientific Revolutions*.

produce texts which historically trace the development of disciplinary or domain specific theory in realist forms.

In the absence of normative epistemological guidance, and regardless of whether these histories are written by historians trained within the discipline, by persons of other disciplines, or by laypersons from outside of History and these specializations, they tend to be written using either implicit or explicit narratives of progress. As a consequence, the intellectual and practical developments occurring within an area of scientific study, or bounded intellectual domain such as Military Studies, mirror the teleological conceptualization of progress as found in the Natural Sciences. Rather than being a by-product of, or a description of how, science works, the concept of progress results from a system of normative and metaphysical beliefs. Although, as noted previously, from a realist standpoint these beliefs and the methods of practice are often erroneously conflated in ontological and epistemological terms. However, whether conflated or not, the set of assumptions underpinning ideas of progress remain dominant influences in Western science and historiography for several reasons. ⁵⁷

First, progress is intimately bound to the scientistic belief that the accumulation of empirical evidence over time results in an increase in knowledge; both quantity and quality. Second, it is those theories which are found to hold greater explanatory power over previously held stocks of empirical knowledge or theory which are considered better theories than ones which explain less. Newer theories are thus read as indicators of improvement, advancement, or

⁵⁵ Arguably, this is inherent not only in formal historiographies of a disciplinary domain, but also as contained in the disciplinary foundational canon which represents the sum of disciplinary knowledge of the domain itself. For example, the introductory texts of a discipline present the student of the discipline with the consensually held and foundational knowledge in historical terms. See Khun, *The Structure of Scientific Revolutions*.

⁵⁶ See I. Niniluoto, "Scientific Progress," Synthese 45, no. 3 (1980).

⁵⁷ See I. Hacking, *Historical Ontology* (Cambridge, MA: Harvard University Press, 2002).

progress in knowledge and knowledge creation. Third, as science 'progresses' and widens the explanatory boundaries associated with phenomenon of interest, i.e., a newer theory able to explain more about a particularly manifestation of reality, these more recent explanations are then assumed to more closely approach correspondence with reality. Finally, the generation and accumulation of knowledge that is correspondent with reality, when viewed as a process which unfolds over time, is considered the most rational and objective approach available in the epistemological arsenal of Western science. Therefore, the modernist conceptualization of science is, axiomatically, determinately teleological in character as newer and better theory replacing older and less effective theory is considered both the ideal and the norm.⁵⁸

Since the underpinning of Western science cannot otherwise avoid making progress, the act of tracing scientific ideas, concepts, and theory over time results in the production of histories of ideas which are also teleological in character. The teleological condition also holds for those disciplines which have borrowed scientific concepts and methods from the hard sciences where, in the absence of contrary epistemological principles, teleology becomes the basis and natural by-product of historically tracing bodies of work or theory. The effects of this may be seen in the manner in which realist forms of history show how the past has led to the present. A form of determinate narrative which itself serves to reify the subjects of the historical research; the focal ideas, concepts, or theoretical constructs, as it inextricably ties them into concepts of advancement, improvement, and progress.

While the conceptualization of science and the manner in which theory and knowledge is actually produced has come under significant critique since the middle of the twentieth century the teleology inherent in Western concepts of progress and the historically determinate narrative

⁵⁸ I. Hacking, *The Social Construction of What?* (London: Harvard University Press, 1999).

tying knowledge creation to progress remains an extant belief and practice. The first major critique of the processes in which science or any scientific enterprise was actually practiced was that of Thomas Khun. Founded upon an empirically grounded conceptualization of how science actually unfolded in historical terms, this work identified the non-scientific, non-objective, and non-rational mechanisms influencing modern scientific knowledge practices. While these mechanisms undoubtedly had operated previously within the project of modernist science, they had remained largely unacknowledged by those who subscribed to the ideals and the methods of science and scientific progress.

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⁵⁹ A strong argument can be made that the concept of scientific progress is itself a relatively recent historical and socio-political construct. Arising from a combination of the thoughts of Auguste Compte on positivistic science and his concepts of the staged development of society transitioning from theological to scientific knowledge, and the evolutionary ideas as espoused by Jean Lamarck and Erasmus Darwin wherein science itself was thought to evolve and change in a positive manner over time. See S. Gould, *Full House: The Spread of Excellence from Plato to Darwin* (New York: Harmony Books, 1996). Burke, *A Social History of Knowledge: From Guttenberg to Diderot*; Burke, *A Social History of Knowledge: From the Encyclopedie to Wikipedia*.

⁶⁰ Khun's work was the first systematic study of the concept of scientific progress published in English. Prior to Khun, Ludwig Fleck arrived at very similar conclusions concerning social influences while studying professional medical communities. Of course, science had previously been the subject of even earlier critique in both philosophical as well as theological terms.

Based upon the historical study of how theories either endured or changed over time, Khun concluded that knowledge was not produced, nor scientific progress made, purely under conditions of empirical evidentiary accumulation or through processes founded upon the ideals of rationality and objectivity. This new Khunian view of scientific change proposed that whatever progress was made within science occurred paradigmatically; that is, as a result of patterns of belief operating under normative conditions of social influence. Within the Khunian paradigmatic framework the practices of science were re-conceived. Science was now shown to be a conceptual space where ideas, concepts, and theories were socially and historically constructed. The practices and results of scientific work could therefore be supported, or contested, upon grounds other than rationality and objectivity, factual evidence, experiment and empirical conclusions. As described within a paradigmatic framework scientific change occurred in ways which were now considered to be either *normal* or *revolutionary* in nature.

⁶¹ It must be acknowledged that the term 'paradigm' is itself considered problematic and has been the subject of much debate across both the Natural and Social Sciences since The Structure of Scientific Revolutions was published and the concept of a scientific paradigm was introduced. Even Kuhn himself admits to conceptually using the term in different ways. See the various discussions in *The Road since Structure: Philosophical Essays*. For the purposes of this paper, the term paradigm will be used in two ways. First, paradigm in a broader sense will be used to indicate the nature of the metaphysical approach used within Military Studies. A system of beliefs that assume an external universal reality that is discoverable and made measureable using a European derived Western Enlightenment model of science. A paradigm founded upon the ideals of rationality and objectivity and which accumulates knowledge in a progressive fashion where the outcomes are believed to be the gain of more and better knowledge of the world with a concomitant ability to describe and explain phenomenon in casual terms. It is from within this larger perspective, the Western development of approaches to military thought and theories of war, that further sub-divisions or paradigms may also be identified and described. These divisions are based upon the periods of dominance in thinking within Military Studies with paradigmatic shifts in and over time; for example, the relative strength of Jominian, Clauswitzian, or Next Generation Warfare perspectives in theorization or practice of war by a military community. In this regard Western militaries may be conceptually treated as being subject to paradigmatic thinking or having dominant schools of thought. From this standpoint the incommensurability thesis associated with the Kuhnian framework is not an issue in military thought. As Western military thinking is grounded in a metaphysically realist and methodologically scientific paradigm (see Betts, Should Strategic Studies Survive?) this paper will focus on the theoretical development and argumentation as found internal to the paradigm itself. Therefore, paradigms and paradigmatic thinking refer to the dominance of one theoretical style over another in historical terms.

⁶² Paralleling the paradigmatic perspective of Khun, *The Structure of Scientific Revolutions*, normative adherence to a set of scientific or disciplinary beliefs have alternatively been described as a thought collective by Fleck, a community of practice by Mannheim, and more recently as a punctuated actor-network by Latour.

Scientists who held to the dominant consensual beliefs and normative practices of their discipline were said to be engaging in the practices of normal science. Using normal science these scientists would accumulate evidence, develop theory, and progressively increase the knowledge required for increased understanding of the phenomenal world. On the other hand, if scientists conducted their work and generated new empirical evidence which could not be accounted for by contemporary theory or concepts scientists could then begin to question the extant normative beliefs or practices held within their field. If the theory or concepts which came under this type of scrutiny happened to be the foundational theoretical propositions of the discipline those members who questioned the fundamental tenets of normal science could now be said to be engaging in revolutionary science. In other words, by engaging in practices which ran counter to the norm they were laying the cornerstone for a new paradigm of belief and practice in their fields.

This process resulted in a socially contested field with some scientists maintaining their beliefs in the older theory while others would discard these in favor of newer theory. If the new paradigm grew in strength and new beliefs began to whelm older beliefs, these new beliefs could reach a sufficiently critical mass so as to eventually become normalized within the field.

Through processes of normalization the attendant concepts, theories, and practices associated with newer theory would eventually supplant those previously held. In this way a scientific revolution was the outcome of an emergent paradigm growing and finally overcoming a previous one.

Progress was now seen as resulting from two separate and interacting processes. First, the practices of science and the contestation between alternative ideas, concepts, and theories used to explain the phenomenal world using logic, rationality, and objectivity as theoretical and

methodological benchmarks. Second, the contestation between groups of scientists based upon their corresponding beliefs which were generated, held, and maintained via social practices.

These practices interacted with scientific ones to influence the outcomes of science and it was these outcomes which were then considered valid or truthful knowledge held within the paradigm or discipline.

While generally acknowledged within the academic scientific communities, the Khunian viewpoint of science still sparks debate with regard to the exact nature of the teleological character of scientific knowledge production. As a consequence there remains a contemporary debate, to varying degrees, concerning the concept of scientific progress and the mechanisms which influence it.⁶³ Despite the presence of debate, it has served to highlight previously unacknowledged influences upon the scientific process; the relational and interactional effects of the co-joined nature of science with society and other non-scientific social forces. It has been increasingly recognized that scientific paradigms, including general or specific theory(ies) and their associated methodological practices, have been opened up to the influence of historical or extant social forces. Forces of influence which are now acknowledged to be at work in the development of disciplinary domains of knowledge. Domains which had previously been assumed to operate in isolation from the social world, being held apart through adherence to the ideals of rationality and objectivity embodied in the scientific project. Recognition that social processes influence scientific knowledge production also has tremendous implications for

⁶³ See for example the discussions in Paul K. Feyerabend, *Against Method: Outline of an Anarchistic Theory of Knowledge* (Atlantic Highlands, N.J.: Humanities Press, 1975); Khun, *The Structure of Scientific Revolutions*; I. Lakatos, "Falsification and the Methodlogy of Scientific Research Programmes," in *Criticism and Growth of Knowledge*, ed. I. Lakatos and A. Musgrave (Cambridge: Cambridge University Press, 1970). For an even more contemporary example, the reader is referred to the issue of global climate change and the influence of political and economic factors on scientific study of this phenomenon. P. Haas, "When Does Power Listen to Truth? A Constructivist Approach to the Policy Process," *Journal of European Public Policy* 11, no. 4 (2004) and in D. Levy and D. Egan, "A Neo-Gramscian Approach to Corporate Political Strategy: Conflict and Accomodation in the Climate Change Negotiations," *Journal of Management Studies* 40, no. 4 (2003).

understanding of the role of theory within almost all Western epistemological domains.⁶⁴ Whether in the Natural or Social Sciences, theory can no longer be viewed solely as an intellectual endeavor developed in a universally rational or objective manner.

While theory remains a scientific device used to explain some range or set of phenomenon it is also a social device; a tool that may simultaneously serve both scientific and social purposes. The purposes, or social-ends, underpinning the development or use of a theory or theoretical corpus may arise from either within the bounds of a particular discipline or be found originating in the larger social context outside of the domain. ⁶⁵ So it can be seen that the historical nature of theory, having both a scientific and social purpose, means that within communities of practice theory represents an intellectual resource which may be used to achieve either disciplinary or social ends. Ends impelled by their means-end relationships as found within the domain or within the larger social context. ⁶⁶

⁶⁴ Arguably this is also true for any external cultures which have adopted or subscribed to the modernist, i.e., Western, conceptualization of scientific progress. However, cultural distinctions are more likely to manifest themselves within epistemic communities of practice, which themselves may be culturally bound. B. Czarniawska, "This Way to Paradise: On Creole Researchers, Hybrid Disciplines, and Pidgin Writing," *Organization* 10, no. 3 (2003).

⁶⁵ See for example, the detailed paradigmatic typology as presented and discussed in the seminal work of G. Burrell and G. Morgan, *Sociological Paradigms and Organizational Analysis : Elements of the Sociology of Corporate Life* (London: Heinemann, 1979).

⁶⁶ The purposes to which theory as an intellectual resource may be applied are not necessarily mutually exclusive. One of the tenets of advanced study, for example to achieve a doctorate in a given field, is to make a new contribution to a discipline. This may involve expansion or amendment of extant theory, or the development of a heretofore new theory, or in the very rare case the supplanting of old theory for new. At this level both a disciplinary and individual level social, or professional, purpose is simultaneously being served. In the former case, the student receives a recognized credential and in the latter, the domain of disciplinary knowledge is expanded.

For military studies in general, and our understanding of the role of Clausewitzian Theory in this project, theory-as-intellectual-resource used for phenomenal or social ends also has several significant implications. First, as war is experiential rather than experimental it must be recognized that theory of war develops from scientific or conceptual understanding based upon historical evidence and experience as well as socially driven imperatives from the past and in the present. This means that both historical and contemporary contextual elements will almost always operate upon the development and use of theory at some level; whether it is disciplinary, professional, personal, or wider societal, ends that are being served. Theory of war is as much socio-politically and historically determined as it is scientifically determined. This means that processes of theoretical development remain much more open to contingency and chance than perhaps previously thought; i.e., the effects of scientific, social, or other factors that function in probabilistic or random ways.

⁶⁷ While Bassford does not explicitly address nor follow up on these issues, he doe identify several factors which are foreign to a professional approach to History or Military Studies which he argues have influenced the reception of Clausewitzian Theory in various contexts. For example, at the individual level he cites the potential for the influence of careerism, personal moral and value beliefs, individual character traits or the personally held sympathies associated with national identity. At another level, he speaks to the potentials for social and cultural influence through inter-state antagonism or the contemporary zeitgeist behind international relations at particular points in time, e.g., the relational alignment of European states after the Second World War.

⁶⁸ It should also be noted that disciplinary and social-ends are not mutually exclusive, that is, the use of theory may simultaneously contribute to both disciplinary/scientific purposes while also serving a social purpose. A contemporary example is the proponent/opponent advocacy of scientists within the Climate Change debate. Also, social-ends must be conceived of as layered influences. For example, the career requirements for publication at the individual level also meet institutionally defined requirements for scholarly contributions, and disciplinary norms for knowledge development. Thus, they may simultaneously serve personal, institutional, and disciplinary imperatives.

Second, rather than being truly universal, a theory of war developed from one set of experiences found in either one socio-political context or community of practice will likely not translate directly into another context or community. This is true for both within-context and between-contexts changes and, therefore, the differences across and between specific socio-political contexts matter in both theory development and its use. Different social units; such as a the nation-state or culturally similar/dissimilar groupings, such as the North American, Western European, or Asian cultural contexts, may give rise to unique constellations of scientific and social elements within a theoretical work.

Context specificity means these elements may then differentially influence the development, dissemination, and belief in the validity or applicability of theory to either intellectual or experiential domains. This is evident in the manner in which different societies conceptualize and engage in war from cultural perspectives. Or in the differences to theory of war found between schools of thought within a particularly society. Or in how theories of war are change over time even within a single society or school of thought as historical experience or the empirics associated with a theory of war warrant a change to theory, e.g., the success or failure in the application of the theory to the actual practice of war by a nation or by different social groupings within a state.

⁶⁹ Translation as used here has two different yet related meanings. The first refers to the act of translating knowledge as textual objects between languages. The second refers to how knowledge objects themselves, with or without the requirement for linguistic translation, may be differentially interpreted by communities of practice. In the case of *Vom Kreige/On War* and issues of translation between the original German and other languages, see Bassford. In the latter case see B. Czarniawski and B. Joerges, "Travels of Ideas," in *Translating Organizational Change*, ed. B. Czarniawski and G. Sevon(Berlin: de Gruyter, 1996).

⁷⁰ See J. Keegan, A History of Warfare (New York: Alfred A. Knopf, Inc., 1993).

⁷¹ See Gat, *The Origins of Military Thought*.

⁷² Van Creveld, *The Changing Face of War*.

Third, while the scientific element of theory of war may be considered universal in nature; e.g., theory of gravity and friction means that the physics of ballistics do not differ from state to state or group to group, and while these universal scientific elements may thus crosscontexts without the necessity for epistemic translation or reconceptualization, social imperatives are culturally bound and are less than universal.⁷³

When the social elements of theory of war cross any contextual or community boundaries they require translation or reconceptualization. In this sense, all held knowledge, that is knowledge possessed by a community of practice, is itself contextual in nature. The movement of knowledge, either within or between contexts, introduces change to that knowledge as it becomes localized to a specific community of practice. This is observable in the manner in which a society may change how it theorizes war over time or in how contemporary societies may simultaneously theorize and practice war differentially. Thus, concepts or theories of war that are held to be normatively valid are done so on the basis of paradigmatic dominance through disciplinary adherence to theory and/or a social consensus. A consensus based upon either the perceived social instrumentality of theory to a particular social grouping and/or the relevancy and validity generated by experience when applying the theory to the phenomenal world.

Therefore, the use of theory as an intellectual resource employed to meet various and simultaneous disciplinary, personal, professional or societal ends means that approaches to theory are more often than not heterogeneous, if only by degree, even when located within an

⁷³ Anthony Giddens, *Central Problems in Social Theory : Action, Structure, and Contradiction in Social Analysis* (Berkeley: University of California Press, 1979).

⁷⁴ E. Kier, *Imagining War: French and British Military Doctrine between the Wars*, ed. J. Snyder and R. Ullman, Princeton Studies in International History and Politics (Princeton: NJ: Princeton University Press, 1999). K. Knorr-Cetina, *The Manufacture of Knowledge: An Essay on the Constructivist and Contextual Nature of Science* (Oxford: Pergamon Press, 1981).

overarching and consensually held paradigm.⁷⁵ Returning to the paradigmatic nature of Social or Military Studies, the presence of multiple interests means it is highly unlikely that all disciplinary activity is accurately subject to the dualistic classification of either revolutionary or normal practice. Instead, these dualities should be re-conceived of as ideal-type polar anchors of consensus or non-consensus.

From this orientation it can be seen that much of the intellectual efforts within a paradigm will be historically situated between these two poles. Put differently, whether the use of theory as a resource within the paradigm tends to either a consensual or non-consensual anchor, depends on its ability to account for experience and the socio-political context within which it is considered a means to an end; whether explanatory, descriptive, or prescriptive. Degree of consensus also depends upon how it is historically located within or transmitted between communities of practice over time. Because different social groupings may perceive the paradigmatic instrumentality of theory differently, or they may have different instrumental ends for the use of theory, its validity, relevance, or domain of effect, theory of war must be considered to be interpretive and local and not universal and enduring.

This condition holds in either weaker or stronger forms between contemporary communities of practice as well as amongst communities of practice which are historically related; i.e., within the historical canon of a discipline.⁷⁶ From a broad perspective, the total

⁷⁵ It has been shown that even within a paradigm, for example the scientific practices associated with Western realist forms of Natural Science, that knowledge is developed in different ways. For example Knorr-Cetina has shown that there are differences in the patterns of activities and practices of knowledge production across scientific disciplines. These differences are the result of the interactive effects of scholars or scientists, the technologies that they use, and the social nature of their interactions in the process of completing their work of in the 'doing' of science. See K. Knorr-Cetina, *Epistemic Cultures: How the Sciences Make Knowledge* (Cambridge, MA: Harvard University Press, 2000).

⁷⁶ See, for example, the description of how the contextualization of management theory was lost within the formalized historical canon of management thought through processes of exclusion in historiographic terms in T.

historical effort of theorizing means that while a theory may appear to be enduring and timeless it is not. The enduring and timeless nature is only the effect of the perception of a given community of practice located in a specific context at a specific time in terms of how the theory is seen as knowledge. Belying its appearance, theory and knowledge of war is always in flux and any stability or timelessness granted to it is a function of acts of knowledge creation in the present.

The mechanisms where theory is re-contextualized and locally interpreted which are available to those working within a discipline, whether theory is used in either a descriptive or prescriptive fashion, are numerous. These processes may also be found in stronger or weaker forms. In the strongest of forms elements or propositions with the theoretical set may be rejected. Others include processes of modification, amendment, or extension to the theoretical work. Less severe modifications may include changes to the domain limits within which the theory is expected to remain valid or to be applied. This is achieved through either expansion or contraction of either the empirical limits or conceptual borders of the theory. Finally, recontextualization of theory may occur as a function of the translation and/or re-interpretation of the theory itself, or any of its conceptual elements, in such a way so as to align or re-align theory between contexts. Whether the mechanisms of change are contemporary with a specific personal, disciplinary, experiential, or a social context, or the change is located in time between historical contexts remains moot. 77

Weatherbee, "Caution! This Historiography Makes Wide Turns: Historic Turns and Breaks in Management and Organization Studies," *Management & Organizational History* in press, no. 7 (2012).

⁷⁷ It has been recognized for some time, particularly in the realm of the Social Sciences, that political ideology is a determinate factor influencing not only how a theory is perceived, but the instrumental purpose to which the theory is used in both inter and intra disciplinary terms. For a detailed discussion see Burrell and Morgan.

In what may be considered the most recent and major historiographies, Bassford's *Clausewitz in English* and Strachan's *Clausewitz's On War*, the authors trace and enumerate the publication and reception of the works of Clausewitz in English up to the twenty-first century. While these works describe and make explicit some of the processes of dissemination and reception, development and evolution, and in some cases re-contextualization, the primary aim of these works is the portrayal of a *history* of the Clausewitzian corpus and not the specific investigation of theory-practice-context interactions. However, as noted previously, as it is in the nature of historiographic study that histories themselves may reveal the progression of ideas or theories over time, these detailed historical resources will form the basis for the identification of the paradigmatic, intellectual, and social uses of Clausewitzian Theory when employed as an intellectual resource by individuals or within communities of practice.⁷⁸

While periodization of historical context is largely an artifact of the historian and not an inherent characteristic of the past, when employed reflexively it remains a useful narrative tool to show how the intellectual or practical meanings associated with a theoretical work are influenced over time. As periodization represents the dominant narrative trope of choice used by the most prominent of Clausewitzian scholars, examples of each will be drawn from and follow the periodization of Clausewitzian Theory as presented in these two histories. As these works

⁷⁸ See for example, the extensive treatments in this area published in Bassford's *Clausewitz in English* and Strachan's, *Clausewitz's on War*.

⁷⁹ See the descriptions of this process in White, *The Content of the Form*.

⁸⁰ See the linear historical tracing of Clausewitzian Theory through narrative construction and periodization as presented by Bassford versus the approach used by Strachan. While Bassford's periodization is more explicit and dominates the structure of his work as a whole, Strachan confines the linearity of his narrative to sections within the text itself. While the linearity of historical narrative is the norm, it must be pointed out that periodization is a function of the choices that the historian/author makes in the interpretation and structuring of their work. While the separation of narratives into periods may simply be a device used to explain historical significance or the effects of context, it also produces a story arc or subject trajectory. Thus, periodization may be said to impart authorial interpretation to the reader in addition to the subject as a function of narrative form. While there are alternative narrative methodologies where the dangers of periodization are rendered far less problematic these are normally

trace and present significant detail concerning the historical trajectory of Clausewitzian thought, albeit mostly in the English speaking world, only selected highlights will be utilized for analytic purposes.⁸¹

The following section will draw upon these histories, employing them as intellectual resources in historiographic terms rather than using them as descriptive histories. Employing them in this way will identify how context; as variously comprised of socio-political, interpersonal, and personal factors, have influenced the use of Clausewitzian Theory. It will also show how theory when passed between military communities affects subsequent choice, development, and interpretation of theory in paradigmatic terms.

CLAUSEWITZIAN THEORY AS AN INTELECTUAL RESOURCE

Similar to the evolutionary processes of professionalization or academization found in many other emerging areas throughout the nineteenth century, the dominant mode of thinking in

limited to other forms of presentation, e.g., thematic or topical treatments rather than linear story arcs, or publication in the form of other than the single-topic presentation texts such as edited collections. In the case of the former see H. Smith, *On Clausewitz: A Study of Military and Political Ideas* (New York: Palgrave MMacmillan, 2005). In the case of the latter see M. Handel, ed. *Clausewitz and Modern Strategy* (London: Frank Cass & Co. Ltd., 1986). Unfortunately, most of the alternative forms of narrative leave subject synthesis up to the reader, or they so violate, in the sense of expectations of the norms of historical treatment, they are not considered 'historical'.

⁸¹ For the purposes of this paper, exposition will focus on selected historical contexts and persons considered directly relevant, either as exemplars or as related to the use of Clausewitzian Theory as an intellectual resource or as applicable to the Canadian context. While the historical presence or use of Clausewitzian theory may be found in other communities of practice, such as the former U.S.S.R. and Warsaw Pact member nations or other nations not within the NATO alliance structure, these will not be specifically addressed unless relevant to the evolution of Clausewitzian Theory or the Canadian context. Those historical intellectual or practitioner circumstances that are either contrary or alternative to Clausewitzian theory of war, e.g., Sun Tzu or Maoist thought, will also not be discussed. Other bodies of work or theorists which have been determined to be relevant within the Canadian context as defined in this paper, e.g., the recent theorization associated the Revolution in Military Affairs or the transformation of war in the post-Cold War or Global War on Terror context will be. It is also clearly acknowledged that this paper represents only one, and a partial, interpretation of a selected set of historical traces concerning the Clausewitzian body of thought.

Military Studies was based upon a mixture of science and engineering formulated as principles. ⁸²
The employment of contemporary scientific and mechanistic principles to within military thought was designed to identify a set of universal principles to guide successful practice in warfare. This included significant consideration of those changes to warfare being brought about by the emergence and employment of new technologies within a post-Napoleonic context. ⁸³
While the practice of a 'what works' approach to warfare is considerably older than the Napoleonic era what was changing at the time was how warfare was being theorized.

Specifically, the use of scientifically derived rule or principle based approaches. This process would take some time to fully mature, and consequently, up until the advent of the First World War it would largely be a Jominian principles based conceptualization of war which would dominate most European military practices. ⁸⁴

Scientific principle or heuristic based thought to military practice was, arguably, the first modern methodological approach to warfare. In many ways, this approach would continue to remain an underlying thematic embedded in Military thought throughout the twentieth century, even when newer approaches, more conceptually driven theoretical approaches, were introduced.

Many of the emerging disciplines in what would eventually become recognized as the Social Sciences or as professions in Western society (e.g., History) first developed disciplinary practices, or heuristics, grounded in the methods of science in the absence of what would be considered any overarching conceptual approach other than utilitarianism. As a result many of the foundational intellectual elements were grounded solely in the professional methods and approaches; scientific or mechanistic principles in application. This had the effect of restricting theorization within disciplines or professions to instrumental purposes instead of within wider conceptual ranges. For example, the historical study of the professionalization of organization theory and management thought is a highly analogous parallel to the intellectual developments in military thinking. See Burke's *A Social History of Knowledge: From the Encyclopedie to Wikipedia* for a thorough treatment of nineteenth academization of knowledge. Also, see Y. Shenhav, "From Chaos to Systems: The Engineering Foundations of Organization Theory, 1879-1932," *Administrative Science Quarterly* 40, no. 4 (1995) for a similar descirption in the field of management.

⁸³ The period between the close of the Napoleonic wars and the First World War saw the pace of technological change; both in terms of industrial infrastructure such as road, rail, and communications, networks and individual level technologies, such as arms development, force fundamental shifts in the way in which the practice of war was carried out. See M. Howard, *War in European History* (Oxford: Oxford University Press, 1976).

⁸⁴ Strachan, "The Lost Meaning of Strategy." See also the discussion in *Clausewitz's on War*.

From an historical standpoint, it is the manner in which Clausewitz approached the development of his theory, rather than anything his theory articulated, which is Clausewitz's true legacy. His approach to the nature of war, based upon a universal and first-principles basis was a novel and unique endeavor for its time. Because of the unique nature of his approach, and the historical contingency of his death prior to completion of his work, Clausewitzian theorization faced several socio-political challenges to its dissemination and adoption by various military communities of practice.

Awareness of the Clausewitzian theoretical corpus would not move much beyond those persons with whom Clausewitz interacted or corresponded in his lifetime. It would not be until after his death and the publication of *Vom Kriege* (*On War*) where his collective thoughts on warfare would start to be disseminated to wider intellectual and military audiences. Even then, the spread of his ideas would be restricted primarily to within Prussia as translated editions would not be appear for some time; almost two decades for a French translation and almost forty years for an English version. ⁸⁶

During this timeframe two significant contextual factors may be seen to influence the dissemination and adoption of Clausewitzian thought. The first was the mimetic nature of knowledge interchange between military communities of practice as they adopted the scientific

⁸⁵ See the discussion on the emergence of a new intellectual paradigm concerning military studies in Gat, *The Origins of Military Thought*.

⁸⁶ For a comprehensive historical timeline of the publication of *Vom Kriege/On War* see the detailed presentation on the publication of the original, its various editions in German, and the subsequent translations of the work into English throughout the period 1832 through 1977 in Strachan's *Clausewitz's on War: A Biography*, 1-10. It should be noted, however, that the absence of translations of *Vom Kriege* into languages other than German would have functioned only to slow or retard dissemination of the work. During this period, many educated individuals could read additional languages from their mother tongue. Burke, *A Social History of Knowledge: From the Encyclopedie to Wikipedia*.

and engineering successes practiced within other communities.⁸⁷ Empirical success in warfare premised on the application of universal scientific or engineering methods formed the intellectual substantiation for many changes in the conceptualization and practice of war across communities of practice.⁸⁸

While historical examples and direct experience often formed the basis of their thinking, it was done so through the lens of the scientific principles of the day and with an instrumentality focused on finding ways to more effectively and efficiently conduct war. ⁸⁹ Moving beyond the engineering orientation of practice to the conceptualization of war via first principles and theory was still a nascent and emergent trend. Theorizing as a solely conceptual endeavor was not then considered a useful activity for the practitioner of war. ⁹⁰ The prevalent norm was the search for scientific or engineering solutions to the problems of practice. Taken in combination with an ambivalent attitude for theorization, this meant that the Clausewitzian approach to war was

⁸⁷ What is contemporarily referred to as Best Practice Exchange or Benchmarking is, in fact, representative of a historically consistent method of knowledge dissemination used throughout much of Western civilization. See the discussions in Burke, *A Social History of Knowledge*. Practices in warfare are often transmitted across cultures or between communities of practice through processes of mimesis or imitation. See R. Girard, *Violence and the Sacred* (Baltimore: The John Hopkins University Press, 1972) and more recently in A. Robben, "Chaos, Mimesis and Dehumanisation in Iraq: American Counterinsurgency in the Global War on Terror," *Social Anthropology* 18, no. 2 (2010).

⁸⁸ In many ways a strong argument may be made that there has always been an undercurrent of this within military studies which continues even today. For example, technology remains the foundation of thinking for proponents of RMA, Net-Centric Warfare, or 4GW. See, for example, W. Lind and others, "The Changing Face of War: Into the Fourth Generation," *Marine Corps Gazette* 73, no. 10 (1989); and for RMA see Sloan, *The Revolution in Military Affairs* with regard to Canada and Nato.

⁸⁹ Clausewitz's theoretical works would be regularly re-interpreted in order to fit them to the political and technological concerns of post-Clausewitzian military practitioners. See A. Echevarria II, *After Clausewitz: German Military Thinkers before the Great War*, ed. T. Wilson, Modern War Studies (Lawrence: KA: University Press of Kansas, 2000).

⁹⁰ While the militaries of both France and Germany engaged with theory of war prior to the First World War, it was much less so for the British. See, for example, the discussion concerning the cultural and national differences in the practitioner attitude towards theory in J. Wallach, *The Dogma of the Battle of Annihilation: The Theories of Clausewitz and Schlieffen and Their Impact on the German Conduct of Two World Wars*, Contributions in Military Studies, vol. 45 (London: Greenwood Press, 1986).

perhaps considered too philosophical in character; another factor which served to suppress its initial dissemination.⁹¹

A second important contextual factor was the composition of the contemporary military communities of practice, their cultural and national origins, and the relationships between them as mediated by their own historical and cultural experience. The heterogeneous nature of the communities comprising the nascent intellectualism found within the discipline of military thought at this time saw increasing separation through both cultural and linguistic barriers.

Despite the universal nature of science and the scientific method, these processes of separation were occurring within the context of an increasingly antagonistic and nationalizing Europe, and military theory was viewed through these cultural or nationalistic lenses.

The publication of *Vom Kriege* in its original German meant that entry of Clausewitzian thought into these various national-cultural groupings of European military communities would occur at different times, different rates, and by differential degrees. The dissemination and reception of the knowledge and concepts contained in *Vom Kriege* would first be affected by the availability of linguistic translations. When translated they would also be mediated by differences in the community's intellectual attitudes towards theory of war. They would be further moderated by the perceived instrumentality of the use of the theory in both military and political application. ⁹² Consequently, both the origin of Clausewitzian thought and its

⁹¹ Many scholars consistently observe that when taken as whole the body of Clausewitz's work is intellectual dense, complex, and more philosophical rather than practical in scope. In some cases this meant that Clausewitzian theorization did not 'fit' within other cultural contexts who were more traditionally reliant on the empiricism of cultural/military experience, e.g., the British in the inter-war years.

⁹² The phenomenon of knowledge transfer between communities of practice, as a function of linguistic translation and timelines in which they occur, is not a comprehensively studied phenomenon. While evidence exists to suggest that this is an important element of knowledge dissemination and use, it is normally treated in historical terms within a particular discipline on a singular and case-by-case basis. One of the major barriers to this process is the manner in which disciplinary histories are written and presented; in a linear and sequenced fashion, on a *post hoc* basis, and where researchers are normally constrained to a particular linguistic frame. For example, Max Weber,

conceptual breadth worked against its dissemination and adoption. In its original context Clausewitzian theory was bounded within a constrained and limited network of actors and communities of practice as a function of extra-theoretic factors; the linguistic and cultural differences of those who studied and practiced war. 93 Not the theory or the knowledge of war it represented.

Vom Kriege's publication in German meant that consideration as theory and adoption in practice would initially be limited to a singular community, that of the Prussian military. It would take another significant shift in socio-political context for the barriers to theorization and the movement of theory to be overcome before other communities of practice would begin to seriously engage with Clausewitz's work. It would take the successes of the Prussian military over both the Austrian and French forces during the wars of German Unification (1866-1871) to spark serious interest by these other communities.

whose work was written in Germany during the latter part of the nineteenth century, is often cited in English historical texts as the father of modern bureaucracy and given a place as one of the founding fathers of Organizational Studies and Management. However, since his work was not translated into English until the middle of the twentieth century, and so was not available to be integrated into these disciplines until after almost a half century of theory development within the field, his historical influence on theory is not actually convergent with the historical narratives. As a consequence, descriptions of the evolution, dissemination, and development of his theoretical work are a function of historical narrative and not actual practice. For a detailed presentation of the dynamics of this process see T. Weatherbee, A. Mills, and G. Durepos, "Strawmen and Stereotypes: Haystacks, History, and Weber in Management Historiography," in *Academy of Management* (Boston: MA: 2012). While both Bassford and Strachen acknowledge some of the problematics surrounding issues of translation, these are presented in terms of either contradictions or errors of interpretation due to mistranslation, or in terms of the dissemination and resurgence of awareness of Clausewitzian thought. Neither historical treatment specifically speaks to the problematics of translations in terms of communities of practice, localization of knowledge, or the impacts these have on the use and application of the theory as it undergoes these processes.

⁹³ As previously discussed, while different schools of thought within paradigms may share a unique approach to paradigmatic issues that separate them from other schools, as they range from full consensus to nonconsensus, the formation of a school is itself both enables and constrains transmission and localization of knowledge. These schools, or communities of practice, have been more recently conceived of as actor-networks. See M. Callon and J. Law, "On Interests and Their Transformations: Enrollment and Counter-Enrollment," *Social Studies of Science* 12, (1982) forming communities of practice which cohere through a process of common understanding and localized knowledge use.

However, even while Clausewitzian theory was becoming known within the Prussian and subsequently the German military community it was a formulation which had been re-cast via the interpretations of several leaders of the German General Staff.⁹⁴ As a result a new form of Clausewitzian-theory-in-practice would emerge as the practices of war were adjusted to account for socio-political change and the changes to communications, logistics, and movement potentials brought about by the industrialization of Europe.⁹⁵

It would be an operational level reformulation of Clausewitzian theory, a theory converted into practice by the Prussian General Staff and Prussian military, which would form the initial wellspring from which knowledge transfer between national communities of practice would occur. The Prussian success on the battlefield served as the instrumental imperative and through mimesis other national military communities began to adopt this reformulated interpretation and application of Clausewitzian Theory. This imitation and reformulation occurred most especially with the French followed by a similar engagement in Britain in the years between the Prussian Wars and the First World War.

During this period until the close of First World War there were over six editions of *Vom Kriege* published, each with an introduction by a senior member of the Prussian/German military. Each introduction served to accentuate different elements or constellation of concepts within the Clausewitzian corpus, and most likely influenced the manner in which Clausewitzian theory was read and understood by the military officer who studies it. See Wallach, *The Dogma of the Battle of Annihilation*, 114.

⁹⁵ The most significant contributions to the evolution of Clausewitzian theory through practices developed in war at this time were the result of the activities of Helmuth von Moltke during the Prussian wars with Austria and France. For von Moltke the Clausewitzian description of war as being comprised of strategy and tactics would be opened to see the introduction of an intermediate, or operational, level of war – one which mediated between strategy and tactics. See M. Krause, "Moltke and the Origins of Operational Art," *Military Review* 70, no. 9 (1990). Following these wars Schlieffen, followed by the younger Moltke would further refine and extends these practices almost completing the reformulation of Clausewitzian concepts of levels of war. It would take the work of Soviet theorists between the two World Wars to fully articulate a theoretical view of the Operational Level of War. See D. Glantz, "The Intellectual Dimension of Soviet (Russian) Operational Art," in *The Operational Art*, ed. B. McKercher and M. Hennessy(Westport: Praeger, 1996) and B. Menning, "Operational Art's Origins," *Military Review* 77, no. 5 (1997).

While the French had their own tradition of military thought and theory, officers of the French Staff College would become increasingly exposed to Clausewitz's work and Prussian/German application through the influence of Marshall Ferdinand Foch and other senior French officers as mediated by their own experience of war, in both national and cultural terms.

Clausewitzian Theory in France would, however, be a uniquely French interpretation. It would be re-contextualized into a Fochian version, one where offensive *a l'outrance* became the premised doctrine of the French Army.

This French version and interpretation was premised mainly on the concepts of offensive action and employment of force *en mass* and was a formulation which would spread to British military thinking through the conduit forged in the personal and professional relationship between Sir Henry Wilson and Marshall Foch.

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While the first encounters with Clausewitzian theory by the British were actually previous to Wilson, dating from the middle of the nineteenth century onwards; by military practitioners and intellectuals such as Wellington and later Sir Garnett Wolseley and the Wolseley Ring, this exposure was not thought to have a significant impact on British military thought. ⁹⁹ Significant movement of Clausewitzian thought in Britain would first grow along with Wilson's career progression as head of the British Staff College, later as Director of

⁹⁶ Much of the historical study of French military theorizing tends to focus on a Napoleonic construct and timeframe. For a post-Napoleonic perspective see P. Griffith, *Military Thought in the French Army*, *1815-51*, ed. I. Beckett, War, Armed Forces & Society (Manchester: Manchester University Press, 1989).

⁹⁷ Including Foch major influences may also be attributed to commanders of the French War College such as Generals Langlois and Grandmaison. See D. Porch, "War and Society: A Yearbook of Military History," ed. B. Bond and I. Roy (New York: Holmes & Meier Publishers, Inc., 1975).

⁹⁸ B. Liddell Hart, *The Ghost of Napoleon* (New Haven, MA: Yale University Press, 1933).

⁹⁹ See Bassford, *Clausewitz in English*.

Military operations prior to the First World War, and finally by wars end head of the Imperial General Staff ¹⁰⁰

In broad terms, while the dissemination and awareness of Clausewitzian views of warfare increasingly spread amongst communities of practice from the publication of *Vom Kriege* to the end of the First World War, the degree to which Clausewitzian theory was adopted into military thinking within these communities, or to the practices of their respective militaries remains a point of much debate. Leaving this contentious issue aside, further explicitly recognized dissemination and interpretation of Clausewitz's work would not occur until the years between the First and Second World Wars. This was a period which represents an analytically separable and unique socio-political context within which Clausewitzian thought would again be either reinterpreted, or indeed rejected, by various communities of military practice.

In reaction to the outcomes of the war, the German military community, as exemplified by the efforts of Ludendorff, would see Clausewitz's concept of the trinity interpreted in such a way so as to lay the blame for the defeat on the German state and the people. From this perspective it was the nation and people, not the German military, which had lost the war. For the German military it would also be the justification and basis by which a newly recast relationship between war, the nation, and state policy was formulated. A new Trinitarian relationship deemed necessary in order for the military to deliver success in any future war to come. This new conception of the Clausewitzian Trinity was firmly grasped upon and used to

¹⁰⁰ Given the timeframe between the Wars of German Unification, the translation of *On War* into French and English, and the interchanges between members of military staffs prior to the outbreak of the First World War, the dissemination of Clausewitzian thought into these communities cannot be assumed to be limited to this one narrow channel. However, given the prominence of, and influence within, their respective communities, these examples are illustrative of two mechanisms wherein theory travels across communities. In this regard they are presented as exemplars only.

The degree of awareness and direct influence of Clausewitz in Britain at this time remains a matter of historical debate. See, for example the views of Liddell Hart versus those of Bassford.

political advantage by the leadership and military intellectuals who would form the Third Reich and take Germany into what would become the Second World War. However, even while Clausewitzian thought was being renewed and employed in Germany to meet the intellectual and political necessities of that context, in Britain, Clausewitzian Theory was being thematically demonized and intellectually derided through the works of Sir Basil Liddell Hart.

Liddell Hart's strong condemnation of Clausewitz and his theory of war are also related to the socio-political context within which he was located. For Liddell-Hart Clausewitzian thought served two purposes. First, his denunciation was likely grounded within and based upon the greater social reaction to the horrific outcome and mass casualties of the First World War. 103 Second, Clausewitzian concepts were used by Liddell Hart as an intellectual resource. Albeit one where Liddell Hart portrayed Clausewitzian concepts in a negative light! This still allowed him to pursue, substantiate, and develop his own theory of war. In the case of the first, Liddell Hart was renowned for his antipathy towards almost all thought and theory associated with Clausewitz; an antipathy firmly grounded in his assertion that it was those who followed Clausewitzian theory that were responsible for the immensely tragic outcomes of the war. 104 In the case of the second, Clausewitzian thought was positioned as the anti-theory for Liddell Hart's own work on strategy in war; his indirect approach. 105 Treating Clausewitzian thought in this

¹⁰² See Strachan, Clausewitz's on War: A Biography.

¹⁰³ The negative reaction to the destruction and devastation of the First World War, which was seen as a form of total war, would act as an interpretative lens on much of the political, military, and even social theorizing on war in the inter-war years. See M. Howard, "War and Society".

¹⁰⁴ For a detailed description of the many ways in which Liddell-Hart treated the dissemination and adoption of Clausewitzian thinking, see the explanation in C. Bassford, "John Keegan and the Grand Tradition of Trashing Clausewitz: A Polemic," *War in History* 1, no. 3 (1994).

Liddell Hart would develop this work over a period of decades, from the late nineteen-twenties into the decade following the Second World War. Initially published as *Decisive Wars in History*, the work and his theory would be developed through several versions and publications throughout the inter-war years and after. Even though Liddell Hart's condemnation of Clausewitz would evolve, and somewhat attenuate, over time the original

way permitted Liddell Hart to aggrandize his own alternative theoretical approach via the belittling and condemnation of Clausewitz's work. This theme was often repeated as Liddell Hart frequently took steps to protect both his professional preeminence and the development of his indirect approach; usually through the intellectual derision of other contemporary and prominent military thinkers such as Charles DeGaulle or BFC Fuller. ¹⁰⁶

In the Soviet Union, the Moltkian operational version of Clausewitz's theory of war would be revisited and reimaged to meet the Russian experience of war. An approach which uniquely imbued the cultural traditions, geography, and socio-historical context of Russia; both that of the First World War as well as their internal civil strife, into the military theorization activities in their own community of practice. In the period bordered by the two world wars, Soviet military theorists would first introduce and then refine their conceptualization of the intermediate level of war thus linking strategy to tactics in a theoretically refined manner.

This reformulation and extension to Clausewitzian Theory emerged as the Soviet concept of the Operational Art. This re-conceptualization and expansion of Clausewitzian Theory by Soviet military intellectuals, reinforced by the outcomes of the Second World War, would

antipathy of the stance taken by Liddell Hart towards Clausewitz would remain a constant presence throughout all of his works. See Liddell Hart, *Decisive Wars of History*; B. Liddell Hart, *The Strategy of the Indirect Approach* (London: Faber and Faber, 1941); B. Liddell Hart, *The Way to Win Wars: The Startegy of the Indirect Approach* (London: Faber and Faber Ltd., 1942); B. Liddell Hart, *Strategy*, Second ed., Books That Matter (New York: Frederick A. Praeger, 1954). See also J. Mearsheimer, *Liddell Hart and the Weight of History*, ed. R. Art and R.

Jervis, Cornell Studies in Security Affairs (Ithaca: NY: Cornell University Press, 1988).

¹⁰⁶ While Liddell Hart was the most proliferate anti-Clausewitzian amongst British military theorists of this period his was not the sole view of Clauswitzian theory. There were also British proponents as well, including; Fuller, Wilkinson, Falls, and Maurice. However, despite the work of these other theorists it was Liddell Hart's critique and negative portrayal of Clausewitz which generally overshadowed any advocacy and the intellectual hold of Clausewitzian thought in Europe, outside of Germany, subsequently declined. For a detailed discussion of Liddell Hart and his theoretical justifications with regard to his contemporaries in this regard see Mearsheimer, *Liddell-Hart and the Weight*.

eventually provide a source of intellectual resources through which the West would see Clausewitzian Theory come to dominate their own military thinking.¹⁰⁷

In the United States, Clausewitzian thought did not initially have the impact that it had had on contemporary military thought or the development of theory of war in Europe in the years from Clausewitz. While the U.S. military establishment and military theorists were aware of the Clausewitzian approach to theorizing war, Clausewitz's thinking did not have any significant impact on U.S. military practices until after the Second World War. 108 Even then, Clausewitzian Theory would enter through two distinct avenues; one dominantly intellectual and one thoroughly experiential in nature. The first in the development of strategic thought associated with the advent of the nuclear era and the second resulted from the U.S. experience in Vietnam; a war occurring within another historically distinct period undergoing more global socio-political context shifts.

While there were both political and social shifts in attitudes towards warfare in the years immediately following the First World War, compared to the all-encompassing shifts in the global socio-political contexts brought about by the world's entry into the Nuclear Age, these earlier shifts must be considered minor as their impacts were restricted to the more narrow military or political segments of society. ¹⁰⁹ In contrast, within ten years of the end of the Second World War it would become apparent to every sector of world society that any war involving the use of nuclear weapons would devastate much, if not all, of humanity.

¹⁰⁷ For a description of the Soviet development of Operational Art and the historical linkages with Clausewitzian concepts entering the military thought and doctrine of the United States, see Menning, "Operational Art's Origins".

¹⁰⁸ Bassford, Clausewitz in English.

¹⁰⁹ R. Preston and S. Wise, *Men in Arms: A History of Warfare and Its Interrelationships with Western Society*, Second Revised ed., Books That Matter (New York: Praeger Publishers, 1974).

The perception of the horrendous outcomes associated with the use of nuclear weapons would begin to rewrite the very relationships existing between military forces and conflict, between governments and strategic policy, and between each with their national publics. The historic relationships that had existed since the Napoleonic era would be completely realigned as the destructive potential of nuclear weapons were viewed as being so great that it served as the major impetus for the social redefinition of warfare and with that the very purpose of armed forces. ¹¹⁰

The threat of nuclear war and the potential effects of the use of nuclear weapons in warfare also produced two additional and interrelated changes, one theoretical and one sociopolitical, and each would see a renewed interest in Clausewitzian thought during the last half of the twentieth century. The first condition, the problematics inherent in the capabilities and outcomes associated with nuclear war, would reframe the intellectual interpretations of Clausewitzian Theory and the concept of total or absolute war. The second condition, the results of the practice and experience of conventional warfare within a Cold War milieu, would eventually see Clausewitzian Theory become the prevalent and dominant theory used for understanding war in the West.

While theory of war and strategic nuclear thought would continue to converge and evolve throughout the last half of the twentieth-century, the critical intellectual and practical mainstay around which Clausewitzian Theory would be hinged were the physical realties associated with

Throughout history the *sine qua non* of the military in an armed conflict had been to deliver success in war. Given the potential for the mass devastation resulting from a nuclear exchange between well-armed adversaries, for the first time in history, the role of the military needed to be reversed. The purpose of national military capabilities was now to act so as to avert war. This was the *pax* atomica which would exist throughout the Cold War, an order of thinking which would prevent the use of nuclear weapons in an exchange between the superpowers and their major allies. This, of course, did not forestall conventional military actions in the many conflicts between other non-nuclear nations or by superpower surrogates in limited and regional conflicts. See B. Brodie and others, *The Absolute Weapon: Atomic Power and World Order* (New York: Harcourt, Brace and Co., 1946), 3.

the outcomes of a nuclear exchange. The scale and scope of the nuclear threat was such that, from a rationalist perspective, it necessitated the intellectual collapse of the classical separation of domain theory of war versus war in practice. This collapse would bring a renewed relevancy to Clausewitz's conceptualization of total or absolute war.¹¹¹ Nuclear military capability meant that war must now be considered as absolute in all respects, with the Platonic ideal and practice of war being considered as conceptually inseparable.¹¹²

Somewhat paradoxically, at the same time as select elements of Clausewitzian Theory were being used to formulate a nuclear strategy for the prevention of absolute war, the diametric positioning resulting from the ideological underpinnings of the two major superpowers, the U.S. and the U.S.S.R., and the nations enmeshed within their respective alliance frameworks, NATO and the Warsaw Pact, meant that the Cold War would also spawn two further doctrinal engagements with Clausewitz.

¹¹¹ See the discussion on Clausewitz's concept of absolute war in Strachan, *Clausewitz's on War: A Biography*, 148-153.

¹¹² For a detailed discussion see B. Nardulli, "Clausewitz and the Reorientation of Nuclear Strategy," *Journal of Strategic Studies* 5, no. 4 (1982).

The first was in operational level planning in response to the threat of a non-nuclear conflict in Europe against the Soviet Union. The second was the emergence of new forms of warfare; the limited conventional proxy wars which would take place outside of Europe throughout the Cold War period. ¹¹³ Wars in which the superpowers would become directly involved as either the U.S. or the Soviet Union politically maneuvered to either expand and consolidate or defend and protect alliance members and those nations they viewed as laying within their political and economic spheres of influence. ¹¹⁴

Taken together, the Cold War era would produce separate but reinforcing lines of intellectual and practitioner engagement with Clausewitzian thought. The intellectual line followed a path focused on the development of concepts associated with nuclear strategy, deterrence, and détente. The practitioner line would result from the experiences of the United States with the conventional wars they would prepare for or fight. Finally, with the publication of another translation of *On War*, historical contingency and context would combine in such a manner as to fully open both the theoretical and doctrinal domains within the U.S. to a renewed engagement with Clausewitzian Theory and thought. 115

¹¹³ These emergent types of war were labeled as "Limited Wars" and were not conceived of as wars qua war, but rather as points along a dimensionality of conflict. See for example, R. Osgood, *Limited War: The Challenge to American Strategy* (Chicago: IL: University of Chicago Press, 1957), 13. Alternatively, rather than being viewed as the extension of policy by military means, these conflicts were conceptualized as signals of political or policy commitment to war through the potential for escalation of unused military capability up to and including nuclear weapons. See T. Schelling, *The Strategy of Conflict* (Cambridge: MA: Harvard University Press, 1960).

¹¹⁴ J. Gaddis, *Strategies of Containment: A Critical Appraisal of Postwar American National Security Policy* (New York: Oxford University Press, 1982); L. Miller, "Regional Organization and the Regulation of Internal Conflict," *World politics* 19, no. 4 (1967).

Most historical studies of Clausewitzian theory in the Western world note the fortuitous nature and intellectual significance the Howard and Paret translation of On War, published in 1976. See Bassford, *Clausewitz in English* and Strachan's *Clausewitz's on War*.

In terms of the historical trajectory and entry of Clausewitzian Theory into the U.S., the significance of the Vietnam War is to be found in its failure. The defeat of U.S. forces became the proximate cause for senior political, administrative, and military leaders to reflexively seek the reason(s) underlying the outcome. Given the extant contemporary perceptions of moral, material, and technological superiority of the U.S. over their adversary this was an almost counterintuitive task. Despite this, the failure of Vietnam would ultimately serve to rejuvenate military intellectualism within the U.S. Armed Forces with the U.S. Army at the forefront of renewal.

The use of Clausewitzian Theory for the development of Operational Level concepts and doctrine would ultimately, when combined with political and global economic advantages of the nation, manifest itself in an ability to rapidly deploy and mass the necessary military elements needed to decisively engage an adversary in conventional combat operations worldwide. The military capability of the U.S. as developed throughout the Cold War were unmatched by most other nations. This gave the U.S. an intellectual and material position of leadership amongst the world's military communities. By the end of the Cold War, U.S. military capability and strategic thought had become preeminent in the alliance(s) of the Western world as allied nations tended

¹¹⁶ S. Melton, *The Clausewitz Delusion: How the American Amry Screwed up the Wars in Iraq and Afghanistan (a Way Forward)* (Minneapolis, MN: Zentih Press, 2009).

¹¹⁷ S. Rosen, "Vietnam and the American Theory of Limited War," *International Security* 7, no. 2 (1982).

¹¹⁸ The extent to which military intellectualism in Military Studies in the United States would be rejuvenated was such that it has been considered analogous to the intellectual tumult of the renaissance period. S. Kinross, *Clausewitz and America: Strategic Thought and Practice Vietnam to Iraq* (New York: Routledge: Taylor and Francis Group, 2008).

to mimic, emulate, or source their own military intellectualism, theory, and doctrine from that of the U.S.; including Canada. 119

Within the Canadian context, the adoption of Clausewitzian Theory and Operational Level concepts, unlike that of the U.S., did not arise as the result of any serious or reflexive consideration of Canadian wartime experience. Nor was it due to the culmination of any traditional line of historical military intellectualism or enquiry into theory of war. Nor was it the result of an internal doctrinal debate focused upon a post-Cold War security environment. It would, perhaps, be more appropriate to describe the entry of Clausewitz and Operational level thought as a form of adoption; a process which incrementally saw theoretical and conceptual seepage from other military communities via a combination of various osmotic mechanisms; some with an intellectual base, some through doctrine development, and some for purely operationally pragmatic reasons.

¹¹⁹ H. Coombs, "Perspectives on Operational Thought," in *The Operational Art: Canadian Perspectives*, ed. A. English et al.(Kingston: Canadian Defence Academy Press, 2005).

¹²⁰ For an overview presentation of how operational level concepts entered the CF see the collection of articles in A. English, ed. *Leadership and Command*, ed. A. English, The Operational Art: Canadian Perspectives (Kingston: Canadian Defence Academy Press, 2006); A. English and others, eds., *Contexts and Concepts*, ed. A. English, The Operational Art: Canadian Perspectives (Kingston: Canadian Defence Academy Press, 2005). H. Coombs, "In the Wake of a Paradigm Shift: The Canadian Forces College and the Operational Level of War," *Canadian Military Journal* 10, no. 2 (2010).

¹²¹ Canada has never had a coherent national level policy at either governmental or institutional levels, concerning the employment of the CF; a point strongly brought forward over four decades ago. See R. Young, "Clausewitz and His Influence on U.S. And Canadian Military," in *The Changing Face of War: Learning from History*, ed. A. English(Montreal-Kingston: McGill-Queen's University Press, 1998). In many ways, the only factor which consistently influenced the strategic policies concerning the strategic employment of the Canadian military was budgetary in nature. See also L. Nastro and K. Nossal, "The Commitment-Capability Gap and Canadian Foreign Policy," *Canadian Defence Quarterly* 27, no. 1 (1997), and R. Rempel, "The Need for a Canadian Security Policy," *Canadian Defence Quarterly* 19, no. 5 (1990).

While this paper categorizes developments in Canadian military and doctrinal thought as being intellectually mimetic or isomorphic, it has also been categorized in a more negative light using terms such as "strategic theoretical parasitism". See C. Gray, "The Need for Independent Canadian Strategic Thought," *Canadian Defence Quarterly* 20, no. 1 Special No. 2 (reprint from 1971 Vol. 1 No. 1) (1990): 7.

For the purposes of historical description, the entry of Clausewitzian Theory and related Operational Level thought into the Canadian military community of practice will be periodized into three broad but overlapping periods. Each period is relatively distinct and separable as differentiated by the underlying logics associated with the way in which Clausewitzian Theory was intellectually employed as a resource within that community. These have been labeled as Pre-Doctrinal, Formative Doctrinal, and Doctrinal periods. 123

Pre-Doctrinal use of Clausewitzian Theory, or the initial entry, was through the unrelated and sporadic efforts of different individuals working within or with the Canadian community of practice. It is likely that in the absence of formal strategic or doctrinal imperatives, these individuals, perhaps spurred by their beliefs in the norms of professionalism or military intellectualism, used Clausewitzian Theory to support their professional beliefs. In any event, Clausewitzian Theory was a known, if not well known, intellectual quantity for numerous individuals within the Canadian community prior to any formalized and doctrinally accepted and promulgated versions. Given that the work of Clausewitz was becoming nearly universally

¹²³ For a more detailed description of the formalized entry of Clausewitzian Theory and Operational Level constructs see Coombs, "In the Wake of a Paradigm Shift" The descriptive schema used here is benchmarked on the first formalized institutional level appearance of the Operational Level of war which occurred in a proposal made by the Canadian Forces College (CFC) to the Officer Professional Development Council (OPDC) in 1987. Therefore, the Pre-Doctrinal timeframe covers the period 1927-1987. It would not be until 1991 when the Operational Level of war would be formally taught in the Land component of the Command and Staff Course. This part of the CFC curriculum was delivered to Army officers only. During this timeframe, the Canadian Army was also in the process of developing and incorporating Operational Level doctrine for the purposes of doctrinal and operational interoperability with the U.S. This was the Formative Doctrinal period, 1987 – 1995 as formal CF level doctrine incorporating the Operational Level of war was not officially promulgated until 1995 for Joint doctrine and 1996 for Army doctrine. The Doctrinal period is from this timeframe forward; as doctrine is still in the process of development to meet the perceived needs of the post 9/11 security environment as based upon the most recent CF Afghanistan experience. It should be noted, that the data used to trace the entry of Clausewitzian Theory and Operational Level concepts are restricted to the formal doctrinal and professional military publications of the CF. These publications include the Canadian Defence Quarterly (CDQ) and the Canadian Army Journal (CAJ). CDQ was published in the periods 1921-39 and 1971-1997 and was renamed the Canadian Military Journal (CMJ) in 1998. For detailed information on the number, type, and format of various publications associated with the CF and the Army see "The Canadian Army Journal", http://en.wikipedia.org/wiki/The Canadian Army Journal (accessed 22 June 2012) or the description offered by A. Godefroy in "Note to File - the Canadian Army and Its Journals," The Canadian Army Journal 8, no. 2 (2005) and in "The Canadian Army Journal, 1947-2007," The Canadian Army Journal 10, no. 3 (2007).

recognized as the leading theorist on war in the West, if not on a global basis, it would not be unusual for either leading intellectuals or professional officers to engage with his work in this manner. These exposures occurred over a period of some sixty years and are the efforts of individuals, including serving and retired officers as well as civilian theorists, whose work was published in various Canadian military journals.¹²⁴

In the Formative Doctrinal period, institutional level exposure first occurred within the CF military education system through the efforts and activities of individual officers who were exposed to the intellectual traditions or doctrines found within the alliance frameworks within which Canada had historically participated in. The intellectual trends and doctrines of allied nations, particularly those of the United States and NATO alliance member countries, would function as intellectual wellsprings from which Canadian officers serving with these armed forces or attending their senior military colleges would draw from. ¹²⁵

These individuals, likely guided by a sense of shared military professionalism, may have been motivated by several factors. Perhaps in the absence of a specific and coherent Canadian operational level doctrine they were motivated by ongoing world events and the implications for

^{1927.} While the reference to Clausewitzian thought was of a disparaging nature, Clausewitz was recognized as the premier land-centric theorist of the time. See R. Custance, "On the Theory of War," *Canadian Defence Quarterly* V, no. I (1927). Other examples include Gray, "The Need for Independent Canadian Strategic Thought", who, while discussing the lack of strategic military policy in Canada, spoke to the inter-relationship and nature of strategic policy, theory of war, and doctrine with reference to both Clausewitz and Jomini. This was also a theme picked up a reiterated in C. Jaekl and D. Bellamy who discuss, in some detail, the lineage of military strategic thought highlighting Clausewitzian Theory in "On 'Home-Grown' Strategic Thought," *Canadian Defence Quarterly* 15, no. 1 (1985). Also by J. Lee and D. Bellamy, "Dr. R. J. Sutherland: A Retrospect," *Canadian Defence Quarterly* 17, no. 1 (1987) who observed that Dr. R.J. Sutherland, acknowledged as one of Canada's premier strategic thinkers of all time, often discussed Clausewitzian Theory with his contemporaries in the Canadian community of practice.

¹²⁵ It is historically normative that Western/NATO/allied formal elements responsible for professional military education, Staff Colleges, to exchange both students and staffs amongst themselves. These formalized subcommunities of practice serve as channels for exchange of information and knowledge of theory of war or doctrine. These channels operate at both the individual and institutional levels allowing for formal and informal movement of knowledge or theory across barriers between different communities of practice. A. English, "The Operational Art," and Coombs, "The Evolution of Canadian Forces Staff Education". See also note 117 in this paper.

the conduct of future warfare under the growing imperatives and pragmatics associated with the necessity for CF interoperability with allies and coalition partners? Perhaps Clausewitzian and Operational thought was carried between military communities as a result of the education and professional developmental of individual officers posted to allied militaries? Or, introduced into the CF colleges via allied officers posted to Canada on exchange? Regardless of the exact nature of the motivation for, or osmotic mechanism behind, the entry of Clausewitz the theory would increasingly began to enter the Canadian community of practice. Over time and through the efforts of many individuals, acting informally and formally, eventually an intellectual critical mass was be reached within the military community and the institution would begin to incorporate Clausewitzian Theory and Operational constructs formally into CF doctrine.

The Doctrinal Period saw this introduction via formalized and doctrinally driven channels, i.e., intentional and institutional wide processes of formal doctrine publication. During this period another event, the CF experience in Somalia, would work to produce a socio-political context and professional military imperative which would be the root cause of an awakening sense of military intellectualism within the CF. This context, while historically contingent, would widen the receptivity for the CF's engagement with theory of war and Clausewitzian thought as officer professional education became an intense area of focus and development in the CF. 127

¹²⁶ See the discussion concerning the two major periods of institutional interest and investment in officer professional education in the CF in R. Wakelam, "Dealing with Complexity and Ambiguity: Learning to Solve Problems Which Defy Solution," The Strathrobyn Papers 4 (2010). Available at http://www.cfc.forces.gc.ca/publications/strathrobyn.

¹²⁷ By this time professional education and military intellectualism in the CF had reached its nadir point with the Somalia revelations and the absence of investment in professional education for the CF had become widely recognized by the early 1990's. D. Bercuson, "Up from the Ashes: The Re-Professionalization of the Canadian Forces after the Somalia Affair," *Canadian Military Journal* 9, no. 3 (2009). For a more detailed description of the wax, wane, renewal and transformation of professional military education in the Canadian historical context see R.

While Clausewitzian Theory and the associated Operational level concepts and constructs are currently formally promulgated within CF Doctrine, in the first case, incorporation was a process carried out in the absence of a coherent Canadian national military strategy for the employment of the CF.¹²⁸ It was also a doctrinal framework that owed more to processes of intellectual mimesis and structural isomorphism rather than to any tradition of professional military intellectualism or reflection upon institutional or professional historical experience. The CF doctrine was drawn from the Clausewitzian-based operational concepts and practices of our primary allies. In its first instantiation, CF operational doctrine was a mélange of British and U.S. military thought where the U.S. approach dominated.¹²⁹

From this point forward, a rough trajectory of renewed institutional military intellectualism and doctrinal thinking in the CF can be traced forward. The increasing coherence of doctrine linked to operational level concepts and activities in the twenty-first century would result from several factors. First, the growing and renewed emphasis and re-engagement with

Haycock, "'Getting Here from There': Trauma and Transformation in Canadian Military Education," *Scientia Militaria, South African Journal of Military Studies* 32, no. 1 (2004).

The strategic and operational turbulence brought about by the events of 9/11 and the follow on involvement in Afghanistan would further highlight the challenges to effecting military strategic thought within the CF. A point emphasized by the Chief of the Defense Staff at the time. See the summary of a CDS presentation as cited in R. McIlroy, "The Strategic Think Tank - Restructuring the Canadian Forces College," *Canadian Military Journal* 8, no. 4 (2007-2008).

¹²⁹ Prior to the end of the Second World War, most of Canada's officers were experienced with or educated in the British Imperial Staff orientation to warfare. It was not until after the war where the institutional relationships between the Canadian military communities of practice shifted from their historic colonial orientation towards relationships with the United States. This orientation would be further reinforced throughout the Cold War as NATO generally realigned itself, both theoretically and doctrinally, to follow and mimic developments in the United States. See G. Peskett, "Levels of War" and Coombs' "The Evolution of Canadian Forces Staff Education". This pattern of relying on allied militaries, primarily the United States, Britain and NATO, for doctrine and doctrinal development would continue throughout and after the Cold War. For example, the adoption and publication of doctrine within the Canadian Army followed a similar process in so far as the formal doctrinal publication incorporating Manoeuvre Warfare and Mission Command concepts were literally and textually sourced from U.S. and British publications; in some cases on a word-for-word basis. See I. Hope, "Misunderstanding Mars and Minerva: The Canadian Army's Failure to Define an Operational Doctrine," *Army Doctrine and Training Bulletin* 4, no. 4 (2001).

academic intellectualism brought about through various CF officer professional education initiatives. Second, the institutional reaction to the necessity of operating in a post-Cold War and post 9/11 security environment which saw both strategic and operational level structural changes brought to bear on an institution which had structured itself on the basis of Cold War planning and budgetary imperatives. Finally, and most recently, the operational experiences of the CF's engagement in Afghanistan which required working directly with NATO forces at the operational level in both warfighting and nation building activities; an activity which would require significant and challenging thought and planning over both strategic and operational timeframes.

As a consequence, the formal incorporation of Clausewitzian Theory and Operational Level constructs into CF doctrine, which commenced two decades ago, has been evolving ever since. A set of changes that were ostensibly tailored to meet the evolving requirements of contemporary force capability and interoperability needs of the CF in the rapidly shifting

¹³⁰ For example, the evolution of the Joint Command and Staff Programme (JCSP) which is now recognized as equivalent to a significant portion of a graduate level degree in Defence Studies. See http://www.rmc.ca/aca/ac-pe/gsc-adc/au-ua/fa/ds-ed-eng.asp

operational level structures see http://www.forces.gc.ca/site/mobil/news-nouvelles-eng.asp?id=4195 and the Report on Transformation 2011 available at http://www.forces.gc.ca/site/reports-rapports/transfo2011/index-eng.asp#b4. For a discussion as to the most recent transformation as compared to previous major changes to the CF structure see the discussion in D. Gosselin and C. Stone, "From Minister Hellyer to General Hillier: Understanding the Fundamental Differences between the Unification of the Canadian Forces and Its Present Transformation," Canadian Military Journal 6, no. 4 (2005-2006). Note: the process of strategic and operational level transformation remains ongoing.

¹³² Canadian military operations in Afghanistan have been underway for over a decade which is a period of time in excess of any previous conflict engaged in by the CF and which represents fully one half of the timeframe of a pensionable military career. Arguably, this experience has, and will continue to have, significant impact on the direction of military thought taken by a full generation of officers within the CF as a whole. Also see the discussion concerning the uniquely Canadian way of "visualizing, describing and implementing the operational level of war." in H. Coombs and R. Hillier, "Planning for Success: The Challenge of Applying Operational Art in Post-Conflict Afghanistan," *Canadian Military Journal* 6, no. 3 (2005): 13.

strategic environment. These changes have also been located in the actions and activities of both individual and institutional efforts.¹³³

Irrespective of the various mechanisms and processes wherein Clausewitzian Theory and related Operational Level constructs entered the Canadian military community, they have become part of the formal doctrine espoused by the institution and now represent a knowledge set which may be used for theoretical, doctrinal, and professional applications. In other words, whether viewed from theoretical, conceptual, or practical terms they have become intellectual resources, available to the CF military community. Resources to be called upon during the turbulent and rapid transition on the CF away from both a Cold War doctrinal orientation and traditional peacekeeping activities towards operations associated with peace-enforcement and participation in the "Global War on Terror" (GWOT), where Counter-Insurgency (COIN) rather than conventional force-on-force operations has become the norm for deployed combat forces. The way in which these intellectual resources are used within CF professional military writing will be discussed in the following section.

with regard to the Operational Planning Process and Campaign Planning (OPP & CP) and how these are to be taught within the college. A group of interested CFC DS have agreed to review the current process for the purposes of recommending updating and change to the OPP & CP. In another related initiative several amendments to the OPP & CP curricula generated in 2011 have already been tabled for consideration by CFC desk officers. As was the case for the original introduction of Operational Level constructs in the late 1980s it is possible that changes driven by professional interest in the subject area may evolve and become institutionally approved changes to doctrine. Separate and unrelated institutional processes have also resulted in formal re-interpretation to doctrine, inclusive of the interpretation and reapplication of Clausewitzian Theory and Operational Constructs. See for example the formal 'roadmap' for future development with the Canadian Army as found in *Land Operations 2021: Adaptive Dispersed Operations: The Force Employment Concept for Canada's Army of Tomorrow*, 2007. And *Designing Canada's Army of Tomorrow: A Land Operations 2021 Publication*, 2011.

CLAUSEWITZIAN THEORY IN CANADIAN PROFESSIONAL MILITARY WRITING

The most appropriate methodology to determine the way in which Clausewitzian Theory and Operational Level constructs are used as intellectual resources in Canadian professional writing was Content Analysis.¹³⁴ The target text(s) were the Canadian Military Journal (formerly CDQ) and the Canadian Army Journal, including those volumes published between 1998 and 2012. These where analyzed for content related to or associated with Clausewitzian Theory and Operational Level constructs.¹³⁵ A two stage analytic process was used for identifying themes within this body of work.

In the first stage, *a priori* based analysis, the focus was the identification and collection of a set of target articles which met the chosen selection criteria; those articles which contained specific reference(s) to the focal concepts of interest. The sub-set of target articles, published in both journals, was identified by performing an electronic search using several key terms. Key terms included; Clausewitz, Center of Gravity, Trinity, Fog and Friction, and Operational Level(s) of War.¹³⁶ Once the target set of articles had been identified, the second stage method was then employed.

¹³⁴ Content analysis is a well-developed methodology for the analysis of professional writing, i.e., articles published in professional journals or texts. S. Stemler, "An Overview of Content Analysis," *Practical Assessment, Research & Evaluation* 7, no. 17 (2001). It is particularly useful for identifying dominate themes and trends in within written texts over time. For more detailed descriptions of the uses and methods of Content Analysis see K. Krippendorff, *Content Analysis: An Introduction to Its Methodology* (Newbury Park, CA: Sage, 1980).

¹³⁵ These journals and this period were chosen for several reasons. First, accessible and available journal content in electronic format was restricted to this timeframe. Second, these journals are the premier military practitioner journals published by the CF. Third, these journals provide both environment specific, e.g., Army, as well as CF Joint perspectives on CF military thought and practice. Fourth, the publication timeframe reflects the approximate period of formalized doctrinal promulgation to the current time. Finally, this period covers the historic processes of a shift from a Cold War to Post-Cold War and GWOT orientation for the CF as a whole and for the Army in particular.

¹³⁶ These terms are representative of the most well-known and discussed concepts within the Clausewitzian *oeuvre*. See Bassford, *Clausewitz in English*; A. Echevarria II, *Clausewitz's Center of Gravity*; Strachan,

In the second stage, *emergence* analysis, which focusses on the identification of broad themes or trends applicable to the target set as a group, was used. Each article in the target set was first read in order to determine how the focal concepts were used or applied by the author within the overall structure of the article. This was done from both rhetorical and substantive perspectives to determine how the concepts were employed as intellectual resources in relation to the thesis of the article and for the identification of the substantive purpose of the concept(s) as used by the author. ¹³⁷

Once each article had been read and both rhetorical and substantive elements identified, the final process within this stage was the derivation of categories of the strategies employed by the authors when taken as a group. The manner in which rhetorical and substantive employment of constructs within each individual article was then serially compared and contrasted to the other articles within the target set. This process was completed several times in an iterative fashion and resulted in the identification of several general and higher-order categorizations or thematic groups. These thematic groupings describe the broad patterns for the use of the focal constructs as intellectual resources.

While similar patterns were found for the treatment and presentation of Clausewitzian

Theory and Operational Level constructs within the articles of the target set, the thematic
categories are neither mutually exclusive nor exhaustive. That is, there were some authors
who employed rhetorical or substantive strategies that could be analytically located in more than

Clausewitz's on War and the thorough treatment in J. Strange and R. Iron, "Center of Gravity: What Clausewitz Really Meant," *Joint Force Quarterly*, no. 35 (2004). Variants of these terms such as Clausewitzian, Clausewitz's, and Trinitarian were also used.

¹³⁷ J. Jasinski, "Sourcebook on Rhetoric", (Thousand Oaks, CA, 2001).

¹³⁸ It is the nature of Content Analysis as a methodology that patterns in data exist at multiple levels of analysis. It is the degree of resolution and discrimination used by a researcher that may result in more or less patterns and categorizations being identified.

one category. In these cases, these articles were classified using the dominant thematic present.

Exemplar articles for each categorization are presented in the associated footnotes.

Each categorization within the overall pattern schema was then assigned a descriptive title. These descriptors are intended to qualitatively capture and reflect the 'sense' in which Clausewitzian Theory or Operational Level constructs were being used. In the next section a description of the general characteristics of the overall target set of articles is first provided followed by descriptions of each of the individual categories.

General

The first stage identified a target data set of 118 articles containing at least one of the key criterion (see summary statistics presented in tabular form in Tables 1-4 in Appendixes 1 and 2). The second stage resulted in a typology which includes the thematic categories of; Ceremonial Call, Historical Figuration, Concept Utility, and Engagement-In-Depth. Each of these is discussed in the sections which follow.

Ceremonial Call

Ceremonial Call is a rhetorical strategy wherein the author employs a Clausewitzian quotation as a dictum.¹⁴⁰ The use of the quotation is for the purposes of introduction or closing emphasis with presentation at the beginning or conclusion of the article. In most cases, the use of a direct quotation, or specific term heavily associated with Clausewitz's work, is presented as a timeless and enduring maxim.

¹³⁹ As the articles in the target set were selected based upon specific criterion in relation to Clausewitzian Theory and Operational Level concepts the summary statistics presented should be interpreted with caution. From both quantitative and qualitative perspectives there are sound methodological reasons for not inferring relations to the publications within the journals taken as whole. For example, the target set of articles represents just over 10% of all articles published in CAJ and CMJ during the period of interest. Drawing conclusions on the relative importance of Clausewitzian Theory to the CF community as a whole would not be justified. These results could, however, be validly used as an indicator to guide future investigation.

¹⁴⁰ See Appendix 1: CAJ articles 4, 35, 58, 94 and CMJ articles 10, 19, 20.

When situated as a rhetorical opening or introduction the quotation is designed to highlight or relate a facet or characteristic of Clausewitzian Theory of War to the thesis or subject of the article. If the reference is used within the internal structure of the article, the maxim is usually employed in such a way as to emphasize or support an individual element of the author's argumentation or to show how the author's argument reflects Clausewitzian thought. When used as a closing strategy, the dictum is designed to support the author's thesis or conclusions through re-emphasis. Irrespective of the rhetorical positioning, the quotation is an intellectual device used to tie the author's thoughts directly to the historical mainstream and accepted tradition of Western military thinking. The use of the term or construct generally provides no direct substantive contribution to the thesis or line(s) of argumentation being made by the author and plays a supporting role only.

Clausewitzian Theory has come to represent a well-spring of quotations and dictums available to be used to support a broad range of positions on strategy, operations, or warfare. In this analysis, the most prevalent of which tended to be those associated with; the Clausewitzian contention that war is an extension of policy/politics; the relationships found between the elements within Clausewitz's Trinitarian conceptualization; the nature of war expressed in terms of Clausewitzian Fog and Friction, and finally; the concept of Center of Gravity. These concepts are so ubiquitous, their use outside of a Clausewitzian framework has become accepted; even as used inside another and different framework.

In summary, the selective use of an element of Clausewitzian Theory or thought, without substantive discussion in theoretical or conceptual terms, is a device which serves to enhance the

¹⁴¹ See B. Flemming, "Can Reading Clausewitz Save Us from Future Mistakes?," *Parameters* 34, no. 1 (2004) or C. Bassford, "Tip-Toe through the Trinity or the Strange Persistence of Trinitarian Warfare," *Working Paper* (2012). http://www.clausewitz.com/readings/Bassford/Trinity/Trinity8.htm (accessed 26 June 2012).

legitimacy or credibility of the author's thesis or argumentation in an indirect fashion. In other words, it serves a purely ceremonial function. 142

Historical Figuration

Historical Figuration is a rhetorical strategy wherein an author situates or ties

Clausewitzian Theory or Operational Level concepts to a specific historical milieu or
circumstance. The concepts and constructs are not themselves the direct subject of the article.

They are used in two manners. First, they are used to support the author's contention or
argumentation concerning either the validity of Clausewitzian or Operational Level thought

when applied to a particular historical context. Here, they are used to show, on a *post hoc* basis,
how a particular historical event or person was actually 'being' Clausewitzian or was engaging in
or with the Operational Level of war. In either case, the theory or concepts are being employed
in an anachronistic fashion in so far as the authors are using the evolved and modern form, or the
author's situated interpretation, of these concepts and constructs. Clausewitzian Theory and
Operational Level concepts are effectively superimposed backwards in time to justify a historical
stance or position espoused by the author.

The second manner in which Clausewitzian Theory and Operational Level concepts are used is by situating them as historical concepts and constructs in comparison to the author's focal subject of interest. That is, they are situated as a form of previous and historical knowledge.

They are then used as the backdrop or context which permits the author to propose a thesis or new line of argumentation, i.e., more recent or more modern, showing how this historical

¹⁴² Ceremonial citation is a pattern of citation use find on other disciplines as well. For another example in management see M. Lounsbury and E. Carberry, "From King to Court Jester? Weber's Fall from Grace in Organizational Theory," *Organization Studies* 26, no. 4 (2005) or C. Stigler and C. Freidland, "The Pattern of Citation Practices in Economics," *History of Political Economy* 11, no. 1 (1979), for patterns of citation in economics.

¹⁴³ See Appendix 1: CAJ articles 11, 14, 23 and CMJ articles 2, 16, 23.

knowledge is either outdated, or how it provided the foundation for, more recent or relevant concepts of warfare.

Concept Utility

Concept Utility is a rhetorical strategy wherein an author employs selected Clausewitzian or Operational Level constructs in isolation of the theoretical framework from which they are derived. The author largely assumes that the reader is familiar with the construct as it is not normally referenced or cited as an element of Clausewitzian Theory or from a doctrinal publication. In essence the author excises specific theoretical elements, e.g., Clausewitzian constructs such as Center of Gravity, Fog and Friction, etc., from their originating framework. They are then employed as focal constructs within the author's thesis or line of argumentation.

The author draws upon either their understanding of these key constructs as found within CF Operational Level doctrine, i.e., the Operational Planning Process (OPP), or they are relying upon a general professional awareness of Clausewitzian Theory and Operational Level concepts by the journal readership. The constructs are employed in a utilitarian and pragmatic manner and used only as an intellectual heuristic; an intellectual device used to resolve an issue posed by the author in his thesis or argument. In this particular form of use, Clausewitz as a Theorist is usually missing or remains formally unacknowledged.

In summary, the substantive discussion and argumentation by the author focusses reader attention on how a chosen construct either has utility when employed within a new framework or context, or how the concept must be re-considered; i.e., adjusted or re-thought to fit a new context or a change or shift in characteristics or factors. Issues which previously were not, in historical terms, considered but which now must be in order for the concept or construct to 'fit' a new context.

¹⁴⁴ See Appendix 1: CAJ articles 17, 56, 62 and CMJ article 24.

Engagement-in-Depth

Engagement-in-Depth is a rhetorical strategy wherein an author creates a line of argumentation that is grounded in either a historically Clausewitzian or theoretically informed Operational perspective. 145 Clausewitzian Theory and/or Operational Level constructs, which may or may not be the subject of the article themselves, are not used in isolation of their originating theoretical or doctrinal frameworks. When employed in this fashion the theory or derivative doctrinal frameworks are usually considered in some detail and depth and they are usually employed for the purposes of comparison and contrast with other theoretical approaches, e.g., RMA, or to the changes to be found within the contemporary operating environment, e.g., the nature of conflict and potential actors in the future security environment.

The author may also employ other theories or theoretical frameworks in addition to the Clausewitzian and Operational Level constructs. They may also be used for the purposes of theoretical argumentation or synthesis within the author's line of argumentation; e.g., recommendation for change to doctrine or to propose a theoretically based alternative, e.g., amendment of the OPP to account for a COIN operational environment.

In summary, the treatment of Clausewitzian Theory or of Operational Doctrine is done in both theoretical terms as well as with acknowledgement of their historical origins and epistemological foundations. In this style of use, Clausewitzian Theory and Operational Level concepts are generally treated in similar terms with the author's acknowledgement of the theoretical and doctrinal linkages between the two.

General Discussion

The results of this study would suggest that Clausewitzian Theory and related

Operational Level constructs are indeed being drawn from the professional knowledge base of

¹⁴⁵ See Appendix 1: CAJ articles 5, 6, 72 and CMJ articles 2, 5.

the CF and used as intellectual resources by the CF community of practice. Although the results show there is a general awareness of Clausewitzian Theory and Operational Level thought as related bodies of knowledge, the degree and depth of knowledge held, and the nature of the employment of this knowledge in practical terms as expressed in our professional journals is done so on a differential basis. The levels of engagement with Clausewitzian Theory appear to be mediated primarily at the concept level. In particular, it would appear that it is those concepts drawn from the Operational Level doctrine, e.g., the OPP, which are most often intellectually deployed as professionally pragmatic heuristics.

However, the differences in the approaches and lack of homogeneity in interpretation should not be considered an unusual circumstance. First, Clausewitzian Theory is primarily land-centric in nature. Consequently it is more theoretically and pragmatically resonant with the Army over the Navy and Air Force. Second, exposure to Clausewitzian Theory and doctrinal Operational Level constructs are formally delivered earlier in the career of those in the Army then in the other service environments. 148

In addition to differentials which stem from an author's environmental orientation, there are other factors which may be of influence. These may include an author's level of training and education or the contingent nature of their work and operational experience. Perhaps authors are

While dissemination processes were not explicitly a focus of this paper, professional experience would suggest that avenues for exposure and dissemination to this knowledge include; doctrinal knowledge directly acquired through formal career training; indirect or trickle down exposure to this knowledge, perhaps gained as a subordinate working with experienced and knowledgeable superiors; through professional knowledge exchange between working peers; or by dint of professional self-education whether that education is institutionally or personally motivated.

¹⁴⁷ Given the nature of this study it is acknowledged that this statement has some significant caveats. These are discussed in the section on limitations.

¹⁴⁸ For example the OPP is taught on the Army's Advanced Operations Course (AOC) at the rank of Capt-Maj which occurs prior to the Joint Command and Staff Course (JCSP) which is attended by Maj-LCols. Also the JCSP is the first formal training exposure for Air Force and Navy personnel; unless individual officers have attended the Joint Staff Officers Operational Planning Course (JSOP).

simply motivated by their own personal degree of interest or sense of professionalism. Or even, any combination of the foregoing! What it does show is that there are sub-communities of practice within the CF and the environments. These sub-communities may be viewed as being aligned either vertically or horizontally. Vertically in the case of silos oriented along environment lines; i.e., bodies of professional knowledge specific to the different services; or horizontally with differences in professional knowledge exposure and training as a function of rank or experience. Given the characteristically institutional nature of modern professional militaries this is to be considered normative.

This observation does indicate that there are two separate, but related, knowledge translation effects which mediate the body of professional knowledge within any particular community of practice. Mediation of Clausewitzian Theory and Operational Level thought occurs at both a macro, i.e., CF, as well as micro or sub-community levels, and are also subject to these effects.

Translation Effects Within Communities of Practice

In the first case, despite the mimetic origins of entry into the macro CF community of practice, Clausewitzian Theory and Operational Level concepts were incorporated into the CF context via translation and application of professional knowledge; in other words, a process involving the localization or 'Canadianization' of doctrine drawn from the militaries of other

¹⁴⁹ The CF military has a tradition of questioning the value of academic understanding. See R. Haycock, "The Labours of Athena and the Muses: Historical and Contemporary Aspects of Canadian Military Education," *Canadian Military Journal* 2, no. 2 (2001).

¹⁵⁰ Institutional and professional knowledge is collectively rather than individually held. See Fleck, *Genesis of Scientific Fact*.

¹⁵¹ The author is cognizant that the perceptual versus substantive correspondence between rank and experience is a problematic one. However, there is a tendency for regression to the mean, and formal doctrinal education tends to be delivered at specific ranks within the hierarchical structure of the CF; both across and within the environmental services.

nations.¹⁵² Uniquely Canadian socio-cultural elements, e.g., the positioning of the CF within the civil society of the nation, and the CF operational experience, e.g., the history of operations in peacekeeping and peace-enforcement, have influenced the translation of Clausewitzian Theory of war and Operational Level thought within the CF as an institution.¹⁵³ At a second and derivative level, the knowledge is also being translated and applied differentially across the environmental services within the CF; each representing a sub-community of practice.

Consequently, the various arms, environments, or levels within the CF each interpret Clausewitzian Theory and Operational Level concepts in divergent manners.

From this perspective, the CF as an institution needs to be viewed as a heterogeneous composite of multiple communities of practice; each with overlapping but distinct thought styles. This is due to processes of localized translation of knowledge based upon shared professional perspectives, common levels and forms of training, and collective exposure to the unique interpretations of environmental versus joint doctrine, or operational experiences. 155

¹⁵² Processes of knowledge translation, and localization based upon cultural, national, or institutional orientation have been recognized for some time. See B. Czarniawski, "Anthropology and Organizational Learning," in *Handbook of Organizational Learning and Knowledge*, ed. M. Dierkes et al.(London: Oxford, 2001).

¹⁵³ According to Gray the nature of war is the result of the interactions of six elements of context; economic, technological, political, cultural, strategic, and geographical. See "Recognizing and Understanding Revolutionary Change in Warfare". See also the argument that the post-Second World War CF operational experience has led to a uniquely Canadian application of the OPP in current operations in Coombs and Hillier, "Planning for Success: The Challenge of Applying Operational Art in Post-Conflict Afghanistan."

assumptions about their domain of expertise, may also be described as schools of thought. In this sense the inculcation and education of new entrants into the particular knowledge and practices of an arm or branch of the military may result in collective ways of thinking about the practice of warfare. So, for example, the unique nature of the operating environment and significant degree of difference between the air, naval, and land environments produces, in the first instance at the tactical level, an environment-centric thought style. It is this very specific thought style that must then, later in an officers career, be reoriented, replaced, or supplanted with a 'joint' thought style at the operational and then strategic levels.

For another illustrative example of localized translation see the discussion concerning the differences in interpretation, definition, and doctrinal use of Clausewitz's concept of Center of Gravity across the U.S. Army, Air Force, Navy, and Marine Corps in C. Fowler, "Center of Gravity - Still Relevant after All These Years?" in *USAWC Strategy Research Project* (U.S. Army War College, 2002).

The manner in which professional knowledge in general, and Clausewitzian Theory and Operational Level concepts in particular, are interpreted for translation and localized use within a community of practice is also heavily influenced by the historical processes and levels of historical awareness found within these communities of practice. In this particular study, it is apparent that much of the historically contingent nature of the origin, entry, or dissemination processes of Clausewitzian Theory and Operational Level thought remain unrecognized and unacknowledged within the various communities of practice in the CF. This is evidenced in the manner in which the theory and constructs are employed as intellectual resources within the professional writing which itself reflects the internalized understanding of Clausewitzian and Operational concepts; a condition where doctrine and elements drawn from doctrine appear to be privileged over theoretical considerations of their use.

The Effects of Historical Realism

Returning to the problematic effects of Historical Realism and representation of theory over and in time, three illustrative examples support the contention that the effects of Historical Realism in professional knowledge translation, production, and dissemination impact how knowledge is received and perceived within a community of practice. In the first case, unrecognized impacts, this is demonstrated by the role played by a single individual that was contingently located, albeit in the appropriate context, to advance an agenda for institutional adoption of theory and concepts. In the second case, unacknowledged impacts, this is demonstrated by how personal, professional, and institutional factors get 'lost' when knowledge is translated, produced, and disseminated. When professional knowledge is given an institutional

¹⁵⁶ See Coombs, "In the Wake of a Paradigm Shift" concerning the professional and institutional activities of Colonel E.R. Nurse and his part in curricula changes at CFC and the entry of Clausewitzian Theory and Operational Level concepts.

imprimatur for use within a profession, the knowledge is literally sanitized and presented as professionally and objectively sourced, obtained, and considered. ¹⁵⁷

Finally, once professional knowledge has been formalized, e.g., an act of translation which promulgates the knowledge as doctrine within institutionally promulgated publications, the unique constellation of persons, activities, and events which lead to the production and translation or localization of that knowledge, are literally 'written-out'. These additional translation effects are one of the second-order effects observed in the process of institutional or professional formalization of a body of knowledge from a historically realist perspective. This is especially characteristic of the Western cultural traditions of academization or professionalization of practice through formalization of disciplinary theory and concepts on the basis of objectivity and rationality. 159

While awareness of the historically contingent nature of these processes would not necessarily reduce the utility of theory or doctrine so produced, from an institutional context it would, perhaps, permit a more nuanced understanding of how these processes work to produce and disseminate knowledge. This would likely enhance or facilitate greater professional understanding of the body of knowledge stocks, and the processes of knowledge flows, within a particular professional community of practice at individual, sub-community, and institutional levels. This is one of the conditions needed for the development of a truly intellectually

For example, the manner in which Clausewitzian Theory and Operational Level concepts were literally sourced from doctrinal publications of other allied militaries. See Hope, *Misunderstanding Mars and Minerva*.

¹⁵⁸ This phenomenon has been observed in the publications and documentation of other professions and institutions as well. See M. McKee, A. Mills, and T. Weatherbee, "Institutional Field of Dreams: Exploring the AACSB and the New Legitimacy of Canadian Business Schools," *Canadian Journal of Administrative Sciences* 22, no. 4 (2005).

¹⁵⁹ T. Weatherbee, "Caution! This Historiography Makes Wide Turns".

grounded, intellectually diverse, and theoretically informed community of practice within any profession.¹⁶⁰

The danger is that without a sufficient level of awareness of the foundational theory and assumptions, in both intellectual and historical terms, received doctrine tends to become dogma. For example, it is the very taken-for-granted nature of the principles of war that results in them being regarded as universal to war. However, it is mimesis rather than logic and first principles which explains why there is a high degree of consistency across the doctrinal principles contained within the publications of NATO and Western allied militaries; a condition that exits despite national social differences in the perceptions of war, or military capability, or doctrine. ¹⁶¹

Institutional processes of knowledge translation and localization that are grounded in Historical Realism also have an effect on the intellectual and professional employment of theoretical constructs by a community of practice. The epistemic fallacy which occurs when realist history of knowledge is conflated with the origins of that knowledge may tend to mask or exaggerate the effects of socio-political context shifts on knowledge translation, production, and dissemination. Since these processes tend to 'write-out' contingency, chance, or the socio-political effects of culture, the adoption of a theoretical interpretation of war as developed by another nation is theory, and derivative doctrine, which has already been localized and translated by factors located in a different specific socio-political context.¹⁶²

¹⁶⁰ See T. Weatherbee and G. Durepos, "Dar'wren'ian Evolution in Management: Implications of the Ethics of Epistemology for the Scholar," in *Academy of Management*, Best Paper Porceedings (Montreal, Quebec: Academy of Management, 2010).

¹⁶¹ See another description of doctrinal mimesis in J. Angstrom and J. Widen, "Modern Armed Forces and the Spead of the Idea of the Priciples of War," in *Annual Conference of the British International Studies Association* (Manchester, United Kingdom: 2011).

¹⁶² This is readily apparent in the observation that Clausewitzian Theory has been translated and localized on numerous occasions by the Prussian/German, French, British, and Soviet and U.S. socio-political contexts prior to entry into the Canadian context.

It then becomes the case that theory and intellectual constructs, which have already been historically and strategically contextualized via the doctrine and the experience of other nation's war(s), may not 'fit' when shifted to a different national context. Some of the problematics associated with theoretical and doctrinal mimesis are apparent while others are not. For example, national level social, political, and geographical factors are usually different from one nation and one community of practice another. Therefore, the mimetic adoption of Clausewitzian and Operational Level theory and doctrine as developed in the U.S. context, will not likely meet all of the intellectual, professional, or pragmatic needs arising from within the contemporary Canadian context or in the future.

One recognized problematic, the force structure differential between that of the U.S. and Canada, particularly in terms of the Operational Level of War, had to be re-assessed within CF Doctrine. In Canadian doctrine there has been a de-linking of the Operational Level of war from force employment in order to accommodate the small size of the CF. While Canadian doctrine avoids associating the Operational Level of war with a specific size of structure, in order to meet pragmatic constraints, it has however, trapped itself within another problematic associated with the strategic frameworks of U.S. and British conceptualizations of warfare. The types and forms of war that these nations are likely to face in terms of their overall strategic perspective is significantly different than that of Canada's. Consequently, mimetic processes in the adoption of

¹⁶³ See for example, the differences between the U.S. and British views with that of another 'middle-power' nation, Australia, an example with more equivalence to Canada in military and geo-strategic terms. M. Evans, "The Closing of the Australian Military Mind: The Adf and Operational Art," *Security Challenges* 4, no. 2.

¹⁶⁴ See, for example, the unique Canadian demands for strategic level thought in the CF in K. Pennie, "Strategic Thinking in Defence," *Canadian Military Journal* 2, no. 3 (2001), and in A. Richter, "Towards a More Strategic Future? An Examination of the Canadian Governments Recent Defence Policy Statements," *Canadian Military Journal* 7, no. 1 (2006).

¹⁶⁵ See the detailed discussion in I. Hope, "Misunderstanding Mars and Minerva". This is especially pertinent as the strategic perspectives concerning the role and function of a nation's military and military capability are distinctly different for Canada's. See the analysis in R. Dickson, "Operational Art in a Middle-Power Context".

theory and doctrine, inter-operability arguments placed aside, which reflect another nation's social view of war and warfare will not likely have resonance across national communities of practice as doctrine, considered as the articulation of a nation's dominant theory of war, is idiosyncratic to the nation's socio-political culture. ¹⁶⁶ This is manifest in the historical social belief that Canada's armed forces have a peacekeeping tradition, rather than for imperialistic employment. ¹⁶⁷ Unfortunately, many of the foundational assumptions undergirding theory or doctrine that has been borrowed may only become visible when dissonance between tactical-operational-strategic perspectives arises. ¹⁶⁸

CONCLUSION

The introduction of Clausewitzian Theory and the Operational Level of war into the CF context has been previously described as a paradigm shift.¹⁶⁹ The evidence to be found in the professional writing in *CAJ* and *CMJ* over the last two decades seems to support this contention; at least in terms of the transition from a previous Cold War orientation to a new more modern replacement based upon Clausewitzian Theory and Operational Level concepts. While the use of Clausewitzian Theory and Operational Level concepts indicate that there has been a shift, as evidenced by these new concepts having become embedded within the professional

¹⁶⁶ See H. Hoiback, "What Is Doctrine?," *Journal of Strategic Studies* 34, no. 6 (2011).

¹⁶⁷ It is acknowledged that this is a point of debate and contention between social points of view, the current government's expressed view, and military points of view. For example, see E. Wagner, "The Peaceable Kingdom? The National Myth of Canadian Peacekeeping and the Cold War," *Canadian Military Journal* 7, no. 4 (2007).

¹⁶⁸ See the discussion in S. Clarkson and E. Fitzgerald, "A Special Military Relationship? Canada's Role in Constructing Us Military Power," *Journal of Military and Strategic Studeis* 12, no. 1 (2009).

¹⁶⁹ See Coombs, "In the Wake of a Paradigm Shift"

knowledge base of the CF, the shift must be considered a weak rather than a strong withinparadigm movement with doctrinal OPP concepts dominating.

However, as noted previously, a dualistic or zero-sum perspective concerning knowledge consensus within a community of practice is an underdetermined position from which to conclude a paradigm shift has occurred. Paradigm consensus and paradigmatic movements are multidimensional, complex, and open to analysis at several levels. ¹⁷⁰ If approached from the domain level of war, a paradigm shift is actually contra-indicated. Each of these conclusions is briefly addressed in the sections which follow.

While Clausewitzian Theory is now part of the professional canon in the CF, elements of the theory are being utilized as intellectual resources outside of the context of the theoretical framework within which they were developed. While this is not an unusual circumstance within either the broader community of intellectualism or military communities of practice, it is not indicative of adherence to a strong form Clausewitzian-based paradigmatic shift. Particularly given that these concepts are being employed within alternative theoretical perspectives such as RMA and EBO; or focused within a COIN construct as it relates to the current operational context of the CF in Afghanistan. 172

At another level of analysis, at the domain level or Western Theory of war, whether

Clausewitzian or otherwise, military thinking tends to remain firmly grounded in a Westphalian

¹⁷⁰ In epistemological terms underdetermination is a condition which exists when there is insufficient evidence to permit a firm conclusion to be made. For a more detailed explanation see R. Boyd, "Realism, Undetermination, and a Causal Theory of Evidence," *Nous* 7, no. 1 (1973).

¹⁷¹ From an intellectual perspective the debate concerning whether Clausewitzian Theory remains valid is ongoing see the arguments presented in Van Creveld, *The Transformation of War*; and in *The Changing Face of War*. From a practitioner perspective, the heuristic nature of concept interpretation and application as observed in CMJ/CAJ is indicative of debate rather than full consensus.

¹⁷² The debate concerning whether Clausewitzian Theory, or the Operational Level of war, is applicable within a COIN or LIC construct has not yet been resolved.

and post-enlightenment context. Strong arguments, particularly those taken from the stand-point of the socially constructed nature of war, can be made that the inter-state context within which Western concepts of war and warfare arose is breaking down. It is possible that the International System which grew from the Westphalian concepts of sovereign equality and autonomy, geographical integrity and non-interference, and the legal basis of international relations is itself transforming.¹⁷³

A related and parallel argument is also being made that the socially defined nature of war is significantly shifting as these new forms of war replace statist forms. These new wars are not introducing new actors per se, but are socially re-positioning historical actors within the social context of war; for example, civil strife between non-state actors motivated by ethnicity, religion, or economics are becoming viewed as the twenty-first century norm. This is one of the dominant assumptions underlying the emergent concept of 4GW which posits that modern militaries will increasingly have to engage in insurgent or guerrilla warfare to quell or combat terrorism, all while managing adversary information campaigns focused on reducing public support for these conflicts. The same parallel argument is also being made that the socially defined nature of war.

Clausewitzian Theory, and its inextricable linkage with Operational Level thought, is not the Clausewitzian Theory of Clausewitz! The Clausewitzian corpus, and the Operational Level constructs associated with it, has become a theoretical bricolage. It has been changed by the

¹⁷³ The socio-political impacts of globalization in combination with the demise of the bi-polar nature of the Cold War are argued to have weakened and transformed the International System of States. In particular the forces of economic globalization have served to undermine the internal authority of the state, and have led to social and economic disparities that are at the root of many of the 'New Wars'. See the discussion in E. Newman, "The 'New Wars' Debate: A Historical Perspective Is Needed," Security Dialogue 35, no. 2 (2004).

¹⁷⁴ M. Kaldor, "Elaborating the 'New' War Thesis," in *Rethinking the Nature of War*, ed. I. Duyvesteyn and J. Angstrom(New York: Frank Cass, 2005).

¹⁷⁵ Lind and others, *The Changing Face of War*.

effects placed upon it by historical contingency and event. Clausewitzian Theory, which started out as a general and philosophically oriented conceptualization of the nature and characteristics of war in the ideal sense, has been borrowed, expanded, and undergone multiple procrustean transformations. Transformations and translations needed to meet the various socio-political and historical contexts it has been localized within; including the Canadian context.

As a body of thought it has been subjected to various national cultural influences and mediated by the thought-styles of both historical and contemporary communities of military practice. In this respect, it is the processes associated with Historical Realism and the localization and institutionalization of knowledge within a community of practice, such as the CF, which yields the perception of coherency between theory and doctrine, rather than any substantive internal consistency generated by the theoretical context.

Though, from pragmatic and utilitarian rather than epistemological or theoretical terms, a lack of internal coherency or consensus within a community of practice; one constructed through the process of knowledge exchange, professionalization, and exposure to shared understandings, is not a necessary condition. Even in the absence of paradigmatic consensus, professionals still somehow always 'muddle-through'. They do their best to professionally deal with the realities of the operational imperatives they are confronted with. From this perspective intellectual concepts, even when taken from their originating theoretical frameworks, still have some utilitarian value when employed as heuristic devices.

The caveat is whether 'muddling through' will be sufficient to meet the complex and multi-dimensional challenges associated with the future security environment? Perhaps there are

¹⁷⁶ 'Muddling Through' is the term associated with an incremental approach to problem solving where, in the absence of perfect information or guiding theory, individuals work through challenges by taking action and allowing the success or failure of their actions to guide them in the absence of theory. See C. Lindblom, "The Science of 'Muddling Through'," *Public Administration Review* 19, no. 2 (1959).

methods, theoretical or otherwise, which will be more efficacious? A very strong argument can be made that theory should be the basis of understanding was as the true value of theory is to be found in the way in which it may assist professionals in conceptualizing the challenges presented to them by war; regardless of the context they find themselves in.¹⁷⁷

¹⁷⁷ Winton, "On The Nature of Military Theory".

Appendix 1

Table 1: Target Set Articles: Canadian Army Journal

Adinall, R. "Transformations of War and Public Perception: Implications for 21st Century Warfare." Canadian Army Journal 9, no. 1 (2006): 50-67. Balasevicius, T. Maj. "Putting a Square Peg in a Round Hole: Finding a Special Forces Capability for the Canadian Army." Canadian Army Journal 7, no. 2 (2004): 35-50. Barrett, R. Capt. "General Sir Arthur William Currie: A Common Genius for War." Army Doctrine and Training Bulletin 2, no. 3 (1999): 53-57. Beardsley, B. Maj. "What Type of Warriors Are We?" Army Doctrine and Training Bulletin 2, no. 2 (1999): 25-28. Bernard, S. Capt. "Clausewitz in the 21st Century." Army Doctrine and Training Bulletin 2, no. 4 (1999): 48-55. Bernard, S. Capt. "The Revolution in Military Affairs: Approach with Caution." Army Doctrine and Training Bulletin 4, no. 1 (2001): 54-62. Bernard, S. Maj. "Educating Officers for the 21st Century: Card Punching or Profession of Arms." Canadian Army Journal 8, no. 4 (2005): 50-64. Bradford, R. Maj. "The Army Landing Force and Standing Contingency Task Force Design." Canadian Army Journal 8, no. 3 (2005): 46-64. Brazeau, D. Col. "From Pentomic Divisions to Canada's Army of Tomorrow: A Study in Transformation." Canadian Army Journal 8, no. 2 (2005): 36-51. Capstick, M. Col. "Firepower 2020: The End of Close Support." Army Doctrine and Training Bulletin 3, no. 2 (2000): 15-18. Cessford, M. LCol. "Some Thoughts on an Army for the 21st Century." Army Doctrine and Army." Army Doctrine and Training Bulletin 4, no. 3 (2001): 48-55. Conepts, Directorate of Land Strategic. "Future Army Capability Requirements." Army Doctrine and Training Bulletin 4, no. 2 (2001): 4-6. Coombs, H. Col, and R. Wakelam. "The Rowely Report and the Canadian Army Staff College." Canadian Army Journal 13, no. 2 (2010): 9-30. Copp. T. "Canadian Operational Art: The Siege of Boulogne and Calais." Canadian Army Journal 9, no. 1 (2006): 29-49. Curtis, V. "The Elastic Defence, 1917-1943." Canadian Army Journal 8, no. 1 (2005): 53-72. Curtis, V. "The Elastic Defence, 1917-1943		
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Appendix 2

Table 3: Target Set Articles: Main Summary

	Canadian Army Journal		Canadian Military Journal			CAJ + CMJ			
Conceptual Schema Typology	Target Set Count	% by Category in Target Set	% by Total Articles in Journal (538)	Target Set Count	% by Category in Target Set	% by Total Articles in Journal (494)	Total Target Set Count	% by Category in Target Set	% by Total Articles (1032)
Ceremonial Call	17	18.09	3.16	8	33.33	1.62	25	21.19	2.42
Historical Focus	27	28.72	5.02	8	33.33	1.62	35	29.66	3.39
Concept Utility	24	25.53	4.46	1	4.17	0.20	25	21.19	2.42
Engagement- In-Depth	26	27.66	4.83	7	29.17	1.42	33	27.97	3.20
Totals	94	100.00	17.47	24	100.00	4.86	118	100.00	11.43

Appendix 2

Table 4: Target Set Articles: Summary Count

Year of Publication	Target Articles By Journal					
	Journ	al				
	CAJ	CMJ	Total Count			
1998	3	0	3			
1999	6	0	6			
2000	9	3	12			
2001	12	2	14			
2002	9	2	12			
2003	12	1	13			
2004	5	1	6			
2005	8	2	10			
2006	6	1	7			
2007	6	2	8			
2008	6	3	9			
2009	2	2	4			
2010	9	3	12			
2011	0	2	2			
2012	1	0	1			
Summary Statistics						
Total Articles By Journal	94	24				
Total Data Set			118			
Average	6.33	1.85	4.25			
Standard Deviation	3.74	0.90	3.58			

Table 4: Target Set Articles: Rank Count

Author/Coauthor Count By Rank	CAJ	CMJ
Gen	-	1
MGen	-	1
BGen	-	1
Col	7	4
LCol	18	4
Maj	30	2
Capt	12	2
Lt	1	-
2Lt	2	-
Sgt	1	-
MCpl	1	-
Civilian	18	10
Unattributed	5	-

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