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THEATRE LEVEL WARFARE: THE MISSING LINK?

By/par Colonel Andrew Leslie

Theatre Level Warfare: The Missing Link?

Introduction

Dramatic changes in technologies, attitudes and the international system are starting to drive us towards re-evaluating old strategies and to look for new reference points amidst the still very much unsettled debris of the Old World order.[1] Most facets of contemporary society are either under critical review or in the process of undergoing dramatic change. The same is true of the profession of arms. Many have written of the Revolution in Military Affairs, but most theorists have concentrated on the cause or the effect as a result of improvements in the application of technology.[2] Perhaps the real revolution in military affairs is not in the technical details, but in how and why military forces are being used.[3] To explain this and "provide a thinking man with a frame of reference",[4] it could be time for a critical review of the current paradigm underlying most contemporary military theories, namely the division of the levels of war between strategic, operational and tactical.

If we are going to critically review certain elements of contemporary military theory, it might be useful to start with one of the grand masters who is often credited as being one of it's founders. Carl von Clausewitz has provided a significant degree of underpinning to a large number of Western military theorists. "By the early 1990's…his theories and concepts had come to permeate Anglo-American writing on military and national security topics",[5] and especially amongst those who have contributed towards the current

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[1] Major General R.A. Chilcoat, Strategic Art: The New Discipline for 21st Century Leaders. (Carlisle: Strategic Studies Institute, October 10, 1995). p 1.
[2] James K. Morningstar, "Technologies, Doctrine and Organization for RMA". Joint Force Quarterly, Spring 1997.
[3] Colonel W Semaimow, "The Revolution in Military Affairs: All That Glitters is Not Gold". (Toronto: Canadian Forces College, 1998). p 7.
[4] Karl von Clausewitz, On War, ed. and translated by M Howard and P Paret. (Princeton: Princeton University Press, 1976). p 142.
[5] Christopher Bassford, Clausewitz in English. The Reception of Clausewitz in Britain and America.(Oxford: Oxford University Press, 1994). p 197.

paradigms on the application of military power in pursuit of national goals.[6] To a certain extent his descriptive writings have stood the test of time as a general theory of war, and have ended up being a point of departure for scholars and military professionals seeking to better understand how war has been and should be waged, especially amongst certain US theorists.[7] But it is important to remember that Clausewitz does not have all the answers to what is an enormously complex and dynamic field of study, as he himself recognised. "Military theory will only be valid if it is not in opposition to reality…the primary purpose of any theory is to clarify concepts and ideas that have become, as it were, confused and entangled".[8] Has the nature of conflict changed since the levels of war as a unified concept was first articulated in the early 19th Century? Is there confusion with regards to the three generally accepted levels of war and what they mean to the commanders in the field. If so, what is the unifying theory that best describes and explains how successful commanders have and should attain strategic goals.

This essay will trace the evolution of the concept of levels of war, and link their development to the changing nature of the employment of military forces to meet strategic goals. By following the development of the levels of war through relatively recent times, and during periods when prior Revolutions in Military Affairs have occurred, lessons can be drawn. These lessons might point out the need to rethink how we want to organise our thoughts on the application of military power in pursuit of national or coalition objectives. The argument will be made that a new level of warfare, residing between operational and strategic, may be required so as to cater to the impact of a variety of factors. These include technology, the emerging trend of military forces being used for purposes other than the traditional definition of war, and the influence of disparate political constraints in near real-time. In an attempt to minimise 'confusion and entanglement' the recommendation for a theatre level of war will be offered so as to complement the strategic, operational and tactical levels already extant.

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[6] Lieutenant Colonel Richard J. Young, "Clausewitz and His Influence on US and Canadian Military Doctrine", The Changing Face of War, ed. Allan D. English (Montreal and Kingston: McGill-Queens University Press, 1998). p 9. p 17-20.
[7] Young: p 17-20.

The Evolution of the Levels of War. Then and Now

The concept of the levels of war was articulated by Jomini in his discussions on grand tactics and strategy in the 1837 Precis de L'art de la Guerre.[9] Clausewitz On War explored the nuances of tactics (the use of armed forces in the engagement) and strategy (the use of engagements for the object of war) and his work of 1832 sought, in part, to explain and model the successes of Napoleon. Though some have argued that much of what Clausewitz termed strategy would now be defined as operational art, [10] it was the practical work of one of his greatest disciples and countryman, General Helmut von Moltke, which came closest to articulating the need for a bridge between tactics and strategy in the 1860-70s.[11] Moltke, like his peers involved in the US Civil War, was able to use the dramatic improvements in technologies in the pursuit of strategic aims during and after the Austrian-Prussian and Franco-Prussian Wars. Firepower had increased exponentially. Railroads allowed the rapid transportation, concentration and supplying of troops. This, when combined with the swelling populations available for military service, meant that the number of soldiers were too large to be controlled by one man from a vantage-point atop some hill. "The armies had grown so large as to require division into subordinate groups that would, hopefully, work together towards some common goal".[12] The telegraph made control of dispersed formations a practical proposition, and together these allowed forces to be controlled and manoeuvred within a theatre of operations in a timely fashion, subject to the limits of available technologies. Enhanced mobility and control mechanisms allowed a commander to link the activities of very large formations into a relatively coherent campaign, focused on strategic goals. "Neither strategy or tactics appeared to encapsulate the skill of the theatre commander – and hence

[8] Howard and Paret: p 140.
[9] John English, "The Operational Art: Developments in the Theories of War", in The Operational Art ed. by BJC McKercher and Michael Hennessy. (Westport: Praeger,1996). p 7.
[10] Ibid: p 8.
[11] Ibid: "The Elder Moltke's Campaign Plan for the Franco-Prussian War" by Bradley Meyer. p 45.
[12] Ibid: p 41.

"operational art" was coined to cover what was between the two".[13] But recognising a theory and applying it can be two separate things, and despite Moltkes' brilliance as a commander of armies during the Franco-Prussian War, he was apparently guilty of forgetting why it was that he was fighting.

Lieutenant Colonel CL Scovell, while a student at the US Naval War College in 1993, wrote a very interesting paper titled "The Operational Commander and War Termination" which examined certain elements of that war. A conflict, with very specific and limited objectives crafted by the Kaiser's brilliant Chancellor, Otto von Bismarck, came very close to growing out of control into total war. This was due to the links being broken between the military conduct of the campaign and the strategic objectives envisioned.[14] When asked as to the political implications of his proposal to crush the French Army throughout France instead of concentrating on the capture of Paris and the capitulation of the French civil authority, Moltke is said to have replied "I am only concerned with military matters".[15] Apparently the current master of planning engagements had lost sight of the requirement to use engagements for the object of war (Clausewitz's definition of strategy). Why? Perhaps the scale and complexities of the campaign were such that no commander could bridge the direct links between tactics and strategy with the degree of balance mandated by limited wars with complicated political objectives. Dramatic improvements in technology, the scale of the campaigns and the need to juggle complex political objectives with military action was starting to overwhelm even the most accomplished of generals, leaders who needed a new paradigm to understand what it was they were supposed to do. It could be argued that the late 1800's held all the potential for a Revolution in Military Affairs (RMA) and that a new theory of war was needed to'…clarify concepts and ideas…that had become 'confused and entangled'. This was not because the practitioners of war were stupid or incompetent but because the very nature of war had changed. Unfortunately, with very few exceptions, nobody fully thought

[13] Martin Dunn, "Levels of War: Just A Set Of Labels?" Research and Analysis: Newsletter of the {Australian} Directorate of Army Research and Analysis, Issue No 10, October 1996, p 3.
[14] Lt Col CL Scovel, "The Operational Commander and War Termination-Assessing the Bridge from War to Peace". (Newport: US Naval War College, 1993). p 11 to p 14.

through the potential implied in this RMA and 'confusion and entanglement' aptly describes the bloodbaths of warfare in the first half of the 20th century.

Like the Franco-Prussian war that preceded it, the First World War started with relatively limited aims that were, however, very poorly defined. The Allies planned to beat the Germans by relying on elan and offensive spirit, but beyond 'defeating the Hun and being home by Christmas' their war aims appeared somewhat vague. The Germans hoped to quickly defeat the French and British in the West, and then to crush the Imperial Russian forces in the East. Easy to say, but very hard to do. The how of the initial German strategy was reduced to mathematical plans based on mobilisation and deployment timetables, brilliantly crafted by a whole generation of staff officers raised in the school of the elder Moltke.[16] But the why was never clearly defined, and the current theory of warfare could not see past achieving the destruction of the enemy. The German's original plan envisioned a series of marches focused on their right wing sweeping through Belgium, and a series of limited actions in the East to fix the Russians. Originally all went quite well but eventually, as is well known, the combatants got bogged down in the slaughter-houses of trench warfare.[17]

Though some blamed the senseless casualties incurred solely on the incompetence of the generals, this may be somewhat unfair. The military leaders on all sides were doing what they had been brought up to do, which was to fight a war to the best of their abilities according to current theory. Perhaps a portion of the fault lay with the inability of senior officers to understand that battles had to be linked to a desired outcome which in turn would contribute towards a strategic goal, but battles were not an end unto themselves. Most Commanders were still seeking that final but elusive single engagement which would result in the enemy's annihilation; the search for the strategic goal being achieved in one tactical instant. But as pointed out by David Glantz in his article on "Soviet Operational Art", "single battles, even those in which a hundred thousand died, failed to

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[15] Michel Howard, The Franco Prussian War: The German Invasion of France, 1870-1871 as quoted in a paper by Lt Col CL Scovel "The Operational Commander and War Termination-Assessing the Bridge From War to Peace". (Newport: US Naval War College, 1993). p 14.
[16] Drew Middleton, Crossroads of Modern Warfare. (New York: Peter Bedrick Books, 1983). p 21-25.

produce strategic results. The destruction of armies no longer ensured war termination".[18] Despite this the First World War strategy of annihilation led to the overriding tactical emphasis on attrition between relatively symmetrical opponents. The results are typified by such charnel houses as the Somme, Ypres, Verdun and other battles whose memory haunts us still.

Outside of the Soviet Union, the period between the two World Wars saw very little innovative discussions on the theory of war, or how and in what direction it should evolve. There was quite a lot of excellent work done by Liddell Hart, Fuller and others dedicated to implementing new technologies and procedures to the techniques of warfighting, but these were mainly focused on how to make war more efficient, and not necessarily more effective.[19]An effective war could be defined as one that achieves the desired endstate within acceptable costs, in terms of lives spent and treasures consumed. But who defines what is acceptable when it comes to the costs of war? Though it is undoubtedly wise to include senior military officers in planning national strategy involving the threat or potential use of force, it may be akin to having monkeys guarding the bananas if the generals are left to determine what constitutes acceptable losses in a war without any significant constraints. Banana consumption is likely to be high. And yet this was very much the case during the first half of the 19th century, perhaps best typified by the German experience but likewise found amongst the Allies.[20]

In his essay "German Strategy in the Age of Machine Warfare, 1914-1945", Michael Geyer has explored the struggle between what he terms the two principle currents of German strategy of the period. One was aimed at the reconstruction of unifying principles and known as the universalist or traditionalist approach, the aim of which was to achieve coherence amongst strategy, operations and tactics. At it's root it sought to preserve the

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[17] Ibid: p 22 to 36.
[18] David M. Glantz, "The Intellectual Dimension of Soviet (Russian) Operational Art", The Operational Art: Developments in the Theories of War ,ed. by BJC McKercher and Michael A. Hennessy. (Westport, Connecticut: Praeger, 1996). p 128.
[19] Edward Luttwak, "The Operational level of War". International Security, Winter 1980/81. Vol 5, No. 3. p 62.
[20] Christopher Bassford, Clausewitz in English .(New York, Oxford: Oxford University Press, 1994). p 216.

autonomy of the military for the exclusive conduct of war. Its members did not entertain debate about the 'why' of any conflict. That was taken as a diplomatic matter, and the role of the military was to conduct war.[21] Once war was declared it was, essentially, the sole prerogative of the military to achieve victory using whatever means was needed. Though it may sound paradoxical, this school of thought believed that by restricting the conduct of war to the exclusive prerogative of the military elite the effects of war would be limited. The "object of war" rested foremost on a group of diplomatic experts which demanded autonomy and promised success without jeopardy for the bourgeoisie and industry. In turn, military strategy reigned supreme and politics had no real say once hostilities had commenced. [22]

The second school believed in the mobilisation of every element of the nation for war, or total war. This was more of an ideological strategy than that of the management of arms implied in the first,[23] and of course this was what occurred during both World Wars once the nation at war became a nation in arms.

Despite the horrific casualties of the First World War there was very little ongoing original thought beyond enhancing the techniques of killing, made available by increased mechanisation and the ever-increasing sophistication of aircraft. The accepted levels of war as strategy and tactics remained fairly constant until the 1920s. Seeking to develop a theory of war which could explain and build on the bitter experiences of the First World War and their own Civil War, the Soviets wrestled with a model which bridged the tactical and strategic levels. This concept was first clearly articulated by General-Major Svechin in 1926, namely operational art.[24]His theory of war was that "tactics makes up the steps from which operational leaps are assembled. Strategy points out the path."[25] This evolved into a definition of operational art that would not be out of place today, namely that "operational art determines methods of preparing for and conducting

[21] Peter Paret, "German Strategy in the Age of Machine Warfare 1914-1945". Makers of Modern Strategy, ed. by Micheal Geyer. (Princeton: Princeton University Press, 1986). p 528.
[22] Ibid: p 533.
[23] Ibid:. p 528.
[24] Jacob Kipp, "The Russian Civil War and Soviet Operational Art, 1920-1932" in The Operational Art, p 61.

operations to achieve strategic goals…and determines the tasks and direction for the development of tactics".[26] Svechin and General Tukhachevsky (his peer but a bitter rival) were driving forces behind a debate that saw the Soviets exploring the complexities underlying victory and defeat in modern warfare. They were focused on developing systematic explanations as to how to incorporate the RMA brought about by the industrial revolution into warfighting, and the concept of linkages between levels of warfare to contend with changes in time, duration, support, scale, range and distances.[27]Some Soviets were starting to realise that battles could be fought for a purpose other than killing the enemy's forces in the first instance. So as to achieve coherence and scope, the strategic goals had to be translated at an intermediate level into sub-components, which in turn were achieved by focusing tactical resources and skills at a particular point and time.

A great deal of sophisticated work was done by a wide range of Soviet military theorists in the 1920's and 30's to refine the meaning and impact of the operational level of war, but much of this knowledge and expertise was lost in Stalin's purges prior to World War Two. The Soviets had to learn how to handle the masses of soldiers and resources dedicated to the war effort the hard way, like the rest of the combatants. Trial and error, with errors representing tens of thousands of lives lost, eventually led to military theorists and practitioners acquiring the skills and mind sets to efficiently deal with the enormously complicated demands of modern war on such a massive scale.[28]Though it was not articulated as such, elements of the operational art were starting to emerge during certain campaigns, starting with the German attacks into Poland and culminating in the Allied thrusts towards Berlin in 1945 and the sweep of US forces towards Japan.[29]

The scale, scope and intensity of war had grown to such an extent that strategic goals could no longer be directly translated into tactical objectives, at least not without causing

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[25] Bruce W. Menning, "Operational Art's Origins", Military Review Vol. 77/5, (Sep-Oct 1997). p 4.
[26] Glantz: p 126.
[27] Menning: p 3.
[28] Glantz: p 128-131.
[29] JFC Fuller, The Decisive Battles of the Western World, Vol Three,ed. by John Terraine. (London: Paladin Books, 1982).

undue confusion and a lack of focused effort. This lesson could have been learnt from perhaps the US Civil and Franco Prussian Wars, but most definitely by the end of the First World War. As discussed earlier, the sub-division of forces into discrete components that operated far removed from the eyes of the strategic authorities was not a new idea. But what was new was the way in which certain successful World War Two commanders and staffs thought. Theatre Commanders (or their Soviet, German and Japanese equivalents) were appointed to co-ordinate and orchestrate the various combined or joint forces in pursuit of national or coalition objectives. These commanders had vast responsibilities and were responsive to a variety of political inputs, but they each had a geographical focus in which they determined the campaign plans and military objectives leading to the desired strategic endstate. This system of organisation was inevitable as no strategic headquarters could be responsive enough to co-ordinate the tactical actions of millions of men and machines engaged in conflicts scattered over the globe, at least not with any efficiency or an acceptable degree of responsiveness. The best of these Theatre commanders were able to appreciate that attrition warfare, where the emphasis was on firepower often at the expense of manoeuvre, must of itself produce a certain degree of reciprocal attrition. It is an old truism that nothing comes for free, and to cause casualties between roughly symmetrical opponents one must be prepared to suffer them.[30] The "Great Captains" of World War Two focused on the enemy's weaknesses at a level above that of the tactical, with a view to achieving strategic success through a series of linked campaigns and battles, most of which had a greater purpose than simply killing the enemy.

Without using the terms that are familiar to most military officers of today (centre of gravity, culminating points, decisive points) the successful Theatre Commanders intuitively understood the concepts without articulating them as such.[31] As pointed out by Edward Luttwak in his essay on "The Operational Level of War" the disappointment was that this new type of thinking was not universal and quick to disappear once hostilities ceased. …"To be sure, there were isolated examples of generalship at the operational

[30] Luttwak: p 63.
[31] The Decisive Battles of the Western World, Vol 3.

level, and indeed very fine examples, but they, and all that they implied, never became organic to the national tradition of warfare. Instead such operational approaches remained the trade secrets of and personal attributes of such men…"[32] Luttwak was speaking within the context of the US experience. But there is no evidence to suggest that, apart from the Soviets, any nation seriously thought through the lessons available from World War Two for the conduct of modern war and the levels therein until sometime into the 1970s. One of the main reasons for this was, arguably, the introduction of nuclear weapons which not only symbolised the Cold War but, at the risk of sounding trite, led to a temporary freeze in Western military thought.

Nothing can focus the military mind more than a defeat, and the US disaster in Vietnam served as a wake-up call that all was not well with regards to how Western military power was being applied. When combined with the changing nature of the Soviet threat in Europe, a wide variety of American military professionals and academics recognised that it was well past time to apply some strong intellectual thought to how and why wars are fought. With the illogical nature of Mutual Assured Destruction becoming self-evident and the strategy of flexible response gaining headway, the US Army found itself in a box and needed a way out. The box was bounded by responsibilities to NATO, the disarray of the US services as a result of Vietnam, the frustration of the civil populace with the apparent incompetence of the military, the need for massed forces to balance those of the Warsaw Pact in Europe, and the impact of new technologies.[33] A lot of serious effort was needed to think their way out of the box, and in 1976 the US Army publication FM 100-5 Operations served as an excellent point of departure for what turned into a very healthy and spirited debate on the art of warfighting.[34]

At it's core it could be that these debates tried to resolve the theoretical struggle between killing the enemy and focusing on strategic success. As previously mentioned, this may be the essential military question which should have bedevilled commanders and military

[32]Luttwak: p 62.
[33] Richard M. Swain. "Filling the Void: The Operational Art and the US Army" in The Operational Art: Developments in the Theories of War. ed. by BJC McKercher and Michael A Hennessy, p 148/149.

intellectuals since the 1800's and might well have mitigated against the senseless slaughter of the World Wars. Up until the 1970's it could be argued that most Western military theorists believed that by killing the enemy, one was guaranteed strategic success. Carried to it's illogical extreme this is true, in that if all the foe's combatants are dead or incapacitated then further resistance is impossible. But why engage in bloodletting when it may not be necessary? As military practitioners spend the vast majority of their professional lives focused on tactical issues, it has often been very difficult for them to break away from the overwhelming desire to close with and destroy the enemy. The US Army's renaissance in military thinking started out with a concept called Active Defence, focused on tactical thinking and dominated by the defence and superior firepower.[35] But a certain amount of confusion was very much in evidence with regards to the tactical or even strategic responsibilities of the various levels of command within the NATO theatre. With the levels of war restricted to those of only tactics or strategy, the tactical imperatives assumed a tremendous weighting in the balance between fighting the battle and linking the outcomes of a series of battles to the "object of war", or the strategic imperative. The drawback to this type of thinking is that history has shown us, more often than not, that combat between roughly symmetrical opponents can quickly become attritional for both sides. History has also shown us that the days of the generals deciding what is deemed acceptable losses in war are over, as are the days of the military and diplomatic elite's deciding how to fight wars in relative isolation from the political process. This concept of Active Defence was, therefore, an incomplete doctrine for fighting a war as it did not minimise confusion and friction. But it was a start in the sense that the debate was now fully underway!

In an attempt to work through this concept of attrition warfare a new school emerged which championed the principal of manoeuvre, drawing heavily from Soviet and German operational history.[36] This in turn led to the formal publication of the AirLand Battle doctrine in 1982 which incorporated emerging technologies, joint and combined

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[34] Captain (N) JS Dewar. "The Impact of the Evolution of the Operational Level of War on the Structure of the Canadian Forces: A Sailor's Perspective". (Toronto: Canadian Forces College, 1998). p 3.
[35] Colonel W Semaimow. "Western Operational Theory: Breaking the Industrial Paradigm". (Toronto: Canadian Forces College, 1998). p 3.

operations between land and air forces towards a common goal and, most significantly, the concept of the operational level of war. This was definitely a step in the right direction as the ability and need to fight battles were being linked not only to each other, but across and deep within the operational theatre towards a common purpose.[37]

In 1986, a new version of FM 100-5 Operations was issued and for the first time the US Army possessed a unified theory for the conduct of advanced operational manoeuvre.[38] The real breakthrough, however, was in recognising that the operational level of war resided between strategy and tactics for the purpose of minimising confusion.[39]

Military professionals have always struggled to bring a degree of order and clarity to war, a condition which by it's very nature is confused and chaotic as it deals with violence between competing groups of people, with results that can be predicted but are not a certainty. Martin Dunn in his essay "Levels of War: Just a Set of Labels?" contends that "…the existence of an operational level is simply a reflection of the practical issues that face commanders, and the command and control measures they adopt to overcome them. These issues include the geography they operate in, the scale of forces involved, and the technology that defines the capabilities of these forces in terms of mobility and firepower, the logistics required to support them, and the communications that control them."[40] Dunn may well have hit the proverbial nail on the head. The art of fighting wars is very much a practical and competitive issue, with very few keen on coming in second place. Commanders search for what has worked in the past and what might work in the future, assisted or guided by the work of military theorists both in and out of uniform. But beyond the practical considerations lies a way of thinking, a means by which all levels within the chain of command can contribute to the desired outcome. If the tactical steps are too numerous and complex to grasp or understand, strategic goals may not be realised. The operational level of war permits strategic goals, and the efforts and

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[36] Ibid. p 3-5.
[37] Swain: p 156 to 159.
[38] Semaimow: p 3.
[39] Colonel KT Eddy. The Canadian Forces and the Operational Level of War. Canadian Defence Quarterly, (Ottawa: April 1992). p 20.

resources needed to achieve them, to be grouped into discrete elements that are achievable and able to contribute towards a coherent picture of what lies ahead. If we revisit General-Major Svechin's original definition of the operational level of war, "tactics makes up the steps from which operational leaps are assembled. Strategy point out the path".[41]

Keeping Svechin's definition in mind, a question worth asking is "are the levels of war nothing more than a convenient grouping of strategic goals, subdivided into operational chunks, which lead to tactical tasks?". The answer (in the best traditions of military theorists) is yes and no. Yes in the sense that this explanation provides a ready answer to those who are focused on ordering their military skills and thinking into easily definable segments. In his monograph titled "The Levels of War: Operational Art and Campaign Planning", Ash Irwin has linked the NATO interpretation of the operational level to that of "…the conception, planning and execution of major operations and campaigns".[42] He then argues that campaign planning is best defined as converting strategic objectives into operational and tactical action.[43] Recognising that the boundary between the levels of war is not absolute, three tests are offered to determine whether the operational level is applicable to any action(s). (1) Is there a political dimension? (2) Will the action achieve a decision that materially alters the situation in terms of the overall campaign? (3) Will the action achieve a decision that materially assists in achieving the strategic goals? If the answer is yes to one or more, then that action or event is at the operational level.[44]

While this questionnaire recognises the links between and amongst the levels of war, it is so broad that almost any action can be categorised as operational. This is especially true in today's environment of real-time communications and media coverage, where a platoon commander can have his actions reviewed and commented on by his head of state before his Brigade Commander is aware of a possible problem. So the 'no' answer of the

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[40] Martin Dunn, Levels of War: Just A Set of Labels? in Newsletter of the Directorate of US Army Research and Analysis, Issue No. 10, October 1996. p 3.
[41] Menning: p 24.
[42] Brig. ASH Irwin, The Levels Of War: Operational Art and Campaign Planning in the Strategic and Combat Studies Institute Occasional No.5, 1993. British Army Higher Command and Staff College. p 7.
[43] Ibid: p 11.

original question may be valid in that the currently accepted levels of war are producing confusion and frustration amongst students, scholars and military professionals as they attempt to define or describe certain of it's elements.[45] Finally, this classification system skates over the main reason why Western military forces are involved in any potential combat activity, and this is related to the contemporary "Object of War", or why forces are deployed/employed in the pursuit of strategic objectives. From this one can deduce that the current paradigm of the levels of war may have failed the acid test of Clausewitz as a military theory in minimising 'confusion and entanglement'.

Up until fairly recently it could be argued that Western military forces were used to defeat or deter the enemy. The desired strategic outcome was, more often than not, the neutralisation of an enemy's ability to conduct war. War was the continuation of politics by other means, with the national or alliance authorities setting the criteria for victory and the civil/military leaders getting on with the details of winning, or losing, the war. But with increasing frequency we have seen military forces deployed whose object is not to defeat an enemy, but rather to restore the peace under a variety of specific terms.[46] Though this may appear to be nothing more than a play on words, it is believed that this poses a fundamental shift in the way in which military forces are being viewed and used. An enormous amount of time and resources has and will continue to be committed to the worst case scenario soldiers/sailors/airmen can face, namely the requirement to fight. Of what use is a military if it cannot fight, especially if fighting is still a threat in the arsenal of the negotiators? A threat without the means or will to back it up is, arguably, nothing more than an idle boast. If the threat of force is insufficient to accomplish the desired strategic objective then the judicious application of military forces occurs.[47] But for what purpose: to fight the enemy?

Nowadays Western military forces fight only as a last resort, and even then tactical goals are subject to a bewildering array of constant changes at the operational and even

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[44] Ibid: p 8.
[45] Ralph Allen, "Piercing the Veil of Operational Art." Parameters , US Army War College Quarterly, Summer 1995. p 111 and p 112.
[46] Julian Lider, Military Theory. (New York: St Martins Press, 1983). p 67 to 70.

strategic levels. At every stage of the campaign the linkages between military action, political inputs and strategic constraints is becoming more absolute, thanks to the communicative technologies available and the democratic principles of transparency and accountability. Though a variety of military purists might well bemoan this "political interference" as usurping the prerogatives of the commanders, it represents progress. There is now a constant fine-tuning of military actions to align themselves with the desired political outcomes. The military are not off on their own tangent, and if we think back to the review of Geyer's case studies of the German traditionalists (and by extension the British, French, Austrian, US and even Russian) both prior to and after World War One, the importance of ensuring civil/political control over military actions is self-evident. Perhaps modern war has become nothing more than a natural extension of the political process instead of a separate state. Instead of war being viewed as the continuation of politics by other means, maybe war should be viewed as the continuation of politics. Full stop. Within this context, then, it may be natural to explore what is meant by war. Is it a different state now as compared to even a few years ago, and if so what theories of war have arisen to explain and define it.

War used to be synonymous with fighting. Simplistically, if armies were not fighting they were at peace. Combat was the focal point of military professional development and, as articulated earlier, will probably remain as such as it represents the worst case facing modern soldiers. But with the military being used for a variety of purposes short of the traditional view of war, the actual fighting of wars is just one of a variety of skill-sets needed by modern soldiers. Peacekeeping, peace support operations, support to humanitarian endeavours, disaster relief, deterrence…all of these activities have been nicely summarised by an acronym known as OOTW, or Operations Other Than War. It is beyond the scope of this essay to fully explore all that is implied in OOTW, but the key point is that such activities represent strategic objectives which have been assigned to a variety of Western military forces,[48] as well as more "traditional" combat scenarios such as Desert Storm. In consultation and co-operation with coalitions and both governmental

[47] Ibid: p 66 and p 83.
[48] Martin Van Crefeld, The Transformation of War. (New York: The Free Press, 1991). p 19-25 and 49-56.

and non-governmental organisations, commanders have had to deploy their forces in a variety of campaigns in which the activities range from massed armoured thrusts across the sands of Iraq to feeding the desperate and dispossessed in Albania and Macedonia. At every stage political input and guidance has been vigorous, as has the importance of maintaining public support and alliance or coalition coherence in the face of adversity. Modern war is not nearly so simple as destroying the enemy. Once again 'confusion and entanglement' may be starting to rear their ugly heads as commanders and soldiers try to deal with a vastly more complicated world bounded by sometimes bewildering changes in technology, expectations and, most importantly, changes in the strategic environment. As pointed out by Colonel Semiamow in his excellent paper on "Western Operational Theory: Breaking the Industrial Paradigm"…"since military theory is qualified by its environment and strategy defines the operational art, then a change in the strategic environment should result in a change in operational theory".[49]

And what operational theory will evolve to either replace the current model, or allow it to cater to the changes happening in the how and why war is conducted. In his article "Piercing the Veil of Operational Art", Ralph Allen has traced the division of responsibilities for warfighting across the US Armed Services. "Military strategy is developed by the Joint Chiefs of Staff, approved by the national Command Authority, and passed in the form of strategic goals or objectives to the various theatre commanders. Theatre commanders are necessarily concerned and involved with the development of military strategy".[50] Ronald D'Amura believes that operational art and the operational level of war are interchangeable terms used to describe warfare that achieves strategic aims. He also points out that US doctrine recognises the campaign plan as the instrument by which strategic goals are achieved. Where 'confusion and entanglement' could start to emerge is when assertions are made that "the campaign is associated with a theatre of war", which in US parlance is very carefully defined in terms of a specific geographical area.[51] Recognising that it is very difficult to have absolute divisions between the levels

[49] Semaimow: p 6.
[50] Allen: p 112.
[51] Ronald D' Amura, "Campaigns: The Essence of Operational Warfare". US Naval War College. Parameters: Journal of the US Army War College, Vol. XVII, no. 2, Summer 1987, p 44.

of war he then articulates US doctrine with regards to the possible sub-divisions of a theatre of operations. "Just as the campaign is associated with a theatre of war, it also finds expression on the smaller stages comprising theatres of operations, which are sub-divisions of some theatres of war. In Europe, the theatre of war is divided into three theatres of operations consisting of the Northern, Central, and Southern European Regions, each with it's own independent but co-ordinated plans for campaigns against the Warsaw Pact….[52] "Campaigns in theatre of operations, though generally lacking the spatial amplitude associated with those traversing an entire theatre of war, do serve to achieve strategic aims and thus qualify as instances of operational art". [53]An interesting question to ask, then, is who in this example is the operational commander? Is it SACEUR? Is it the all three of the regional commanders? Are there more than one, and if so is does it matter?

Fresh from his experience of the Gulf War, General Colin Powell issued a doctrinal statement of selected joint operational concepts in late 1992. It is very well thought-out and provides a great deal of insight into how the US Services intend to organise their thoughts and procedures in future wars. He recognises the three levels of war and that…" there are no distinct boundaries between the levels, and they are not associated with any particular level of command, size of unit, piece of equipment or type of force or component…actions are defined as strategic, operational or tactical based on their effect or contribution to achieving strategic, operational or tactical objectives."[54] He then goes on to make the point that "…joint campaigns, especially in multinational efforts, must be kept simple and focused on clearly defined objective."[55] That old search for clarity and simplicity is still very much alive. So too is the recognition that the attainment of strategically complex and politically sensitive activities (which includes not only war but OOTW) must be translated into objectives that are as simple and relevant as possible, or else the various levels within a chain of command may find themselves overwhelmed.

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[52] Ibid. p 45.
[53] Ibid. p 46.
[54] General Colin Powell, "A Doctrinal Statement of Selected Joint Operational Concepts", issued on the authority of the US CJCS (Washington: 10 Nov 1992). p 1.
[55] Ibid. p 3.

The examples of the Franco Prussian and World Wars are very germane, and the same set of conditions might well apply as we enter the new millennium.

Rapid advances in technology, new ways of employing military forces for the achievement of national or strategic goals, and changing societal values both at home and abroad sounds very familiar within this context of learning from history.[56] Clarity and focus must be present or else confusion will be the order of the day. To that end, the doctrinal US (and by extension most other Western nations) position on the levels of war may be flawed. Though it is unlikely that all the lessons of the Gulf War have had time to be fully extracted, Colonel Leake has written of "Operational Leadership in the Gulf War: Lessons from the Schwarzkopf-Franks Controversy". There is no doubt that Operation Desert Storm was a brilliant victory for the US and their allies, but in all such endeavours there are lessons to be learnt, both good and bad. While not disputing Leake's focus on the leadership qualities and interpersonal skills of the principles, it becomes fairly apparent that the so-called operational commander (Schwarzkopf) was overwhelmed by the information flow, and was unable to ensure the integration of the key activities at all levels of war. This resulted in a vital operational objective, the destruction of the Iraqi Republican Guard, not being fulfilled with strategic consequences that are still with us today.[57] Colin Grey has written a damning interpretation of the current fixation over the Revolution in Military Affairs in which he claims that "…as the consequences of Desert Storm revealed, superior operational artistry and unmatchable prowess in fighting do not constitute an adequately comprehensive theory of war. At the political level, which is the only level that gives meaning to military behaviour, Desert Storm proved to be less than an outstanding success".[58]

And what is meant by "the political level" in multi-national coalitions such as occurred with Desert Storm; or during many the UN or even NATO missions since their inception. Who sets the strategic goals? In the case of Desert Storm the answer is fairly obvious.

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[56] Menning: p 10.
[57] Colonel JP Leake, "Operational Leadership in the Gulf War: Lessons from the Schwarzkopf-Franks Controversy". (Toronto: Canadian Forces College, 1998). p 2 and 3.

The US provided the absolute majority of the combatants and logistic power and 'called the plays', subject to polite interaction amongst the coalition of the willing. The operational commander was still subjected to an enormous range of political inputs, but most of these could be absorbed by the US strategic level command elements. The conflict was blessed with an easily recognisable enemy in the form of Saddam Hussein, who had achieved almost universal world condemnation for his invasion of Kuwait. It is not nearly so easy on a UN or even a NATO operation, as the experiences in the Former Yugoslavia has revealed. Most recently, the trials and tribulations of General Wesley Clarke in Kosovo/Serbia are worthy of further study.[59] The amount of conflicting and disparate political demands made on the NATO military leadership may well be the sign of things to come, and could not help but distract SACEUR from the task at hand. But, some will say, that was his job. The object of war is to achieve the strategic objectives. The comeback to this point is to ask "at what level of war SACEUR operating?". Was he the strategic commander, assisting in the development of the national/alliance objectives. Or was he the operational commander, establishing those actions that will achieve the strategic aim. The answer to both questions might well be yes, and therein lies the potential for 'confusion and entanglement'.

The US Strategic Studies Institute published a report in 1995 titled "US Dept of Defence Strategic Planning: The Missing Nexus". It is beyond the scope of this paper to critically review this process, but suffice to say that what General Clarke went through bears little resemblance to any of the definitions of what constitutes either strategic or operational level planning.[60] What he had to do was an amalgam of both levels, while responding to a bewildering host of inputs from allies, superiors at home and abroad, and other groups eager to help.[61]At the same time that he was interacting with national/alliance/coalition authorities he was prosecuting the details of a very complex campaign plan. Most mortals would probably have suffered a cardiac arrest trying to manage all this, but the fact

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[58] Colin S Gray, "The American Revolution in Military Affairs: An Interim Assessment". Strategic and Combat Studies Institute. The Occasional, number 28. 1997. p 34.
[59] Michael Ignatieff, "The Virtual Commander" in The New Yorker. (New York: August 2, 1999). p 30 to 36.
[60] Douglas C. Lovelace jr. and Thomas-Durell Young, "US Department of Defense Strategic Planning: The Missing Nexus". (Carlisle Barracks: PA. Sept 1, 1995). p 1 to 8.

remains that in the opinion of such as Michael Ignatieff, General Clarke was as successful as possible under the real-time constraints of the various national and alliance authorities.[62] It remains to be seen, however, just how effective the division of responsibilities between the levels of war actually were. Early indications, such as the interview with Lieutenant General Short (air component commander for Operation Allied Force) in US Airforce Magazine, are not favourable. "The massive and laborious tank plinking effort in Kosovo was in many ways a waste of airpower since, in his {Short's} opinion it did little to achieve NATO's strategic goals…eventually we, the airmen of the Alliance, were able to convince General Clarke that we could conduct sustained and parallel operations…against that Army in Kosovo while attacking other more lucrative targets in Serbia proper…I think we were constrained to an extraordinary degree and were prevented from conducting the air campaign as professional airmen would have wanted to conduct it ".[63] On a similar note, General Clarke has complained about NATO's tendency to leap from the strategic to the tactical, and it's political micro-management of the campaign.[64] But perhaps this occurred, in part, because confusion existed within the military with regards to the understanding of the levels of war and implied responsibilities. If commanders and their staffs are unsure of who should be doing what, how can one expect the politicians or bureaucrats to do any better? And for those who argue that NATO's mission in Kosovo/Serbia was an anomaly, and did not represent the full range of combat elements and the crafting and execution of a "normal" campaign plan, we can always refer back to the example of Desert Storm.

Contrary to the overall impression one might receive from Schwarzkopf's book It Doesn't Take a Hero, the evolution of the campaign plan was not a one-man show. But as the operational level commander it could be argued that Schwarzkopf felt he was the sole link between the strategic level and that of the tactical. Instead of concentrating on his theatre responsibilities, he became focused on the details of warfighting and a certain

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[61] Ignatieff. p 30.
[62] Ignatieff: p 30 to 36.
[63] John A Tirpak, quoting Lieutenant General MC Short in US Airforce Magazine. September 1999. p 43 to 47.
[64] Tom Raum. "General Blasts NATO War Plan in Yugoslavia". Associated Press in The Globe and Mail. (Toronto: Saturday October 23, 1999). p A9.

degree of confusion and entanglement ensued.[65] General Crosbie Saint has written "A CINC's View of Operational Art" in which he outlines the principle condition for success at the operational level, namely getting the right mix of forces to the decisive place and time while defining the objectives and desired endstate.[66] In his doctrinal statement, General Powell pointed out that "Joint Force Commanders…may spend as much time on regional political and diplomatic efforts as on direct preparation of their forces for combat…they must protect their forces and their freedom of action…".[67] Perhaps this was the key role Schwarzkopf should have been focused on. He did a brilliant job in building consensus amongst the coalition's members and in following Crosbie's recipe for success up until combat action started. But by getting immersed in the operational battle he lost the ability to maintain his focus on what was really important, which was to buy time for his subordinates to accomplish the strategic objectives and to maintain situational awareness with both the strategic level and subordinate commanders.[68] Much like Moltke a century before he was doing that which he had been trained to do, but his working model of the theories of war may have been insufficient for the task at hand.

As we have seen, Moltke could not fully bridge the gap between strategy and tactics. His tactical imperatives (destroy the enemy) influenced his strategic logic (do that which is required to achieve the goals set by Bismarck). Perhaps Schwarzkopf fell victim to a similar set of circumstances. He was obviously driven to assume hour to hour command of military operations and lost his objectivity, falling into the trap that Saint describes as the squad leader mentality.[69] He was unable to fully link the strategic requirements to the tactical objectives, and vice versa. Perhaps Schwarzkopf should have fully embraced his role as the theatre commander and allowed his subordinates to focus on achieving the goals set out in the theatre commanders campaign plan. Division of labour and focus might have led to a far better strategic endstate.[70] Though one might argue that the theatre

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[65] Leake: p 7.
[66] General Crosbie E Saint. "A CINC's View of Operational Art". Military Review (January-February 1997). p 65.
[67] Powell: p 7.
[68] Leake: p 16.
[69] Saint: p 67.
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commander's involvement was a function of sound leadership at the decisive moment, [71] it may have been due to his training and understanding of the current levels of war. Though it may sound like a circular argument he was the operational commander and perhaps he felt he had to command ongoing operations, even though some might interpret this as micro-management (of the armoured land battle, for example), and well outside his area of expertise.[72]

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Should, then, a theory of war be changed to accommodate what may have been errors (imposed or actual) on the part of a limited number of commanders during one or two military operations. The obvious and correct answer is no. But are these local anomalies, or is it indicative of systemic flaws in the understanding and application of the three currently accepted levels of war. As we have seen, commanders will normally fight they way they have been trained. In the US case their system of Joint Regional Commanders has it's roots in the Second World War, but the training of such men as Eisenhower, MacArthur and Nimitz and their staffs was very much on the job.[73] The theory of levels of warfare is not and by itself important so long as clarity of purpose, thought and action are optimised. But with the increased complexities surrounding the application of military force, and the unwillingness to sustain the casualties caused by commanders who are learning as they go, is it enough to keep the status quo. General Saint's article provides an interesting overview of what a theatre commander's responsibilities should include. His admittedly land-centric subdivision of military forces into fighters (company, battalion, brigade), integrators (brigade, division, corps) and shapers (corps, army group, theatre) points out that there is overlap amongst the levels of war, but that each must have a focus. He makes the very salient point that the operational process starts with the theatre commander, but he is applying the traditional paradigm to his analysis. A theatre level of war is currently outside of his frame of reference.[74]

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[71] General N Schwarzkopf. The Autobiography: It Doesn't Take a Hero. (New York. Bantam Books, 1992).
[72] Leake: p 2 and 7.
[73] Menning: p 7.
[74] Saint: p 65 to 68.

A challenge for any student of war is to find a recent campaign, either "traditional " warfighting or OOTW, where the concepts and ideas as to the division of responsibilities in pursuit of strategic objectives has not been 'confused or entangled'. If we agree with Dunn's analysis that the levels of war were adopted so as to contribute to the reduction of such confusion, has the paradigm worked? It has certainly contributed to a more efficient application of military forces in resolving strategic problems, but is there room for improvement? If the answer is yes, then perhaps we should refer back to Edward Luttvak's ground breaking article entitled "The Operational Level of War". In his introductory remarks he wrote that "…In theatre strategy, political goals and constraints on one hand and available resources on the other determined projected outcomes… In the operational dimension…schemes of warfare...evolve or are exploited. Such schemes seek to attain the goals set by theatre strategy through suitable combinations of tactics".[75] But who determines theatre strategy. And who fights the war at a level above that of the tactical. While the Director of Land Studies in Toronto, Colonel Keith Eddy wrote an article on "The Canadian Forces and the Operational Level of War". He argues that "at the operational level…. commanders must remain beyond the scope of battles and engagements". But none have, at least none that are relatively recent or readily apparent. In complex and multi-faceted operations someone has to get involved in commanding the actions of enormous organisations, and if not large in terms of numbers then certainly large in terms of tactical tasks; and that is the duty of the operational level commander. So who should co-ordinate the development of theatre specific goals, resources, balance political pressures, support agencies, non-governmental organisations and other inputs while maintaining the link between the strategic and operational levels? - the recommendation is that these are the duties of the theatre commander. In the interests of minimising 'confusion and entanglement', and so as to assist the paradigm of levels of war in keeping pace with events, the following model is offered as a framework for thought:

Strategic Level: the development and implementation of strategic plans to meet national, alliance or coalition objectives.

[75] Luttwak: p 61.

Theatre Level: the employment of military forces and supporting agencies to attain strategic goals in a theatre of operations.

Operational Level: the design, organisation and execution of campaign plans to achieve theatre goals.

Tactical Level: the planning and execution of battles, engagements or missions to meet operational goals.

Conclusion

Since the acceptance of the strategic, operational and tactical levels of war as a unified theory much has changed. Many have written of the revolution in military affairs, but most have focused on the technologies now available, which will certainly change how some fight but not necessarily why military forces are brought to bear on the issue. In terms of the employment of military forces, we are at a crossroads. Much like the situation General Moltke faced during the Franco Prussian wars, the contemporary strategic environment is undergoing dramatic changes. The object of war is no longer defined as destroying the enemy, but rather to accomplish sometimes subtle and often very complicated political objectives. Some of these objectives have very little to do with combat, though the possibility of combat (the worst case) should never be far from our minds as we contemplate the development of campaign plans to get the job done. These campaign plans are now subject to near real-time inputs or modifications from national or coalition authorities. This ensures that the military forces will not wander away from the pursuit of the desired political endstate, and regress back to the follies of the World Wars and all that blindly seeking to destroy the enemy implies.

The concepts of the strategic and tactical levels of war are well understood, but that of the operational much less so. Some have argued that the levels of war are nothing more than an attempt to bring a degree of order to the confusion that is war, and they may be right. Commanders have always struggled to minimise confusion and chaos, because the price of being more confused than the enemy is usually failure. Recent examples of complex multi-national military operations conducted by forces that have a good grasp of the current levels of war have resulted in a significant degree of entanglement and confusion, most of it focused on the operational level of war. There appears to be a gap in the thought process involved between the operational and strategic, a gap which leaps over the functions inherent in a theatre level of war. The enormous range of decisive points which lead to strategic success can and will compress the separations between the levels of war, with often bewildering rapidity brought about by technology and real time political constraints. The test of any military theory is its ability to stay relevant under evolving circumstances, and to clarify concepts and ideas that have become 'confused and entangled'. If the theory of the levels of war is a framework for military thinking, then have we thought enough on the issue or is there room for further evolution.

Due to the changing nature of how and why military forces are used, technological improvements, and the impact of political constraints on every military activity there may be a link missing in the levels of war. Perhaps the missing link is that of the theatre level of war, the bridge between the operational and strategic.

BIBLIOGRAPHY

Books

Allen, R.L., editor. Operational Level of War - It's Art. Carlisle Barracks, Penn. US Army War College, 1884.

Barnett, Roger W. Strategy, Operational Art, Tactics, Concepts and Doctrines. US NAval War College, Strategic Research Department . Research Report 4-96. 11 June 96.

Bassford, Christopher. Clausewitz in English: The Reception of Clausewitz in Britain and America 1815-1945. New York, Oxford: Oxford University Press, 1994.

Bellamy, Christopher. The Future of Land Warfare. London: Croon Helm pub, 1987.

Bellamy, Christopher. The Evolution of Modern Land Warfare; Theory and Practice. London: Routledge, 1990.

Blackwell, James, et al. The Gulf War: Military Lessons Learned. Washington DC: Center for Strategic and International Studies, 1991.

Clausewitz, Karl von. On War. Edited and translated by Michael Howard and Peter Paret. Princeton: Princeton University Press, 1976.

Chilcoat, MGen Richard A. Strategic Art: The New Discipline for 21st Century Leaders. Carlsisle. US Army War College, October 10, 1996.

Dewar, Capt (N) JS. "The Impact of the Evolution of the Operational Level of War on the Structure of the Canadian Forces: A Sailor's Perspective". Toronto: Canadian Forces College, 1998.

English, Allan D. editor. The Changing Face of War. Royal Military College, Montreal and Kingston: McGill-Queens University Press, 1998.

Fuller, Major General JFC. The Decisive Battles of the Western World, Volumes Two and Three. ed. by John Terraine. London: Paladin Books/Granada, 1982.

Glantz, David M. The Nature of Soviet Operational Thought. Fort Leavenworth, Kansas: US Combined Arms Center, 1985.

Gray, Colin S. The American Revolution in Military Affairs: An Interim Assessment. London: Strategic and Combat Studies Institute, No. 28. 1997.

Ignatieff, Michael. Blood & Belonging. Toronto: Viking/Penguin Group, 1993.

Irwin, ASH. Brigadier. The Levels of War: Operational Art and Campaign Planning. London: Strategic and Combat Studies Institute, No. 5. 1993.

Jomini, Antoine H. The Art of War. Translated. GH Mendell and WP Graghill. Harrisburg, Pennsylvania: Stackpole Books, 1987.

Keegan, John. The History of Warfare. New York: Alfred A Knopf, 1994.

Kuykendall, Anthony N. "Operational Level Planning". Maxwell, Alabama: Air University, US Airforce, 1988.

Leake, Colonel John Patrick. "Operational Leadership in the Gulf War: Lessons from the Schwarzkopf-Franks Controversy". Toronto: Canadian Forces College, 1998.

Liddell Hart, BH. The Theory and Practice of War. London: Cassell, 1965.

Lider, Julian. Military Theory: Concept, Structure, Problems. New York: St Martin's Press, 1983.

Lovelace, Douglas C. and Young, Thomas-Durell. US Department of Defence Strategic Planning: The Missing Nexus. US Army Strategic Studies Institute: PA: Carlisle Barracks, September 1, 1995.

Luttwak, Edward N. On the Meaning of Victory: Essays on Strategy. New York: Simon and Schuster, 1986.

Luttwak, Edward N. Strategy and History: Collected Essays, Volume 2. New Brunswick (USA): Transaction Books, 1985.

McKercher BJC and Michael A. Hennessy, editors. The Operational Art: Developments in the Theories of War. Westport, Conneticut: Praeger, 1996.

Mead, EM, editor. Makers of Modern Strategy. Princeton: Princeton University Press, 1943.

Middleton, Drew. Crossroads of Modern Warfare. Sixteen 20th Century Battles That Shaped Contemporary History. New York: Peter Bedrick Books, 1983.

Murray, Knox and Bernstein A. editors. The Making Of Strategy. Cambridge : Cambrideg University Press, 1997.

Paret, Peter, editor. Makers Of Modern Strategy. Princeton: Princeton University Press, 1986.

Powell, General Colin L. "A Doctrinal Statement of Selected Joint Operational Concepts". Published on the authority of CJCS. Washington: 10 November, 1995.

Rios, Leon H. "The Linkage of the Strategic and Operational Levels of War". Fort Leavenworth, Kansas: US Army Command and General Staff College, 1986.

Scovel III, LCol CL. "The Operational Commander and War Termination: Assessing The Bridge From War To Peace". Newport, RI: Naval War College, 17 May 1993.

Semiamow, Colonel W. "Western Operational Theory: Breaking the Industrial Paradigm". Toronto: Canadian Forces College, 1998.

Semiamow, Colonel W. "The Revolution in Military Affairs: All That Glitters Is Not Gold". Toronto: Canadian Forces College, 1998.

van Crevald, Martin. Technology and War: From 2000 BC to the Present. New York: The Free Press, 1989.

Periodicals

Allen, Ralph L. "Piercing The Veil Of Operational Art". Parameters: Journal of the US Army War College, Vol XXV no.2, Summer 1995. p 111-119.

Christman, Daniel W. "NATO's Military Future". Joint Force Quarterly. Spring 1966. p 74-78.

D'Amura, Ronald M. "Campaigns : The Essence of Operational Warfare". Parameters: Journal of the US Army War College, Vol XVII, no. 2, Summer 1987, p 42-51.

Dunn, Martin. "Levels Of War: Just A Set of Labels?" Newsletter of the US Army Directorate of Research and Analysis. Issue No 10. October, 1996.

Eddy, Colonel KT. "The Canadian Forces and the Operational Level of War".Canadian Defence Quarterly. April 1992. p 18-24.

Ignatieff, Michael. "The Virtual Commander". The New Yorker. New York. August 2, 1999. p 30-36.

Jablonsky, David. "Strategy and the Operational Level of War: Part 1". Parameters. Spring 1987. p 65-76.

Jablonsky, David. "Strategy and the Operational Level of War: Part 2". Parameters. Summer 1987. p 52-68.

Luttwak, Edward N. "The Operational Level of War". International Security, Winter 1980/1981 (Vol 5, No. 3). p 61-79.

Menning, Bruce W. "Operational Art's Origins". Military Review. 77, No. 5, 1997. p 32-48.

Saint, General Crosbie E. "A CINC's View of Operational Art". Military Review. Jan/Feb 1997. p 65-78.

Tirpak, John A. (senior editor). "Short's View of the Air Campaign". Airforce Magazine, September 1999. p 43-47.