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REUNITING OPERATIONAL ART WITH STRATEGY AND POLICY
A New Model of Campaign Design for the 21st Century

By/par

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Abstract

The current Western interpretation of campaign design must reunite with its strategic roots of ends and means in its quest to seek ways of winning both the war and the peace in the post 9/11 era. To that end, a new model of campaign design must acknowledge the inherent incoherence of strategy and impose a focus on evolving strategic objectives, rather than maintaining the current obsession with the Centre of Gravity. This implies that routine re-evaluation of the ends must be incorporated into a Commander's daily activities. If necessary, that evaluation must also instigate a full review of the entire campaign design, from first principles. The author postulates that the ends of that campaign should be characterized by a set of *Campaign Termination Conditions*, coinciding with the end of the war and the beginning of the peace, and incorporating the full achievement of policy. To that effect, a series of military operations need to succeed each other. The conditions achieved at the end of one operation are a set of dynamic, forward looking *Sequel Conditions*, eliminating the concept of end-state and their associated criteria. Within each operation, *Enabling Effects* will continue that thread, allow the sequencing of desired effects, which could then be incorporated into *Effects Lines of Operation*. These would integrate all instruments of national or coalition power and be directed at *Campaign Objectives*, rather than a Centre of Gravity or an enemy force. These *Effects Lines of Operation* may thus cross *Sequel Conditions*, allowing continuity of effort between an operation and its sequel. In turn, they may be translated into *Component Task Lines of Operation* relevant to the force's subordinate components.

Introduction

It had all started so well. The most battle-worthy, best-trained, equipped and led army in the world had made a stunning advance in enemy country. It had defeated the enemy army and captured its national capital. By all rules of classical warfare, this should have been the end of it. But the enemy continued to resist. Soon, scattered elements were hitting back hard and the long lines of communication were threatened. Hostile neighbouring countries began to see the opportunities...

The echoes of Napoléon's campaign of 1812 in Russia still resonate today: they are at the core of our understanding of war, and the relationship between policy, strategy and operational art.¹ Statesmen and generals have sought to explain this relationship ever since Socrates urged one of his students to go learn the art of war from a famous visiting general, only to hear him report, upon his return, that he had learned "tactics and nothing else."² Succeeding generations of practitioners and theorists deduced or postulated a number of elements, concepts and theories about warfare that form the basis of current Western doctrine. In the words of Aron:

Le stratège utilise les combats et les victoires en vue d'une fin que le chef d'État détermine et qui ne se confond pas avec la victoire militaire et n'exige pas toujours la destruction des forces armées de l'ennemi.³

¹ There are many synonymous terms for the various levels of war. For simplicity, this article uses: policy to convey what is implied in other terms such as geostrategy, grand strategy, war aims etc; strategy when referring to determination of military ends and means; and operational art when discussing the employment of military forces to achieve strategic objectives.

² Xenophon, *The Memorabilia*, Book III-1, translated by H.G. Dakyns; available from <http://www.textkit.com/files/memorabilia.pdf>; Internet, accessed 24 September 2004, 83.

³ "The strategist uses battles and victories towards an end that is determined by the head of state. That end does not equate to military victory and it does not always demand the destruction of the enemy's armed forces." Author's translation. Raymond Aron, *Sur Clausewitz*, (Bruxelles: Editions Complexes, 1987), 33.

Recent history has merely reminded us of the paradox of the campaign of 1812 in Russia. Indeed, the numerous critiques, opinions and analysis of the campaigns in Afghanistan and Iraq center around one critical question, best posed by Kagan: “Why has the United States been so successful in recent wars and encountered so much difficulty in securing its political aims after the shooting stopped?”⁴ The answer, for some, is political.⁵ Kagan offers a more subtle view that the problem lies not only in politics but also with the US “method of warfare.” He singles out concepts such as “shock and awe” and “network centric warfare” as guilty of fostering an ability to produce “stunning military victories but ... not necessarily accomplish the political goals for which the war was fought.”⁶ A deeper analysis of the subject by Echeverria concludes that such failures are caused by:

... a persistent bifurcation in American strategic thinking ... in which military professionals concentrate on winning battles and campaigns, while policymakers focus on the diplomatic struggles ... partly [as] a matter of preference and partly as a by-product of the American tradition of subordinating military command to civilian leadership....⁷

Yet US and NATO military doctrine are crystal clear that “Wars are successful only when political goals are achieved and these goals endure.”⁸ If doctrine is sound at this level, the problem, if any, then surely lays elsewhere and suspicion must fall on the ways in which the ends are met. Is there a fault line between strategy and operational art,

⁴ Frederick W. Kagan, “War and Aftermath,” *Policy Review* Vol 120 (July-August 2003) available from http://www.policyreview.org/aug03/kagan_print.html; Internet, accessed on 24 September 2004.

⁵ See, for example, James Fallows, “Blind Into Baghdad,” *The Atlantic Monthly*, January/February 2004, 53-74.

⁶ Kagan, *War and ...*

⁷ Antulio J. Echevarria II, *Toward an American Way of War* (Carlisle : US Army War College Strategic Studies Institute, March 2004), 7.

⁸ Department of Defence, *Joint Publication 3-0, Doctrine for Joint Operations*, (Washington: Joint Chiefs of Staff: 10 September 2001), III-25. See also for example *Joint Publication 1, Joint Warfare of the Armed Forces of the United States*, (Department of Defence: 14 November 2000) II-5; and *Allied Joint Publication 3, Allied Joint Operations*, (NATO: September 2002), 6-1.

and, if so, is it made worse by inadequate campaign design ? The thesis of this article is that there is, and that the current Western interpretation of campaign design must thus reunite with its strategic roots of ends and means in its quest to seek ways of winning both the war and the peace in the post 9/11 era.

In support of this thesis, an analysis of the key elements of campaign design will conclude that flawed concepts, artificial blinkers and unbalanced focus on certain elements can lead to a compartmentalized and invalid approach. A review of the nature and compelling characteristics of strategic ends and means will then set the scene for a discussion of an improved manner of campaign design, one conducive to better ways of realizing strategy in the 21st Century.

The Current Interpretation of Campaign Design

A campaign may be defined as “a set of military operations planned and conducted to achieve a strategic objective within a given time and geographic area...”⁹ - a view that espouses the Clausewitzian concept that war serves policy, and that military campaigns are conducted in concert with “other instruments of national power – diplomatic, economic, and informational – to achieve strategic objectives.”¹⁰ The genesis and object of campaign design are therefore intrinsically strategic. Indeed, campaign design seeks to devise ways in which strategic ends are met through the employment of strategically generated means. It entails the formulation of a commander’s vision and the

⁹ AJP 3-0, G-3.

¹⁰ Department of Defence, *Joint Publication 5-00.1, Joint Doctrine for Campaign Planning*, 25 January 2002, vii.

application of the operational art in the conduct of the campaign.¹¹ To assist in what is essentially a creative process aimed at solving complex military problems, commanders and campaign planners use a number of “elements”¹² such as Centre of Gravity, Decisive Points, Lines of Operation, etc. Although an argument can be made that, depending on nationality, these elements are applied differently through distinct methods of integration in wider planning processes and separate approaches to decision making,¹³ their definitions, logic and structural interrelationship display a surprising commonality across the major NATO nations. Unfortunately, as alluded to earlier, these elements “...hamstring planner’s and commander’s abilities to design and construct effective, coherent campaigns for operations across the spectrum of conflict in today’s security environment.”¹⁴

The first weakness of these elements is that they reinforce a pervasive dichotomy between ends and ways. Indeed, whilst “Campaign planners should never lose sight of the fact that strategic objectives must dominate the campaign planning process at every juncture,”¹⁵ they are admonished, two paragraphs later, that “Above all, the [operational] concept must make it explicitly clear that the focus is on the destruction or neutralization

¹¹ Department of National Defence, *B-GG-005-004/AF-000, Canadian Forces Operations* (Ottawa: Department of National Defence, 2000-12-18), 3-1; and *JP 3.0*, I-1.

¹² US Joint doctrine terms some of these “Facets of Operational Art” (*JP 3-0*), whilst US Army doctrine calls them “Elements of Operational Design” (*FM-3, Operations*, June 2001). Canadian Forces doctrine uses the term “Operational concepts in campaign design” (*B-GJ-005-500/FP-00, CF Operational Planning Process*, 6 November 2002). Meanwhile, NATO doctrine uses “Planning tools/Key operational concepts” (*AJP-3*). Finally, UK doctrine calls them Campaign Planning Concepts (*JDP 01 (Study Draft)* 25 October 2003). For simplicity, this paper will use the term “elements of campaign design”.

¹³ See for example Howard G Coombs, *Perspectives on Operational Thought* (Toronto: Canadian Forces College, 4 June 2004), 8.

¹⁴ James K. Greer, “Operational Art for the Objective Force”, *Military Review*, Vol 82, Issue 5 (Sep/Oct 2002), 22-23.

¹⁵ Department of Defence, *Joint Publication 5-00.1, Joint Doctrine for Campaign Planning*, (Washington: Joint Chiefs of Staff, 25 January 2002), II-11.

of the adversary's [Centres of Gravity]."¹⁶ Since the latter are more often than not defined, at the operational level, as the enemy armed forces (or a key element thereof),¹⁷ the result is an undue focus on seeking battle rather than the attainment of policy itself. Such a focus stems from a predisposition to concentrate on the destruction of the enemy armed forces. An understanding of this predisposition and its rival approach, true operational art, is essential before any further discussion of the interpretation of campaign design.

The yearning of military forces to fight the enemy is natural and, indeed, desirable to a degree, so one might well ask why this inclination is so dangerous. The difficulty occurs when the method, fighting, takes on some of the attributes of an end *per se*. As Leonhard observes: "...because the battle is the focus, it also becomes an imperative that sooner or later (and the sooner the better) the opposing armies must clash – strength on strength."¹⁸ The roots of this quest for battle are deep. In Western civilization, it is ingrained in cultural tradition, values and even religious scripture. When Goliath cries "I defy the ranks of Israel this day: give me a man, that we may fight together,"¹⁹ David answers the call by attacking the enemy strength.²⁰ When Hector accepts battle with Achilles, he does so out of honour and his attack of enemy strength, related in Homer's Iliad, becomes the very model of heroic behaviour. According to Dixon, military codes of honour "...are designed to ensure that threatening situations are met by fight rather than

¹⁶ *Ibid.*, II-12.

¹⁷ See for example Joe Strange, "Centres of Gravity and Critical Vulnerabilities: Building on the Clausewitzian foundation so that we can all speak the same language", in *Perspectives on Warfighting, No 4, 2nd Edition*, (Quantico: Marine Corps University, 1996).

¹⁸ Robert Leonhard, *The Art of Maneuver, Maneuver-warfare theory and AirLand Battle*, (Novato: Presidio, 1991), 14.

¹⁹ *The Bible, 1 Samuel: 16*, (London: Collins) 254.

²⁰ Interestingly, by using what could be termed an asymmetrical tactic.

flight.”²¹ A quick look at four thousand years of history reveals that we can extrapolate this individual behaviour at a collective level, since the desire to settle conflict through battle is the norm. It was codified in the writings of Clausewitz, who declared that:

...the very concept of war will permit us to make the following unequivocal statements: 1. Destruction of the enemy forces is the overriding principle of war, and, so far as positive action is concerned, the principal way to achieve our object. 2. Such destruction of forces can *usually* be accomplished only by fighting.²²

Despite the timid qualifier in the second proposition, such a view gave rise to the concept of the Battle of Annihilation (*Vernichtungsschlacht*), according to which, “in order to defeat the opponent’s massive army, the entire volume of military activity must be initially integrated into a single, linear battle in which it would be destroyed.”²³ Here was an ideology, according to Naveh, that had an “overpowering vitality”, a “magnetic attraction” and an “addictive impact” on succeeding generations of military theorists and practitioners who, unfortunately, lacked the cognitive tools to assess the validity of Clausewitz’s work.²⁴ In Echevarria’s analysis, the corollary is the subsumption of a way of war into a way of battle, a practice shared by the United States and its major allies.²⁵ Despite major changes in the means of waging such a battle since Clausewitz’s time and the introduction of operational art in some US doctrine beginning in 1986, as late as 1993, *FM 100-5*, the US Army doctrine for operations, stated “The objectives of military forces in war is victory over the opposing military forces...” albeit one that “seeks to end

²¹ Norman Dixon, *On the psychology of Military Incompetence* (London: Pimlico, 1994), 197.

²² Carl von Clausewitz, *On War*, Edited and translated by Michael Howard and Peter Paret, (Princeton University Press: 1984), 258, italics in the original.

²³ Naveh, *In Pursuit of Military Excellence, The Evolution of Operational Theory* (London: Frank Cass, 1997), 16.

²⁴ *Ibid.*, 71.

²⁵ Echevarria, *Toward...*, 1-7.

conflict on terms favorable to US interests.”²⁶ One had to wait for the publication of *Doctrine for Joint Operations*, in 2001, for a more subtle view that “The fundamental principle for employment of US joint forces is to commit decisive force to ensure achievement of the objectives established by the National Command Authorities.”²⁷ Nevertheless, lingering elements of *Vernichtungsschlacht* remain in doctrine as alluded to earlier and as will be demonstrated below.

In contrast to this quest for battle, stands a competing viewpoint, one in which the achievement of policy predominates over battle. That view finds expression in Sun Tzu’s dictum that “...attaining one hundred victories in one hundred battles is not the pinnacle of excellence. Subjugating the enemy’s army without fighting is the true pinnacle of excellence.”²⁸ The will to eschew battle, when possible, in favour of more shrewd operations still capable of achieving policy is another, albeit less frequent thread that runs through history. It is exemplified by several campaigns such as those of Belisarius, du Guesclin, Wallenstein, Napoléon at Ulm etc. It reappears under Liddell-Hart’s pen as a pronouncement that “...battle is but one of the means to the end of strategy.”²⁹ Underpinning this idea is the notion of originality, creativity, art, even, in “the arrangement of related operations necessary to attain theater strategic objectives”³⁰ or, put another way, “when, where, and under what conditions the combatant commander intends to give or refuse battle, if required.”³¹ In other words, operational art.

²⁶ FM 100-5, *Operations* (United States: Department of the Army, June 1993), 1-4.

²⁷ *JP 3-0*, ix.

²⁸ Sun Tzu, *The Art of War*, translated by Ralph Sawyer and Mei-chun Lee Sawyer (New-York: Barnes and Noble, 1994), 177.

²⁹ Basil Liddell-Hart, *The Strategy of Indirect Approach* (London: Faber and Faber, 1941), 192.

³⁰ *JP 5-00.1*, I-1.

³¹ *Ibid.*, II-11 & 12.

These two competing views are related to the debate about manoeuvrist and attritionist theories of operations. The difference is that whilst the latter debate is generally situated at the tactical and operational levels of war, the former sits squarely at the strategic-operational interface. Its most pernicious effect is that it can generate cognitive dissonance in the design of a strategy or campaign. In early 1942, for example, British and American strategists argued over whether it was best to commence immediately a build up for a direct attack of German forces over the English Channel, or else undertake a more indirect approach aimed at collapsing the Wehrmacht by strategic encirclement, from Norway through to the Mediterranean, capitalizing on the expected uprising of conquered nations, and with a cross-channel assault figuring only as a relatively minor “coup de grâce.”³² It is significant that, in the end, neither view was fully implemented, revealing a truth about the nature of strategy, to which we will return later.

More recently, as we have seen, the military defeats of Taliban and Iraqi forces also highlight the risk of a gulf between military victory and the achievement of policy. In all these cases, we find a dichotomy of thought, born of a conflicting predisposition to *Vernichtungsschlacht* or a more artful way of achieving policy. This dichotomy is present in the elements of campaign design, which we can now examine. For that, we shall focus on those elements that apply most in the planning stage of a campaign: Centre of Gravity, Decisive Points, Lines of Operation³³ and Arrangement of Operations.

³² Maurice Matloff, *Strategic Planning for Coalition Warfare, 1943-1944* (United States: The War Department, 1959), 10-11.

³³ Whilst US Doctrine places Lines of Operation as a subset of the facet of “Operational Reach and Approach”, (partly as a result of the more geographic connotation of its US definition) NATO doctrine considers it a “key operational concept.”

The Centre of Gravity was first postulated by Clausewitz and was introduced in current Western doctrine by the authors of the 1986 edition of the US Army's *FM 100-5, Operations* manual. It is now interpreted using many variations of the joint US definition: "Those characteristics, capabilities, or sources of power from which a military force derives its freedom of action, physical strength, or will to fight."³⁴ Western doctrine is fixated on Centre of Gravity formulation and it is no exaggeration to say that this concept has spawned a cult-like following, as evidenced by the massive literature devoted to it, some of it reading more like the exegesis of holy Clausewitzian scripture.³⁵ The volume of discussion generated by this concept attests, in fact, to its somewhat nebulous nature. Yet it remains, no doubt, a useful way of analyzing the strengths and, by extension, weaknesses of the enemy as well as of our own forces. The danger is that when its importance is elevated above that of our own strategic objectives it acts as a pole of attraction for many other elements of campaign design. Indeed, faulty reasoning, based on vague doctrinal definitions, can lead to the successful attack and destruction of an enemy capability, thought to be a Centre of Gravity, and still remain far from achieving the political aim. If, for example, "Baghdad" was the enemy Centre of Gravity of the US-led campaign in Iraq, then we may wish to consider, as Kagan points out, that "The true center of gravity in a war of regime change lies not in the destruction of the old system, but in the creation of the new one."³⁶ Or, at the very least, we should consider whether the first Centre of Gravity changes to the second in coincidence with the transition from decisive to post-conflict operations.

³⁴ *JP 5.00-1*, GL-3.

³⁵ See for example, Antulio J. Echevarria II, *Clausewitz's Center of Gravity: Changing our Warfighting Doctrine-Again!* (Carlisle: US Army War College, Strategic Studies Institute, September 2002).

³⁶ Kagan, "War and ...".

We must also question the validity of a concept whose premise is that “...sufficient connectivity exists among the various parts of the enemy to form an overarching system (or structure) that acts with a certain unity...”³⁷ Indeed, the contemporary operating environment has seen the rise of trans-national terrorism, the resurgence of certain other types of irregular war and the loose alignment of autonomous threat organizations, all of which call for a much more subtle and refined appreciation of that concept.

Finally, excessive focus on the enemy Centre of Gravity, during both planning and conduct of operations, tends to make one lose sight of the *enemy* aim and objectives. An appreciation of these aim and objectives is essential for campaign planners to gain insights about the effects required to protect our own Centre of Gravity, to negate an enemy objective, etc. But the importance of the Centre of Gravity as currently understood is especially dangerous because many other elements of campaign design are conceived only in terms of it.

Decisive Points are one such element, first postulated by Jomini, who envisioned them as points “capable of exercising a marked influence either upon the result of the campaign or upon a single enterprise.”³⁸ The term was also resurrected from obscurity by the authors of the US Army’s *FM 100-5, Operations* manual in 1986. Its new definitions offer campaign planners ample room to characterize it, ranging from a geographic location, an event, a system, a function or a condition. The only thing we can be sure of is that a Decisive Point implies an intermediate step on the way to victory. US

³⁷ Echeverria, *Clausewitz’s Centre of ...*, 16.

³⁸ Baron de Jomini, *The Art of War* (London: Greenhill Books, 1992), 86.

doctrine emphasizes the advantage it confers over the enemy generally,³⁹ instead of accomplishing effects useful to the attainment of strategic objectives. Such a separation from strategy is even more pronounced in NATO and Canadian doctrine, both of which specifically define it as a point from which a Centre of Gravity can be threatened.⁴⁰ Another potential weakness is that it may foster an incremental approach that could jeopardize key operational art concepts such as simultaneity and depth, which are essential in creating “operational shock” in the enemy system. Finally, the very term makes *Decisive Points* ideal candidates for confusion with *Decision Points*, a very different concept.⁴¹ Yet wisely chosen Decisive Points are useful elements of campaign design, because there will always be certain imperatives for accomplishing a set of effects before others can be attempted or achieved. We will return to this idea later.

The real danger, however, comes when the concept of Lines of Operation is introduced. Again, this is a Jominian term, whose original meaning only intended the *roads* that “... the army would follow to reach one of these decisive points.”⁴² US doctrine today defines them as lines “which connect a series of decisive points”,⁴³ retaining a geographic slant (“directional lines linking geographic decisive points”⁴⁴), not found in NATO doctrine, which is more conceptual and which, interestingly, envisions them as a form of “critical path.”⁴⁵ In practice, they appear to have recently adopted a functional, or capability-based character. Franks’ Lines of Operation for the 2002 US

³⁹ *JP 5-00.1*, GL-5

⁴⁰ *AJP-3*, 3-7.

⁴¹ “The point in space and time where the commander or staff anticipates making a decision concerning a specific friendly course of action.” DOD Dictionary, available from <http://www.dtic.mil/doctrine/jel/doddict/data/d/01517.html>; Internet, accessed on 18 October 2004.

⁴² Jomini, *The Art of War*, 91.

⁴³ *JP 5-00.1*, B-1; and *AJP-3*, 3-8

⁴⁴ *JP 5-00.1*, B-1

⁴⁵ *AJP-3*, 3-8.

intervention in Iraq for instance, included operational fires, manoeuvre, unconventional warfare etc.⁴⁶ In both doctrine and in practice, however, Lines of Operation lead to the Centre of Gravity or “the defeat of an adversary force,”⁴⁷ rather than the achievement of strategic objectives.

The notion that campaign events can be neatly laid out on linear, sequential lines using Cartesian logic ignores the chaotic, random nature of war and the complexity of enemy systems.⁴⁸ Whilst there is merit to Critical Path Analysis, we must remember that it was developed as a business solution to the management of large defence projects in the 1950s. For example, the fact that the keel of a ship must be laid before the installation of bulkheads is a fine critical path in the relatively closed, predictable field of shipbuilding. But does, say, the establishment of air superiority, a typical Decisive Point in campaign design, really need to take place before other effects, such as securing a border or many types of information operations?

⁴⁶ Tommy Franks, *American Soldier* (New York: Harper Collins, 2004), 336-340.

⁴⁷ *JP 3*, 3-8; and *JP 5-00.1*, B-1.

⁴⁸ For a discussion of systems theory and its application in operational art, see Naveh, *In Pursuit of...*, Chapter 1.

Although there is great value, as we shall see later, in wisely used Lines of Operation, the resulting typical construct of a campaign design looks like the box in Figure 1:

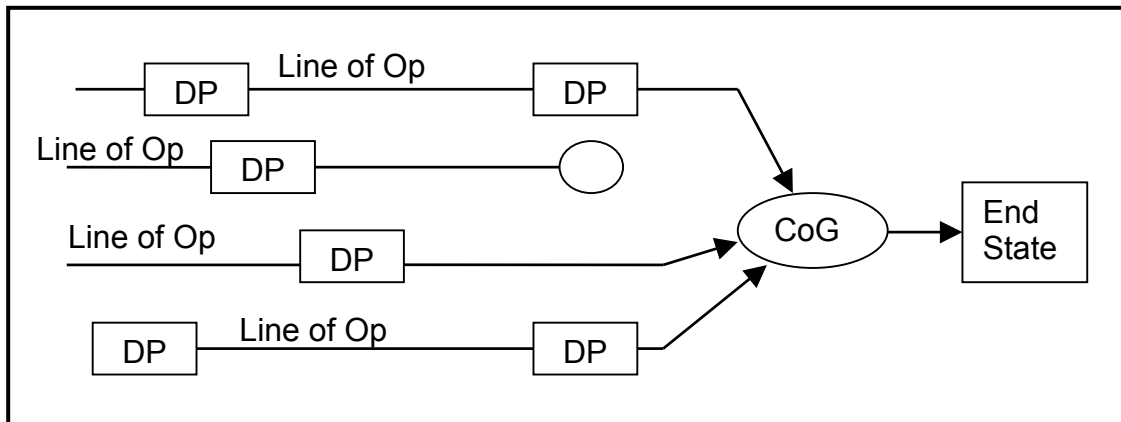


Figure 1. Link between Decisive Points, Lines of Operation, Center of Gravity and End State
 Extracted and simplified from AJP-3, *Allied Joint Operations*, (September 2002), 3B-1.

As is plain from this diagram, current elements of campaign design do not seem related to our *own* Centre of Gravity. Lines of Operation focus on the achievement of one effect: destruction or neutralization of the *enemy* Centre of Gravity. What then? Is the end state automatically attained as suggested by this drawing? The facile retort that an unattained end state meant that a wrong Centre of Gravity had been chosen reinforces the danger inherent in that concept. A more subtle view could reside in the nature of the Centre of Gravity itself. Indeed, doctrine provides some clues, but they are buried in the details. For instance, one finds allusions to the transitory nature of Centre of Gravity.⁴⁹ Presumably, then, once a Centre of Gravity is attained, it morphs into a different one, or a new one is determined. The difficulty is that the entire campaign plan is based on the old

⁴⁹ JP 5-00.1, 11-7; and JP 3-0, III-22.

Centre of Gravity. Are campaign plans therefore “transitory in nature” so that they can match the transitory Centre of Gravity to which they are anchored? Another explanation, that beyond the Centre of Gravity we would enter a sequel operation, is unconvincing. Indeed, the whole point of campaign design is to imagine a solution aiming at the achievement of a strategic objective. If that objective is not achieved post-Centre of Gravity neutralization, then that campaign plan has, by definition, not yet concluded. Rather, it may be that military objectives are incremental and not necessarily coincident with the achievement of policy, a point we will return to later.

Finally, the arrangement of operations, called in NATO doctrine “sequencing and phasing,” is the “arrangement of activities within an operation in terms of time and space, and resources.”⁵⁰ This framework, which may involve phases, is superimposed on the construct at Figure 1. Inherent in this definition is the assumption that sufficient resources are available, ultimately, to achieve the aim. This may not always be the case, as we shall also see later.

The current interpretation of campaign design is, therefore, largely based on a juxtaposition of land-centric Clausewitzian and Jominian concepts. While useful individually, these have inherent conceptual and interpretative weaknesses that can be compounded when employed in concert. Essentially, their main flaw is that beyond the enemy Centre of Gravity, one is left in a void, hoping that things will turn out all right or, in the rather more elegant words of AJP-3, that “the necessary leverage should exist to

⁵⁰ *AJP-3*, 3-8.

prevent the enemy from resuming hostilities.”⁵¹ A better way must be found but, for that, we must first consider the strategic ends.

The Ends

Strategy, declared Liddell-Hart, consists of “the art of distributing military *means* to fulfill the *ends* of policy”.⁵² Since campaign design frames the *ways* of using means to achieve ends, a thorough understanding of these ends is therefore key to the present argument. The nature of these ends form the basis of entire fields of study such as security studies and international studies: therefore we can only summarize here some of their key characteristics, as they relate to the direction of military operations. Let us start at the very top.

The highest policy goal of any nation is security. In World War II, for example, “The ultimate purpose of the (Western Allies) was to remove a potential menace to themselves, and thus ensure their own security.”⁵³ But what is security? At its core, according to Buzan *et al*, “security is about survival,”⁵⁴ giving the term “vital interest” its literal sense. The conditions for survival usually revolve around the absence of threat, the sustainment of life, etc. Security is often accompanied by policy goals based on national interests such as the increase of influence, wealth and power. Altruism, the promotion of certain values, even proselytism, are other goals that may influence a state’s policy. The desired end result is a new order, one that satisfies the notion that “the object in war is to

⁵¹ *AJ*- 3, 6-1.

⁵² Basil Liddell-Hart, *The strategy of Indirect Approach*, 187. Italics added.

⁵³ Basil Liddell-Hart, *History of the Second World War* (London: Pan, 1973), 1.

⁵⁴ Barry Buzan, Ole Weaver and Jaap de Wilde, *Security, A New Framework Analysis* (Boulder: Lynne Rienner, 1998), 21.

attain a better peace.”⁵⁵ Of all these broad goals, however, and notwithstanding differing interpretations of the aims of non-state actors,⁵⁶ only narrowly defined national security can justify the expense of a nation’s “blood and treasure”. Indeed, in the words of Field-Marshal Haig, who was not shy about accepting casualties, “Few of us believe that the democratization of Germany is worth the loss of a single Englishman.”⁵⁷ From a procedural point of view, the US National Security Act of 1947 “ensures that there is a methodical linking of security objectives to national policy” whilst in other countries the process is more of an ad hoc nature and, in NATO, is the purview of the Military Sub-Committee of the North Atlantic Council.⁵⁸

Policy goals, however, usually fall within the category of the “broad generalities of peace, prosperity, cooperation and good will – unimpeachable as ideals but of little use in determining the specific objectives we are likely to pursue.”⁵⁹ Much policy, then, will tend to be broad and perhaps vague. For example, in the context of Iraq in 2003, the United Kingdom’s wider policy goals included:

- a) Efforts to resolve other causes of regional instability, including the Middle East Peace Process;
- b) Wider political engagement with Arab countries and the Islamic world;
- c) Efforts to counter the proliferation of WMD; and
- d) The elimination of terrorism as a force in international affairs.⁶⁰

⁵⁵ Basil Liddell-Hart, *The Strategy of ...*, 202. See also Clayton Newell, *The Framework of Operational Warfare* (London: Routledge, 1991), 57-58.

⁵⁶ See, for example, Martin Van Creveld, *The Transformation of War* (New York: The Free Press, 1991), 196-205.

⁵⁷ Quoted in John Gooch, “Soldiers, Strategy and War Aims in Britain 1914-1918” in Barry Hunt and Adrian Preston, *War Aims and Strategic Policy in the Great War 1914-1918* (London: Rowman and Littlefield, 1977), 30.

⁵⁸ Coombs, *Perspectives on...*, 10-12.

⁵⁹ General Maxwell Taylor, *Precarious Security* (New York: W.W. Norton and Co, 1976), 17-18.

⁶⁰ Hansard, *Statement by the Secretary of State for Foreign and Commonwealth Affairs (Mr. Jack Straw)* (London: United Kingdom Parliament, 7 January 2003); available from

Such policy goals offer little help in charting a course of action in a conflict. More precise policy goals, or objectives, are required. To pursue the above example, the United Kingdom's policy objectives pertaining to Iraq were formulated as follows:

Our prime objective is to rid Iraq of its weapons of mass destruction (WMD) and their associated programmes and means of delivery, including prohibited ballistic missiles (BM), as set out in [United Nations Security Council Resolutions]. This would reduce Iraq's ability to threaten its neighbours and the region, and prevent Iraq using WMD against its own people. UNSCRs also require Iraq to renounce terrorism, and return captured Kuwaitis and property taken from Kuwait.⁶¹

As Flavin contends, then, "...military forces will rarely receive political objectives that contain the clarity they desire".⁶² As a result, we must now enter the province of military strategy, and the formulation of military strategic objectives and end-states. Objectives may be defined as "The clearly defined, decisive, and attainable goals towards which every military operation should be directed."⁶³ At the strategic level, US doctrine distinguishes between, "military strategic objectives"⁶⁴ and "Theater Strategic Objectives."⁶⁵ Sometimes, certain national or policy objectives will be of a clear military nature, without being labeled as such. For instance, Canada's "National Objectives" in support of the US-led campaign in Afghanistan in November 2001 did not discern

http://www.publications.parliament.uk/pa/cm200203/cmhansrd/vo030107/wmstext/30107m01.htm#30107m01.html_spm13; Internet; accessed 28 Sept 2004.

⁶¹ Hansard, *Statement by...*

⁶² William Flavin, "Planning for Conflict termination and Post-Conflict Success," *Parameters* (Carlisle: US Army War College, Autumn 2003), 97.

⁶³ US DOD Dictionary, available from <http://www.dtic.mil/doctrine/jel/doddict/data/o/03768.html>; Internet; accessed on 12 December 2004.

⁶⁴ *JP 5-00.1*, GL-8. Also known as "Supporting military objectives" to political objectives (*JP 1*, II-5, II-6) or as "military objectives" (*JP 5-00.1*, II-2).

⁶⁵ *JP 3-0*, III-9. Also known as "objectives applicable to the combatant command or theater" (*JP 3-0*, II-3).

between political and military objectives.⁶⁶ There may be wisdom in this, since it affords both flexibility and unity of purpose.

The broader issue, though, is the relationship between strategic objectives and policy goals. There are two dimensions to this relationship: a sequential one, and a hierarchical one. The first is closely tied to the definition of war itself. According to Echevarria, “Failure to see the purpose for which a war is fought *as part of war itself*, amounts to treating battle as an end rather than means.”⁶⁷ More to the point, as Flavin observed:

Conflict termination and resolution are not the same thing. Conflict resolution is a long process. It is primarily a civil problem that may require military support. Through advantageous conflict termination, however, the military can set the conditions for successful conflict resolution.”⁶⁸

To understand how military operations fit in between the two, it is useful to consider a US Army War College construct that envisions post-decisive operations in a war of regime change as occurring in four phases: security, stabilization, building of institutions and handover/redeployment. After handover, military forces may stay, but only in a supporting role to civil reconstruction efforts that may last for years after the eventual full withdrawal of military forces.⁶⁹ From a military perspective, then, the actions and effects required vary greatly over time, especially if we include the prior phases of a campaign,

⁶⁶ Objective Number 2, for example, “Take the appropriate military action to compel the Taliban to cease harbouring, and co-operating with Al-Qaeda” was clearly military whilst Objective Number 3 “Isolate the Taliban regime from all international support” was more diplomatic in nature. Department of National Defence, *Operation Apollo – Lessons Learned Staff Action Directive* (Ottawa: DND, April 2003), B-2/41.

⁶⁷ Echevarria, *Toward...*, 18.

⁶⁸ Flavin, *Planning for...*, 96.

⁶⁹ Conrad C. Crane and W. Andrew Terrill, *Reconstructing Iraq: Insights, Challenges, and missions for Military Forces in a post-conflict Scenario* (Carlisle: US Army War College Strategic Studies Institute, February 2003), 43-44.

typically deterrence, seizing the initiative, etc. This will usually be exacerbated by the relief of forces by succeeding ones occurring at critical junctures in the campaign. The case of the land component of the initial US campaign in Iraq is illustrative of such post “end-state” planning being left entirely to another organization, one with which insufficient contact had a clear negative impact.⁷⁰ Since the desired new order should tend towards a steady state balance and hence, conflict resolution rather than mere conflict termination, the achievement of military strategic objectives is therefore likely to be sequential.

The second, hierarchical, dimension is driven by a quest for clarity. Military objectives, even if they are clearly identified as such, will likely be further translated into tasks to the operational level commander, or, still, as mission elements. This, presumably, provides direction of a sufficiently precise nature to allow commencement of campaign design. To continue the above example, “tasks to the coalition” were to:

- a. overcome the resistance of Iraqi security forces;
- b. deny the Iraqi regime the use of weapons of mass destruction now and in the future;
- c. remove the Iraqi regime...⁷¹

Another example, in a defensive context, is the direction given to MacArthur on 30 March 1942: “...hold the key military regions of Australia as bases for future operations

⁷⁰ Confidential interview, February 2004.

⁷¹ United Kingdom, *Operations in Iraq, First Reflections* (London: Director general Corporate Communications, July 2003), 39.

against Japan, and in order to check the Japanese conquest of South West Pacific Area [...] Check the enemy advance towards Australia and its lines of communication.”⁷²

If this was not clarity enough, starting in the late 1980s, and in the wake of the 1984 “Powell-Weinberger Doctrine” which called for “clearly defined political and military objectives,”⁷³ the end-state emerged as a new concept for helping envision the aim. Defined as “The set of required *conditions* that defines achievement of the commander’s objectives,”⁷⁴ the end-state can be interpreted in three different ways, according to the meaning attached to the word condition. Indeed, the classical sense of the word means a prerequisite to something else (now sometimes known as a “pre-condition”). It can also express a mode of being, meaning the state in which something, or a system of things is set. Finally, emerging Effects Based Operations doctrine considers conditions to be the result of an action and its effect.⁷⁵ Unfortunately, the “End-state” is also a concept that implies that, once reached, the job is finished. In fact, the set of conditions achieved may well require long-term military commitments or operations to sustain it, or else simply act as the start-state for follow-on operations underscoring, again, the need for successive sets of military objectives or conditions.

Even this was not enough for military staffs, though, and “End State Criteria,” “Criteria for Success” or “Termination Criteria” were devised to measure success in attaining the end-state. A criterion is defined as a “test ... or standard by which anything

⁷² Maurice Matloff, *Strategic Planning for Coalition Warfare 1941-42* (Washington: The War Department, 1953), 171-172.

⁷³ Weinberger Doctrine, available from http://college.hmco.com/history/readerscomp/mil/html/mh_057800_weinbergerdo.htm; Internet; accessed on 28 September 2004.

⁷⁴ *JP 5-00.1*, GL-5. Italics added.

⁷⁵ Department of Defence, “Operational Implications of Effects Based Operations,” *Joint Doctrine Series, Pamphlet 7*, (Suffolk: Joint Warfighting Centre, 17 November 2004), 12.

is judged or estimated.”⁷⁶ Doctrinal definitions highlight the measurement of success, and the need to make more specific “end-states [which] are broad in nature.”⁷⁷ For example, the military end-state for a peace support operation in Guatemala was defined as:

Force reductions in accordance with the Guatemalan Peace Accord, including the re-insertion of demobilized URNG combatants in a legal manner into civil, political, socio-economic and institutional life of Guatemala.⁷⁸

The “Criteria for Military Success” supporting this end-state were:

- a. Early start to disarmament and re-integration process, and constant progress throughout.
- b. Impartiality during the disarmament and re-integration process.
- c. Synchronization with efforts of Canadian civil agencies....⁷⁹

The link between a condition and its measures are here unclear, and risk creating a new pole of attraction away from the original conditions we seek to achieve. To be of value, then, criteria must be directly tied to a given condition.

But the military quest for clarity does not end here. To the end-state, we have added operational, or campaign, objectives and end-states.⁸⁰ Some Regional Combatant Commanders have even introduced “campaign imperatives” to assist in orienting their campaign. Such a proliferation of objectives and end-states are invariably problematic. Indeed, whilst clarity might be achievable in conventional, decisive combat operations, it often remains elusive or ambiguous in peace support or counter-insurgency operations.

⁷⁶ Oxford English Dictionary; available from <http://dictionary.oed.com/>; Internet; accessed 16 December 2004.

⁷⁷ Department of National Defence, *Canadian Forces Operational Planning Process, B-GJ-005-500/FP-00* (Ottawa: Department of National Defence, 6 November 2002), 4-5.

⁷⁸ Department of National Defence, *Strategic Planning Guidance – Guatemala* (Ottawa: DND Canada, Dec 1996), 1.

⁷⁹ *Ibid.*

⁸⁰ *JP 5-00.1*, C-5; and *JP 3*, I-9. NATO doctrine, which generally retains only strategic objectives as the basis of campaign planning, also mentions operational objectives in its glossary of terms, although practice often considers them to be the same as strategic objectives. (*AJP 3*, G-10).

The very terms can also be dangerous. The traditional understanding of objectives as a geographic or physical element, for instance, tends to skew their significance at the operational level. More importantly, all this pseudo clarity means that operational commanders may be lulled into a false sense of certainty and a belief that strategic ends, once received, are set in stone. The dynamic nature of strategy may soon invalidate all this clarity.

Strategy is always alive, and nowhere more so than within that tenuous, high-strung link between policy and military strategy. Translating policy into strategy is arduous and takes time. In World War II after Pearl Harbour, for example, the US had already deployed some 132,000 troops to the Pacific Theatre before some semblance of a coherent coalition strategy could be formulated during the “Arcadia” conference of 22 December 1941- 14 January 1942. In addition to the meetings between Churchill and Roosevelt, this conference alone required some 12 meetings at the Chief of Staff level and ten more at the lead planner level. Even then, the priority of theatres was a decision that had to be deferred to later.⁸¹ More recently, Franks provides us with evidence that well advanced operational planning can still have unclear strategic objectives, which must therefore be stated as assumptions.⁸²

Strategy formulation is also intellectually perplexing. In World War I, for example:

...the political version of Britain’s most ambitious and fervidly proclaimed aim – the destruction of Prussian militarism - ...dictated victories over Germany of such

⁸¹ Maurice Matloff, *Strategic Planning for Coalition Warfare, 1941-1942* (United States: The War Department, 1953), 97-98, 119.

⁸² Franks, *American Soldier*, 330-331.

magnitude as to permit changing the social fabric and the political structure of Germany.⁸³

In contrast, the military view was that “the fundamental strategic objective was to inflict a military defeat upon Germany of sufficient magnitude as to cure her of her relish for a role as a world power.”⁸⁴ Not surprisingly, debate of British war aims was never allowed in cabinet and long blocked from parliament,⁸⁵ for fear of exposing rifts in national policy.

In World War II, Eisenhower expressed the same difficulty when he confided “The struggle to secure the adoption by all concerned of a common concept of strategical objectives is wearing me down.”⁸⁶ One of these difficulties is how purely political reasons can drive strategy itself, as opposed to merely stipulating the higher purpose. To continue the above World War II example, US strategic planners were opposed to a landing in North Africa in 1942, but Roosevelt “considered it very important to morale, to give this country a feeling that they are at war, to give the Germans the reverse effect, to have American troops somewhere in active fighting across the Atlantic.”⁸⁷ Military officers could be tempted to see such political influences as something sinister, but, in fact, they merely reflect the nature of politics, which is “the shaping of human behaviour for the purpose of governing large groups of people.”⁸⁸ Roosevelt was simply the best judge of how to maintain the public support necessary to the prosecution of a cataclysmic

⁸³ John Gooch, “Soldiers...”, 24.

⁸⁴ *Ibid.*, 25.

⁸⁵ *Ibid.*, 26.

⁸⁶ Matloff, *Strategic Planning for Coalition Warfare, 1941-1942*, 156.

⁸⁷ George C. Marshal, *Notes on Meeting at White House*, 23 Dec 1941, quoted in Matloff, *Strategic Planning for Coalition Warfare, 1943-1944, ...*, 105.

⁸⁸ Barry Buzan *et al*, *Security, A New Framework ...*, 142.

war like World War II.⁸⁹ In this case, it meant forsaking possibly sounder shorter-term strategy for longer-term prospects of victory.

Personality will also make the formulation of policy difficult. In World War II, for example, an exasperated British Chief of the Imperial General Staff confided that:

Politicians still suffer from that little knowledge of military matters which gives them unwarranted confidence that they are born strategists ! As a result they confuse issues, affect decisions, and convert simple problems and plans into confused tangles and hopeless muddles...It is all desperately depressing.⁹⁰

At the same time, the US Chiefs of Staff found in Roosevelt a wartime president who overruled them on only two occasions, and history is replete with examples of how personality affects the formulation of strategy.

Furthermore, military strategy changes over time. Evolving policy might be one reason.⁹¹ For instance, Liddell-Hart distinguished between “permanent policy,” which provides the national policy goal and “policy in execution”⁹² which we would now call national or coalition political objectives.⁹³ The latter are also likely to be iterative in nature. According to Woodward, for instance, in the run up to the 2002 US intervention in Iraq, policy was formulated or refined on at least three different occasions.⁹⁴ But even steady policy is still no guarantee of a correspondingly unalterable military strategy. For

⁸⁹ Interestingly, Roosevelt was also very detailed in the way he later implemented this decision, outlining, for example, how many divisions were to go where, how fast, the rerouting of airplanes etc. Matloff, *Strategic Planning for Coalition Warfare, 1941-1942*, ... 273.

⁹⁰ Alan Brooke, *Diary*, quoted in David Rigby, *The Combined Chiefs of Staff and Anglo-American Strategic Coordination in World War II* (PhD Thesis, Brandeis University, 1996), 119.

⁹¹ *JP 1*, II-6.

⁹² Liddell-Hart, *The Strategy of ...* 187.

⁹³ *JP 1*, II-5.

⁹⁴ Bob Woodward, *Plan of Attack* (London: Pocket Books, 2004) 1-2, 154-155 and 328.

example, in the 1999 Kosovo campaign, despite five clear and enduring policy goals,⁹⁵ military strategy changed at least three times.⁹⁶ Such fluctuations are by no means confined to modern warfare. Indeed, in World War II, Allied military strategy experienced no less than eight major decisions involving significant repercussions for theatre or operational level commanders between 1942 and 1945, or about once every five months.⁹⁷ Thus, military strategic objectives are rarely enduring, and campaign design must be sufficiently agile to adjust to their fluctuations.

Compounding this difficulty are the different interests and objectives of coalition powers. For example, in World War I, France's war aims went beyond Britain's goal of destroying Prussian militarism and re-establishing an independent Belgium. It included the restitution of the lost provinces of Alsace and Lorraine, as well as the territory lost in the early stages of the war,⁹⁸ and explains in no small measure why France accepted the highest number of casualties per capita of all the World War I participants.⁹⁹ These different objectives, and the degree to which a country fears for its survival, therefore create fundamental differences in the options open to its statesmen, and will determine the nature of that country's commitment in terms of "blood and treasure", with a corresponding impact on the formulation of coalition strategy.

⁹⁵ These goals were formulated by the US and communicated to NATO Ambassadors on 22 March 1999. Benjamin S. Lambeth, *NATO's Air War for Kosovo: A Strategic and Operational Assessment* (Santa Monica: RAND Corporation, 2001), 10.

⁹⁶ William M. Arkin, "Operation Allied Force: The Most precise Application of Air Power in History," in Andrew J. Bacevich and Eliot A. Cohen, *War over Kosovo* (New York: Columbia University press, 2001), 4, 10, 12 & 16.

⁹⁷ Kent Roberts Greenfield, *American Strategy in World War II: A reconsideration* (Baltimore: Johns Hopkins Press, 1963), 4-10.

⁹⁸ John Gooch, *Soldiers...*, 21, 44.

⁹⁹ Barbara W. Tuchman, *The Guns of August*, (Toronto: Bantam, 1980), 488. See also Margaret MacMillan, *Paris 1919* (New York: Random House, 2003), 26-28.

We must also understand the nature and effect of military objectives and end-states, which are not really ends as such, but rather interpretations of the ends. The more objectives and end-states are allowed to proliferate, the more they add filters, distance and, possibly, obfuscation between operations and policy. Yet military systems are not closed systems. They are open, complex systems, firmly integrated within broader societal, political, cultural and economic systems. Boxing campaign design in a construct using hermetic definitions of military objectives and end-states may have value – but we must be aware of the dangers of losing sight of the aim. The logical, linear derivation of strategy from policy is thus affected by intrinsic fluctuations, making it somewhat of an iterative, parallel process. Acknowledging the inherent difficulties and incoherence, even, of strategy leads us to a new campaign design model, one in which the fluctuating conditions of the desired new order become a constantly reappraised focal point.

The Means

Once campaign planners are satisfied that they have some understanding of the strategic ends they must attain, they then need to turn their attention to the means required to prosecute the campaign. This is no simple matter, because it involves many levels of authority, results in very different national commitments and, especially, exceeds the scope of purely military forces.

The military strategic level is the first to make an estimate of the military means required, an essential condition to gaining political approval for a strategic course of action. Since detailed operational level planning has not yet begun, only a general idea of the force required can result from this process or, in the words of the official historian of

the US Army in World War II, “a ‘guess’ of what the task force commander might consider necessary.”¹⁰⁰ Even then, differing assumptions and potential concepts mean that these estimates can vary greatly.¹⁰¹ A further complication is the fluctuating nature of the military forces required. Post conflict operations may, for instance, involve more troops than decisive combat operations.¹⁰² Beyond the requirement for the establishment of security and all the other responsibilities of an occupying power,¹⁰³ such a force is also instrumental in providing the strategic leverage alluded to before. For example, as late as 20 May 1919, some seven months after the armistice that terminated World War I, the Allies directed the deployment of a force of 42 divisions, including 200,000 Americans troops, and moved towards renewing the blockade of Germany, “preparing for the possibility that the Germans would not sign the peace treaty.”¹⁰⁴ Elsewhere, the powers controlling the long Versailles treaty negotiations quickly saw their leverage decrease commensurately with the demobilization of their armed forces.¹⁰⁵ Evolving strategic conditions therefore imply evolving operational level means, a fact that greatly restrains campaign design.

Once a strategic course of action has some level of political agreement, there occurs, especially in a coalition environment, a complex set of negotiations, involving “statements of requirement” by operational level commanders, troop-contributing

¹⁰⁰ Matloff, *Strategic Planning for Coalition Warfare, 1943-1944*, 114.

¹⁰¹ See, for example the narrative of strategic planning for the landing in North Africa in 1942 in *Ibid.*, 105-107. The development of the plan for the US intervention in Iraq in 2002 is another example.

¹⁰² See for example James D. Scudieri, *Iraq 2003-4 and Mesopotamia 1914-18: A Comparative Analysis in Ends and Means* (Carlisle: US Army War College Centre for Strategic Leadership, Student Issue Paper S04-07, August 2004), 16; and Fallows, *Blind Into Baghdad*, 64-65, 72.

¹⁰³ As stipulated in the 1907 Hague Convention, 1949 Geneva Convention and its 1977 First Additional Protocol 1949, in *AJP* 3, 6-7.

¹⁰⁴ Crane, *Reconstructing Iraq...*, 13; and Margaret MacMillan, *Paris 1919*, 471-472.

¹⁰⁵ Margaret MacMillan, *Paris 1919*, 159, 267-8.

conferences etc. Such a dynamic is a facet of the inseparable relationship between the operational and the strategic levels. The most likely outcome of the force generation process is a multinational force of very different capabilities but, more importantly, differing mandates and political limitations. This may cause some dismay in certain officers who forget Slim's adage that "...there's only one thing worse than having allies – that's not having any."¹⁰⁶ National limitations to military missions and tasks are particularly misunderstood by senior coalition officers, as they appear to run against the military ethos of teamwork, sharing of risk, etc. In fact, they merely reflect each nation's appreciation of the threat to their own national security. Indeed, unless national survival or security is directly threatened, most democracies will, sensibly, assign mandates and rules of engagement that will restrict the employment of their contingent within a coalition. Yet nowhere in doctrine do we find mention of this. Presumably, then, forces are assumed to be available, trained, able and without limitations.

In limited war, this is an assumption that can lead to cognitive dissonance in the campaign design, as exemplified by NATO's 1999 campaign in Kosovo. As a humanitarian intervention, the character of this campaign was essentially altruistic. Certainly, none of the NATO countries' survival was threatened, which contributed to "significant disagreement ... inside both the US and NATO militaries with regard to strategy and priorities"¹⁰⁷ and corresponding limitations on the mandates of individual national contingents. The operational level commander was, *de facto*, Supreme Allied Commander Europe (SACEUR), General Wesley Clark, who understood:

¹⁰⁶ William Slim, *Higher Command in War*, Transcript of 1952 address to US Army Command and General Staff College (New York: Brown University Press, 1999), 9-16.

¹⁰⁷ Arkin, *Operation Allied Force...*, 4.

how fragile and tentative was the consensus within the Alliance in support of any military action. If commanders became too insistent in demanding a more aggressive approach to using force, they would undermine that consensus and – without a shot having been fired – hand Slobodan Milosevic a victory.¹⁰⁸

In other words, Clark understood that the preservation of NATO's cohesion rested in the acceptance that national objectives and, hence, acceptance of risk, differed with each NATO country's appreciation of the threat to their own security. The means placed at SACEUR's disposal were therefore limited: air forces only with, initially, important limitations, expressed as national Rules of Engagement (ROE), strict NATO targeting restrictions and national vetting of that targeting. Even US forces were limited by the Clinton administration's policy for this campaign.¹⁰⁹ Finally, the lack of a land component¹¹⁰ meant that Serb land forces could freely adopt a posture on the ground that allowed them to minimize their exposure to allied air power.

In this context, an important disagreement occurred between Clark and his Air Component Commander, Lieutenant-General Short. This disagreement, especially over the definition of the enemy Centre of Gravity, can be directly traced to Short's intent to prosecute an air operation by the rules of conventional war as understood by the US Air Force, and practiced during the Gulf War of 1991.¹¹¹ Such an idealized approach to campaign design was at odds with the strategic imperatives of that campaign. The outcome went beyond healthy debate in the planning stages of an operation. It resulted in personal acrimony between the two key commanders, one that appeared to have

¹⁰⁸ *Ibid.*, 5.

¹⁰⁹ "Nimble Lion" which was the US-only contingency plan contained strict limitations on targeting. President Clinton and secretary of Defense Cohen were also clear that no ground troops would be committed. *Ibid.*, 3-4, 8-9.

¹¹⁰ Other than the initially ineffectual Kosovo Liberation Army.

¹¹¹ Arkin, *Operation Allied Force...*, 4-5.

communicated down to their own subordinate commanders. More importantly, it caused a campaign design that did not seem able to reconcile the two approaches. The eventual adoption of a “strategic attack line,” simultaneously with a “tactical line of operation” may have been intended to satisfy both Clark’s and Short’s visions of the campaign, but did nothing for unity of effort.¹¹²

On a different level, the means can be so lacking that achievement of the end state is in question or is impossible, even with a sequenced approach to operations. Once again, the remoteness of ends to the contributing nation’s vital interests usually explains the discrepancy. The case of Afghanistan is illustrative and is typified by the fact that the NATO Alliance, whose countries possess over 15,000 helicopters, only offered six of them for service in that, NATO’s only major active operation. In fact, Afghanistan had in its first post-conflict year only 0.18 international soldiers in a stability role per 1,000 inhabitants, compared with 18.6 in Bosnia, 20 in Kosovo and 100 in post World War II Germany.¹¹³ Campaign design must therefore offer methods of quantifying shortfalls and determining the impact. Should more modest ends be recommended? Or is a campaign that has culminated while maintaining a modicum of stability sufficient? Again, doctrine is silent on this issue. Campaign design must thus offer methods of quantifying shortfalls of means in terms of their impact on the formulation of strategic objectives.

The greatest difficulty in evaluating the means of a campaign lies, though, in another dimension. Since military systems are not closed systems, they must interact with

¹¹² Arkin, “Operation Allied Force...”, 6.

¹¹³ James Dobbins *et al*, *America’s role in nation-Building: From Germany to Iraq*, (Santa Monica: RAND Corporation, 2003), 136, 150, 151.

all instruments of national or coalition power in the achievement of the aim. In US doctrine, this is recognized as the diplomatic, informational, military and economic instruments of national power, shortened under the acronym of DIME.¹¹⁴ We find the same idea in the concept of the Joint, Interagency, Multinational and Public (JIMP) approach to operations.¹¹⁵ Canada's current operation in Afghanistan, has embraced a related concept, one that also comes with a sharp moniker: the "3D Approach" of defence, diplomacy and development, "involving unprecedented levels of coordination among government departments and agencies."¹¹⁶ Whilst the idea of this kind of integration is not a new concept, recent operations and emerging doctrine have highlighted its critical importance.¹¹⁷ But the short length of today's campaigns means that planners no longer have the leisure to prepare for conflict resolution activities as they had in past wars lasting years.¹¹⁸ Indeed, in World War II, "...formal doctrine for military government (and) a School of Military Government was established at the University of Virginia, and thinking began there about postwar reconstruction..." as early as the Spring of 1942.¹¹⁹ In today's environment, an ad hoc approach to operational level campaign design involving all instruments of national power is insufficient. More often than not, operational planning is in a box, as in Figure 1, with civil-military input limited to the J9 CIMIC staff. In fairness, AJP-3 does consider strategic, or interagency, lines of operation,

¹¹⁴ *JP 1*, I-5 to I-8.

¹¹⁵ See for example Department of National Defence, *Canadian Forces Strategic Operating Concept Draft 4.4* (Ottawa: Department of National Defence, DCDS, 21 May 2004), 17.

¹¹⁶ Department of Foreign Affairs and International Trade, "Beyond Peace: Canada in Afghanistan," in *Canada World View*, Issue 20 (Ottawa: DFAIT Canada, Autumn 2003), 4. See also Paul Martin, Address by Prime Minister Paul Martin at CFB Gagetown, New Brunswick (Ottawa: Office of the Prime Minister, 14 April 2004) available from <http://pm.gc.ca/eng/news.asp?id=172>; Internet, accessed on 10 August 2004.

¹¹⁷ Joint Warfighting Centre, *Operational Implications of ...*, 2, 4, 7, and 11.

¹¹⁸ Echevarria, *Toward...* 13-14.

¹¹⁹ Crane, *Reconstructing Iraq...* 13.

but outside of this box. The requirement for a tight supporting and supported relationship between agencies is also acknowledged in US doctrine,¹²⁰ but not translated into an integrated set of campaign design elements. We should now examine the ways of doing so.

Ways

Recently, a number of new approaches to campaign design have been proposed to solve some of the challenges posed by the contemporary operating environment.¹²¹ They range from a refinement of the currently used elements to broad theories that have not yet yielded practical and integrated aids to campaign planners and whose linkages to the higher purpose of war are not apparent. The author will therefore propose here a comprehensive approach, using redefined or new elements, and whose novelty resides chiefly in the full integration of campaign design with policy and strategy.

If we accept that there is a single inter-agency campaign, then military operations must be sequenced across its entire breadth and depth to support the attainment of policy in full. That desired “resultant order” must be described as specifically as possible.¹²² For this, the focus must be on the conditions, which will be termed here *Campaign Termination Conditions*. In such a view, a condition such as “regional stability ensured by indigenous security forces” would mean that everything else involved, including, say, the defeat of the enemy and regime change, would be a matter of Decisive Points and

¹²⁰ JP 5.00-1, II-5.

¹²¹ Greer, for example, summarizes five, apparently exclusive, alternatives: Current doctrine, Systems Approach, Effects-Based Operations, Destroy-Dislocate-Disintegrate and Center of Gravity to Critical Vulnerability. Greer, *Operational Art for ...*, 27-28.

¹²² Newell, *The Framework of Operational Warfare...57-58*.

other such elements of campaign design. Another possibility is a more segmented approach, with two or three major military operations succeeding each other to achieve that same end. Whatever the case may be, *Campaign Termination Conditions* must be the object of improved, dynamic and systemic reassessment. In the profusion of boards, meetings and conferences that make up the daily routine of an operational level headquarters, time must be set aside for the commander's long term planners and political advisor, or Joint Inter-Agency Coordination Group (JIACG) to consider the evolving policy and military strategic objectives, as well as the conditions that must be set, or effects achieved, by the current operation for its sequel. Pursuing this line of reasoning further, the daily "Campaign Assessment" now being proposed under the aegis of emerging Effects Based Operations doctrine,¹²³ measures effects achieved as part of a campaign against the set of conditions *initially* envisioned as defining the strategic end-state, as opposed to an *evolving* or *subsequent* set of conditions. The latter may well call for a validation, from first principles, of the entire campaign design. Only once these conditions are visualized, is it appropriate to start thinking in terms of method. From *Campaign Termination Conditions* we can thus derive *Campaign Objectives*, which serve to focus effort, facilitate the communication of the commander's intent and establish a link to instruments of national and coalition power. In keeping with the thesis of this paper, a distinction between military strategic and operational objectives should, in theory, be avoided, and all *Campaign Termination* and *Sequel Conditions* be set by the strategic levels. Yet, we have seen that the realities of the formulation of strategy may not allow this. The operational level commander and campaign planners must therefore have

¹²³ Stephen Runals, *Effects-Based Planning and Operations, An overview* (Quadripartite Combined Joint Warfare Conference, 2 June 2004), 22-25. See also Joint Warfighting Center, *Operational Implications...*, 16-17.

the liberty to adopt or deduce appropriate conditions and objectives that repeat and, if necessary, supplement these conditions. The introduction of a single set of evolving *Campaign Termination Conditions* linking *Campaign Objectives* directly to policy goals is the key advantage here, one that ensures a truly integrated approach.

There can also be no question of “end-states” at artificial junctures in a campaign. Yet, it would be impractical for military planners to attempt the production of a single major operation covering such a vast endeavour in its entirety. One need only consider the plight of US Central Command planners after Iraq’s invasion of Kuwait on 2 August 1990 to convince oneself of that. A succession of major operations should therefore remain as critical segments of a campaign. The transition between each of these operations should also be defined by a set of forward looking and evolving conditions whose purpose is to enable the sequel operation. Using Effects-Based Operations terminology, it would be more accurate to formulate the conclusion of each of these operations as an assemblage of conditions established by the effects resulting from of a series of actions.¹²⁴ We will thus call them here *Sequel Conditions* and eliminate the use of end-states and their associated criteria. The final such set of conditions would coincide with *Campaign Termination Conditions*.

To illustrate, using the case of the recent US intervention in Iraq, the primary US or coalition policy goals could have been, simply, national security and regional stability. The *Campaign Termination Conditions* satisfying these goals have been expressed thus:

We would like Iraq to become a stable, united and law abiding state, within its present borders, co-operating with the international community, no longer posing

¹²⁴ Stephen Runals, *Effects*....

a threat to its neighbours or to international security, abiding by all its international obligations and providing effective and representative government for its own people.¹²⁵

These conditions describe a long-term and enduring desired new order. The criteria that measure their attainment can now easily be derived, using a simple matrix. For example, the condition “Iraq no longer poses a threat to its neighbours” can be measured using a number of criteria, some more civil in nature, others more military. The latter could include: “Weapons of mass destruction and the capacity to develop them eliminated,” and “Iraqi regular army maintained and reformed as a defensive under civil constitutional authority”.

Regrouping some of these criteria into clusters relevant to methods and instruments available to achieving the task at hand, we obtain *Campaign Objectives*, which here could have been “Replacement of the Baath regime with a law abiding democratic government,” “Elimination of Iraqi military threat to the region” etc. If predominantly military means are chosen to achieve these objectives, it is possible to envision a sequence of at least two major operations hinging on the elimination of the old order and the emplacement of the new order. The *Sequel Conditions* defining this junction would therefore contain elements of both elimination and creation. Thus, a classical condition such as “Iraqi military forces defeated or capitulated” would coexist with one such as “A safe and secure environment established for civil government in Iraq,” with all that entails in terms of civil and military efforts.

¹²⁵ Hansard, *Statement by the Secretary of State for Foreign and Commonwealth Affairs (Mr. Jack Straw)* (London: United Kingdom Parliament, 7 January 2003); available from http://www.publications.parliament.uk/pa/cm200203/cmhansrd/vo030107/wmstext/30107m01.htm#30107m01.html_spm3; Internet; accessed 28 Sept 2004.

Within an operation, certain sets of effects, or conditions, will need to be achieved before others or, put another way, arranged and sequenced. Decisive Points remain useful here, although their focus should be on effects rather than our own actions or supporting operations. *Enabling Effects* would be a more appropriate term, one that allows greater consideration of second and third order effects, a key element when planning sequel operations. More importantly, *Enabling Effects* must be identified as being under a civil or military lead.

Effects Lines of Operation can now be determined to link civil and military sets of effects and conditions. In theory, these should reflect the logical sequence or critical path of *Enabling Effects*. In practice, it may be more advantageous for them to reflect a theme, function or sector of effects. This offers potential for clarifying the respective roles of military and civil agencies. The use of *Civil*, or *Military Effects Lines of Operation* is also helpful terminology, as long as it is understood that they imply a “supporting/supported” framework, and not a compartmentalized approach. One of the finest examples of this kind of mutual support is found in the synergy achieved by the French in the war in Algeria, between some 400 civil-military development teams, local Algerian leadership and French Army forces.¹²⁶ That this relationship was not without complications and stresses remains, however, a constant of contemporary operations as attested by the challenge of developing and implementing the “Multi-Year Road Map”¹²⁷ in Bosnia. This document was, for all practical purposes, an operational level interagency campaign

¹²⁶ Alistair Horne, *A Savage War of Peace, Algeria 1954-1962* (New York: Penguin, 1987) 109, 165, 220.

¹²⁷ Kerensa Hardy, “Multi-Year Road Map tracks SFOR progress” in *SFOR Informer Online*; available from <http://www.nato.int/sfor/indexinf/112/s112p03a/t0105033a.htm>; Internet; accessed 12 October 2004.

plan using several Lines of Operation corresponding to different sectors of activity, such as Economy, Good Governance, Rule of Law, General Security, Entity Armed Forces Reductions etc. Each of these Lines of Operation had multiple, sequential sets of effects, or conditions, to achieve. But such an approach presupposes coalition or international military and political control over the host nation. An adapted version is required when a military force is in support of a sovereign government, as is now the case with the International Security Assistance Force in Afghanistan.

From here, it is possible for campaign planners to formulate *Tasks* to subordinate components, some of which were previously understood as Decisive Points, like the securing of lines of communication, the establishment of air superiority etc. In turn, this would allow the development of *Component Task Lines of Operations*. The result would be a clear, coherent and comprehensive view of campaign effects, one that translates into a task structure suited to the force's components.

Another set of procedural elements is linked to the nature of the means of prosecuting the campaign. The national objectives and limitations of each troop contributing nation's forces are here a factor that should drive a sober appreciation of achievable ends or acceptable culminating points, as well as appropriate sets of effects. More importantly, the activities conducted by the other instruments of national, coalition or international power need greater visibility, understanding and integration in today's military operations. Indeed, the consideration of military systems as complex systems in accordance with systems theory further reinforces the links between military and civil efforts. For some, part of the solution resides in granting, in an operational level

headquarters, greater status to the civil-military staff officer (J9) vis à vis his operations and plans colleagues.¹²⁸ Existing mechanisms such as civil-military operations centers and JIACGs may also be improved, but all this would be tactical level remedies to an operational level problem.

The solution begins, of course, at the strategic level where a systematically flawed approach will poison any operational level attempt to integrate the instruments of national power, the current situation in Iraq being a textbook example. Superb, prescient work by the US State Department, the CIA, the US Army War College, USAID, etc on how to exploit a potential military victory to achieve US policy was, in the run up to the war, systematically ignored by the Department of Defense, whose focus was on decisive combat operations. Even in the aftermath of Saddam's fall, that department kept control of Iraq until transfer of sovereignty to an Iraqi Interim Government on 28 June 2004.¹²⁹ Yet two years before the start of that campaign, Wells had identified a "... lack of a basic framework for synchronizing all elements of national power at the strategic level," and postulated that a "strategic geometry" using Clausewitzian and Jominian terms be developed to address this problem. For him, each instrument of national power was, essentially, a line of operation with its own decisive points.¹³⁰ The lack of a common approach to strategic level interagency planning should therefore be understood as a

¹²⁸ C. R. Kilford, *On 21st Century Operational Art* (Toronto: Canadian Forces College Advanced Military Studies Course Paper, October 2003), 11-12.

¹²⁹ Paul Bremer reported to the DOD: the State Department never assumed control of post-conflict activities. US Ambassador Negroponte, arriving after the 28 June transfer of authority never met Bremer. For a thorough treatment of this subject in the lead up to the war, see Fallows, *Blind Into Baghdad*.

¹³⁰ Gordon M. Wells, *The Center of Gravity Fad: Consequence of the Absence of an Overarching American theory of War* (Arlington: Association of the American Army Institute of Land Warfare, No 01-1, March 2001), 2, 6, 8.

possible limitation by operational level planners but not one that ought to restrain practical solutions at the operational level.

One of the characteristics of *Civil Effects Lines of Operation* is that they often aim at long-term policy objectives. This means that they extend through *Military Sequel Conditions*, which tend to succeed each other at shorter intervals. The significance of that is in requirement for military operations to support or, at least, not be counter productive to the achievement of effects that, on the surface, may seem beyond the scope of the military objective. Sometimes, the differences are irreconcilable. For instance, it may be necessary to destroy some of the key infrastructure of an enemy country in order to ensure its military defeat, even though the ultimate policy objective might be to turn that country into a prosperous, stable, peaceful one. Such military necessity is inevitable, but an understanding of policy objectives will minimize it. Often, though, the differences are caused by a deliberately narrow interpretation of the military mission. Policies such as the Powell-Weinberger Doctrine foster the avoidance of “mission creep” which often results in tension between narrowly defined military “end-states” and unfulfilled policy objectives. One need look no further than Haiti or Bosnia for an illustration of this dilemma. In other words, strategists and campaign planners must accept that peace will not necessarily follow a victorious battle, and that military operations will occur over the long term, sometimes as the main effort, sometimes not, and will always evolve within the continuum of policy.

Another key element in the above construct is that *Effects Lines of Operation* are not directed at a conceptual Centre of Gravity. They aim at the achievement of strategic

or operational objectives, through *Sequel Conditions* or *Campaign Termination Conditions*. In the Afghan model cited above, Centre of Gravity analysis was used to understand the environment in order to help determine focus, main effort and sequencing. This hints at the true purpose of Centre of Gravity analysis, which is to understand the enemy system as well as we do ours. Many methods may serve that purpose. The old “Intelligence Appreciation of the Situation” was one such method, using inductive logic to draw major deductions, or probable inferences, from a variety of factors in a holistic way, leading to the imagination of possible enemy courses of action and ultimately, of our own options. Another method is Operational Net Assessment, which is an ambitious attempt to use “...systems analysis [to] reveal ... critical nodes and vulnerabilities that may be used in effects-based operations [and] recognize... the adversary's goals, intentions, strengths, weaknesses, and behaviors.”¹³¹ Finally, we have Strange’s CG-CC-CR-CV method, which dissects Centres of Gravity into Critical Capabilities, Critical Requirement and Critical Vulnerabilities.¹³² The weakness of the latter method, compared to the first two, is that it does not expressly consider the enemy policy and strategic goals and objectives, from which it is often possible to derive certain elements of campaign design. However, these three methods do attempt to understand the enemy in a complex, holistic and more or less nuanced manner. All have value, and the selection of one over the other will likely have more to do with the skill and availability of a sufficient staff afforded enough time. As such, though, these methods are preferable to the determination of a single, ill-defined and possibly irrelevant Centre of Gravity as the basis for all subsequent campaign design. Centres of Gravity should, therefore, be

¹³¹ United States Joint Forces Command, “*Operational Net Assessment*,” http://www.jfcom.mil/about/fact_ona.htm; internet; accessed 22 September 2004.

¹³² Strange, *Centers of gravity*....

retained as a useful, but not essential way of understanding key elements of our own or enemy systems and should not be confused with a proper analysis of these systems using better, more adapted methods.

In summary, then, *Effects Lines of Operation* link civil or military *Enabling Effects*. They may extend beyond sets of *Sequel Conditions*, spanning more than one military mandate or operation. They aim at the achievement of *Operational Objectives*, themselves aggregates of conditions, which, together, make up *Sequel Conditions* or *Campaign Termination Conditions*. Figure 2 illustrates this relationship.

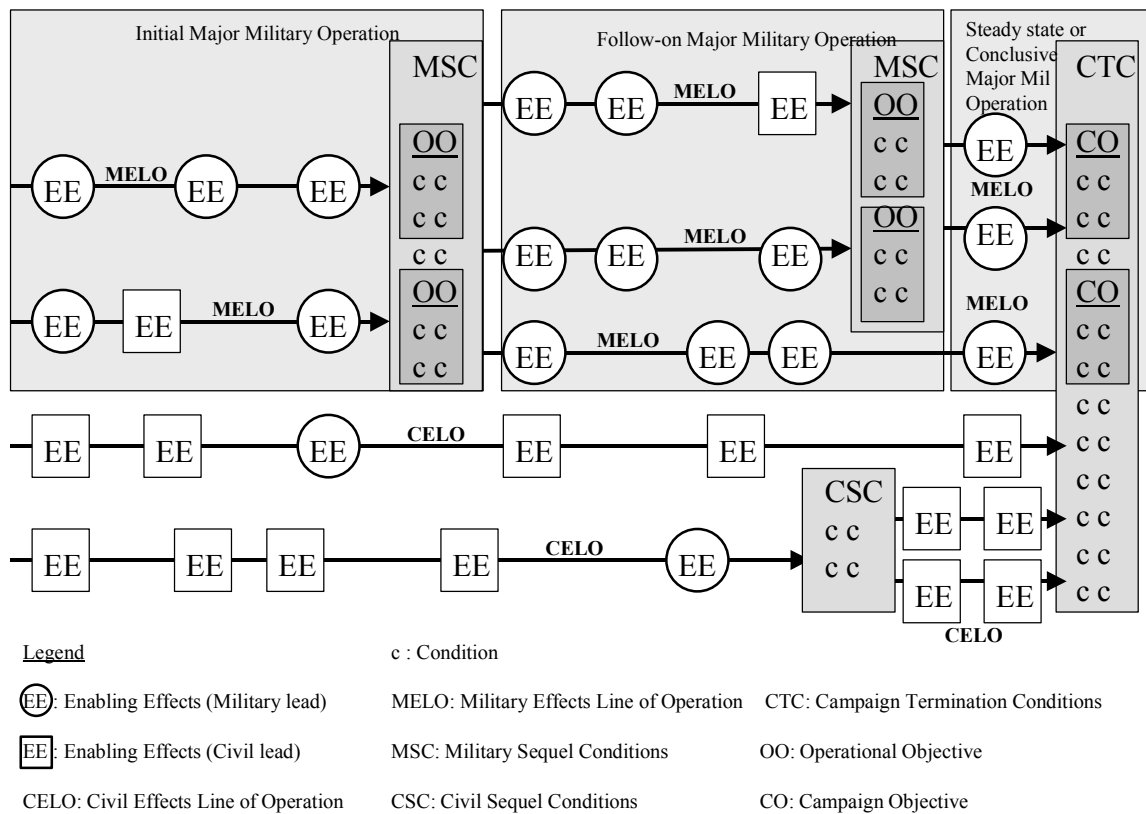


Figure 2: Theoretical relationship between proposed elements of Campaign Design

Conclusion

Campaign design involves the finding of ways to achieve strategic ends using strategically generated means. Its current interpretation has contributed to great military victories but has not guaranteed the achievement of policy. This is the product of a lingering belief in the quest for a battle of annihilation, and an over reliance on ill-defined concepts such as the Centre of Gravity, which becomes a pole of attraction for all campaign design elements, even at the expense of the achievement

operational art with strategy, and harmonizes military operations with other instruments of national power.

BIBLIOGRAPHY

- Arkin, William M. "Operation Allied Force: The Most precise Application of Air Power in History." In Andrew J. Bacevich and Eliot A. Cohen, *War over Kosovo*. New York: Columbia University Press, 2001.
- Aron, Raymond. *Sur Clausewitz*. Bruxelles: Editions Complexes, 1987.
- Bible, The. London: Collins, 1952.
- Brooke, Alan. *Diary*, quoted in David Rigby. *The Combined Chiefs of Staff and Anglo-American Strategic Coordination in World War II*. PhD Thesis, Brandeis University, 1996.
- Buzan, Barry, Ole Weaver and Jaap de Wilde. *Security, A New Framework Analysis*. Boulder: Lynne Rienner, 1998.
- Canada. Department of National Defence, *B-GG-005-004/AF-000, Canadian Forces Operations*. Ottawa: Department of National Defence, 2000-12-18.
- Canada. Department of National Defence. *B-GJ-005-500/FP-0,0 Canadian Forces Operational Planning Process*. Ottawa: Department of National Defence, 6 November 2002.
- Canada. Department of National Defence. *Canadian Forces Strategic Operating Concept Draft 4.4*. Ottawa: Department of National Defence, DCDS, 21 May 2004.
- Canada. Department of Foreign Affairs and International Trade. "Beyond Peace: Canada in Afghanistan," in *Canada World View*, Issue 20. Ottawa: DFAIT Canada, Autumn 2003.
- Canada. Department of National Defence. *Operation Apollo – Lessons Learned Staff Action Directive*. Ottawa: DND, April 2003.
- Canada. Department of National Defence. *Strategic Planning Guidance – Guatemala*. Ottawa: DND, December 1996.
- Coombs, Howard.G. *Perspectives on Operational Thought*. Toronto: Canadian Forces College, 4 June 2004.
- Crane, Conrad C. and W. Andrew Terrill. *Reconstructing Iraq: Insights, Challenges, and missions for Military Forces in a post-conflict Scenario*. Carlisle: US Army War College Strategic Studies Institute, February 2003.
- de Jomini, Baron Antoine-Henri. *The Art of War*. Wesport, Greenwood Press.

- Dixon, Norman. *On the psychology of Military Incompetence*. London: Pimlico, 1994.
- Dobbins, James, *et al.* *America's role in nation-Building: From Germany to Iraq*. Santa Monica: RAND Corporation, 2003.
- Echevarria, Antulio J. II. *Clausewitz's Center of Gravity: Changing our Warfighting Doctrine-Again!* Carlisle: US Army War College, Strategic Studies Institute, September 2002.
- Echevarria, Antulio J, II. *Toward an American Way of War*. Carlisle : US Army War College Strategic Studies Institute, March 2004.
- English, Allan. *The Operational Art: Theory, Practice and Implications for the Future*. Toronto: Canadian Forces College. 15 March 2003.
- Fallows, James. "Blind Into Baghdad," *The Atlantic Monthly*. January/February 2004.
- Flavin, William. "Planning for Conflict termination and Post-Conflict Success" *Parameters*. Carlisle: US Army War College, Autumn 2003.
- Franks, Tommy. *American Soldier*. New York: Harper Collins, 2004.
- Gooch, John. "Soldiers, Strategy and War Aims in Britain 1914-1918" in Barry Hunt and Adrian Preston, *War Aims and Strategic Policy in the Great War 1914-1918*. London: Rowman and Littlefield, 1977.
- Greenfield, Kent Roberts. *American Strategy in World War II: A reconsideration*. Baltimore: Johns Hopkins Press, 1963.
- Greer, James K. "Operational Art for the Objective Force", *Military Review Vol 82 Issue 5*, Sep/Oct 2002.
- Hardy, Kerensa. "Multi-Year Road Map tracks SFOR progress" in *SFOR Informer Online*; available from <http://www.nato.int/sfor/indexinf/112/s112p03a/t0105033a.htm>; Internet; accessed 12 October 2004.
- Horne, Alistair. *A Savage War of Peace, Algeria 1954-1962*. New York: Penguin, 1987.
- Kagan, Frederick W. "War and Aftermath," *Policy Review*, Vol 120, July-August 03, available from http://www.policyreview.org/aug03/kagan_print.html; Internet, accessed on 24 September 2004.
- Kilford, C. R. *On 21st Century Operational Art*. Toronto: Canadian Forces College Advanced Military Studies Course Paper, October 2003.

Lambeth, Benjamin S. *NATO's Air War for Kosovo: A Strategic and Operational Assessment*. Santa Monica: RAND Corporation, 2001.

Leonhard, Robert. *The Art of Maneuver, Maneuver-warfare theory and AirLand Battle*. Novato: Presidio, 1991.

Liddell-Hart, Basil. *The Strategy of Indirect Approach*. London: Faber and Faber, 1941.

Liddell-Hart, Basil. *History of the Second World War*. London: Pan, 1973.

MacMillan, Margaret.

- Sun Tzu. *The Art of War*. translated by Ralph Sawyer and Mei-chun Lee Sawyer. New-York: Barnes and Noble, 1994.
- Taylor, General Maxwell. *Precarious Security*. New York:W.W. Norton and Co, 1976.
- Tuchman, Barbara W. *The Guns of August*. Toronto: Bantam, 1980.
- United Kingdom. *Operations in Iraq, First Reflections*. London: Director general Corporate Communications, July 2003.
- United Kingdom. Hansard. *Statement by the Secretary of State for Foreign and Commonwealth Affairs (Mr. Jack Straw)*. London: United Kingdom Parliament, 7 January 2003; available from http://www.publications.parliament.uk/pa/cm200203/cmhansrd/vo030107/wmstext/30107m01.htm#30107m01.html_spm3; Internet; accessed 28 Sept 2004.
- United States. Department of Defence. *FM 100-5, Operations*. Washington: Department of the Army, June 1993.
- United States. Department of Defence. *Joint Publication 1, Joint Warfare of the Armed Forces of the United States*. Washington: Joint Chiefs of Staff, 14 November 2000.
- United States. Department of Defence. *Joint Publication 3-0, Doctrine for Joint Operations*. Washington: Joint Chiefs of Staff: 10 September 2001.
- United States. Department of Defence, *Joint Publication 5-00.1, Joint Doctrine for Campaign Planning*, Washington: Joint Chiefs of Staff. 25 January 2002.
- United States. Joint Forces Command. “*Operational Net Assessment*,” available from http://www.jfcom.mil/about/fact_ona.htm; Internet; accessed 22 September 2004.
- Van Creveld, Martin. *The Transformation of War*. New York: The Free Press, 1991.
- von Clausewitz, Carl. *On War*, Edited and translated by Michael Howard and Peter Paret. Princeton University Press: 1984.
- Weinberger Doctrine*, available from http://college.hmco.com/history/readerscomp/mil/html/mh_057800_weinbergerdo.htm; Internet; accessed on 28 September 2004.
- Wells, Gordon M. *The Center of Gravity Fad: Consequence of the Absence of an Overarching American theory of War*. Arlington: Association of the American Army Institute of Land Warfare, No 01-1, March 2001.
- Woodward, Bob. *Plan of Attack*. London: Pocket Books, 2004.

Xenophon, *The Memorabilia*, Book III-1, translated by H.G. Dakyns; available from <http://www.textkit.com/files/memorabilia.pdf>; Internet, accessed 24 September 2004.