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EFFECTS BASED OPERATIONS: BUZZWORD OR BLUEPRINT?

By /par

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ABSTRACT

The Canadian Forces (CF) has stated that it will apply Effects Based Operations (EBO) to its future defence and security operations. This intent presents some difficulties, as the CF definition seems to suggest that the concept is really nothing new. Consequently, many may miss the value of EBO by regarding it as just another 'buzzword.' The paper provides an overview of EBO and proposes that it is indeed a new way of thinking that will require us to revise how we conceive operations. Specifically, our appreciation of Centre of Gravity and Decisive Points will demand greater clarity that will result in changes to how we interpret and apply these elements of the operational art. The paper suggests an example of how EBO may be applied in a Canadian context by analyzing a recent Peace Support Operation (PSO) in Bosnia-Herzegovina and concludes by highlighting the need to develop doctrine to implement the EBO concept.

INTRODUCTION

The 21 May 2004 *Canadian Forces Strategic Operating Concept* states that the Canadian Forces (CF) is poised to adopt Effects Based Operations (EBO) as its *modus operandi* for future defence and security operations. In this document, EBO is described as “an effort to leverage the soft and hard power assets of a nation or coalition, including its political, economic, technological, and social resources, in order to achieve a set of desired outcomes. It seeks to establish influence over the mind of an adversary to affect his will to act while, at the same time, keeping collateral damage to a minimum.”¹ EBO is presented as an enabling concept that will allow the CF to take full advantage of emerging technologies in the realm of information systems while harnessing non-military agencies in operations to achieve dominance over future adversaries. The Canadian emphasis on EBO is not unique and reflects similar trends in Allied thinking, particularly in the US.

Based on this description of EBO, one might reasonably question whether it represents anything new or substantively different from the way that the CF presently

¹ Department of National Defence. *Canadian Forces Strategic Operating Concept (Draft 4.4)*, (Ottawa: National Defence Headquarters, 21 May 2004): 18.

designs and executes operations. Certainly, the notion of influencing an adversary's mind has been enshrined in doctrine for some time. Indeed, a Canadian Army manual states: "moral forces exert a more significant influence on the nature of conflict than do physical. This point is fundamental to understanding Canadian Army doctrine."² Similarly, any Canadian student of military history understands conflict, and war in particular, to be a highly complex enterprise comprising political, economic and diplomatic dynamics as necessary complements to military endeavours. As Coombs points out, the notion of inter-agency cooperation is not foreign to the Canadian operational experience and indeed, may be regarded as characteristic of the Canadian approach to the operational art.³ Thus, we might excuse the skeptic who would regard EBO as just another 'buzzword'.

Of course, EBO is not so simple. By discerning its underlying complexities and nuances, EBO's true value as a framework for operational art becomes apparent. EBO attempts to establish a link between action and effect in war, an environment that is both complex and non-linear. It defines success through the impact on "human psychological and sociological behaviour, as opposed to a mechanistic approach focused only on physical (materiel and quantitative) effects."⁴ It requires the adoption of a systems approach to warfare by "understanding the adversary – any adversary – as a complex adaptive system of political, cultural, technological, military and economic components and then identifying the key nodes and links in that system which, if addressed in the

² Department of National Defence. B-GL-300-001/FP-000. Operational Level Doctrine for the Canadian Army. (Ottawa: National Defence Headquarters, 1 July 1998), 13. "The term moral used here is not restricted to ethics but pertains to those forces of psychological rather than physical nature, including mental aspects:" 14.

³ Howard G. Coombs. "Perspectives on Operational Art," Unpublished. (Toronto: Canadian Forces College Paper, 4 June 2004): 21.

⁴ Gene Myers, "Effects-based Operations: Everything Old is New Again, As Concept Reveals," *Armed Forces Journal*, (June 2003): 48.

combined campaign most likely would result in achieving the required effect.”⁵ In short, EBO may be regarded as a “way of thinking”⁶ that allows us to succeed in war’s test of wills. By emphasizing the human dimension of war, EBO offers a mechanism through which we can begin to understand and exploit the moral forces that are fundamental to our doctrine. Rather than a transient ‘buzzword’ then, we may regard EBO as “indeed something new that will require changes in the way the military thinks and operates.”⁷

This paper contends that EBO will change current operational doctrine by affecting how we conceive and apply the key elements of the operational art, particularly the centre of gravity and decisive points. The discussion will offer an overview of the EBO philosophy and highlight how it provides a mechanism to link our actions with the enemy’s thinking and behaviour. The paper will suggest that as we apply an EBO approach, our notion of the center of gravity will require greater clarity that will transform not only how we understand the concept, but also how we view the operational level of war. Secondly, the paper proposes that our application of decisive points will also be modified. How we select and articulate campaign objectives will be altered with important consequences for the design and execution of campaigns. Finally the discussion will focus on the doctrinal implications of EBO in a CF context by offering a potential example of this way of thinking in a Peace Support Operations (PSO) context.

⁵ *Ibid*: 48.

⁶ Maris McCrabb, *Effects-based Coalition Operations: Belief, Framing and Mechanism*, In Austin Tate, ed., Proceedings of the Second International Conference on Knowledge Systems for Coalition Operations, 23-24 April 2002, DMM Ventures: Yorktown, VA: 143.

⁷ Colonel (Retd) Edward Mann, Lieutenant Colonel Gary Endersby and Tom Searle. “Dominant Effects: Effects-Based Joint Operations,” *Aerospace Power Journal*.15, (Fall 2001): 93.

EBO – A CONCEPTUAL OVERVIEW

Before considering the doctrinal implications for EBO, it is first necessary to gain a better appreciation of the concept. EBO is an expansive subject that relies on a number of supporting theories that are disciplines in their own right. For the purposes of this Paper, EBO will be analyzed from a macro perspective with a view to understanding how it strives to provide a mechanism to shape an adversary's thinking and behaviour.

EBO is based on the notion that conflict of any sort can be characterized in three distinct domains – Physical, Information and Cognitive.⁸ As the term implies, the Physical Domain consists of those physical actions that we take to achieve a desired effect on an adversary. These may include military force, “but also those that occur in other arenas of national power and may be political and economic in nature.”⁹ The Information Domain comprises those systems and capabilities that enable the enemy and us to comprehend and monitor the environment including all sensors, information collation processes and all means of displaying information.¹⁰ Lastly, the Cognitive Domain pertains to an adversary's thinking and decision-making processes and includes “perceiving, making sense of a situation, assessing the alternatives, and deciding on a course of action.”¹¹ The Cognitive Domain lies at the heart of EBO. Understanding how the enemy operates in this realm, including the factors that affect his perceptions, rationale and decisions, will govern how our actions in the Physical and/or Information Domains are able to influence his behaviour.

⁸ E. Smith, *Effects Based Operations in Peace, War and Crisis*. US Department of Defense, CCRP Publication, (November 2002): 160.

⁹ *Ibid*: 163.

¹⁰ *Ibid*: 164.

¹¹ *Ibid*: 173.

The key to understanding the Cognitive Domain may be found in the Boyd Theory, the Observe-Orient-Decide-Act (OODA) model for decision-making. Applying this theory to war, Boyd postulates that the side that is able to operate the OODA loop at a higher tempo will win. As Polk highlights, the key phase in the OODA cycle occurs during Orientation when the observer engages in a mental process of ‘destruction and creation’ in which a reality is broken into its “constituent elements” and a new reality is created through mental processes “specific to general induction, synthesis and integration of common qualities found in the chaotic world.”¹² According to the Boyd Theory, we can overwhelm an adversary by introducing and sustaining a series of actions at such a tempo that he is prevented from orienting sufficiently to his new circumstances and consequently, from making coherent decisions or acting in any coordinated way. The broader the range of our actions, and the greater the rapidity with which they are imparted, the more likely the enemy will be relegated to a state of paralysis.

The focus then for EBO is the orientation process and how the enemy interprets his environment and reacts to changes to it. There are two elements that influence orientation. The first is the observer and how he perceives actions. McCrabb suggests the idea of ‘Belief Structures’ to describe the predisposition of an adversary to interpret an event based on a range of factors that are primarily social and specific to his particular community.¹³ Importantly, the adversary is assumed to be rational and “the point of emphasis is on preferences: the set of outcomes, or conditions, the actor prefers to see occurring.”¹⁴ The idea that an enemy will have a peculiar manner in interpreting our

¹² Robert B. Polk, “A Critique of the Boyd theory – Is It Relevant to the Army?” *Defense Analysis*.16, no. 3 (December 2000): 261.

¹³ McCrabb: 142.

¹⁴ McCrabb: 142.

actions is fundamental to EBO. Not only does it preclude us from viewing our actions through our own perspective, but it also requires us to regard our adversary in his complete context taking into account the various social, cultural and other factors that influence his perceptions and affect his decision-making. This approach imposes a significant challenge to create a model that accounts adequately for the complexity of his beliefs.

The second element of orientation process poses additional challenges by requiring us to attempt to understand how events interact in a complex system. In war, “it is usually extremely difficult, if not impossible, to isolate individual causes and their effects, since the parts are all connected in a complex web.”¹⁵ As Rousseau points out, war exhibits the characteristics of a non-linear, complex system in which the correlation between input and output is difficult to establish.¹⁶ In such an environment, there is no simple model; large-scale actions may have limited effect, while small actions may have quite disproportionate results on the enemy’s will and behaviour. While considerable work is ongoing to develop predictive models, it is likely that the best that can be done is to achieve “not precise estimates but rather general tendencies.”¹⁷ This means that we are required to think of our effects in terms of first order, direct effects and second/third order indirect effects.¹⁸ Implied in this requirement is the need to continually monitor and assess the effects of our actions to ensure that we are achieving our aims. Moreover,

¹⁵ John F. Schmitt, “Command and (Out of) Control: The Military Implications of Complexity Theory,” *Marine Corps Gazette*, 82, no. 9 (September 1998): 57.

¹⁶ Colonel C. Rousseau, “Commanders, Complexity and the Limits of Battlespace Visualization,” (Toronto: Canadian Forces College Advanced Military Studies Course Paper, October 2002).

¹⁷ McCrabb: 142. In *Effects Based Operations in Peace, War and Crisis*, Smith also notes that “we might parse the infinite range of possibilities into a finite set of categories that can give us some idea of what kinds of effects we might produce in a given set of circumstances.” He suggests two categories and seven potential effects: Physical (Destruction, Physical Attrition and Chaos/Entropy) and Psychological (Chaos/Entropy, Foreclosure, Shock and Psychological Attrition): 256-7.

¹⁸ Mann, Endersby and Searle. “Dominant Effects: Effects Based Joint Operations:” 98.

agility must be maintained to exploit unforeseen opportunities that may be presented. As we increase the range and tempo of our actions to operate within the enemy's OODA loop, the requirement to continually evaluate and modify our actions will place considerable demands on our sensors, information and command and control networks and processes.

So what may we conclude from this conceptual overview of EBO? First, EBO contends that decisive operations occur not in the physical realm, but in the Cognitive Domain. Physical destruction is thus not an end in itself – a fact that Kagan believes has been lost in contemporary operations by those who “see the enemy as a target set and believe that when all or most of the targets have been hit, he will inevitably surrender.”¹⁹ Second, EBO demands a high degree of fidelity on the enemy such that we examine him in his entirety and strive to understand his decision-making process. The enemy is not just a factor, he is the focus; how he thinks and behaves, and how we can influence his decisions, is the essence of our operations. Third, the idea that we can overwhelm, or at least influence, the enemy's decision-making process through the depth and tempo of our actions promotes an approach by which we leverage all available means at our disposal to shape his thinking and behaviour. Fourth, EBO assumes a chaotic environment in which the link between action and effect is difficult to establish. Monitoring and assessing the effects of our actions during the planning and execution of the campaign will be key to successful EBO. Finally, the concept and terminology used in EBO is fairly ‘generic’ suggesting that it may be applied across the continuum of conflict. This ‘portability’ has important implications for how EBO is adopted within the CF.

¹⁹ Frederick W. Kagan, “War and Aftermath,” *Policy Review*. (August-September 2003): 4.

DOCTRINAL IMPLICATIONS OF EBO

In order for concepts to have any operational relevance, they need expression in doctrine. For the purposes of this discussion, doctrine is deemed to be the “conceptual framework” that describes how an organization conducts operations and ultimately, how it fights. However, since doctrine is a broad subject, the implications of EBO require some focus. Given that “CF doctrine espouses a command driven philosophy in all aspects of Force Employment,”²⁰ this discussion will focus on key aspects of campaign design practiced by commanders as part of the operational art. As the essence of the operational art is “the identification of the enemy’s center of gravity, and the single-minded focus on the sequence of actions necessary to expose and neutralize it,”²¹ the discussion will begin by considering the impact of EBO on the commander’s determination of the centre of gravity.

EBO AND CENTRE OF GRAVITY

There is probably no more important element of the operational art than the centre of gravity. Still, there appears to be some disagreement, even confusion, as to how it is interpreted and applied to the operational art. Canadian doctrine offers the following definition and amplification:

The center of gravity is that aspect of the enemy’s total capability, which if attacked and eliminated or neutralized, will lead either to his inevitable defeat or his wish to sue for peace through negotiations. It has also been described as that characteristic, capability, or location from which enemy and friendly forces derive their freedom of action, physical strength, or will to fight...At the strategic level the center of gravity may often be abstract, such as the enemy’s public opinion or perhaps his strength of national purpose. Thus the strategic center of gravity may be discernable but not accessible to military attack. In such cases an operational

²⁰ Department of National Defence. B-GJ-005-500/FP-000. *CF Operational Planning Process*. (Ottawa: National Defence Headquarters: 6 November 2002): 1-1.

²¹ Department of National Defence. B-GG-005-004/AF-000. *Canadian Forces Operations*, (Ottawa: National Defence Headquarters: 18 December 2000): 3-2.

level center of gravity must be selected which could contribute to the elimination of the strategic center of gravity... The center of gravity may be moral or physical... [I]f the center of gravity is moral, such as the public will (strategic level) or military cohesion (operational level), the problem of elimination is more complex.²²

This definition indicates that the center of gravity may be physical (a capability, location) or a moral element (his will to fight), and introduces the possibility of more than one center of gravity depending on the level of war that is being examined. Furthermore, there appears a dissonance between a moral center of gravity and the military's ability to influence it. Indeed, the doctrine appears bereft of suggestions as to how to affect a moral center of gravity except to say that it is "more complex."

The problem of clarity is not confined to Canadian doctrine. While agreeing that the center of gravity is a source of enemy strength, Vego defines it as "a massed effect of power, military or non-military,"²³ and suggests, "in a campaign several operational [centers of gravity] will exist."²⁴ Strange and Iron take a different tact by stating that centers of gravity are not sources of strength, but are "instead physical and moral entities that strike effective blows in operations and campaigns designed to defeat enemy centers of gravity."²⁵ Like Vego, they promote the notion of multiple centers of gravity at the strategic, operational and tactical levels of war. In the case of the latter two levels, "they are almost invariably specific military forces."²⁶ In his treatise on emerging operational art in the 21st Century, Kilford suggests that as we increase our appreciation of the enemy, numerous centers of gravity emerge in all aspects of his military and societal

²² *Ibid*: 3-2.

²³ Milan Vego. "Center of Gravity." *Military Review*. (March-April 2000): 24.

²⁴ *Ibid*: 27.

²⁵ Joe Strange and Colonel Richard Iron, "Understanding Centers of Gravity and Critical Vulnerabilities," p. 21.

²⁶ *Ibid*: 7.

structure. He offers no less than nine distinct centers of gravity in his analysis of an operational training scenario.²⁷

These varying perspectives present a number of difficulties in our doctrine. The idea of numerous centers of gravity at all levels of war seems to diffuse its importance as the focus of operational art. It could also be argued that the different centers of gravity at the strategic, operational and tactical levels of war entrench definitions that, in reality, may be quite arbitrary. Moreover, by predisposing operational and tactical level centres of gravity as specific military forces, as Strange and Iron assert, we are almost inevitably drawn into operating in the physical realm with an accompanying emphasis on destruction. Most importantly, how do we reconcile physical and moral components of war? From this analysis, it seems that current methods of thinking are not conducive to promoting a coherent approach to the operational art and the subject of center of gravity.

EBO offers an alternative way of determining the enemy's center of gravity that avoids the present difficulties. EBO requires us to consider the enemy holistically, understanding the nature of his beliefs, decision-making processes and structure. Using an EBO approach, it is possible to conceive of the center of gravity as being a single entity. Echevarria contends that the center of gravity is "a focal point" in which "a blow would throw him off balance, or put differently, cause his entire system (or structure) to collapse."²⁸ He goes on to state that the center of gravity is only present "where there is sufficient connectivity among the various parts of the enemy to form an overarching

²⁷ LCol C.R. Kilford, "On 21st Century Operational Art." (Toronto: Canadian Forces College Advanced Military Studies Paper, October 2003). The centres of gravity proposed by the author include: military (moral), civilian (moral), government, cultural, religious, judicial, economic and environmental.

²⁸ Antulio Echevarria II, " 'Reining In' the Center of Gravity Concept," *Air & Space Power Journal*. 17, no. 2, (Summer 2003): 91.

system (or structure) that acts with a certain unity.”²⁹ The centre of gravity is not a source of strength or weakness, but instead “a centripetal force that acts to hold an entire system or structure together.”³⁰ As we may well imagine, such a ‘centripetal force’ may very well be a moral component, such as the will to fight, that will require us to operate in the cognitive domain that lies at the heart of EBO.

The deduction that there is a single center of gravity is significant for our present doctrine. If we eschew the notion that there are centers of gravity for each level of war, and our efforts are directed at striking at a single center of gravity, our traditional strategic, operational and tactical framework becomes less significant, reinforcing a trend to compression that some believe has already started.³¹ The emergence of “parallel warfare,” or the simultaneous engagement of the enemy at all levels of war, provides an indication of what this may mean for future campaigns. Relying on network-centric information and precision technology, parallel warfare encompasses the entire Theatre such that “combat [will] no longer have to proceed in the traditional step-by-step, or serial manner; neither [will] there be any single axis of effort or point of main attack. Combat [will] instead be multidimensionally [sic] and comprehensively joint.”³²

It may be further argued that by maintaining a holistic approach to the enemy, we are necessarily drawn into the theatre-strategic realm and our operations should be conceived and executed at this level. Already US Air Force doctrine is incorporating this kind of thinking through ‘strategic attack,’ or “the generation of effects to achieve

²⁹ *Ibid*: 91.

³⁰ *Ibid*: 91.

³¹ Douglas A. MacGregor, “Future Battle: The Merging Levels of War,” *Parameters*. 22, no.4, (Winter 1992-93): 42.

³² Paul Murdock, “Principles of War on the Network-Centric Battlefield: Mass and Economy of Force.” *Parameters*. 32, no. 1 (Spring 2002): 90.

national security objectives affecting the adversary's leadership, conflict sustaining resources and strategy.”³³ This doctrine focuses on US capabilities to strike directly at the enemy center of gravity in order to “directly contribute to achieving strategic – and indeed often war-winning – effects and objectives.”³⁴ These capabilities are primarily air and space based systems, although the doctrine is not restricted to these capabilities. Interestingly, strategic attack “seeks to achieve strategic ends without first defeating enemy field forces”³⁵ and it is seen to be more effective when combined with other instruments of national power. As this doctrine matures, we can imagine that there will be profound implications for the future of the operational art and how the CF contributes to future missions involving US forces.

If our notion of center of gravity is affected by the EBO way of thinking what about other elements of the operational art? How do we go about striking at the center of gravity and organizing our objectives so that they will accomplish the end state? For these answers we need to examine the concept of decisive points from an EBO perspective.

EBO AND DECISIVE POINTS

Decisive points are used in the operational art as a means of striking at the enemy center of gravity. They are predicated on the notion that the enemy always protects his center of gravity and thus we should adopt an indirect approach by identifying, or indeed creating, and exploiting key vulnerabilities. On this basis, our current doctrine defines decisive points as “those events, the successful outcome of which are preconditions to the

³³ United States. Department of Defense. *Strategic Attack*. US Air Force Doctrine Document 2-1.2, (30 September 2003): 1.

³⁴ *Ibid*: ii.

³⁵ *Ibid*: 3.

neutralization of the enemy's center of gravity."³⁶ It is instructive to note that decisive points reflect enemy vulnerabilities that may be either physical or moral and that by using the term 'preconditions' a certain causal link between action and effect on the center of gravity is assumed. As well, by applying military force through decisive points, we produce critical paths to the center of gravity, known as lines of operation, that are key to campaign design.³⁷ For these reasons, it is helpful to think of decisive points as being our campaign objectives.

Decisive points are critically important in an EBO context. However, there will need to be some modifications to how they are determined and articulated. EBO requires that we consider our effects, and articulate what we want to achieve, from an enemy perspective. This is somewhat of a shift from present practice as we normally describe our actions in terms of tasks we must accomplish. For example, rather than describing a goal as 'achieve air superiority,' an EBO objective might be: 'deny the enemy control of the airspace.' In this way, the effect on the enemy that we are trying to achieve becomes the decisive point or objective. Specific actions that achieve this effect then become tasks that are assigned within a joint force. Many tasks may be required to achieve an effects-based objective. In the example of airspace control, specific actions may include destruction of his air defence systems, electronic suppression of command and control systems, etc. The action taken will depend on their effectiveness and the assessment of potential effects. This distinction between objectives and tasks requires a three-tiered

³⁶ Department of National Defence. *CF Operations*: 3-3. Note that there is no consensus on the term 'decisive point.' In US Joint Doctrine, decisive points, "[are] usually geographic in nature, can assist a force in gaining a marked advantage over the enemy and may greatly influence the outcome of an action," United States. Department of Defense. *Operational Art*. US Joint Electronic Library, Joint Force Employment Briefing Module. J7 Operational Plans and Interoperability Directorate.

³⁷ *Ibid*: 3-3.

process in which we continually assess the success of the campaign (are we achieving the mission?), effects (are we doing the right things?), and tasks (are we doing things right?).³⁸

Framing objectives in terms of effect on the enemy is more than just semantics. It is fundamental to gaining clarity of purpose, establishing unity of effort and sustaining operational tempo during the conduct of the campaign. Dubik believes that expressing objectives in terms of effect on the enemy, rather than task, promotes greater understanding of intent because it establishes a fixed goal. Moreover, he argues that this approach also affords wider scope to consider options to achieve ends and better responsiveness in fluid situations.³⁹ In order to realize these results, we must undergo some basic shifts in our thinking and how we conceive our campaign objectives.

How we articulate the effects themselves is extremely important. First, we need to establish clearly the effects that we wish to accomplish, or indeed avoid, over the course of the campaign. Additionally, we must consider potential subsequent second, third and fourth order consequences that may result from the primary effect that we are considering. Denying the enemy the use of a particular capability through its destruction is indeed an effect, but it may not be the appropriate one in the long term. Exactly how we arrive at this sort of determination is currently the subject of considerable research. However, the difficulty in defining a precise model should not prevent us from attempting a full assessment of the effects of our actions.

³⁸ Stephen Runals, "Effects-Based Planning and Operations: An Overview," Presentation to the Quadripartite Combined Joint Warfare Conference, US Joint Force Command. (2 June 2004).

³⁹ Major General James M. Dubik. "Effects-Based Decisions and Actions." *Military Review*. (January-February, 2003): 34 – 35.

Our consideration of the various areas where we need to achieve effects should be similarly expanded in response to the complexity of the enemy. Our decisive points should not only be military but also incorporate all elements of the enemy's physical and moral structure. To account for this complexity the US applies a useful framework known as PMESII (Political, Military, Economic, Social, Information and Infrastructure) to account for different enemy system nodes and key vulnerabilities. Through this construct, relevant Diplomacy, Information, Military and Economic expertise, capabilities and resources, (summarized through the mnemonic DIME), are harnessed to direct EBO throughout the campaign.⁴⁰ While the military has cooperated in the past with other government and non-government agencies, the unique aspect of EBO is that it entails a close harmonization for planning and relies on a common orientation to the campaign objectives that are to be achieved.

These aspects of decisive points in our operational art have some important implications for future doctrine. As noted at the outset, cause and effect is quite difficult to gauge in war. This challenge will place a significant burden on headquarters to establish relevant and measurable indicators of effectiveness, and ensure that the information acquired is interpreted in an appropriate and timely manner. Of course, this process is easiest in the physical realm. It is not so easy when the object is intangible and related to influencing the enemy's will. One author suggests that a way to address the requirement to continually monitor effects is to restructure the planning staff to incorporate red and blue teams with a view "to accentuate the importance of viewing objectives, courses of action and, and elements of operational art, from both a physical

⁴⁰ Stephen Runals, "Effects-Based Planning and Operations: An Overview."

and nonphysical sense.”⁴¹ Others suggest that more elaborate computer modeling and simulation tools will be required to “mitigate the likelihood of serious, negative [and] unintended effects.”⁴² Whatever the solution it is clear that EBO should have a profound effect on staff structures and command decision-making processes.

Perhaps the most important impact will be the incorporation of other non-military agencies to address the range of DIME effects in the campaign. How the required non-military expertise is directed is still unclear. One thought is that DIME effects may be determined through interagency discussion at the strategic level with the military role being simply to articulate an effects-based process to assist in this effort.⁴³ However, this approach encounters difficulty during the campaign execution phase when assessment of effects and redirection of action requires a more closely coordinated effort. Limited practice to this point has shown that the challenges involved in achieving such a level of harmony between the various non-military agencies are significant.

EBO – A PRACTICAL APPLICATION

If EBO is to transform from concept to operating doctrine, we will need to draw on some practical application. The CF cannot expect to match many emerging US concepts due to the fact that, in all likelihood, we will not possess the same capabilities. However, recognizing that EBO has broad application across the spectrum of conflict, it is perhaps within the realm of Peace Support Operations (PSO) that we can find a relevant example of how EBO as a way of thinking may be incorporated in our future doctrine.

⁴¹ Daniel E. Liddell, “Operational Art and the Influence of Will,” *Marine Corps Gazette*, 82, no. 2 (February 1998): 55.

⁴² Mann Endersby and Searle. “Dominant Effects: Effects-Based Joint Operations:” 96.

⁴³ Ibid: 97.

The situation in Bosnia-Herzegovina is familiar to most in the CF. While it is beyond the scope of this discussion to provide a detailed analysis of the 1995 Dayton Accord and the NATO campaign to implement its provisions, by examining the conflict from a macro perspective and Canadian operations in particular, we can suggest how EBO may be applied to future PSO missions.⁴⁴

EBO requires a careful examination of the enemy to understand his complexity and determine the center of gravity. In the Bosnia mission, the center of gravity was not readily apparent, as there was no single ‘enemy’ in the traditional sense. Indeed, Echevarria states that in such a situation, there is no center of gravity.⁴⁵ Consequently, it would have been an error to look for the ‘centripetal force’ that binds the enemy as a coherent whole. Insofar as there is a ‘binding’ element in Bosnia, it may be said to exist in the distinct ethnic identities (predominantly Serb, Croat and Muslim) that have dominated the Balkan landscape. Breaking down the power and influence of these entities and their leaders by creating a Bosnian identity became the overarching goal of the campaign.

Applying an effects-based approach, the Canadian campaign plan assessed the effects that would be required to support Bosnian identity within a peaceful, democratic Bosnia. The first effect was to encourage civilians to remain, or in some cases, return to their communities following the civil war, particularly in regions where mixed ethnicity existed prior to the civil war. Reconstructing mixed communities would exploit a potential vulnerability of the ethnic ‘hardliners’ by denying them homogenous regions in which to influence behaviour.

⁴⁴ The campaign plan developed by the First Battalion PPCLI during Operation Palladium Rotation 11 where the author served as Commanding Officer will be used as a vehicle for this examination.

⁴⁵ Echevarria. “Clausewitz’s Center of Gravity: Changing Our Warfighting Doctrine Again!” 18 – 19.

Termed ‘population stability,’ this effect became the first decisive point, or objective, in the campaign. Through this effect, two additional effects were sought: the reconstruction of local communities and, most importantly, the generation of a voting base for the emerging democratic process. This effect hinged on the creation of a secure environment in which the population would be safe from inter-ethnic tensions and violence. The military assumed the lead in this task and performed a number of tasks such as patrolling, weapons collections and seizures and information operations to create safe communities. It should be noted that this effect was not the exclusive purview of military forces. Increasingly security tasks were transferred to local civilian police and security services. As well, legal aspects of returning displaced persons were the responsibility of representatives of the United Nations High Commission for Refugees (UNHCR). Close coordination was required to achieve these tasks in a coherent and effective manner.

The second campaign effect focused on creating a respect for the rule of law. This effect was directed at the need to establish public confidence in the legal system to resolve disputes and regulate society, especially within communities where ethnic divisions were still entrenched. This objective was intended to achieve a number of additional effects: undermine the power and influence of ethnic ‘hard-liners’ in communities, provide a framework within which professional civilian police forces could function, promote the proper functioning of legislative bodies and create favourable conditions for economic development by providing a legal framework within which credit banking could occur. This effect depended on the creation of responsible public institutions, particularly municipal and cantonal governments. Consequently, the lead for

monitoring and advising governments was with the Office for Security and Cooperation in Europe (OSCE). Still, at the unit level the military provided support to these efforts through the efforts of Civil Military Cooperation (CIMIC) teams. Moreover, through expertise resident in the military, additional tasks in support of establishing responsible social institutions such as, schools and community groups and even an independent media, were also undertaken with a view to bridging ethnic divides and instilling respect for the rule of law.

The third campaign effect was directed to establishing Economic Security, a term that described the expectation for individual employment and prosperity. This effect was critical to the sustainment of the other two effects. Without the hope of economic prosperity and security, the population would be migratory, public institutions would be denied an adequate taxation base for revenues, and a more favourable climate would be created for inter-ethnic conflict. The effect of economic security was intended to accomplish the additional effect of inter-ethnic cooperation as it was assessed that this occurred best in the realm of commerce. The task of promoting economic development was shared between a number of agencies including OSCE, local government and private business. While maintaining unit liaison with the Canadian International Development Agency (CIDA), this objective was never really accomplished due a lack of coherent goals and inter-agency integration.

The Canadian effects-based campaign plan can be summarized in Figure 1 that depicts effects (objectives), tasks and lines of operation:

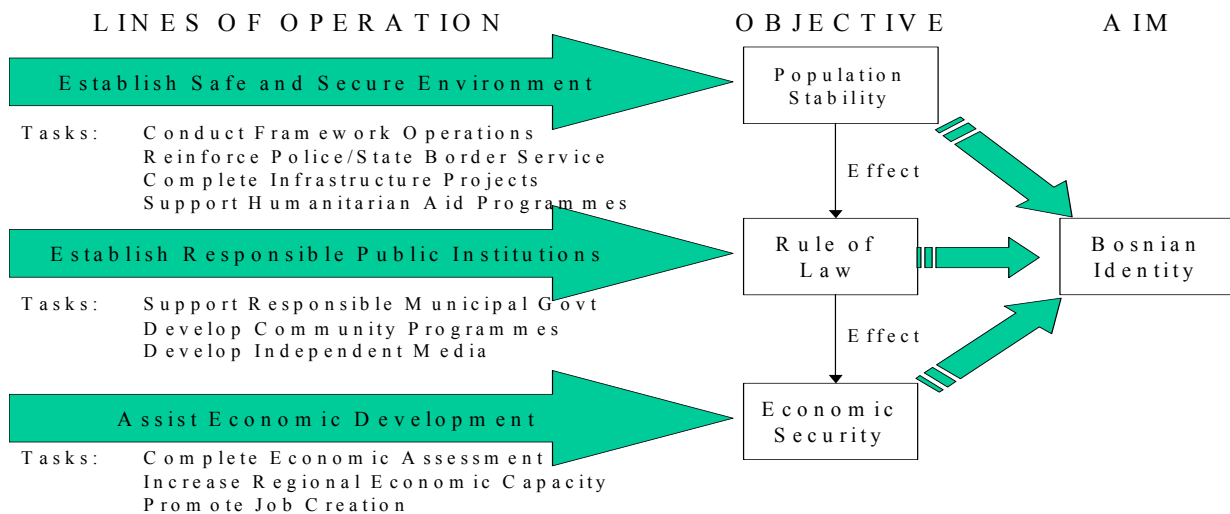


Figure 1 – Canadian Campaign Plan Operation Palladium Rotation 11

From this analysis, two points are instructive. It should be noted that that EBO applied in a PSO context is not necessarily conducive to rapid, decisive results. The types of effects to shape an adversary’s thinking and behaviour in PSO are complex and require considerable time to accomplish. The extended duration of the CF and NATO presence in Bosnia is indicative of this aspect of PSO. Additionally, despite adopting an effects-based approach, the Canadian model was not entirely successful in implementing the campaign and achieving the complete range of its objectives. A lack of adequate measures of effectiveness with which to gauge progress, poor inter-agency integration and a lack of consistency during subsequent rotations to sustain effort meant that mission success was confined to primarily military and security endeavours. The campaign deficiencies experienced in Bosnia can be traced to the lack of a proper doctrine that incorporates EBO as a way of thinking. Until this is done, the CF will be unable to implement EBO as a cornerstone of its future operations.

CONCLUSION – A BLUEPRINT FOR THE FUTURE

So what is indeed new about EBO? Concepts such as center of gravity and decisive points are still relevant in EBO as they are in current practice. Perhaps the skeptics have a point and we would be prudent not to think of EBO as some radical concept that will usher in a revolution in military affairs.

Still, we should not fool ourselves that we have always been following the tenets of EBO. We need look no further than present events in Iraq to understand that because success has been accomplished in a physical sense that the enemy is necessarily defeated in the moral domain. We cannot assume that our destructive capability will necessarily lead to the surrender of the enemy. War is too complex a business.

The true value of EBO lies in its application as a way of thinking about warfare and the operational art. From this perspective, it is not so much a revolutionary way of thinking as it is a refinement – a means of introducing a better way of accomplishing what we have always believed must be done to defeat the enemy. One author summarized the military’s relationship with EBO by noting “despite deep EBO roots, the military has never really institutionalized the thought processes necessary to ensure consistent adherence to EBO principles.”⁴⁶

It is through this ‘institutionalization’ of EBO in our doctrine that its true value becomes apparent. Whereas the enemy was accounted for as a factor in our campaign design, EBO ensures that he remains the focus and that our actions are framed in the cognitive domain where we have always sought to be decisive.

It is inevitable that this way of thinking should have an impact on how we practice the operational art. We must apply some care to the meaning of the term center

⁴⁶ Mann, Endersby and Searle. “Dominant Effects: Effects-based Joint Operations:” 93.

of gravity. If the enemy is regarded holistically as a system, then there is some attraction to looking for the binding element that holds him together as an entity and attacking it. The proposition that there is but one center of gravity is reasonable, but it comes with significant implications for how we currently conceive the levels of war and how we prosecute campaigns. As the levels of war become more compressed and technology in the form of stealth and precision advances, we are likely to see the notion of parallel warfare and the doctrine of strategic attack as the foundation for future operations. This is noteworthy for the CF in terms of how we might contribute to future US-lead campaigns.

Similarly, our notion of decisive points requires some adjustment. Framing decisive points as objectives and in terms of their effect on the enemy has important implications for how we apply force and frame our effects on the enemy. Defining second, third and fourth order consequences will demand more from our information systems and doubtlessly will require changes to staff structures and decision-making processes. The integration of non-military agencies into the planning process will pose considerable challenges and require a degree of cooperation that is presently missing.

Recent operations in Bosnia indicate that the CF has some basic experience with EBO but the concept has not been applied in a coherent or particularly successful manner. We need to reflect EBO in our doctrine and in this area, there is still much to do. Moreover, if EBO were going to be a viable operational concept for future CF force employment, there would appear some urgency to address this requirement. While Bosnia has faded from prominence, the CF will be engaged shortly in Provincial Reconstruction Teams (PRTs) in Afghanistan where there will be considerable scope to practice the operational art and apply the tenets of EBO. Unless we adopt EBO as a way

of thinking, there is a chance that our PRT may be every bit as inconclusive as our experience in Bosnia. The blueprint for success is at hand; it only requires that we understand and apply EBO properly.

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