

Influence Operations: Historical and Contemporary Dimensions

KMG Associates

A Report Prepared by
Allan English, James McKay and Howard Coombs

Scientific Authority:
Keith Stewart

Defence Research and Development (DRDC) - Toronto
Command Effectiveness and Behaviour Section

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Abstract

This report was written to support research by Defence Research and Development Canada (DRDC) Toronto designed to enhance the ability of the Canadian Forces (CF) to plan, implement, and evaluate “influence” campaigns in future expeditionary operations. It contributes to a one-year scoping study that is being conducted to better define the CF’s requirements for further research in this area. The report is based on a review of relevant academic disciplines and provides a broad, representative coverage of the area of investigation by clarifying the range of influence activities and providing a classification scheme for those activities. Canadian approaches to influence operations in the last half of the 20th century and the early years of the 21st are a particular focus of this work. Concluding material includes findings on multi-agency planning in the contemporary environment and suggestions for future research in the area of influence operations.

Résumé

Le présent rapport a été rédigé pour appuyer les recherches que fait Recherche et développement pour la défense Canada (RDDC) Toronto pour améliorer la capacité de planification, de mise en œuvre et d’évaluation des campagnes d’« influence » des Forces canadiennes (FC) au cours des futures opérations expéditionnaires. Il contribue à une étude de délimitation d’un an qui permettra de mieux définir la nécessité pour les FC de poursuivre les recherches dans ce domaine. Le rapport est fondé sur un examen des disciplines pertinentes et offre une couverture large et représentative du champ de l’enquête en précisant l’étendue des activités d’influence et en fournissant un plan de classification de ces activités. La façon d’aborder les opérations d’influence qu’a utilisée le Canada au cours de la dernière moitié du XX^e siècle et au début du XXI^e siècle met tout particulièrement l’accent sur ces travaux. La conclusion comprend des résultats de la planification multi-organismes dans l’environnement contemporain et des propositions concernant les recherches futures dans le domaine des opérations d’influence.

Executive Summary

This report was written to support research by Defence Research and Development Canada (DRDC) Toronto that is designed to enhance the ability of the Canadian Forces (CF) to plan, implement, and evaluate “influence” campaigns in future expeditionary operations. It contributes to a one-year scoping study that is being conducted to better define the CF’s requirements for further research in this area. The report is based on a review of relevant academic disciplines and provides a broad, representative coverage of the area of investigation by clarifying the range of influence activities and providing a classification scheme for those activities. Canadian approaches to influence operations in the last half of the 20th century and the early years of the 21st are a particular focus of this work. Concluding material includes findings on multi-agency planning in the contemporary environment and suggestions for future research in the area of influence operations.

The notion of influencing adversaries, allies and neutrals to achieve one’s goals with the minimum cost in blood and treasure is an ancient one. The writings of Sun Tzu and Thucydides, which are still used widely today in senior officer professional military education, show that actions like feints or demonstrations, threats and ultimata, as forms of coercion and deterrence, were all used as stratagems to influence adversaries, friends and neutrals. The ancients did not construct any specific models for applying their stratagems of influence; however, they used the stratagems regularly to achieve their goals while minimizing their losses, when possible. The classical writers on military thought, such as Clausewitz and Corbett, developed ideas related to influence operations, but the modern era of influence operations began with writings of the airpower theorists in the early 20th century and then evolved in the writings of their successors in the late 20th and early 21st centuries.

The use of influence to achieve objectives is a constant theme in “small wars” and counterinsurgency operations. Generally speaking, Western approaches to small wars have evolved since the 19th century so that non-kinetic effects have gradually replaced kinetic effects in the attempt to influence others. Asian approaches to small wars use all the stratagems of influence operations, but the Asian approaches do not rely on technology or explicit statements of doctrine to the same extent that Western armed forces do. For Asian practitioners of small wars, as well as Soviet theorists of war, the use of influence is implied throughout the whole of their political and military discourse.

Currently, the term “influence operations” is being used to define a fairly narrow set of activities, largely in a land force context, at the operational-level and tactical-level. However, there is a lack consistency among current conceptual models and ideas related to “influence operations,” in Western doctrine. Some commonality is, nevertheless, visible in some Western doctrine on influence operations. While British doctrine uses the less restrictive term “activity,” instead of the more restrictive term “operation” found in most US doctrine, the general notion of influence activities is compatible in many ways with the US term. Furthermore, the framework to coordinate all activities related to

influencing a target audience within a theatre of operations is based on ubiquitous US doctrine.

Culture and historical experience, both national and service, affect how influence is characterized by various organizations and writers. For example, the practice of describing influence in terms of an operation, as in the term “influence operation,” is common in armies who, since the last two decades of the 20th century, have been strongly influenced by the paradigm of operational art. In this army paradigm, campaigns are sequenced with the conduct of various operations, which are limited by time and resources.

Navies, on the other hand, see the application of influence differently. From their perspective, naval assets are constantly exerting influence. From a ship’s visit to a foreign port with a trade delegation aboard, to blockades, to full scale warfare, navies see themselves as constantly exercising influence along a continuum of violence.

Western air forces also view influence differently from armies because air forces have traditionally sought to link tactical actions (or outputs) to strategic outcomes without necessarily applying the operational art. For most Western air forces their current approach to operations, Effects Based Operations, is essentially about influencing various actors based on experience and theories that have evolved from the beginning of the 20th century. The most recent NATO information operations doctrine appears to accept applying EBO to IO; however, US and Canadian land forces have not wholeheartedly done so. And their adoption of the term Effects Based Approach to Operations is a deliberate doctrinal statement to distance themselves from the air force EBO concept.

Canadian perspectives of attaining strategic influence arose from the crucible of the Second World War and are grounded in the historical experience of earning membership in a wartime alliance. Despite popular images of Canada as an unbiased and neutral nation, the reality of Canadian participation in the international community is grounded in pragmatism and a desire to maintain influence with global reach.

The experience of senior Canadian commanders in recent influence activities has been diverse, depending on the physical environment and the coalition or other organization in which the experience took place. Despite this diversity of experience, there are some common threads in it, including Canada’s ready acceptance into coalition leadership positions based on competence, enlightened leadership and management techniques; the value of Canadian national culture with its characteristics of accepting diverse cultures associated with its traditions of bilingualism and multiculturalism; and the value of Canada’s military culture with its history of alliance and UN operations and its judicious exploitation of available technology.

In order to address the key issues identified in the report, it recommended that research be pursued in the following areas: 1) clarifying the concepts related to influence operations and then identifying how influence activities might fit within a more rigorous lexicon; 2) examining the cultural dimension to influence activities, in both our own culture and

targets' cultures; 3) investigating measures of effects/effectiveness (MOEs) to support influence activities; 4) seeing how influence operations could fit into the operational art paradigm, for example, creating campaign design tools that incorporate influence operations explicitly and more completely into campaign design process than is currently the case with existing tools; 5) documenting and analyzing the experiences of senior Canadian commanders with influence activities, particularly in the post-9/11 era.

Sommaire

Le présent rapport a été rédigé pour appuyer les recherches que fait Recherche et développement pour la défense Canada (RDDC) Toronto pour améliorer la capacité de planification, de mise en œuvre et d'évaluation des campagnes d'« influence » des Forces canadiennes (FC) au cours des futures opérations expéditionnaires. Il contribue à une étude de délimitation d'un an qui permettra de mieux définir la nécessité pour les FC de poursuivre les recherches dans ce domaine. Le rapport est fondé sur un examen des disciplines pertinentes et offre une couverture large et représentative du champ de l'enquête en précisant l'étendue des activités d'influence et en fournissant un plan de classification de ces activités. La façon d'aborder les opérations d'influence qu'a utilisée le Canada au cours de la dernière moitié du XX^e siècle et au début du XXI^e siècle met tout particulièrement l'accent sur ces travaux. La conclusion comprend des résultats de la planification multi-organismes dans l'environnement contemporain et des propositions concernant les recherches futures dans le domaine des opérations d'influence.

L'idée d'influencer les adversaires, les alliés et les neutres pour atteindre ses objectifs avec le moins de pertes humaines et financières possibles est ancienne. Les écrits de Sun Tzu et de Thucydides, qui sont encore largement utilisés aujourd'hui dans la formation militaire des officiers supérieurs, montrent que les mesures telles que les feintes ou les démonstrations, les menaces et les ultimatums, en tant que formes de coercition et de dissuasion, ont toutes été utilisées en tant que stratagèmes pour influencer les adversaires, les amis et les neutres. Les anciens n'ont pas construit de modèle précis pour appliquer leurs stratagèmes d'influence ; ils utilisaient toutefois régulièrement les stratagèmes pour atteindre leurs objectifs tout en réduisant leurs pertes au minimum, lorsque c'était possible. Les auteurs classiques sur la pensée militaire, tels que Clausewitz et Corbett, ont développé des idées se rapportant aux opérations d'influence, mais l'ère moderne des opérations d'influence a commencé avec les écrits des théoriciens de la force aérienne du début du XX^e siècle et a évolué dans les écrits de leurs successeurs à la fin du XX^e et au début du XXI^e siècles.

L'utilisation de l'influence en vue de l'atteinte d'objectifs est un thème qui revient constamment dans les « guerres de petite envergure » et les opérations anti-insurrectionnelles. Généralement parlant, les façons d'aborder les guerres de petite envergure de l'occident ont évolué depuis le XIX^e siècle, si bien que les effets non cinétiques ont graduellement remplacé les effets cinétiques dans la tentative en vue d'influencer les autres. Dans leurs approches des guerres de petite envergure, les Asiatiques utilisent tous les stratagèmes des opérations d'influence, mais ils ne comptent pas sur la technologie ou sur les déclarations catégoriques de doctrine dans la même mesure que les forces armées de l'Ouest. L'utilisation de l'influence est sous-entendue dans l'ensemble du discours politique et militaire des praticiens asiatiques des guerres de petite envergure et des théoriciens soviétiques de la guerre.

À l'heure actuelle, on utilise l'expression « opérations d'influence » pour décrire un ensemble assez étroit d'activités qui se situent largement dans le contexte des forces terrestres aux niveaux opérationnel et tactique. Il y a toutefois un manque de cohérence dans les idées et les modèles conceptuels se rapportant aux opérations d'influence dans la doctrine de l'Ouest. Une certaine communauté est néanmoins visible dans certaines doctrines occidentales sur les opérations d'influence. Si la doctrine britannique utilise le terme « activité » moins restrictif plutôt que le terme « opération » plus restrictif qu'on trouve dans presque toute la doctrine des États-Unis, l'idée générale des activités d'influence concorde à bien des égards avec le terme américain. De plus, le cadre de coordination des activités relatives à la façon d'influencer un public cible dans un théâtre d'opérations est fondée sur l'omniprésente doctrine américaine.

L'expérience culturelle et historique, tant nationale que militaire, montre comment l'influence est caractérisée par divers organismes et auteurs. Par exemple, la pratique de décrire l'influence du point de vue d'une opération, comme dans le terme « opération d'influence », est fréquente dans les armées qui, depuis les deux dernières décennies du XX^e siècle, ont été fortement influencées par le paradigme de l'art opérationnel. Dans ce paradigme de l'armée, les campagnes sont enchaînées avec la conduite de diverses opérations, qui sont limitées par le temps et les ressources.

Dans les forces maritimes, par contre, on envisage l'application de l'influence autrement. À leur point de vue, les ressources maritimes exercent constamment de l'influence. De la visite d'un navire à bord duquel il y a une délégation commerciale dans un port étranger jusqu'à la guerre totale, en passant par les blocus, les forces maritimes estiment être constamment en train d'exercer de l'influence dans un continuum de violence.

Les forces aériennes de l'Ouest envisagent aussi l'influence d'une autre façon que les forces terrestres parce qu'elles ont traditionnellement cherché à lier les actions (ou résultats) tactiques aux résultats stratégiques sans nécessairement appliquer l'art opérationnel. L'approche actuelle des opérations de la plupart des forces aériennes de l'Ouest, à savoir les opérations basées sur les effets, consiste essentiellement à influencer divers acteurs en fonction de l'expérience et des théories qui se sont développées depuis le début du XX^e siècle. La doctrine la plus récente sur les opérations d'information de l'OTAN semble accepter l'application des opérations basées sur les effets aux opérations d'information; les forces terrestres américaines et canadiennes n'ont toutefois pas fait de même sans réserve et leur adoption du terme « approche opérationnelle basée sur les effets » est une déclaration doctrinale bien pesée leur permettant de prendre leur distance par rapport au concept des opérations basées sur les effets de la force aérienne.

Les perspectives canadiennes sur l'atteinte de l'influence stratégique viennent du creuset de la Seconde Guerre mondiale et sont fondées sur l'expérience historique de l'adhésion à une alliance de temps de guerre. En dépit des images populaires du Canada en tant que pays neutre et impartial, la réalité de la participation canadienne à la société des nations est fondée sur le pragmatisme et sur un désir de conserver une influence qui lui permet de manœuvrer partout dans le monde.

Au cours des activités d'influence récente, les commandants supérieurs canadiens ont acquis une expérience diversifiée suivant le milieu physique et la coalition ou les autres organismes au sein desquels ils l'ont acquise. Malgré sa diversité, l'expérience acquise a des points communs, dont l'acceptation facile du Canada à des postes de commandement de la coalition en fonction de la compétence, d'un leadership éclairé et de techniques de gestion, la valeur de la culture nationale du Canada caractérisée par l'acceptation de diverses cultures associées à ses traditions de bilinguisme et de multiculturalisme et la valeur de la culture militaire canadienne avec son histoire d'alliances et d'opérations de l'ONU et son exploitation judicieuse de la technologie disponible.

Pour aborder les principales questions définies dans le rapport, il est à conseiller de poursuivre les recherches dans les domaines suivants : 1) préciser les concepts relatifs aux opérations d'influence et déterminer ensuite comment les activités d'influence peuvent s'intégrer à un lexique plus rigoureux, 2) examiner l'aspect culturel des activités d'influence, tant dans notre propre culture que dans les cultures cibles, 3) étudier les mesures des effets/de l'efficacité soutenant les activités d'influence, 4) examiner la façon dont les opérations d'influence pourraient s'intégrer au paradigme de l'art opérationnel, par exemple créer des outils de conception de campagnes qui incorporent les opérations d'influence dans le processus de conception de campagne explicitement et plus complètement que ce que font actuellement les outils existants, 5) étayer et analyser l'expérience acquise par les commandants supérieurs canadiens dans le domaine des activités d'influence, et surtout au cours de la période postérieure au 11 septembre.

PART I – INTRODUCTORY MATERIAL

Introduction

The notion that states and their armed forces attempt to influence the perceptions and behaviour of their adversaries, allies and others in various ways is an ancient one. This notion is at the heart not only of the practice of diplomacy, but also of theories of conflict. At the beginning of the 21st century the term “influence operations” has been used to define a fairly narrow set of activities, largely in a land force context, at the operational-level and tactical-level. However, as the use of the term evolves, its meaning shows signs of expanding to include its broader historical roots.

This report has been written in support of that part of Defence Research and Development Canada (DRDC) Toronto’s research that is aimed at enhancing the ability of the Canadian Forces (CF) to plan, implement, and evaluate influence¹ campaigns in future expeditionary operations. Owing to the novelty of this research area and the still-nascent CF efforts to build its capacity in this regard, this report will contribute to a one-year scoping study that is being conducted to better defining the CF’s requirements for further research in this area. This report, based on a review of relevant academic disciplines, provides a broad, representative coverage of the area of investigation by clarifying the range of influence activities and providing a classification scheme for those activities.

Conceptions of military operations have been evolving in the post-Cold War era. For example, in a 2005 concept paper, the US Marine Corps introduced the term “Distributed Operations” to portray its operations in the new security environment. “Distributed Operations” has its roots in “decentralized operations” described in the 1940 version of the US Marine Corps *Small Wars Manual*, which is discussed in more detail later in this paper. While still evolving, the term “Distributed Operations” seems to be displacing “Expeditionary Operations” in the Marine Corps lexicon, as there is no reference in the text of the concept paper to “expeditionary,” only a Figure that refers to the need for an “expeditionary culture.”² Similar to the US Marine Corps, the Canadian Army is developing what it calls a “Dispersed Operating Concept,” which, while different in some ways from the USMC’s “Distributed Operations,” also eschews the use of term “expeditionary.”³ The demise of the term of expeditionary in concept papers signals changes in professional military thought about operations at the beginning of the 21st century. Another term, “Long War,” has been used extensively in the press and other

¹ An initial definition of “influence operations” for the purposes of defining the scope of this project was taken to be “all targeted activities conducted by the CF, its partners, and its adversaries with a view to affecting the attitude, intent, and behaviour of neutrals and adversaries within the campaign space.”

² US Marine Corps, “A Concept for Distributed Operations,” US Marine Corps Training and Education Command, Quantico, VA, dated 25 April 2005, available at <http://www.mcwl.quantico.usmc.mil/A%20Concept%20for%20Distributed%20Operations%20-%20Final%20CMC%20signed%20co.pdf>. Accessed 3 April 2007.

³ Canada, Directorate Land Concepts and Doctrine, “Land Operations 2021: Adaptive Dispersed Operations – A Force Employment Concept for Canada’s Army of Tomorrow. Kingston: Army Publishing Office, 2007.

popular publications to indicate changes in how US involvement in places like Iraq and Afghanistan is perceived. Once characterized as expeditionary operations,⁴ this involvement is now being described as part of the “Global War on Terrorism,” which, by definition, is a “Long War.” Despite its widespread use, the term “Long War” has not been precisely defined by armed forces; however, for now, it is perhaps best encapsulated by the following statement:

Since the end of the Cold War, the nature of military operations conducted by conventional forces has evolved: they have become longer in duration and more diverse in location and scope; they also require general purpose forces to perform more specialized tasks, and to distribute these tasks across all ranks and billets. This new mission profile is now understood as the ‘Long War.’⁵

From this definition, one can infer that US military operations are transitioning from the concept of expeditionary, implying operations with a specific objective and therefore limited by duration and resources, to “Long War” operations, implying operations based on long term objectives and therefore commitments (measured in years instead of weeks), conducted from permanent facilities in the areas where operations are conducted. These changes in the nature of operations will, and to a certain extent already have, as we shall see, impacted on the concept of “influence operations.”

Current Approaches to Influence Operations

At the beginning of the 21st century, the term “influence operations” is starting to gain some currency in the professional military literature and doctrine. The term is not well defined, however, and, when referring to operational-level and tactical-level activities, is generally used as a subset of either psychological operations (PSYOPS) or information operations by those who use the term “influence operations.” For example, recent US Air Force doctrine on information operations lists influence operations as a capability of information operations:

The new framework of information operations groups the capabilities of influence

⁴ NATO doctrine defines an “expeditionary operation” as “the projection of military power over extended lines of communications into a distant operational area to accomplish a specific objective.” *AAP-6 – NATO Glossary of Terms and Definitions* (A-AD-AAP/JX-001) http://www.dtic.mil/doctrine/jel/other_pubs/aap_6_04.pdf.

⁵ Call for papers, “Pedagogy for the Long War: Teaching Irregular Warfare,” for a conference to be held 29 October through 2 November 2007 at the General Alfred M. Gray Research Center, in Quantico Virginia, [nd, April 2007?]. The term “Long War” appears to have been coined by General John P. Abizaid, the former head of US Central Command, “to signal to the American public that the country was involved in a lengthy struggle that went well beyond the war in Iraq and was political as well as military.” The term has apparently now been ordered dropped from Central Command’s lexicon by the current head of Central Command, Admiral William J. Fallon, because “the concept of a long war alienated Middle East audiences by suggesting that the United States would keep a large number of forces in the region indefinitely.” Michael R. Gordon, “US Command Shortens Life of ‘Long War’ as a Reference,” *New York Times* (24 April 2007) online edition, <http://www.nytimes.com/2007/04/24/washington/24policy.html?ex=1335067200&en=7f6ab0fef2346358&ei=5090&partner=rssuserland&emc=rss>. Accessed 24 Apr 2007.

operations, electronic warfare operations, and network warfare operations according to effects achieved at the operational level. Each of these capabilities consists of separate and distinct subcapabilities that, when combined and integrated, can achieve effects greater than any single capability.⁶

Nonetheless, even in official US doctrine confusion exists about the term information operations of which influence operations may be a subset. For example, US joint PSYOP doctrine uses a very restrictive definition of information operations, one that emphasizes its technical aspects: “Actions taken to affect adversary information and information systems while defending one’s own information and information systems.”⁷ Whereas, US joint information operations (IO) doctrine takes a much broader view of IO:

Information operations (IO) are described as the integrated employment of electronic warfare (EW), computer network operations (CNO), psychological operations (PSYOP), military deception (MILDEC), and operations security (OPSEC), in concert with specified supporting and related capabilities, to influence, disrupt, corrupt, or usurp adversarial human and automated decision making while protecting our own.⁸

While less focused on technical aspects of IO than the previous definition, this second definition is restrictive in its own right as it focuses on the adversary and does not mention friendly, or neutral, groups. More importantly, for this discussion, unlike the US Air Force definition of information operations, this definition of IO makes no reference to influence operations.

Not surprisingly, given the landcentric nature of most joint doctrine, land force doctrine in this area closely resembles joint doctrine. Since land forces emphasize the tactical and operational levels of conflict, their explicit focus in much of their doctrine, particularly the US Army, has been on defeating an enemy. Based on their experiences at the beginning of the 21st century, land forces have increasingly recognized the requirement to influence friendly and neutral parties, but this requirement tends to be implicit in most army doctrine. As shown in the quote that follows, US Army doctrine IO doctrine is very similar to the US joint doctrine cited above:

Information operations is the employment of the core capabilities of electronic warfare, computer network operations, psychological operations, military deception, and operations security, in concert with specified supporting and related capabilities, to affect or defend information and information systems, and to influence decisionmaking.⁹

⁶ US Air Force, Air Force Doctrine Document (AFDD) 2-5, *Information Operations* (11 Jan 2005), Foreword.

⁷ US Joint Staff, Joint Publication (JP) 3-53 *Doctrine for Joint Psychological Operations* (5 Sep 2003), p. I-11

⁸ US Joint Staff, JP 3-13 *Information Operations* (13 Feb 2006), ix.

⁹ United States, United States Army, *FM 3-13 (FM 100-6) Information Operations: Doctrine, Tactics, Techniques, and Procedures* (Washington: Headquarters, Department of the Army, November 2003), iii.

While US Army doctrine refers to the same capabilities as joint doctrine, its application of these capabilities is slightly more nuanced towards influencing “decisionmaking” than joint doctrine. Elsewhere in US Army IO doctrine, due to its focus on theatre-level warfare, reference is made to a host of coordination mechanisms to ensure the “synchronization” of information activities, and these systemic approaches to these activities are imbued in the doctrine of most, if not all western militaries.¹⁰

The US Marine Corps appears to be taking a slightly different approach than the US Army has taken to information operations, according to the online journal *Small Wars*. In a section titled “Information/Influence Operations,” it describes the US Marine Corps Center for Emerging Threats and Opportunities approach to IO as follows:

The focus of IO is on the individual decision makers and the decision making process. IO is the ability to adversely influence enemy decision making processes while enhancing and protecting our own. Therefore, for IO to be successful, it demands an ability to understand people, cultures, and motivations. In the context of maneuver warfare, IO attempts to disrupt the observe, orient, decision, action (OODA) loop of the enemy, affecting his ability to act by causing the enemy to receive information that is inaccurate, incomplete, or received at an inopportune time.¹¹

This US Marine Corps approach to IO is more human focussed than other US service approaches to IO and it specifically recognizes the importance of understanding target audience culture and motivation. The Marines also tie IO explicitly to manoeuvre warfare and the OODA loop in this approach.¹²

A somewhat different approach to IO and influence operations has been taken by the British armed services and the North Atlantic Treaty Organization (NATO) both of whom have doctrine that speaks more directly to “influence” than US doctrine. British doctrine explicitly depicts “influence activities” as a key component of information operations and describes influence activities as “any activity whose primary purpose is to influence will.”¹³ This view of influence activities is based on the British experience with

¹⁰ For further discussion of the mechanistic aspects of US doctrine see Howard Coombs, “Perspectives on Operational Thought,” in Allan English et al, eds. *The Operational Art – Canadian Perspectives: Context and Concepts*, (Kingston: Canadian Defence Academy Press, 2005), 75-96.

¹¹ “Information Operations,” Information / Influence Operations, Issues / Concepts / Lessons, Reference Library, *Small Wars Journal* <http://smallwarsjournal.com/reference/informationoperations.php>, accessed 27 Mar 2007.

¹² For a description of the importance of manoeuvre and the OODA loop to land forces see Allan English, et al., eds., *The Operational Art: Canadian Perspectives – Context and Concepts* (Kingston, ON: Canadian Defence Academy Press, 2005), 34-48.

¹³ United Kingdom, Director General Joint Doctrine and Concepts, *JWP 3-80 Information Operations* (June 2002), 2-3. The use of the term “influence activity” instead of “influence operation” denotes a broader view of influence because in this context we believe that an “influence activity” is used to bring about a desired effect, in other words “influence activities” focus on causes rather than effects. “Influence activities” might also be seen as ongoing actions that are designed to shape the strategic or operational environment, in this context. However, some may interpret the term “activities” to mean actions that are subsets of operations. These differing viewpoints are directly attributable to the lack of clarity in the lexicon of the topic of

expeditionary operations in the 19th and 20th centuries, which will be discussed later. This view also takes into account a wider range of potential target audiences, including allies and friendly nations. For example, the British armed forces acknowledge the need to produce their own national doctrine not only in cases where NATO doctrine is inadequate or nonexistent, but also “to influence the development of NATO doctrine.”¹⁴ British influence on NATO doctrine can be seen in the following extracts from NATO information operations doctrine:

INFO OPS [information operations] aims at achieving effects in the virtual and physical space in which information is received, processed and conveyed. It consists of the information itself and information systems. These information systems comprise personnel, technical components, organizational structures and information-based processes that collect, perceive, analyse, assess, create, manipulate, store, retrieve, provide, display, share, transmit and disseminate information.

*NATO’s use of INFO OPS becomes even more important as the Alliance moves towards Effects Based Operations (EBO) that are designed to influence the will of an adversary or neutrals through the co-ordinated application of military capabilities, in order to achieve desired objectives [emphasis added]. This focus on effects and their influence on behaviour rather than only attrition and targets will clearly require INFO OPS to define desired effects.*¹⁵

In this definition of information operations NATO doctrine uses much broader concepts than similar US doctrine and makes an explicit reference to Effects Based Operations. This reference to EBO would be seen, in many circles in the US military, as skewing NATO information operations doctrine towards the US Air Force view of these types of operation.¹⁶

US Air Force doctrine is similar, but not identical, to US joint doctrine regarding information operations and influence operations. It defines information operations as “the integrated employment of the capabilities of influence operations, electronic warfare operations, and network warfare operations, in concert with specified integrated control enablers, to influence, disrupt, corrupt, or usurp adversarial human and automated

“influence.” Further confusion in the lexicon is demonstrated by differing definitions of “influence” in British joint doctrine itself. For example, UK doctrine on the effects-based approach uses a different, if somewhat similar, definition of influence than that found in *JWP 3-80 Information Operations*. See United Kingdom, Director General Development, Concepts and Doctrine, *Joint Doctrine Note 7/06, Incorporating and Extending the UK Military Effects-Based Approach* (Shrivenham: The Development, Concepts and Doctrine Centre, September 2006), p. 1-7.

¹⁴ United Kingdom, *JWP 3-80 Information Operations* (June 2002), vii.

¹⁵ North Atlantic Treaty Organisation, *AJP-3.10 Allied Joint Information Operations Doctrine* (2nd Study Draft) (As Of 23 April 2004), 1-2.

¹⁶ The use of the term “Effects Based Operations” can be very controversial in some military circles. Because of EBO’s association with a particularly air force approach to operations, some, particularly those associated with land forces, prefer the term, “Effects-Based Approach to Operations” (EBAO). Allan English and Howard Coombs, eds., “Proceedings of a Workshop on Effects Based Operations,” a report prepared for Defence Research and Development Canada (DRDC) – Toronto, dated 4 March 2007, 54.

decision making while protecting our own.”¹⁷ Note that, unlike the joint doctrine definition of IO (above), the US Air Force definition includes influence operations as a specific capability of IO.

The US Air Force currently provides the only detailed definition of the term “influence operations” in publicly available US doctrine. However, its definition of influence operations appears to overlap with that of information operations. Its definition may even contradict US joint doctrine, based on the joint doctrine definition of IO, as the military capabilities of influence operations in the US Air Force doctrine are very similar to the capabilities of IO in joint doctrine, as shown by the emphasized parts of the US Air Force definition:

Influence operations are focused on affecting the perceptions and behaviors of leaders, groups, or entire populations. Influence operations employ capabilities to affect behaviors, protect operations, communicate commander’s intent, and project accurate information to achieve desired effects across the cognitive domain. These effects should result in differing behavior or a change in the adversary’s decision cycle, which aligns with the commander’s objectives. *The military capabilities of influence operations are psychological operations (PSYOP), military deception (MILDEC), operations security (OPSEC), counterintelligence (CI) operations, counterpropaganda operations and public affairs (PA) operations.*¹⁸ [emphasis in original]

The fact that the authors of this US Air Force doctrine chose to highlight military capabilities of influence operations that are different from definitions in joint doctrine suggests that the US Air Force may be taking a different approach to influence operations than others.¹⁹ This different approach can also be discerned in a 2005 article entitled “Emergent Capability: Influence Operations and the Strategic Airman”:

After developing *target sets* that affect key decision makers, influence planners then pair Air Force capabilities with those sets to change the behavior of the intended receiver. Photos of bomb craters and destroyed targets do not represent victory—capitulation of the adversary does. In the lexicon of influence operations, a change in observed behavior defines victory—not well-crafted messages or delivered information.²⁰ [emphasis added]

This article appeared in the same year as the US Air Force IO doctrine cited above was published and its title suggests that the US Air Force interpretation of influence

¹⁷ US Air Force, AFDD 2-5, 1.

¹⁸ US Air Force, AFDD 2-5, 5.

¹⁹ This view was confirmed in an email exchange concerning “influence operations” between Howard Coombs and with a Canadian liaison officer serving in the US. The liaison officer indicated that the US Air Force “seems to be only service” that is pursuing influence operations as a concept. Email between Howard G. Coombs and Canadian Liaison Officer dated 20 March, 2007.

²⁰ Shaun Copelin and Andre Provoncha, “Emergent Capability: Influence Operations and the Strategic Airman,” *Air and Space Power Journal* 19, no. 4 (Winter 2005). Available at <http://www.airpower.maxwell.af.mil/airchronicles/apj/apj05/win05/qlcopelin.html>. Accessed 13 Mar 2007.

operations may be evolving from the tactical and operational levels to the strategic level. Furthermore, the reference to “target sets” implies a connection between influence operations and the US Air Force approach to Effects Based Operations, which could be interpreted as another way of looking at influence operations.²¹ In fact, the propensity of air forces to see their influence as best applied at the strategic level is rooted in the history of airpower, which will be discussed later. Another indication that the US Air Force may be taking influence operations out of a joint and army operational-level and tactical-level context to a more strategic-level context is a somewhat cryptic reference on the L-3 Communications Titan corporation website that claims that it is part of a group associated with Air Combat Command that “is leading development in the newest aspect of Air Force Information Operations—the rapidly evolving field of Influence Operations.” There is very little information provided on this project; however, an image on the website depicts using influence operations (i.e., PSYOP, MILDEC, OPSEC, CI, and PA) to exert “Air Force Influence” on the “Cognitive Target Domain.”²² While the details of this US Air Force initiative have yet to emerge in the public domain, it is clear that the initiative is taking influence operations into new waters as far as some current definitions of influence operations are concerned, but waters in which navies have sailed for some time.

While navies have traditionally not shown a great deal of interest the doctrinal minutia that have been the domain of armies, and more recently some air forces, navies have been extremely cognizant of the influence that maritime forces can exert on friends, neutrals and adversaries. In summarizing over a century of maritime strategy, the Canadian Navy’s strategic blueprint, *Leadmark*, notes that naval diplomacy can be used “to influence, not only potential adversaries, but also friends and partners.”²³ *Leadmark* also calls the ability of navies to influence events at a distance “the essence of sea power,”²⁴ and it defines “maritime manoeuvre” as the “ability to use the unique access provided by the sea to apply force or influence at a time and place of ones own choosing.”²⁵

There has been some interest in strategic aspects of influence operations at the US Army War College as shown by the publication of a student paper that analyzes the US government’s “current approach to conducting strategic influence operations within the international environment.” This paper examines issues surrounding influence operations involving US interagency co-operation or what in Canada have been called “integrated” operations.²⁶ The resurgence of interest in strategic aspects of influence operations in the

²¹ Allan English, Richard Gimblett, and Howard Coombs, “Beware of Putting the Cart before the Horse: Network Enabled Operations as a Canadian Approach to Transformation,” DRDC Toronto, Contract Report CR 2005-212 (19 July 2005), 43-8.

²² L-3 Communications Titan website, “Service – Influence Operations,” available at <http://www.titan.com/products-services/abstract.html?docID=415>. Accessed 13 Mar 2007.

²³ *Leadmark: The Navy’s Strategy for 2020* (Ottawa: Chief of Maritime Staff, 2001), also at: http://www.navy.dnd.ca/mspa_news/news_e.asp?id=11, 96.

²⁴ *Leadmark*, 46.

²⁵ *Leadmark*, p. GL 13.

²⁶ Colonel Brad M. Ward, “Strategic Influence Operations – The Information Connection,” Carlisle, PA: Unpublished United States Army War College Strategy Research Project, 7 April 2003, iii.

US has been prompted by perceived failures in US policy based on a misunderstanding of adversary responses to attempts to influence them. For example, the former director of the US Central Intelligence Agency, George Tenet, is reported to have said that there was a “perennial problem” with US intelligence analysts assuming that “other people thought like they did.” This problem became critical, Tenet claimed, when they were called upon to judge “whether Hussein was lying when he said Iraq had no weapons of mass destruction, [because] ‘we did not account for . . . the mind set never to show weakness in a very dangerous neighborhood.’”²⁷ In other words, Hussein could not respond to American attempts to influence him in the way American officials expected, by denying that he had weapons of mass destruction, because this response could have endangered his regime domestically and regionally. To Hussein, in this context, he was compelled to claim he had weapons of mass destruction, whether he did have them or not, in order to maintain power. Therefore, according to critics of US policy towards Hussein over weapons of mass destruction, it was doomed to failure because of an inability or unwillingness to understand how Hussein would react to US attempts to influence him.

The current Canadian approach to influence operations was summarized by General Rick Hillier when he was Commander International Security and Assistance Force in Afghanistan in July 2004:

In normal operations one attempts to overwhelm the enemy. There is an attempt to tear the enemy down instead of build yourself up. *In post conflict environments one must constrain the growth of the threat forces and manage the perceptions that there is an increase in measurable government capacity.* The military component is just one element of the overall campaign. [emphasis added]²⁸

However, at the time that General Hillier made that statement, no Canadian doctrine existed to reflect this approach. In an attempt to address quickly this lack of doctrine, the Canadian Land Force sought an immediate solution by adopting doctrine concerning influence activities that mirrors NATO doctrine. However, on closer examination as we have seen, this doctrine is based on British concepts of influence operations.²⁹ While the new Canadian Land Force doctrine provides an immediate solution to the lack of Canadian doctrine on influence operations, the practice of adopting alliance or other nations’ doctrine without a careful analysis of one’s national experience has its risks. For, like the Canadian application of operational art, our ideas on influence may be unique to the Canadian experience, and, therefore need to be the subject of careful study to ensure that our doctrine reflects Canadian experience and practice. And this practice is constantly evolving both on operations abroad and now, apparently, at home.

²⁷ Karen DeYoung, “Tenet Details Efforts to Justify Invading Iraq,” *Washington Post* (28 April 2007), p. A01. For a discussion of the importance of cultural awareness in operations see Montgomery McFate, “The Military Utility of Understanding Adversary Culture,” *Joint Force Quarterly* 38 (3rd Quarter, 2005), 42-8.

²⁸ Lieutenant General (now General) Rick Hillier, Commander International Security Assistance Force (ISAF), interview by Howard G. Coombs, Headquarters ISAF, Kabul, Afghanistan, 20 July 2004.

²⁹ See United Kingdom, JWP 3-80 Information Operations; and Land Force Doctrine and Training System Directorate of Army Doctrine, Conduct of Land Operations – Operational Level Doctrine for the Canadian Army (B-GL-300-001/FP-000) “Chapter 5 – Application of Combat Power” DRAFT in possession of authors.

Traditionally the CF has not engaged in overt or explicit influence operations in a domestic context. However, General Hillier, Chief of the Defence Staff, has stated that the CF has implemented an “operation” to influence public opinion in Canada:

One of the things that has remained a constant irritant for all in uniform, was the distance, our separation, from the population that begat us. Canadians mostly didn't know we existed, what we did, why we did it, or our importance to the country. We are determined to change that by actively linking to moms and dads across Canada with their sons and daughters in the Canadian Forces, and by reaching out to all Canadians so that they are all much more aware of us and educated about what we do and its value. *Being military, we approached this as an operation with a strategic goal - "Recruit the Nation." Our aim is to have the population own its armed forces, through good times and bad, to help ensure that when we are asked to do things we have the wherewithal to do it, and that individually, we are supported within the communities where we live when deployments or tragedy strikes.* Most importantly, when things go wrong, all Canadians feel they are a part of it and the terrible separation of population and Canadian Forces that occurred in and around the Somalia events never occurs again. We feel that much progress has been made, Canadians are more aware and understanding of their Canadian Forces than ever before, and the positive impact for all is immense.³⁰ [emphasis added]

From this brief review it can be seen that there is a lack consistency among current conceptual models and ideas related to “influence operations.” This inconsistency is apparent even among US joint and service doctrine. Nevertheless, in the current security environment, out of necessity, some synthesis of Western approaches to influence operations has occurred in NATO. On the one hand, the British model, based on referring to influence using the more expansive term “activity” instead of the more restrictive term “operation” found in most US doctrine, seems to be forming the basis for understanding the use of influence to alter behaviour. On the other hand, the framework to coordinate all activities related to influencing a target audience within a theatre of operations is based on US practices. In summary, NATO doctrine on influence operations is conceptually British with American implementation.

Some critics of current US IO practices have distinguished between the information domain and the cognitive domain in dealing with conflict. For example, a former US Army officer with considerable experience in military intelligence and counter-terrorism, argues that exploiting, and if possible dominating, the cognitive domain is the key to achieving success in conflict situations. However, he contends that current US doctrine incorrectly, but increasingly, “defines Information Operations in terms of competition for

³⁰ “General Rick Hillier on the Canadian mission in Afghanistan,” *Globe and Mail Update* posted on the internet at 12:00 AM EDT on 12 March 2007 available at <http://www.theglobeandmail.com/servlet/story/RTGAM.20070309.whillierQA0313/BNStory/Front/home>, p. 5 of 9. Accessed 23 Mar 2007.

the domination of cyber-space.” This approach, he argues, focuses too much on the ability of information technology to transmit large quantities of data, but with “almost a total absence of consciousness of the cultural content or impact of that data, except at the lowest and most superficial levels...” He concludes that the successful exploitation of the cognitive domain will require the orchestration of “all instruments of national power” in order to “influence key actors, organizations and nations (friendly, hostile, and neutral) through their political constituencies.”³¹

This paper will explore the lineage of the concepts that have been used in the construction of various approaches to influence operations that now exist. It will start in the Ancient World with a brief discussion of Sun Tzu and Thucydides and then leap forward to the classical era to discuss Karl von Clausewitz and Sir Julian Corbett. Influence operations, in the twentieth century, have multiple sources, such as Soviet military thought, the airpower theorists and the literature on coercion. Each of these will be discussed, in turn, with a view to applying the four criteria of the definition and describing the various stratagems of influence operations, which will be discussed next.

A Conceptual Framework for Influence Operations

The ideas behind influence operations are not new and have been used from the earliest days of warfare, even if they have not been explicitly articulated in the context of an overarching concept of influence operations. These ideas include deception, demonstrations or feints, fighting on the moral³² (or psychological) plane, altering another’s perception of a situation in order to achieve a specific outcome, shaping military operations to achieve particular effects such as causing fear and panic, information operations, deterrence or compellence, the provision of support or advisors, and the threat or use of discrete types of force. Due to the broad nature of the concept of influence operations, it is necessary to define it more precisely. Therefore, for the purposes of discussion, influence operations are defined as:

Targeted activities intended to cause the target to behave in a desired manner primarily through effects on their will, understanding and perceptions in order to support the achievement of objectives.

³¹ Norman Conquest [pseudonym], “Massacre in Fallujah: A Lasting Lesson on the critical Role of Perception and Cognition in Warfare,” SITREP: A Publication of the Royal Canadian Military Institute 66, no. 6 (Nov-Dec 2006), 3-4, 16.

³² In the late 19th and early 20th centuries, psychology was often taught as part of the curriculum of philosophy in Western universities. Some aspects of human behaviour, including ethics and psychology, that are related to influence operations today, were referred to as “moral philosophy” at that time. Therefore, many 19th and early 20th century writers used the term “moral” to refer to what today we would call “psychological,” today, e.g., “moral effects” then would mean “psychological effects” today. See for example William James, “The Moral Philosopher and the Moral Life,” *International Journal of Ethics* 1, no. 3 (April 1891), 330-54.

Examining this working definition more closely, there are four criteria that demarcate its limits: 1) effects on the will, understanding and perceptions of others; 2) application to adversaries, third parties and allies; 3) the intent to cause the target to behave in specific manners; and 4) no necessity for the use of violence. Each of the criteria will be discussed in turn.

The effects on the will, understanding and perceptions of the target in the definition means that the target of the desired effect of any influence operation is in the mind(s) of those to be influenced. An influence operation is intended to affect the target's decision calculus; that is to say, to cause them to behave in the way desired by the influencer through effects on their will to act, their understanding of the situation or their perceptions of the situation or other parties. Therefore, the aim of an influence operation is to cause someone else to choose to behave the way the influencer desires.³³ The choice to behave rests with the decision-makers, be they politicians or military personnel, and as a result, their minds are the intended target of any influence operations. It is important to note that in this discussion the target of an influence operation is not necessarily an adversary, and that any individual or group could be the target of an influence operation. This statement also takes into account the fact that today's adversary could be tomorrow's ally or vice versa.

This brings us to the second criterion referring to "adversary, third party or ally" because, as noted above, influence operations may be directed at one's adversaries or neutral parties or one's allies. This point is worth emphasizing because there is a difference in terms of the desired effects on each potential target.³⁴ Influence operations directed at adversaries would be normally intended to deceive or demoralize them. The ultimate in influence operations would be to defeat the adversary without having to resort to violence.³⁵ Influence operations aimed at neutral parties would normally be intended to shape the overall situation in one's favour by discouraging support, be it political or military, for one's adversary or encouraging the same kind of support for oneself from neutral parties. This is perhaps the most important use of influence operations at the strategic and operational levels. Influence operations directed towards allies would normally be intended to reinforce their resolve or to shape their actions to support one's own goals.³⁶ The military instrument of national power is traditionally associated with

³³ In some of the strategic studies literature pertaining to coercion, this has been described as the dichotomy between "choice" and "control." In the former, the adversary can choose to comply or suffer the consequences whereas in the latter, the adversary is denied the ability to choose. For a more detailed explanation, see Lawrence Freedman, "Strategic Coercion," in Lawrence Freedman, ed., *Strategic Coercion: Concepts and Cases* (Oxford: Oxford University Press, 1998), 20-3; and Thomas C. Schelling, *Arms and Influence* (New Haven: Yale University Press, 1966), 2-6.

³⁴ For a discussion of "coercive" and "non-coercive" means of influencing other parties, see Stephen J. Cimbala, *Coercive Military Strategy* (College Station: Texas A&M Press, 1998), 16; and Stephen J. Cimbala, "Military Persuasion and the American Way of War," *Strategic Review* 22, no. 3 (Fall 1994), 34.

³⁵ For a discussion of this concept, see the section on Sun Tzu below.

³⁶ This activity lies at the heart of coalition operations. For example, the command and control arrangements for the Coalition in 1990-1991 as it prepared to deal with Iraq were designed to ensure General Norman Schwarzkopf remained in charge of the plans for liberating Kuwait while appearing to share the role with HRH Khaled Bin Sultan, the Saudi Prince. See: General H. Norman Schwarzkopf, *It Doesn't Take A Hero* (New York: Bantam Books, 1991), 434-5; and Robert Fisk, *The Great War for Civilisation: The Conquest of the Middle East* (London: HarperPerennial, 2006), 782-3. In his memoirs, the

dealing with adversaries by using violence; however, while not denying the military's focus on the use of violence, the use of this working definition may cause armed forces to expand their capabilities beyond what has traditionally been the norm for the military instrument of national power.

The third criterion, which refers to the intent to cause the target to behave in a specific manner, is intended to limit the notion of influence operations in three ways. The first is to separate influence operations from other activities that have an influence on behaviour. An influence operation's purpose is to cause the target to behave in a specific manner and changes to the physical and mental states of a target must be a byproduct of the operation. In other operations, changes to the physical and mental state are the intent of the operation and any influence on their behaviour is a byproduct of the operation. If such a demarcation does not exist, influence operations could be said to be ubiquitous and the concept valueless. The second limitation is based on the fact that acts intended to deliberately influence another state or organization require interaction with and the coordination of activities with policymakers in order to ensure all instruments of national power³⁷ are used appropriately to obtain the desired effect. In other words, these acts are political uses of force as described by Barry Blechman and Stephen Kaplan:

A political use of the armed forces occurs when physical actions are taken by one or more components of the uniformed military services as part of a deliberate attempt by the national authorities to influence, or to be prepared to influence, specific behaviour of individuals in another nation without engaging in a continuing contest of violence.³⁸

The third way the notion of influence operations is limited by the definition is by distinguishing between tactical-level activities that have a strategic impact and those deliberate acts intended to influence others. This distinction is necessary due to the confusion created in the last decade by some concepts related to the effects that very junior military personnel can have, in certain circumstances, on the strategic stage.³⁹ In this study of influence operations the inadvertent effects of the "strategic corporal" are deliberately excluded. This distinction, between purposeful acts to influence others and inadvertent influence effects is crucial to an understanding of influence operations; otherwise, anything with a strategic impact could be included in this type of operation.

Saudi Prince saw it rather differently, and was even insulted by his treatment in Schwarzkopf's memoirs; see, and HRH Prince Khaled Bin Sultan, *Desert Warrior: A Personal View of the Gulf War By The Joint Forces Commander* (London: HarperCollins, 1996), 189-265.

³⁷ The instruments of national power are typically described as Diplomatic, Informational, Military and Economic.

³⁸ Barry M. Blechman and Stephen S. Kaplan, *Force without War: U.S. Armed Forces as a Political Instrument* (Washington, DC: Brookings Institution, 1978), 12-16, cited in Stephen S. Kaplan et al., *Diplomacy of Power: Soviet Armed Forces as a Political Instrument* (Washington, DC: Brookings Institution, 1980), 15.

³⁹ See: Simon King, "Strategic Corporal or Tactical Colonel? Anchoring the Right Variable," *Defense & Security Analysis* 19, no. 2 (March 2003), 189-90; General Charles C. Krulak, "Strategic Corporal," *Leatherneck* 28, Issue 1 (January 1999), 14-18; General Charles C. Krulak, "Strategic Corporal: Leadership in the three block war," *Marine Corps Gazette* 83, no. 1 (January 1999), 18-23, and Douglas A. Macgregor, "Future Battle: The Merging Levels of War," *Parameters* 22, no. 4 (Winter 1992-93), 33-47.

Whereas, influence operations here are taken to be calculated actions with the intent to change the adversary's behaviour as opposed to unintended consequences of military operations.

While the military instrument of power has been associated with dealing with adversaries in a violent manner, this does not mean that the use of violence is necessarily appropriate in all cases, because the military instrument can be used to provide "carrots" as well as "sticks" in an influence operation. For example, as opposed to resorting to actual violence, it may be sufficient for the military to make demonstrations or threats or to provide limited support to certain groups to influence the decision calculus of a target. Alternatively, it may be possible to provide "carrots" to a group through support or training. This approach represents an application of the concept of the economy of force at the highest level; it could also be described as "winning without fighting," another means of achieving one's objectives.⁴⁰ This approach, however, contradicts some other views on the nature of war, such as Karl von Clausewitz's belief in the necessity of decisive battle to utterly defeat an adversary.⁴¹ This debate may provide a fruitful avenue for research in the future.

⁴⁰ For a discussion of this concept, see Part II below.

⁴¹ For a discussion of the requirement for a decisive battle to "compel our adversary to do our will," see Karl Von Clausewitz, *On War* (New York: The Modern Library, 1943), 3-30.

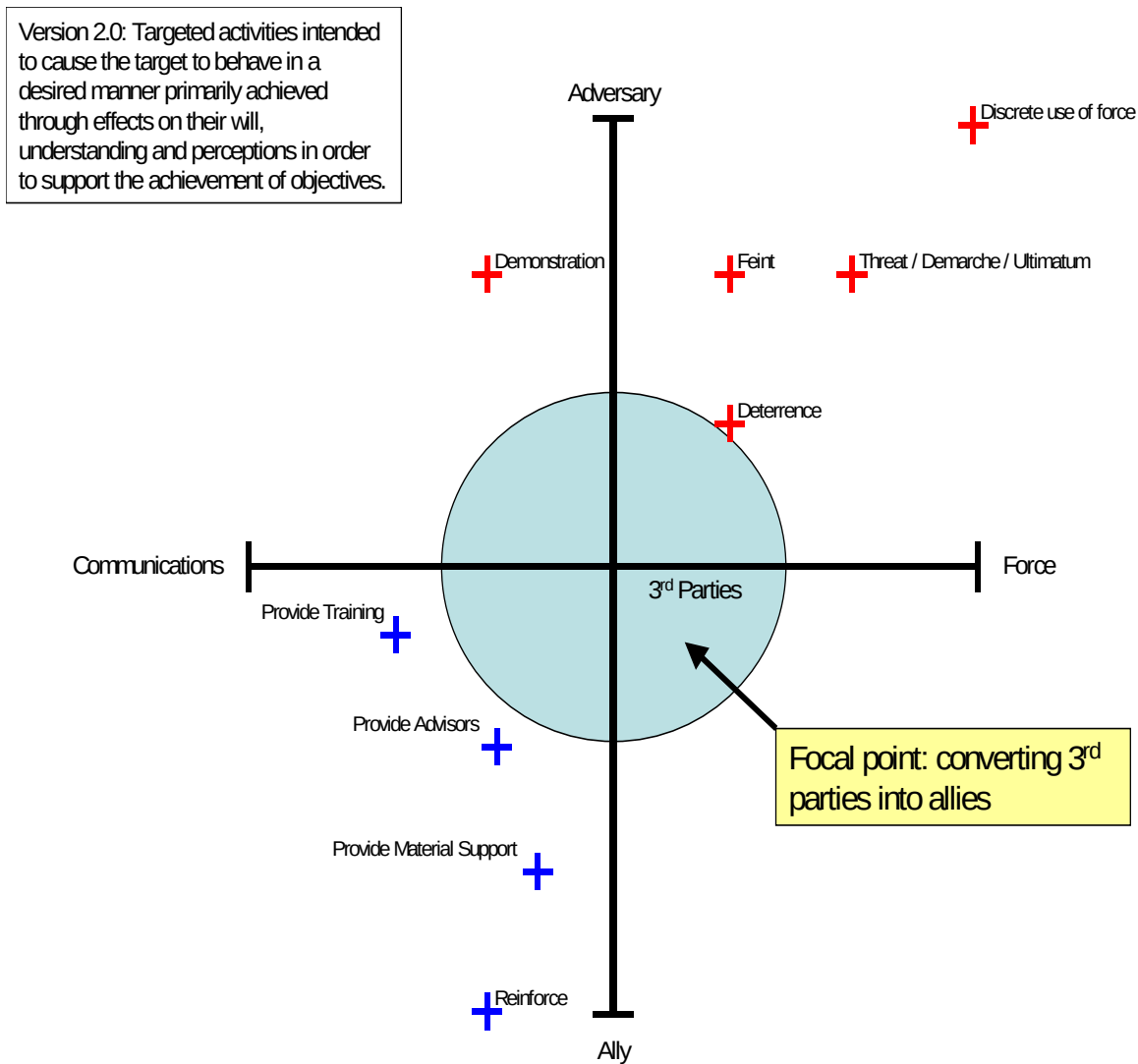


Figure 1: Stratagems of Influence Operations⁴²

Figure 1 above is a depiction of some of the various stratagems of influence operations. The term “stratagem” is taken to mean a plan or scheme to influence an adversary, a third party or an ally. These stratagems have been plotted on a Cartesian plane. The x-axis reflects the degree to which a stratagem employs violence or the threat thereof; the far right represents the use of military force and at the far left there is an absence of violence. The target to be influenced defines the y-axis of the plane; the adversary is at the top, the third party in the center and the ally is at the bottom. The center is perhaps the most

⁴² An alternate way of considering the depiction of influence would be to place the influencer at the centre of a Venn diagram that had as interlocking rings to represent the allies, third parties and adversaries in a conflict. Influence operations would be depicted as efforts to expand one’s “sphere of influence” temporarily or permanently in one or more directions. The idea for this concept was raised at the Influence Operations workshop held at DRDC Toronto 23-24 May 2007 by Deborah Jeppeson.

important dimension of the Cartesian plane – the conversion of hesitant adversaries and third parties into allies would isolate adversaries and encourage further compliance or reduce resistance. The various stratagems are described briefly as follows:

- **Provide Training** – this involves providing an ally or third party with military training. It can be undertaken for a number of reasons, such as improving the professionalism of another force, increasing its capacity to undertake particular operations or seeking to influence a decision in one’s favour. A Canadian example of this stratagem is the current Military Training Assistance Program.
- **Provide Material Support** – this involves providing an ally or third party with military equipment. It can be undertaken for a number of reasons, such as increasing its capacity to undertake particular operations or seeking to influence a decision in one’s favour. A Canadian example of this stratagem is the recent provision of armoured vehicles to the African Union for use in Darfur.
- **Reinforce** – this involves deploying one’s own forces to support an ally or third party. It can be undertaken to deter a third party or adversary from particular acts, to increase the resolve of an ally or to influence a decision in one’s favour. One could argue that Canadian forces stationed in Europe represented a long-term reinforcement of an ally during the Cold War.
- **Demonstration** – this involves the conduct of an actual or simulated military operation in full view of a third party or adversary to show them the capability and signal resolve to use that capability if so required. This can be undertaken to deter a third party or adversary from particular acts or to influence a decision in one’s favour.⁴³ For example, NATO’s “Strong Express” series of exercises in the 1970s were designed to show the Soviet Union that Canada and the US were willing and able to move reinforcements to NATO’s northern flank in the event of a Soviet attack there.
- **Provide Advisors** – this is similar to the provision of training, with the exception that the advisors remain with the supported force or government over a longer period of time. A Canadian example of this stratagem is the current Military Training Assistance Program or the ISAF efforts with the training of the Afghan National Army.
- **Feint** – this involves the conduct of an actual or simulated military operation in full view of a third party or adversary in an attempt to cause the adversary or third party to redeploy their forces in a manner favourable to one’s plans. A classic influence operation conducted as a feint was the pre-D-Day activities prior to June 1944 involving dummy forces, information operations and various deception operations to successfully keep the Germans guessing and unable to concentrate their forces against the actual landings.
- **Deterrence** – this involves the deployment of military forces in such a manner that a third party or adversary chooses to not carry through with an action that they

⁴³ See A. Vagts, *Defense and Diplomacy: The Soldier and the Conduct of Foreign Relations* (New York: King’s Crown Press, 1950), 231-2.

otherwise might choose. The deployment of nuclear deterrent forces by the Soviet Union, the US, Britain and France are classic examples of deterrence-based influence operations.

- **Threat / Demarche / Ultimatum** – this involves the deliberate communication of a threatened use of violence, the nature of the decision, the desired outcome to a third party or adversary and a timeline. For example, President Kennedy’s speech of 22 October 1962 combined with visible mobilization efforts of US forces and the imposition of a naval blockade on Cuba by the US Navy led to the Soviet decision on 28 October 1962 to withdraw its nuclear-armed missiles from Cuba.⁴⁴
- **Discrete use of force** – this involves the actual use of violence against a third party or adversary without further escalation. It is typically carried out by air, naval or special operations forces. Operation Allied Force, conducted by NATO air and naval forces from March to June 1999 against the military and security structure of Serbia, is an example of the discrete use of force.

Now that the conceptual framework has been provided for a discussion of influence operations, the historical roots of this concept will be examined next to provide a context for better understanding this topic.

⁴⁴ This is one of several explanations. See Graham T. Allison, *Essence of Decision: Explaining the Cuban Missile Crisis* (Boston: Little, Brown & Co., 1971).

PART II – HISTORICAL AND CONTEMPORARY APPROACHES TO INFLUENCE OPERATIONS

Influence in the Ancient World: Sun Tzu and Thucydides

Many elements of influence operations can be found in the ancient world. Two examples of such thought, which are often cited in the professional military literature, are presented in this paper. While the examples in question do not meet all of the criteria in the definition, they are early examples of some of the early warfare theory that forms the foundation of influence operations. The first, Sun Tzu's *The Art of War*, comes from ancient China and the second comes from Thucydides' writings on the Peloponnesian War. These examples have been chosen because they are often featured in US senior officer professional military education as examples of the subtleties and nuances found in the conduct of ancient warfare.

Sun Tzu. Sun Tzu was a general who lived in the state of Wu (what is now the area surrounding Shanghai in China) in the Sixth Century BCE. French Jesuit missionaries translated his treatise on warfare, *The Art of War*, in 1782 and since that time it has been read widely across both the eastern and western worlds. *The Art of War* comes across as a rather abstract treatise on the conduct of warfare with some short chapters dealing with practical applications of tactics. The former, for the purposes of influence operations, is far more useful. Sun Tzu offered two concepts relevant to this report in the treatise – the value of winning without fighting and the ubiquity of deception.

Sun Tzu believed that the highest form of the art of warfare was to defeat one's enemies without actually having to fight. He stated that: "To fight and conquer in all your battles is not supreme excellence; supreme excellence consists in breaking the enemy's resistance without fighting."⁴⁵ In another part of the treatise, he wrote: "True excellence is to plan secretly, to move surreptitiously, to foil the enemy's intentions and balk his schemes, so that at last the day may be won without shedding a drop of blood."⁴⁶ These are ultimately arguments in favour of the principle of the economy of force; if one does not engage in combat, then one does not take casualties and is more able to withstand the rigours of combat in the future. This approach can also be interpreted as using an alternate method of defeating the adversary's will as opposed to their physical capacity to fight. Winning without fighting therefore represents an early description of having an effect on the adversary's will.

Deception was described by Sun Tzu as the key to success in war. He saw it as a virtuous necessity. Deception, according to him, was about the manipulation of appearances in relation to actual situations to act as a force multiplier. He wrote that:

⁴⁵ James Clavell, ed., *The Art of War – Sun Tzu* (New York: Doubleday, 1983), 14.

⁴⁶ *Ibid.*, 20.

All warfare is based on deception. Hence, when able to attack, we must seem unable; when using our forces, we must seem inactive; when we are near, we must make the enemy believe we are far away; when far away, we must make him believe we are near. Hold out baits to entice the enemy. Feign disorder, and crush him. If he is secure at all points, be prepared for him. If he is in superior strength, evade him. If your opponent is of choleric temper, seek to irritate him. Pretend to be weak, that he may grow arrogant. If he is taking his ease, give him no rest. If his forces are united, separate them. Attack him where he is unprepared, appear where you are not expected.⁴⁷

Sun Tzu, in this passage, advocated the manipulation of another's perceptions to set the conditions for victory by leading the adversary to do something that they might not do under normal conditions.⁴⁸ This is an example of how the stratagems of a demonstration or a feint could be employed.

Sun Tzu's concepts are forerunners of some of the later concepts of influence operations. While they discuss the effects on the will, understanding or perceptions associated with particular violent and non-violent actions, they have been applied only to adversaries and the intent of those actions is not always to generate those effects.

Thucydides. The Melian Dialogues, from Thucydides' history of the Peloponnesian War has often been used to illustrate an early example of the concept of realism and the use of influence to students of international relations and senior officers in advanced professional military education.⁴⁹ The most famous passage of the Dialogues pertains to the use of power in international relations and it reads: ". . . as the world goes, is only in question between equals in power, while the strong do what they can and the weak suffer what they must."⁵⁰ While this commentary on the nature of politics is both accurate and tragic, it overshadows some of the other comments made in the Melian Dialogues.

Melos was an island in the Cycladic chain that failed to join the Delian League. The Athenian Empire could not tolerate an independent and neutral island within the frontiers of its empire. The Melians tried to base their security on deterrence, believing that the Spartans would come to their aid against Athens. This, however, turned out to be a flawed assumption. The Athenian Empire, due to some defeats by the Spartans on land,

⁴⁷ Ibid., 11.

⁴⁸ Later works have described two basic types of deception. The first, the A-type, is based on increasing the ambiguity of the situation for the adversary so that the adversary becomes unsure of the situation. The second, the M-type, is based on decreasing the ambiguity so that the adversary is drawn to the wrong conclusion. See: Donald C. Daniel and Katherine L. Herbig, "Propositions on Military Deception," Donald C. Daniel and Katherine L. Herbig, eds., *Strategic Military Deception* (Toronto: Pergamon Press, 1982), 5-6.

⁴⁹ Realism is a political theory based on three premises: "(1) states (or city-states) are the key units of action; (2) they seek power, either as an end in itself or as a means to other ends; and (3) they behave in ways that are, by and large, rational and therefore comprehensible to outsiders in rational terms." Robert Keohane, "Realism, Neorealism, and the Study of World Politics," in Robert Keohane, ed., *Neorealism and its Critics*, (New York: Columbia University Press, 1986), 7.

⁵⁰ Thucydides, "The Melian Debate," in John A. Vasquez, *Classics of International Relations*, Second Edition, (Englewood Cliffs: Prentice Hall, 1990), 17.

had returned to its seaborne strategy and was eager to demonstrate its power. The Athenians had also surmised that Sparta, while difficult to defeat on land, would not run the risk of challenging Athens at sea.⁵¹ The Athenians soon blockaded Melos. The Melians wanted to negotiate as a result of the blockade; however, the Athenians were prepared to negotiate the surrender of Melos in order to avoid combat, but nothing else.⁵² The Melian Dialogue is Thucydides' description of the negotiation between the Athenian military commanders and the rulers of Melos.

The first point of interest in the Dialogue is the Athenian view of the situation. The Melians asked:

Melians: And how, pray, could it turn out as good for us to serve as for you to rule?

Athenians: Because you would have the advantage of submitting before suffering the worst, and we should gain by not destroying you.

Melians: So that you would not consent to our being neutral, friends instead of enemies, but allies of neither side.

Athenians: No; for your hostility cannot so much hurt us as your friendship will be an argument to our subjects of our weakness, and your enmity of our power.

Melians: Is that your subjects' idea of equity, to put those who have nothing to do with you in the same category with peoples that are most of them your own colonists, and some conquered rebels?

Athenians: As far as right goes they think one has as much of it as the other, and that if any maintain their independence it is because they are strong, and that if we do not molest them it is because we are afraid; so that besides extending our empire we should gain in security by your subjection; the fact that you are islanders and weaker than others rendering it all the more important that you should not succeed in baffling the masters of the sea.⁵³

The Athenians evidently believed that if they showed mercy to an independent and neutral state within the confines of its empire, the Empire would be seen as weak, and the resistance to Athenian rule would increase as a result. In other words, inaction in the face of defiance communicates a message as well as an action; the very credibility of the Athenian Empire was at stake.

The Melians attempted to employ the stratagem of deterrence, in vain, during the Dialogues. They sought to convince the Athenian commanders that attacking Melos

⁵¹ Donald Kagan, *The Peloponnesian War* (New York: Viking Books, 2003), 247-8; and R. Zaretsky, "It's still all Greek to us: On the Timelessness of Thucydides," *Virginia Quarterly Review* 68, no. 1, 54-69.

⁵² Donald Kagan, *The Peloponnesian War*, 248.

⁵³ Thucydides, *The Melian Dialogues*, from: <http://www.mtholyoke.edu/acad/intrel/melian.htm>, accessed 26 April 2007.

would bring divine retribution and failing that, the Spartans would be compelled as their allies to come to their aid. Thucydides noted that the Melians argued:

Melians: You may be sure that we are as well aware as you of the difficulty of contending against your power and fortune, unless the terms be equal. But we trust that the gods may grant us fortune as good as yours, since we are just men fighting against unjust, and that what we want in power will be made up by the alliance of the Lacedaemonians [Spartans], who are bound, if only for very shame, to come to the aid of their kindred. Our confidence, therefore, after all is not so utterly irrational.⁵⁴

The Melian attempt at deterrence was not credible in the eyes of the Athenians for two reasons. First, the gods could intervene on behalf of Athens as well as Melos. Second, the Athenians believed that the Spartans would only act under conditions favourable to Sparta, namely on land with a significant numerical advantage as opposed to at sea. In the end, the siege of Melos continued until the Melians surrendered.

In terms of the thought on influence operations, the Melian Dialogue showed an early awareness of the main requirement for the successful application of deterrence – a credible threat. Interestingly, the other point of the Dialogue was also related to credibility. Actions or the lack thereof taken towards a weaker adversary may lead others to perceive weakness. Melos was not attacked and besieged for Melos itself; it was attacked and besieged as an example for all the other potential resisters to Athens' rule. The Melian Dialogues fit all four criteria of influence operations: it described a deliberate Athenian attempt to break the will of the Melians and ensure Athens was perceived as a strong power that enforced its will on others.

These are two examples of thought and practice regarding influence operations from the Ancient World. Sun Tzu advocated two streams of thought, namely the value of the economy of force and the use of deception through stratagems like feints or demonstrations as a force multiplier. Thucydides offered a historical example of the application of some of the stratagems, i.e. the Athenian's use of threats and ultimata and the Melians' attempt at deterrence. His contribution can be summarized as an early depiction of the political effects of military actions.

The Classical Theorists and Influence: Karl von Clausewitz and Sir Julian Corbett

The writings of a large number of military practitioners, philosophers and theorists comprise the classical canon of literature on warfare, but the writings of two of them are the most germane to the discussion of influence operations. The first is Karl von Clausewitz, a Prussian Army officer and author of *Vom Kriege (On War)*, and one of the seminal military thinkers in the western world. His work is cited frequently in the professional literature and the doctrinal writings of the US services, and his theories appear to guide the formulation of much of US doctrine.⁵⁵ The second is the British naval

⁵⁴ Ibid., 18.

⁵⁵ Allan English, "The Operational Art," in Allan English, et al., eds., *The Operational Art - Canadian Perspectives: Context and Concepts* (Kingston, ON: Canadian Defence Academy Press, 2005), 4.

historian and theorist Sir Julian Corbett. Sometimes referred to as “the Clausewitz of naval strategy,” of all the classical theorists of seapower Corbett’s ideas are the most relevant to the current security environment in which military forces operate.⁵⁶ He has been included in this paper for three reasons. First, his inclusion provides a naval perspective to influence operations. Second, the discussion of “limited” and “unlimited” war bridges Clausewitz’s thought and that of the twentieth century coercion theorists. Third, Corbett’s discussions of naval blockades and the role of commerce in naval warfare merit mention as they frame any consideration of economic sanctions and military actions to enforce sanctions regimes.

Karl von Clausewitz. Karl von Clausewitz (1780-1831) has been quoted and invoked in any number of works, and some of his work on warfare pertains to influence operations. While he is often quoted, those quoting him do not understand his arguments as well as they may portray. His work is both abstract and philosophical, which can mislead the practical minded. *On War* is remembered for a number of different contributions to the history, philosophy and theory of warfare, but three elements stand out in particular. First, it offered a succinct statement of how politics and their conduct guided the nature and conduct of war. Second, it argued that moral, or psychological, factors were as important as physical factors in warfare. Third, it proclaimed a doctrine that is antithetical to notions like influence operations, and therefore opposing arguments such as Clausewitz’s merit examination.

Clausewitz is most remembered for declaring that politics guides the conduct of warfare. His most well-known phrase that war is the continuation of politics by other means is followed by an important caveat: “. . . war is only a part of political intercourse, therefore by no means an independent thing in itself . . . It has, to be sure, its own grammar but not its own logic.”⁵⁷ There are two points to note about this passage. The first and rather obvious comment is that war is one among many means of engaging in political intercourse, and, therefore war is not separate from politics as the latter gives war meaning.⁵⁸ Raymond Aron, the French political theorist, observed during the late Cold War that: “Current opinion is that the military leaders who most want to throw off the yoke of civil leaders finally acknowledge, after discussion, that the beginning and the end, the declaration of war and the conclusion of peace, are the responsibility of the head of state or the government.”⁵⁹ Even though some military leaders might seek to wage war without constraints if called upon to do so, they recognized that the decision to start and end war was not their decision. This idea of war without constraints speaks to the second point of the aforementioned passage associated with the “grammar” and “logic” of the war. While it may be desirable, for some, to fight with as few constraints as possible in order to obtain victory quickly, this way of fighting could make victory an end in itself. However, according to Aron, victory ought to remain a means to an end, because, as Aron cautioned in his study of Clausewitz, if victory rather than peace became the ultimate objective of war, then war would become an independent activity

⁵⁶ Leadmark, 42-3.

⁵⁷ Clausewitz, *On War*, 596. Italics in the original.

⁵⁸ Michael Howard, *Clausewitz* (Oxford: Oxford University Press, 1983), 50.

⁵⁹ Raymond Aron, *Clausewitz: Philosopher of War* (London: Routledge & Kegan Paul, 1976), 104.

and an end itself. But as long as war is only a means to an end, then war has no ultimate objective other than peace.⁶⁰ Therefore, in the logic of war the ends of war must be peace. Clausewitz believed that there were two types of wars. In one, called “absolute” war, the end was based on the destruction of the enemy and in the other, the end was based on being able to dictate the terms of the peace to the enemy. Either way the end could only be achieved by fighting. For Clausewitz, however, the political ends to be achieved were what justified contemplating absolute versus other types of war.⁶¹

The superiority of politics over war had some other consequences according to Clausewitz. For instance, the success or failure of military actions should be judged on whether or not they had a long term political effect.⁶² In this context, one could defeat an adversary on the battlefield, but unless this defeat had a prolonged political effect, then it would be misleading to use this as proof of a link between strategy and military tactics.

The 1991 Gulf War has been used as an example of this situation where the Iraqi armed forces were defeated thoroughly, but for a number of reasons, of which some were politically inspired, this defeat did not lead to the end of a confrontation with Iraq.⁶³ In this example, using Clausewitz’s concept of “absolute” war, in 1991 the coalition ought to have continued military actions until Iraq’s Ba’athist government was overthrown in order to avoid expending further blood and treasure over the 1990s culminating in today’s quagmire in Iraq. This course of action represents the “grammar” of war where military actions may culminate in total victory. Using this example to illustrate the point that war’s “grammar” is constrained by the “logic” of political intercourse, one would observe that the nature of the coalition and the requirement to maintain a sufficient consensus to obtain the international community’s support of the forceful liberation of Kuwait by the coalition imposed limitations on war’s grammar. This “logic” limited both the scope and the ends of military operations against Iraq. Perhaps the most important limitation on military operations was the fact that it was acceptable to the non-western members of the coalition to enter Iraqi territory in order to set the conditions to liberate Kuwait, but it was not acceptable to engage in regime change only because the opportunity for regime change presented itself. The case of the 1991 Gulf War is an example, therefore, of the application of some of Clausewitz’s key ideas concerning politics as the guide to the conduct of warfare.

Despite his advocacy of the physical defeat of an adversary, Clausewitz also acknowledged the existence of a moral, or psychological, plane of warfare. He argued that the moral factors of war (described as: “. . . the talents of the commander, the military value of the army, its national feeling . . .”⁶⁴) were as important as the physical factors in war. In *On War*, he wrote that:

⁶⁰ Aron, *Clausewitz*, 101.

⁶¹ Aron, *Clausewitz*, 111 and Howard, p. 35.

⁶² Howard, *Clausewitz*, 37.

⁶³ Robert Callum “War as a Continuation of Policy by Other Means: Clausewitzian Theory in the Persian Gulf War”, *Defense Analysis*, Vol. 17, No. 1 (2001), pp. 59-71.

⁶⁴ Clausewitz, *On War*, 127.

. . . the moral qualities are among the most important subjects in war. They are the spirits which permeate the whole sphere of war . . . The spirit and other moral qualities of an army, a general or a government, public opinion in provinces in which the war is proceeding, the moral effect of a victory or a defeat – these are things which in themselves vary greatly in their nature, and which, according as they stand with regard to our object and our circumstances, may also have a very different kind of influence.⁶⁵

While Clausewitz recognized the importance of moral qualities, he was careful not to portray them in any absolute sense. Since he observed that moral qualities varied from state to state and from situation to situation, he inferred that one must understand the target of influence very well in order to affect its moral qualities.

Clausewitz was not blind to the moral effects of the application of particular stratagems in war. While the concept of surprise allowed for the creation of situations where superiority in numbers could be generated at the opportune time and location, he also noted that: “Surprise . . . is also to be regarded as an independent principle in itself, on account of its moral effect.”⁶⁶ This is another example, although one that was not explored in depth by Clausewitz, where classical theorists understood that results in war were based on more than just numerical advantage.

One of the other concepts that has become associated inextricably with Clausewitz is that of the “decisive battle.” This concept holds that all activities in war ought to be devoted to the enemy’s defeat as this outcome will serve both of the ultimate aims of war – destroying the enemy force so that it will no longer be a threat in the future and compelling the enemy to seek peace on the victor’s terms. In a memorably poetic passage, he wrote that:

We content ourselves here with acknowledging in general their possibility as something pointing to the deviation of practice from theory and to the influence of particular circumstances. But we cannot avoid showing here at once that the *bloody solution of the crisis*, the effort to destroy the enemy’s force, is the first-born son of war. When political objects are unimportant, motives slight and the tensions of the forces small, a cautious commander may skilfully try all sorts of ways by which, without great crises and bloody solutions, he may twist himself into a peace through the characteristic weakness of his opponent in the field and in the cabinet. We have no right to blame him if the assumptions on which he acts are well founded and promise success; but still we must require him to remember that it is a slippery path he is treading on which the god of war may surprise him, and to keep his eye always upon the enemy that he may not have to defend himself with a dress rapier if that enemy takes up a sharp sword.⁶⁷

⁶⁵ Clausewitz, *On War*, 125.

⁶⁶ Clausewitz, *On War*, 142.

⁶⁷ Clausewitz, *On War*, 30.

According to Clausewitz, wars are won only through the attrition or annihilation of the enemy, and all other means ought to support those activities. This provides an interesting counterpoint to Sun Tzu's argument about "winning without fighting." Clausewitz did not necessarily disagree with Sun Tzu on this point, as long as the force was always ready to resort to violence and was actually prepared to do whatever it would take to defeat the enemy in case other means did not work.⁶⁸ Clausewitz held this view, based on the bitter experience of Napoleonic wars, because he understood that in many cases the enemy only kept the peace when their will to fight was far weaker than their will to comply with the terms of the peace.

Some of the stratagems that we would consider as influence operations were a legitimate means of waging war in Clausewitz's eyes:

If we wish from the enemy only a small sacrifice, we are satisfied with winning by means of the war only a small equivalent, and we expect to attain that by moderate efforts . . . If this influence of the political object on war is once permitted, as it must be, there is no longer any limit, and we must put up with such warfare as consists in a *mere threatening of the enemy* and in *negotiating*.⁶⁹

For him, what we might see as influence operations were legitimate ways of achieving one's objectives if, and only if, the stakes were low enough. These operations, according to Clausewitz, should be seen in the context of war being an extension of politics to be properly understood. Activities such as the use of threats and negotiating with an enemy were seen as a political activity as opposed to a military one by him.⁷⁰ War, to Clausewitz, was separate from other uses of military force, described as influence operations above, to ensure that threats made to others remained credible.⁷¹ By the same token, Clausewitz would classify much of what we would classify as information operations as a political activities.⁷² He believed that the use of diplomacy and other means was the province of political leadership vice the military. His concerns notwithstanding, activities such as the use of threats and / or discrete applications of force to cause another state or group to behave in particular ways, ought to be controlled and coordinated as high a level as possible. One could make the argument, based on Clausewitz's ideas, that by their very nature, any information operation ought to be operational if not strategic in nature and application.

⁶⁸ Clausewitz, *On War*, 97 and Howard, *Clausewitz*, 43, 46.

⁶⁹ Clausewitz, *On War*, 595. Italics in the original.

⁷⁰ Howard, *Clausewitz*, 39-40.

⁷¹ R.D. Hooker, Jr., "Beyond Vom Kriege: The Character and Conduct of Modern War," *Parameters* 35, no. 2 (Summer 2005), 5-6. Note that the credibility of threats was one of the arguments presented by the Athenians to the Melians.

⁷² William Darley, "Clausewitz's Theory of War and Information Operations," *JFQ: Joint Force Quarterly*, Issue 40 (January 2006), 74. The CF definition of "Information Operations" is "actions taken in support of national objectives which influence decision makers by affecting other's information while exploiting and protecting one's own information." See DND, *CF Information Operations*, B-GG-005-004/AF-010, (Ottawa: Department of National Defence, 1998), p. 1-5.

Clausewitz's work, while crucial to understanding the concepts that lay at the foundation of influence operations, does not fit the criteria for influence operations, described above, particularly well. While he describes the effects required to undertake influence operations well, his concepts do not apply well to third parties or allies, and he challenges the idea that victory can be obtained through an approach based on economy of force.

Sir Julian Corbett. Sir Julian Corbett (1854-1922) was a naval historian and theorist in Great Britain at the turn of the twentieth century. He has been included in this review as he provides a naval perspective on warfare and the role of stratagems we would recognize as influence operations today. Furthermore, Corbett's *Principles of Maritime Strategy* represents in some ways a naval extension of Clausewitz's *On War*, and yet in others, especially on the role of battle, parallels Sun Tzu's advocacy of winning without fighting.⁷³ Corbett's works also provide an alternate discourse to Clausewitz's advocacy of absolute war. In them he discusses the role of blockades, and this discussion is a forerunner to the theory surrounding the application of economic sanctions as a way of influencing a party's behaviour.

Corbett, like Clausewitz before him, sought to classify war as "limited" or "unlimited" ("absolute" in Clausewitz's terms). Corbett believed that Clausewitz's use of the war aim or the political ends to be achieved, based on the point that war represented an extension of the political realm, as the means to distinguish between one type and the other was sound, but that the definition was somewhat incomplete. To Corbett, the means by which the war aim is pursued is equally as important to defining a war as either limited or unlimited.⁷⁴ To make his point, he noted that prior to the French Revolutionary and Napoleonic era and the *levée en masse*, where whole nations would participate in the war effort, warfare in the pre-French Revolutionary and Napoleonic era was a matter of battle conducted by two relatively small but professional armies.⁷⁵ The aims for which wars were fought did not differ between the two eras, yet both eras saw different styles of warfare. Corbett, therefore, explicitly linked the aims for which a war was fought and the means by which it was fought. He argued that limited wars sought to obtain political concessions to improve the nature of the peace, but unlimited wars sought the destruction of the enemy army or navy as the case may have been in his era.⁷⁶ This is where Corbett began to differ significantly from his Prussian predecessor.

The major difference between Corbett's and Clausewitz's thoughts on warfare was that Corbett believed that Clausewitz's concept of "absolute war" was not supported by the historical record. While the idea of decisive battle was attractive to Corbett, the evidence suggested that the incidence of decisive battle in history was actually quite rare.⁷⁷ As a result, Corbett believed that the concept of the decisive battle represented an ideal that

⁷³ Michael I. Handel, "Corbett, Clausewitz and Sun Tzu," *Naval War College Review* 53, no. 4 (Autumn 2000), 106-35.

⁷⁴ Julian S. Corbett, *Principes de Stratégie Maritime* (Paris: Economica, 1993), 53-4.

⁷⁵ Corbett, *Principes de Stratégie Maritime*, 54-5.

⁷⁶ Corbett, *Principes de Stratégie Maritime*, 56; and Corbett, "Notes sur la stratégie," in Corbett, *Principes de Stratégie Maritime*, 263.

⁷⁷ Hervé Coutau-Bégarie, "Préface," in Corbett, *Principes de Stratégie Maritime*, 15.

was rarely seen in reality.⁷⁸ When he sought to apply it to a naval context, he found that the application of the concept presented significant problems. For Corbett, the naval context meant that the two fleets were fighting for the “command of the sea,” and there were two ways to achieve it. If one wanted to establish permanent command of the sea, then the enemy fleet would have to be utterly destroyed. If one wanted to establish command of the sea temporarily, one would have to split the enemy’s fleet through diversions, deceptions or its containment through a blockade.⁷⁹ In order to destroy the adversary’s fleet through a decisive battle, one would have to concentrate one’s fleet in time and space. Any concentration of forces before decisive battle occurred, however, would mean that the adversary had just been awarded the command of the sea. Therefore, the customary deployment of naval forces in war required strategic dispersal, combined with the ability to rapidly concentrate forces once battle was joined.⁸⁰ Interestingly for this discussion, he added a cognitive dimension to the issue of the concentration of forces. Corbett argued that this cognitive dimension was fundamentally a matter of planting perceptions in the enemy through deception measures, like seeking to appear to be weak where one is strong or using a smaller force to entice the enemy to deploy against a perceived threat.⁸¹ The latter method applied particularly to amphibious or airborne formations prior to employment. Because of their mobility, such forces, when prepared for deployment, could cause an adversary to invest a disproportionate amount of forces by dispersing them to counter the threat of an airborne or amphibious landing. Paradoxically, due to the fact that airborne and amphibious forces lack the firepower and sufficient service support to conduct anything other than “seize and hold” operations for any length of time, they may have a greater effect on the adversary prior to their actual deployment than afterwards.

Corbett also drew links between what naval fleets did in war and their other roles. He saw three basic roles for a fleet - these were support to land operations, commercial warfare and the prevention or finalization of alliances.⁸² Of the three roles, the last two merit mention for the purposes of this discussion. The last role is interesting in that fleets, through their presence, could communicate resolve to an ally, signal to a third party that there may be a cost to political alliances or threaten an adversary. The mere presence of a fleet, therefore, is an example of the stratagem of demonstration.

Corbett’s commentary on “commercial warfare” is valuable here as they frame the discussion of naval blockades and their modern descendants, economic sanctions and one of their enforcement mechanisms, maritime intercept operations. The logic of the blockade was the same logic used in siege warfare where one sought to contain an enemy in their fortifications until they opted to fight on ground of one’s choice or their will to fight eroded as supplies dwindled. Corbett’s commentary was influenced significantly by the Royal Navy’s role throughout British history. He concluded that commerce was the

⁷⁸ Corbett, *Principes de Stratégie Maritime*, 40.

⁷⁹ Corbett, “Notes sur la stratégie,” 270.

⁸⁰ Handel, “Corbett, Clausewitz and Sun Tzu,” 106-35.

⁸¹ Handel, “Corbett, Clausewitz and Sun Tzu,” 106-35.

⁸² Corbett, “Notes sur la stratégie,” 267.

driving consideration in British maritime strategy over time.⁸³ A key pillar of this strategy was the application of the military instrument of power against the enemy's economic instruments of power. Naval theorists and practitioners since the ancient world knew that victory could be obtained by interdicting commercial maritime traffic on the high seas, but the volume of effort imposed by the sheer geographical span of the seas made this task difficult. Thus the concept of the blockade was born where a fleet or commercial vessels were contained in their ports. One commentator on Corbett's work astutely noted that blockades were at their essence, attempts at generating psychological effects:

Either [a blockade] prevented the enemy from using the sea for any use by bottling up his naval fleet and preventing commerce from using the sea lanes, or it provoked the enemy to engage an opposing fleet in an attempt to break Command of the Sea by the destruction of the opposing fleet. In either case, the aim of blockade was the exertion of pressure on the citizens and their collective life.⁸⁴

From the passage above, it is possible to ascertain that Corbett conceived of two different types of blockade, which he termed the "naval" blockade that was intended to prevent the fleet from getting out of port and forcing it to fight, and the "commercial" blockade that was intended to prevent commerce from occurring. While both types of blockade could occur simultaneously, their aims were different in that one sought the naval equivalent of "absolute war" and the other, while limited in nature, sought to achieve a much longer-term effect.⁸⁵ The long-term effects of practices related to Corbett's concept of "commercial warfare" can be significant and have modern applications.

For example, economic sanctions and their enforcement have operated under the same assumptions as Corbett's concept of "commercial" blockade. While economic sanctions represent the application of the economic instrument of power, blockades are the military means of enforcing sanctions. Since 1945, sanctions have been, according to international law, an alternative to warfare because of the way in which they have been enshrined in Chapter VII (Action With Respect To Threats To The Peace, Breaches Of The Peace, and Acts Of Aggression) of the Charter of the United Nations:

Article 41 . . .

The Security Council may decide what measures not involving the use of armed force are to be employed to give effect to its decisions, and it may call upon the Members of the United Nations to apply such measures. These may include complete or partial interruption of economic relations and of rail, sea, air, postal, telegraphic, radio, and other means of communication, and the severance of diplomatic relations.

Article 42 . . .

⁸³ Ian C.D. Moffat, "Corbett: A Man Before His Time," *Journal of Military and Strategic Studies*, online version at <http://www.jmss.org/2001/article2.html>. Accessed 19 February 2007.

⁸⁴ Moffat, "Corbett," note 46.

⁸⁵ Corbett, *Principes de Stratégie Maritime*, 153-4. See also Corbett, "Notes sur la stratégie," 271. Corbett argued against those naval advocates of the principle of war known as the selection and maintenance of the aim that believed nations were defeated at sea if and only if their fleet was destroyed.

Should the Security Council consider that measures provided for in Article 41 would be inadequate or have proved to be inadequate, it may take such action by air, sea, or land forces as may be necessary to maintain or restore international peace and security. Such action may include demonstrations, blockade, and other operations by air, sea, or land forces of Members of the United Nations.⁸⁶

Sanctions are depicted here as the first necessary and non-violent step in the application of collective security measures. According to the Charter, sanctions have to be applied before one can resort to demonstrations or blockades. While one could argue that sanctions are non-violent, one cannot argue credibly that sanctions have no human cost. They are, at their essence, a blunt instrument in that they create situations where non-combatants can be deprived of the necessities of life. Furthermore, those governments targeted by sanctions often deflect the deprivation from themselves to their populations for a variety of reasons.⁸⁷ While the designation comes with a negative connotation for some, others have argued that sanctions are an instrument of war and a means of engaging in coercive diplomacy.⁸⁸ On the one hand, international law suggests that sanctions are a non-violent means to enforce collective security. On the other hand, opponents of the effects of sanctions argue that they are a form of warfare that ought not to be used. The proponents of coercive diplomacy argue that they are an effective means of influencing one's adversaries.

The recurring debate over sanctions can be applied to the discussion on influence operations, because whether they are used as an alternative to war or as a complement to war, they are designed to influence behaviour. If used as an alternative to war, economic sanctions are an example of the application of Sun Tzu's principle of "winning without fighting," sometimes referred to as the principle of economy of effort. If used as a complement to war, economic sanctions represent the full application of the diplomatic and economic instruments of national power through military means.⁸⁹ So what can economic sanctions achieve and why would a state or group of states seek to use them? Seven different purposes have been identified, of which four (the first two and last two listed below) are influence-based:

- Deterrence – to convince an adversary not to undertake actions that they otherwise might undertake
- Compliance – to coerce an adversary into altering policies and / or behaviour

⁸⁶ United Nations, *Charter of the United Nations*, <http://www.un.org/aboutun/charter/>. Accessed 21 February 2007.

⁸⁷ Robert Pape, "Why Economic Sanctions Still Do Not Work," *International Security* 23, no. 1 (Summer 1998), 76-7. See also Donald L. Losman, "Pain without Gain: The Sanctions Saga," *Mediterranean Quarterly* 8, no. 1 (Winter 1997), 36-59; and John Mueller and Karl Mueller, "Sanctions of Mass Destruction," *Foreign Affairs* 78, no. 3 (May/June 1999), 48-53.

⁸⁸ For example, see Paul Taylor, "Clausewitz on Economic Sanctions: The Case of Iraq," *Strategic Review* 23, no. 3 (Summer 1995), 49-56.

⁸⁹ Kimberly Ann Elliott, "The Sanctions Glass: Half Full or Completely Empty?" *International Security* 23, no. 1 (Summer 1998), 51-4. See also David A. Baldwin, "The Sanctions Debate and the Logic of Choice," *International Security* 24, no. 3 (Winter 1999/2000), 92-6; and Richard Haass, "Sanctioning Madness," *Foreign Affairs* 76, no. 6 (November-December 1997), 74-85.

- Punishment
- Destabilization
- Limitation of conflict
- Symbolism – to communicate specific messages to other parties, namely the setting of precedents
- Signalling of resolve – to reduce the adversary's will to resist.⁹⁰

Corbett's work meshes well with three of the four criteria of influence operations described above, i.e., 1) effects on the will, understanding or perceptions of the target; 2) application to adversaries, third parties and allies; 3) intent to cause the target to behave in a desired manner ; and 4) no necessity for the use of violence. His work is particularly relevant in describing the coordination of the instruments of national power to achieve effects on adversaries without necessarily resorting to violence; however, because of its focus on dealing with the enemy fleet and seaborne commerce, it did not address the fourth criterion in the same level of detail as the others.

Soviet Concepts of Influence: Clausewitz as Interpreted by Lenin and his Successors

Soviet military thought offers a number of concepts that fit the criteria of influence operations as well as numerous examples of the stratagems of influence operations described at the beginning of this paper, as applied to warfare. Despite its revolutionary origins and the pervasive influence of Marxist-Leninist ideology, Soviet military thought was consistent with some of the ideas from the ancient world and the classical era, and Soviet thinkers referred directly to Clausewitz in their writings on influence.

From Clausewitz, the Red Army inherited the doctrine of political dominion over the conduct of warfare, although this came through the prism of Marxist-Leninist thought. Early Soviet doctrine, such as Aleksandr Svechin's work on strategy in the 1920s, included versions of Clausewitzian thought.⁹¹ Svechin's work was reinforced by the Soviet government's publication of Lenin's notes on Clausewitz in 1933, which focused on the relationship between politics and war.⁹² Later Soviet works on strategy, such as Sokolovsky's *Military Strategy: Soviet Doctrine and Concepts*, maintained this Clausewitzian foundation for its doctrine, although they were careful to always attribute the source to Lenin's observation on Clausewitz.⁹³ In Soviet thought, war had its place in politics and it was seen as a means to achieve: "... the transformation of the world order. The objective of the war, or hundreds of kinds of wars which they think could occur, is not only geographical; it is for the control of consciousness."⁹⁴ The very purpose of any war, in their eyes, was to achieve influence over others. Influence was both a means to

⁹⁰ Sofia Heine-Ellison, "The Impact and Effectiveness of Multilateral Economic Sanctions: A Comparative Study," *International Journal of Human Rights* 5, no. 1 (Spring 2001), 84-5.

⁹¹ Andrei A. Kokoshin, *Soviet Strategic Thought. 1917-1991* (Cambridge, MA: MIT Press, 1995), 19-22.

⁹² Byron Dexter, "Clausewitz and Soviet Strategy," *Foreign Affairs* 29, no. 1 (October 1950), 41-50.

⁹³ For example, see Marshal V.D. Sokolovsky, "Military Strategy: Soviet Doctrine and Concepts," in Raymond Garthoff, ed., (New York: Praeger, 1963), xiv, 17, 21, 167.

⁹⁴ Robert Bathurst, "Two Languages of War," in Derek Leebaert, ed., *Soviet Military Thinking* (Boston: George Allen & Unwin, 1981), 31.

and an ends in war. Warfare was very much the instrument of Soviet policy, but Soviet theorists took some interesting semantic voyages that stretched Clausewitz's thoughts on the matter. One expert on Soviet military thought noted that it subscribed to a pseudo-corollary of Clausewitz's point on politics: "If the policies of war are the violent continuation of the policies of peace, then, in Lenin's view, the policies of peace could only be the non-violent continuation of the policies of war."⁹⁵ This meant that, to them, preparing for a future conflict through the use of non-violent means was perfectly legitimate if not necessary. Lenin's codicil to Clausewitz's famous statement about war and politics was that war used "forceable means." If "forceable means" were not used, it was merely "coercion"; by the 1960s, the Soviets appeared to believe that coercion was becoming increasingly important as a tool of influence.⁹⁶ Coercion, to the Soviets, was based purely on the use of threats as opposed to the more recent definition that includes both threats and discrete uses of force. There were three types of Soviet threats, which have been described as "straw man" warnings (e.g., if State X takes this action, there will be consequences), "post facto propaganda" (e.g., a symbolic action that occurs after the fact), and "coercive" threats (e.g., State X will take this action or it will suffer the consequences).⁹⁷ Diplomacy and military power were therefore mutually reinforcing to the Soviets.⁹⁸ Such ideas definitely fit all four criteria, as articulated earlier in this paper, associated with influence operations.

The Soviets also owed an intellectual debt to Sun Tzu for the idea of the value of "winning without fighting"; however, this idea was subjected to the Soviet ideology and mindset. As a result of its early experiences in such conflicts as the Russian Civil War, the Soviet Union had a tremendous sense of inferiority. It remained, despite the best efforts of the Communist Party to modernize the state (albeit in a combination of comical ineptness and callous brutality), a technologically backward state that spread across the Eurasian landmass. The Soviets were not blind to their weaknesses and began to look to means other than the force of arms to ensure the sanctity of their revolution and foment world revolution. More subtle and psychological means, for example deception, subversion, and surprise, therefore became a means of improving the likelihood of victory for them.⁹⁹ The Soviets did not see "winning without fighting" in terms of economy of force per se, but rather a means to ensure that the "correlation of forces" (a concept to describe the quantitative and qualitative ratios of friendly and enemy forces) was tipped in their favour. For example, Kintner noted that: "Fundamentally, non-military means of conflict are used to subvert a target society so that it can be taken over with open warfare. Non-military methods include psychological warfare, disinformation,

⁹⁵ Aron, *Clausewitz*, 267-8; Christopher Donnelly, *Red Banner: The Soviet Military System in Peace and War* (Alexandria: Jane's Publishing Group, 1988), 62, and Howard, *Clausewitz*, 66.

⁹⁶ Sokolovsky, "Military Strategy," 167-9. This line of thought also existed in the West at the same time as limited war theory and gave rise to theories of coercion.

⁹⁷ Ken Booth, *The Military Instrument in Soviet Foreign Policy, 1917-1972* (London: RUSI, 1973), 43-6. More recent scholarship, as discussed below, would describe "straw man" warnings as specific cases of deterrence and "coercive threats" as compellence.

⁹⁸ Booth, *The Military Instrument in Soviet Foreign Policy*, 54-5.

⁹⁹ Robert Bathurst, "Two Languages of War," in Derek Leebaert, ed., *Soviet Military Thinking* (Boston: George Allen & Unwin, 1981), 37; Booth, *The Military Instrument in Soviet Foreign Policy*, 9; and William E. Odom, "Soviet Military Doctrine," *Foreign Affairs* 67, no. 2 (Winter 1988/1989), 118.

agitation, anti-military subversion, negotiations, and intimidation.”¹⁰⁰ The Cold War reinforced this trend, especially as the potential for mutual annihilation increased, and non-violent means became increasingly attractive to the Soviets to foment world revolution.¹⁰¹ Influence operations, to the Soviets, were never seen as a substitute for conventional warfare, but the informational instrument of power was applied to ensure that should the military instrument be employed, it would be successful. The key Soviet contributions to the concept influence operations are the value of surprise, how surprise can be achieved through deception (*Maskirovka*), disinformation/propaganda, and how an adversary can be controlled through specific actions (“Reflexive Control”). Each of these contributions will be discussed in turn, and then some examples of how the Soviet Union employed these stratagems will follow.

The Soviet Armed Forces came to understand the value of surprise first hand. The German invasion of the Soviet Union in 1941 was a powerful lesson to them, although Stalin’s refusal to accept any evidence that Germany, then his erstwhile ally, was preparing to attack made the German’s task easier.¹⁰² Since that time, and especially after Stalin’s death in 1953, Soviet Armed Forces’ doctrine came to revere the concept of *Venezapnost* (“surprise”). Soviet doctrine recognized two effects of surprise. The first was physical in nature. Surprise would “stun” an adversary and make them incapable of reacting. The second effect was psychological in nature; surprise could confuse an adversary and make them capable of weakening themselves.¹⁰³ Surprise came to be seen by the Soviets as being absolutely crucial to victory at all levels of war, and surprise was enabled by deception. Deception included a variety of activities intended to disorient an adversary making them susceptible to being surprised.¹⁰⁴ There is a crude syllogism at work here: deception leads to the achievement of surprise, and surprise leads to victory. If victory represented the ends, surprise represented a means to the end and deception the means of choice.

Maskirovka was the Soviet term for deception, and it could be described as one of the ubiquitous terms in Soviet doctrine. Its official definition was:

The means of securing combat operations and the daily activities of forces; a complexity of measures, directed to mislead the enemy regarding the presence and disposition of forces, various military objectives, their condition, combat readiness and operations, and also the plans of the command . . . *maskirovka* contributes to the achievement of surprise for

¹⁰⁰ William R. Kintner, *Soviet Global Strategy* (Fairfax: Hero Books, 1987), 47.

¹⁰¹ Booth, *The Military Instrument in Soviet Foreign Policy*, 42. See also Schelling, *Arms and Influence*, 34.

¹⁰² David Glantz, *Strategic Military Deception in the Second World War* (London: Frank Cass, 1989), 1, 559.

¹⁰³ Nathan Leites, “The Soviet Style of War,” in Leebaert, ed., *Soviet Military Thinking*, 216-17.

¹⁰⁴ Earl F. Ziemke, “Stalingrad and Belorussia: Soviet Deception in World War II,” in Donald C. Daniel and Katherine L. Herbig, eds., *Strategic Military Deception* (Toronto: Pergamon Press, 1982), 243.

the actions of forces, the preservation of combat readiness, and the increased survivability of objectives.¹⁰⁵

Deception became a constant in Soviet practice at all levels of war, although the actual means of deception would change depending upon the level. For example, at the tactical level, deception would be largely based on the use of decoys, false communications traffic and the masking of movements through obscurants or demonstrations.¹⁰⁶ At the operational level, it would be based on demonstrations, false maneuvers, false radio traffic, camouflage / concealment, disinformation and the construction of false installations or engineer works.¹⁰⁷ At the strategic level, it would be based on treaty violations, the use of disinformation, propaganda and “semantic warfare,” although at this level, influence operations were not the responsibility of the Soviet military.¹⁰⁸ *Maskirovka* was the logical result of Lenin’s view of the relationships between war, peace and the pursuit of policy objectives.¹⁰⁹

Soviet military doctrine on deception is remarkably clear, as it not only describes how deception contributes to victory, but also how deception was to be achieved. First and foremost, doctrine prescribed that deception be controlled at as high a level as possible and that its effect was greatest at the early stages of an operation.¹¹⁰ There are two reasons for such prescriptions. One, when one’s forces are in contact with an adversary, it is difficult to maintain the degree of operational security required to ensure deception measures remained credible. Control as high a level of possible was one means of preventing the adversary from becoming aware of one’s intentions. Two, the proverbial paralysis induced by surprise alters the “correlation of forces” in one’s favour, as the Soviets learned at the hands of the Germans in 1941.

The Soviets did not remain a victim of surprise for very long, however. They became adept at deception during the Second World War and used it on a number of occasions. Based on their experience they came to categorize the basic means of deceiving an adversary in two ways. The first was to deprive the adversary of information with the exception of providing false impressions. The other means was not so much about providing a fiction for the adversary to consume as providing a credible alternate to the truth. For example, Operations URANUS (the counter-offensive in the fall of 1942 to fight for Stalingrad against the German Army Group B) and MARS (the counter-offensive against German Army Group C) were originally planned as two simultaneous Soviet offensives. It was eventually decided that MARS would become a diversion for

¹⁰⁵ V.A. Yefrimov and S.G. Chermashentsev, “Maskirovka,” *Sovetskaya voennaya entsiklopedia [Soviet Military Encyclopedia]* (Moscow: Ministry of Defence, 1978), 175, cited in Glantz, *Strategic Military Deception in the Second World War*, 2.

¹⁰⁶ Christopher Donnelly, *Red Banner: The Soviet Military System in Peace and War* (Alexandria: Jane’s Publishing Group, 1988), 21, 42, 83.

¹⁰⁷ Glantz, *Strategic Military Deception in the Second World War*, 11.

¹⁰⁸ Kintner, *Soviet Global Strategy*, 10. “Semantic warfare” refers to the use of different semantics, e.g., to the Soviets, the term peace (“*mir*”) was defined as the state of being after the achievement of world revolution as opposed to the state of an absence of violent conflict.

¹⁰⁹ Glantz, *Strategic Military Deception in the Second World War*, 3, 570, 583.

¹¹⁰ Charles W. Blandy, “Military aspects of the two Russo-Chechen conflicts in recent times,” *Central Asian Survey* 22, no. 4 (2003), 429.

URANUS, yet the ambiguity surrounding both operations had a profound effect on the Germans.¹¹¹ The second means is similar to a concept in western approaches to manoeuvre warfare where commanders are encouraged to present an adversary with a dilemma to force them to choose a poor course of action. The difference between the two approaches is that the Soviet approach was conceptualized as psychological in nature whereas the western approaches were seen as physical in nature.

Soviet doctrine also noted that the establishment of good *Maskirovka* was dependent not only on sound operational security but also on the enemy's predisposition to deception and the timing, scale and location of military operations, especially offensive operations. Doctrine suggested that since it was often difficult to conceal the intent to attack an adversary, this situation could be turned to the attacker's advantage, because it was easier to feed disinformation to an enemy that expected an attack to and in these circumstances the enemy tended to misinterpret demonstrations and feints. The Soviets were less concerned about taking steps to conceal the scale and location of an attack because these were seen as the simpler of the tasks. The most difficult task, they believed, was deceiving an adversary with regard to the timing of an attack as this required a significant effort in terms of the coordination and control of activity.¹¹²

Besides deception, the Soviets also showed a predilection for the use of a form of propaganda known as *desinformatsiya* or "disinformation." It represented the deliberate spreading of falsehoods about another state or individual through the distribution of forgeries, the spreading of rumours and the staging of events.¹¹³ Such activities were often guided by a campaign, and one author noted that: "The purpose of a disinformation campaign is to influence the consciousness and mind of man."¹¹⁴ Disinformation was used to shape attitudes towards another state or individual in order to set conditions more favourable to the Soviet Union. Disinformation, therefore, represents the application of the informational as opposed to the military instrument of national power.

The Soviet military also developed a doctrine they called "reflexive control." Its definition is as follows:

Reflexive control involves creating a pattern or providing partial information that causes an enemy to react in a predetermined fashion without the enemy realizing that he is being manipulated. Its aim is to

¹¹¹ Ziemke, "Stalingrad and Belorussia,," 268-9. This is not really a new idea; Clausewitz stated that: "...the term diversion is understood such that an attack on the enemy's country as draws off forces from the principal point. It is only when this is the chief intention, and not the gaining of the object attacked on the occasion, that it is an enterprise of a special character; otherwise it is only an ordinary attack." See: Clausewitz, *On War*, 552.

¹¹² Glantz, *Strategic Military Deception in the Second World War*, 564.

¹¹³ Kintner, *Soviet Global Strategy*, 63-4.

¹¹⁴ Timothy L. Thomas, "Russian Views on Information-Based Warfare," *Airpower Journal*, Special Edition, vol. 10, (1996), 31. See also: Timothy L. Thomas, "Reflexive Control in Russia: Theory and Military Applications," *Reflexive Processes and Control* 1, no. 2 (2002), 62.

force an enemy commander to make a decision that, through the manipulation of information, was predetermined by the opposing side.¹¹⁵

This definition is both subtle and elegant and predates notions such as “information warfare.”¹¹⁶ With reflexive control, information is manipulated to obtain a pre-determined reaction from an adversary without the adversary realizing that they are being manipulated. Western literature on the topic is limited, but some references can be found to Russian language sources that indicate how reflexive control could be used. A number of different stratagems associated with “reflexive control” were identified:

- **Distraction**—during preparatory stages of combat operations, creating a real or imaginary threat against one of the most vital enemy places such as flanks and rear, forcing him to re-evaluate his decisions to operate on this or that axis.
- **Overload**—often manifested by sending the enemy a large amount of conflicting information.
- **Paralysis**—creating the belief of a specific threat to a vital interest or weak spot.
- **Exhaustion**—causing the enemy to carry out useless operations, thereby entering combat with expended resources.
- **Deception**—during preparatory stages of combat operations, forcing the enemy to reallocate forces to a threatened spot.
- **Divisive techniques**—causing the enemy to believe he must operate in opposition to coalition interests.
- **Pacification**—through a peaceful attitude and approach cause the enemy to lose vigilance.
- **Deterrence**—creating the impression of superiority.
- **Provocation**—forcing enemy action advantageous to your side.
- **Suggestion**—offering information that affects the enemy legally, morally, ideologically or in other areas.
- **Pressure**—offering information that encourages society to discredit its own government.¹¹⁷

¹¹⁵ Thomas, “Russian Views on Information-Based Warfare,” 32. In another article, Thomas stated that V.A. Lefebvre, a Soviet military theorist, defined reflexive control as: “a process by which one enemy transmits the reasons or bases for making decisions to another.” See Thomas, “Reflexive Control in Russia,” 61.

¹¹⁶ For two summaries of the western information warfare literature, see Peter D. Feaver, “Blowback: Information Warfare and the Dynamics of Coercion,” *Security Studies* 7, no. 4 (Summer 1998), 88-120; and Bradley A. Thayer, “The Political Effects of Information Warfare: Why New Military Capabilities Cause Old Political Dangers,” *Security Studies* 10, no. 1 (Autumn 2000), 43-85.

¹¹⁷ S. A. Komov, “About Methods and Forms of Conducting Information Warfare,” *Military Thought* (July-August 1997), 18-22, cited in Timothy L. Thomas, “Human Network Attacks,” available at <http://www.au.af.mil/au/awc/awcgate/fmsso/humannet.htm>, accessed 11 February 2007. Seven similar means were identified in Blandy, “Military aspects of the two Russo-Chechen conflicts in recent times,”

Regretfully, the paucity of sources prevents one from exploring each of these stratagems more fully, and the Soviet use of semantics means that the terminology used to describe each type may be somewhat misleading. Other sources provide more detail on the nature of “reflexive control.” For example, Timothy Thomas, a former US Army lieutenant colonel, translated elements of Major General M. Ionov’s 1995 article in *Morskoy Sbornik*, which contained some principles of “reflexive control,” for example, the controller must anticipate how the target will react to the situation the controller creates; the controller should consider how the activity used to generate the situation may be uncovered and develop counter-measures; the controller must consider the effectiveness of the target’s reconnaissance assets and the controller should consider such measures in the light of social and other factors.¹¹⁸

Some of the English language literature, however, provides examples of “reflexive control” from the post-Soviet era. Although they are tactical examples, both the Russian and Chechen forces attempted forms of “reflexive control.” In one case, the Chechen president declared that the rebels must remain in their positions until 23 February. Meanwhile, he authorized the rebels to abandon defensive positions as of 1 February. His intent was to pin Russian forces in place to allow the rebels to act elsewhere. The Russians, at a different point in the conflict, encouraged the Chechen rebels to withdraw from Grozny to the southwest. The encouragement came in the form of false radio traffic for Chechens to intercept that indicated that the Russians were weakest along that route. In reality, the route was well covered with a series of obstacles and blocking forces, and the Chechens were canalized through deception as opposed to physical obstacles.¹¹⁹ Another example of “reflexive control” occurred during the 1979 Afghan coup when Soviet advisors, through low level deception measures, set the conditions for success by immobilizing forces capable of countering the Soviet attack.¹²⁰

In addition to the influence operations stratagems discussed above, the Soviets made use of some others as well. First of all, the Soviet Navy was often employed to make forward deployments.¹²¹ This action not only showed the flag in a far off port to the host nation, it also demonstrated the span of Soviet influence to neighbouring states and the West. Secondly, in terms of influence, the Soviets preferred to provide military aid to “friendly” states in the form of equipment and/or advisors.¹²² Like forward deployments, military aid had a notable effect on the state receiving the aid as well as the international

432, but these are attributed to V.A. Lefebvre, *Konfliktujushcie Structury*, *Sovetskoe Radio*, (Moscow, 1973), 43-60.

¹¹⁸ M. Ionov, “Control of the Enemy,” *Morskoy Sbornik* no. 7 (July 1995), 29-31, cited in Timothy L. Thomas, “Russian Information-Psychological Actions: Implications for U.S. PSYOP,” *Special Warfare* 10, no. 1 (Winter 1997), 12-19.

¹¹⁹ Timothy L. Thomas, “Grozny 2000: Urban Combat Lessons Learned,” *Military Review* 80, no. 4 (July-August 2000), 56-7.

¹²⁰ Martin Ewans, *Afghanistan: A Short History of Its People and Politics* (London: HarperPerennial, 2002), 203; and Stephen Tanner, *Afghanistan: A Military History from Alexander the Great to the Fall of the Taliban* (New York: Da Capo Press, 2002), 235.

¹²¹ Booth, *The Military Instrument in Soviet Foreign Policy*, 47; and Edward Luttwak, *The Grand Strategy of the Soviet Union* (London: Weidenfeld and Nicolson, 1983), 45. Corbett also described the use of fleets to carry out this function.

¹²² Booth, *The Military Instrument in Soviet Foreign Policy*, 50-3.

community. Soviet provision of aid, however, was not always beneficial and was seldom, if ever, altruistic. For example, while Egypt benefited significantly from Soviet aid in the form of anti-tank missiles and surface-to-air missiles, it suffered a number of unnecessary heat-induced casualties from the use of Soviet staff tables on water consumption. Thirdly, the Soviets regularly staged military exercises to demonstrate capability, as a form of deterrence, to make an implicit threat to another state and/or to make preparations to carry out such threats.¹²³ Prior to the 1968 invasion of Czechoslovakia, for example, elements of the Group of Soviet Forces Germany were deployed to exercise in Czechoslovakia and southern East Germany.

The notion of influencing the behaviour of adversaries, friends and neutrals was implicit in the works of the major ancient and classical writers on warfare, and a more explicit articulation of these theories was provided by the Soviets. Other, but different explicit theories on how to use military means to influence the behaviour of others, appear in the modern era in the writings of the airpower theorists, which will be discussed next.

¹²³ Stephen S. Kaplan, et al., *Diplomacy of Power: Soviet Armed Forces as a Political Instrument* (Washington, DC: Brookings Institution, 1980), 10, 37.

Airpower Theorists and the Use of Influence

The Early Days of Powered Flight. Less than ten years after the Wright Brothers launched the air age with their first tentative flights in 1903, heavier-than-air aircraft had already proved their worth on the battlefield. One of the first recorded uses of aircraft in war was in 1911 by the Italians in the Turkish province of Tripoli, now known as Libya. Italian aircraft flew over 300 sorties in roles ranging from reconnaissance to transport to bombing. The lessons of the Italian experience were recorded by the military correspondent of the *Times* of London, and the one that stands out as relevant today for influence operations was that the “casual dropping” of bombs and grenades was futile and had little effect.

At about the same time as the Italians were using aircraft in operations in North Africa, in Britain, the Army’s Royal Flying Corps (RFC) was using aircraft, both fixed wing and lighter-than-air, its 1912 manoeuvres. The winner of the war games, General Sir James Grierson declared that aircraft had “revolutionized the art of war,” based on the “decisive advantage” the continuous and immediate information he received from his airship’s telegraph link.¹²⁴

A great deal has been written about the use of aircraft in the First World War, but the literature that is most relevant to this study relates to the first strategic bombing campaigns carried out between 1914 and 1918. While the First World War strategic bombing campaigns are largely forgotten today, they had a lasting impact on airpower theory, as the experience from these campaigns was the foundation for much early airpower theory, including that theory related to attempting to influence adversary behaviour.

One of the first persons to actually write about how the air weapon might be used influence enemy actions was Lt Lord Tiverton of the Royal Naval Air Service who used statistics to conduct target analysis and bomb damage prediction. He also conducted a strategic analysis of the German war economy and advocated concentrated raids on the German chemical industry to disrupt it, which he believed would lead to the collapse of other key German war industries. While Tiverton’s ideas were not put into practice for a number of reasons, not the least of which was the lack of a suitable British aircraft to conduct heavy bombing raids, his ideas did influence American aviators’ concepts on how to use aircraft in future wars.¹²⁵

¹²⁴ John Terraine, “Lessons of Air Warfare,” *JRUSI* 137 (Aug 1992), 53-8. See also Phillip S. Meilinger, “Giulio Douhet and the Origins of Airpower Theory,” in Phillip S. Meilinger, ed. *The Paths of Heaven: The Evolution of Airpower Theory* (Maxwell AL: Air University Press, 1997), 1-3.

¹²⁵ The inter-relationship between British and American approaches to strategic bombing is described well in Tami Davis Biddle, *Rhetoric and Reality in Air Warfare: The Evolution of British and American Ideas About Strategic Bombing, 1914-1945* (Princeton University Press; Princeton, 2002). See also Neville Jones, *The Origins of Strategic Bombing* (London: William Kimber, 1973) for more detail on Tiverton’s role.

While British concepts of how to affect the outcome of the war by using aircraft against targets in the enemy homeland may have more advanced than others' concepts, it was the Germans who waged the first systematic air bombardment campaign against a civilian population. Sometimes referred to as the "first Battle of Britain," German Zeppelins and later purpose-built massive fixed wing bombers¹²⁶ dropped bombs on various parts of Britain between 1915 and 1918. Although this uncoordinated bombing campaign was largely ineffectual in terms of physical destruction, German raids by both airships and aircraft caused hundreds of casualties in London and had a profound and lasting psychological effect on Britons. An immediate impact of the raids was political unrest whose open manifestations included rioting mobs in the working-class east end of London and attacks on members of the RFC (because they seemed powerless to stop the attacks) who appeared in public. As a result, the British Prime Minister, Lloyd George, feared that civil disorder combined with a general disillusionment with the war might lead to collapse of his government and the installation of a regime that was prepared to make a separate peace with Germany. In response to this domestic threat, Lloyd George created a committee that studied these matters. He accepted its recommendations and the Royal Air Force (RAF) was created in 1918. At the time, its main purpose was to wrest control of all military aircraft from the Army and Royal Navy for the air defence of London after they had refused to provide them. The longer term effect of these raids was that Britain, which up to that time had believed itself to be invulnerable to direct attack as long as the Royal Navy ruled the waves, now saw itself as vulnerable to attack from any enemy that was willing to build a bomber force.¹²⁷

Between the Wars – The Bomber Will Always Get Through. The First World War experience had a profound effect on military theorists of all stripes, including the new theorists of airpower. The latter published their ideas in various media and these ideas had an important impact on how people perceived war, which continues to this day. The theorists observed that the war had ended not in the traditional fashion by the capture of the defeated nation's capital, but with the collapse of the German government due to civil unrest and a lack of will to continue the war. They also observed that the Russia had left the war and made an armistice with Germany after its government had been overthrown by a revolution. Furthermore, both the French and Italian armies had mutinied in 1917, causing political crises in both countries including public demands, as with Britain, that each nation make a separate peace with their adversaries.

Based on these experiences, airpower theorists' ideas evolved to point where their supporters claimed that wars of the future could be won by destroying the enemy's will to resist instead of the enemy's military and naval forces. Victory was to be achieved by bombing major enemy cities with vast fleets of aircraft until the people demanded that their government sue for peace.

¹²⁶ For example, the "Giant" aircraft had 6 engines, a wingspan of 140 feet, a crew of nine, a maximum bomb load of two tons, and it could fly 600 miles non-stop. The best account of the German attack on Britain, including aircraft details, is Raymond Fredette, *The Sky on Fire: The First Battle of Britain 1917-1918* (New York: Holt, 1966).

¹²⁷ See Andrew Boyle, *Trenchard* (London: Collins, 1962), for Trenchard's account. See also H. Montgomery Hyde, *British Air Policy Between the Wars* (London: Heinemann, 1976).

The leading airpower theorist, even today, was Giulio Douhet (1869-1930) as he was the first person to propose a coherent vision for this radical new form of warfare. Douhet's vision was conceived based on Italy's geostrategic situation, and he characterized his native land as resource poor and at the mercy of a potential enemy. Based on the First World War experience, Douhet assumed that future wars would be static with no decision reached by the actions of armies or navies. However, he argued that air forces would be able to overcome the ineffectiveness of other arms and achieve a decisive victory. He also believed that future wars would be total wars for survival, and, therefore no distinction would be drawn between combatants and non-combatants.

Douhet's theories evolved during his lifetime, but the key ideas for the purposes of this paper are summarized next. Douhet argued that to impose one's will on the enemy, one had to destroy both the enemy's material and morale. He suggested targeting large and important industries, public buildings, transportation assets, and areas inhabited by the civilian population. In a passage in his seminal work, *Command of the Air*, often overlooked by scholars, Douhet proposed that these attacks be conducted using a weapon mix, in a proportion of 1:3:6, of explosives (including some with delayed action fuses to hinder firefighting and rescue work), incendiary bombs, and bacteriological and chemical weapons.¹²⁸ In other words, Douhet's weapon mix was designed not just to destroy targets, but to impose the maximum amount of suffering on those in the target area. It should be emphasized that Douhet did not argue for widespread bombing of an enemy nation, but for attacks on carefully selected targets. The aim of these attacks was to make the targeted cities impassable for days and hopefully persuade the enemy population to force their government to sue for peace. It should also be noted that as devastating as these attacks might be, Douhet and his intellectual successors believed that if they resulted in a relatively quick end to a war, this outcome would be much preferable to the devastation, which would be caused by a long drawn out conflict as occurred during the First World War.

Despite the flaws in Douhet's ideas, their simplicity and conceptual unity led to his adoption by the US Air Force in particular as the "father" of airpower theory. While Douhet's ideas seemed less attractive to some after the inability of strategic bombing with conventional weapons to bring the Second World War to a quick conclusion, the dropping of the two atomic bombs on Japan in 1945 resurrected Douhet's ideas. A leading American strategist, Bernard Brodie, declared near the beginning of the Cold War that Douhet's ideas were "peculiarly pertinent to any general war in the nuclear age,"¹²⁹ and when the US Air Force was created in 1949 it quickly adopted Douhet's ideas as a foundation for its way of war. Therefore, Douhet's ideas still permeate much of what has been written about airpower.¹³⁰

¹²⁸ Giulio Douhet, *Command of the Air* trans. by Dino Ferrari (New York: Cowan-McCann, 1942, reprint Ayer Publishers, 1984), 347.

¹²⁹ Bernard Brodie, *Strategy in the Missile Age* (Princeton, NJ: Princeton Univ. Press, 1959), 106.

¹³⁰ Two of the best accounts of Douhet's life and work are Meilinger, "Giulio Douhet and the Origins of Airpower Theory," 1-40; and Claudio Segre, "Giulio Douhet: Strategist, Theorist, Prophet?" *Journal of Strategic Studies* 15 (Sept 1992), 351-66.

Despite Douhet's dominant position as the originator of the airpower theory today, in some respects his theories were, and still are, unacceptable to many nations. His tenet that civilian populations had to be targeted by large-scale bombing attacks that would cause many civilians to lose their lives was unacceptable to some nations' air forces who nevertheless still accepted Douhet's basic premise that the key to a quick victory was to influence the national will to wage war by turning the civilian populace against its government. Therefore, during the inter-war period both the RAF and zealots in the US Army Air Corps created their own version of Douhet's theories to support the concept of an independent air force.

In Britain, Sir Hugh Trenchard (1873-1956) presided over an air staff, from 1919 to 1929, that created its own theories of air warfare; however, they were not published in widely read books, like *Command of the Air*, but were to be found in doctrine manuals and personal accounts of those conducting air operations in the inter-war period. Trenchard's approach to airpower was unique in that he combined concepts from strategic bombing doctrine with practice from successful and relatively inexpensive "air control" campaigns, which might be termed expeditionary operations today, in British colonies. The principal aim of Trenchard's approach was to preserve the RAF's independence from the Army and Royal Navy by proving that the RAF could perform many of their roles more cheaply. Air control will be discussed later in the section on small wars.¹³¹

In general terms, initial post-war RAF doctrine closely paralleled Douhet's theories. The earliest draft (1922) of the RAF War Manual indicated that bombing attacks should be conducted "in great strength" on enemy towns to influence enemy morale; the Manual suggested that "high explosives have the greatest moral [psychological] effect, but at night large fires by incendiaries have a very useful effect..." This British doctrine was reflected in its policies and actions at the time. A worsening in Anglo-French relations began in 1921 and continued until 1923, and at the height of the period of bad relations in 1922 and early 1923, the Prime Minister believed that Britain, especially London its political and financial capital, was in "extreme peril" from a bombing attack by the superior French Air Force.¹³² One of Trenchard's acolytes supported this view in an article claiming that the French Air Force could drop 186 tons of bombs on London over a 24 hour period compared to a mere 4 tons dropped by the Germans in a raid in 1917. He concluded that London would be "uninhabitable" after such raids.¹³³ Taking a somewhat less pessimistic view, RAF Staff College documents published in 1929 stated that in the event of an air war between Britain and France involving attacks on each other's capital cities, France would capitulate first because, while London was a more vulnerable target to air attack than Paris, "the English [were] more stubborn and have a less imaginative

¹³¹ A good account of Trenchard's influence on RAF doctrine can be found in Phillip S. Meilinger, "Trenchard, Slessor, and Royal Air Force Doctrine before World War II, in Phillip S. Meilinger, ed. *The Paths of Heaven*, 41-78.

¹³² Hyde, *British Air Policy Between the Wars*, 110-11, 135; and Barry D. Powers, *Strategy Without Slide-Rule* (London: Croom Helm, 1976), Powers, 185, 188-9.

¹³³ C.J. Mackay, "The German Air Raids on London," *A Selection of Lectures and Essays from the Work of Officers Attending the Royal Air Force Staff College*, Air Publication 1152 (London: Air Ministry, July 1925), 45-64, quote from 63.

temperament than the French, and are therefore less susceptible to bombing.”¹³⁴ Or as Trenchard is reputed to have said, the French would “squeal first.” Nevertheless, popular books at the time made it clear to their readers that they should not underestimate “the panic and disturbance that would result from a concentrated blow by a superior air fleet.”¹³⁵

Subsequent drafts of RAF doctrine repudiated these early RAF ideas on bombing and reflected views common among prominent British figures and the public that bombing innocent civilians to achieve a moral, or psychological, effect was wrong. Therefore, later versions of RAF doctrine equivocated on the matter with the final pre-war version of the RAF War Manual (AP 1300) stating that the air force’s main aim was to attack the enemy’s “vital centres” where “the moral effect is the main aim.” It is worth noting here that British qualms about using bombing to create moral, or psychological effects, only applied to “civilized” foes as RAF doctrine permitted more violent actions to be taken against other types of enemy in a chapter in AP 1300 titled “Warfare Against an Uncivilised Enemy.”¹³⁶

On the other side of the Atlantic, Billy Mitchell’s (1879-1936) name became almost synonymous with airpower. His public profile was very high and his sacrifice of his military career for what he saw to be the good of US Army aviation earned him the title the US Air Force’s “John the Baptist.”¹³⁷ While Mitchell popularized the cause of airpower, much of his work was polemical and lacked rigour. His lack of rigour was offset by a small band of aviators who were on the staff of the US Army Air Corps Tactical School (ACTS) in the 1920s and 1930s. They took Mitchell’s loosely structured concepts and systematically built on them to formulate the very clear doctrine of daylight precision bombing designed to destroy a nation’s industrial “web” by attacking key nodes or points in that web. For example, they analyzed the US economy and concluded that the destruction of the Great Lakes locks at Sault Ste Marie, which carried more traffic than the Suez, Panama, and Kiel canals combined including 90% of the iron ore used by US industry, would paralyze the American economy. Similarly, proponents of this theory noted that the aluminium plant at Arvida, Quebec, which supplied the Commonwealth aircraft industry with 90% of the aluminium it required, was another example of a key node.¹³⁸

While Douhet’s works were available to ACTS staff and students and his ideas were popular with many of them, Douhet’s lurid descriptions of wreaking death and

¹³⁴ Report on the Qualifying Exam for the RAF Staff College...1928, Air Publication 1352 (London: Air Ministry, March 1929), 12.

¹³⁵ See for example Basil H. Liddell Hart, *Paris, or the Future of War* (New York: Dutton, 1925). Quote from p. 39.

¹³⁶ Britain, Air Ministry, *RAF War Manual Part I-Operations*, AP 1300 (London: Air Ministry, 1928).

¹³⁷ John Keegan and Andrew Wheatcroft, *Who's Who in Military History*, 2nd ed. 1987, 211.

¹³⁸ See Richard Goette, “Plugging the Holes in the Roof: The Origins of a Northern Aerial Threat to North America and the Defence of Central Canada,” in Office of Air Force Heritage & History, ed. *Proceedings, 7th Annual Air Force Historical Conference: Canada in NORAD*, Colorado Springs, CO, June 4-8 2001, (Winnipeg: Air Force History and Heritage, nd), 27-40 for more details on fears of a German attack on Sault Ste Marie.

destruction on civilians to achieve victory was not acceptable in the American interwar political climate. Whereas, the US Army Air Corps' industrial web theory, with its antiseptic descriptions of destroying enemy infrastructure with bombers that could hit a "pickle barrel" from 20,000 feet, was acceptable. However, American sensitivities at the time precluded ACTS from gathering industrial intelligence on other countries, and it was, therefore, forced to develop its theories based on its analysis of the American economy.¹³⁹

The physical incarnation of the ACTS philosophy was the enormous Convair B-36 intercontinental bomber, whose specifications were based on a mission profile from Gander, Newfoundland to Berlin and back. The specifications were first let by the US Army Air Corps in April 1941 based on ACTS theories of air warfare at a time when it looked like Britain might fall and the US might have to fight Germany alone, and the aircraft made its first flight in August 1946. The B-36 was powered by six radial engines and up to four jet engines, could carry up to 86,000 pounds of bombs, and could carry out missions to targets 3,400 miles (5,500 km) away, staying aloft as long as 50 hours. Over 380 of them were built and the B-36 was in service from 1948-58, being the mainstay of the US Air Force's strategic bombing force for much of that time.¹⁴⁰

Despite the varied approaches of airpower theorists in their respective countries, the overall effect of their ideas had a significant effect on Western notions of war fighting prior to 1939. Moreover, various aspects of airpower were used in the interwar period to influence the perceptions and actions of potential adversaries, allies and neutrals.

Much of the influence of airpower was based on its new and ever improving technology, but its influence was also based on perceptions of aviators as almost superhuman beings, able to not only master new and incredibly complex technology but also able to withstand the rigours of flight in a harsh environment. In an age before pressurized aircraft and where many still flew in open cockpit aircraft without benefit of accurate meteorological information or navigation aids, aviators were seen in the same light as astronauts were seen in the second half of the 20th century – pioneers, with "the right stuff" on the edge of a new frontier. Some even attributed god-like characteristics to aviators. For example, when Charles Lindbergh visited Canada in 1927, Prime Minister MacKenzie King reflected the views of many on this continent when he recorded in his diary: "A more beautiful character I have never seen...He was like a young god who appeared from the skies in human form – all that could be desired in youthful appearance, in manner, in charm, in character, as noble a type of the highest manhood I have ever seen."¹⁴¹

Other aviator's were worshiped as well, but sometimes their impact was more sinister. Marshal Italo Balbo, head of Italy's Aeronautica (air force), was also renowned for his exploits as an aviator. He accomplished one of the most spectacular feats ever seen to that

¹³⁹ For a detailed account of ACTS see Peter R. Faber, "Interwar US Army Aviation and the Air Corps Tactical School: Incubators of American Airpower," in Phillip S. Meilinger, ed. *The Paths of Heaven*, 183-238.

¹⁴⁰ "Convair B-36," Wikipedia, <http://en.wikipedia.org/wiki/B-36>, accessed 24 March 2007.

¹⁴¹ Jonathan F. Vance, *High Flight: Aviation and the Canadian Imagination* (Toronto: Penguin Canada), 97.

time when he led an armada of 23 large, multi-engine seaplanes (the Savoia Marchetti 55) on a round trip from Italy, across North America, to Chicago and back in the summer of 1933 as part of the Italian contribution to that year's Chicago World Fair whose theme was "A Century of Progress." Balbo's feat had a huge impact on the American psyche at the time for his 23 Italian air force planes riding at anchor in Chicago harbour sent a message that was interpreted by many Americans to mean that for the first time in their history a foreign power had the means to attack their industrial heartland.¹⁴²

The reason Balbo's message was so powerful was that it was just one of many that constantly bombarded the public in the interwar period. Before widespread availability of television after the Second World War, the newsreels shown before movies in cinemas gave people their only moving visual impressions of the news of week, and these images showed Lindbergh's arrival in Paris after his dramatic trans-Atlantic solo flight; they tracked the progress of Balbo's air armada across the world arriving in New York and Chicago to a hero's welcome; in a more sinister vein they showed aircraft from Balbo's Aeronautica drop poison gas bombs on Ethiopians resisting Mussolini's invasion of their country; they showed the Luftwaffe's Condor Legion use terror bombing tactics against cities in the Spanish Civil War; and they showed Japanese aircraft bomb Chinese cities with heart rending images of young children killed or wounded outside burning buildings, with an announcer declaring "these were homes like yours" on the soundtrack.¹⁴³

In this context, the 1936 film "Things to Come," based on the H.G. Wells book *The Shape of Things to Come* (published in 1933), and a number like it were shown after the newsreels. In "Things to Come" a mass air attack with explosives and poison gas in 1940 on "Everytown," causes widespread destruction and panic. The defences are powerless to stop the attackers and eventually, as a result of decades long global war, the world enters a new dark age. It is rescued from this situation by a band of scientists, based in Basra, Iraq, who have formed a society known as "Wings Over the World." Despite the use of hostages tied to poles to discourage the scientists from attacking them, the members of the dark age society are subdued by sleeping gas bombs dropped from large modern looking multi-engine aircraft. After subduing them, the leader of the scientists, played by Raymond Massey, declares: "...and now for the rule of the airmen and a new life for mankind."¹⁴⁴

Although few members of the public had read Douhet or other airpower theorists, his ideas were portrayed strikingly in their cinemas: unstoppable bombers dropping explosives and gas on their cities, a breakdown public order after the attacks, all

¹⁴² The definitive work on Balbo's exploits is Claudio Segre, *Italo Balbo: A Fascist Life* (Berkeley, CA: Univ. of California Press, 1990). See also Vance, 206.

¹⁴³ Malcolm Smith, *British Air Strategy Between the Wars* (Oxford: Clarendon Press, 1984), 47. There is a small but growing literature on the impact of aviation on ideas and popular culture. See for example Michael Paris, *From the Wright Brothers to Top Gun: Aviation, Nationalism and Popular Cinema* (Manchester: Manchester Univ. Press, 1995) and Joseph J. Corn, *The Winged Gospel: America's Romance with Aviation 1900-1950* (New York: Oxford Univ. Press, 1983).

¹⁴⁴ "Things to Come," entry in Wikipedia, http://en.wikipedia.org/wiki/Things_to_Come; also copy of "Things to Come" in the possession of Allan English.

(including children who were portrayed in “Things to Come” as being killed in much the same way that Chinese children had been killed by Japanese bombing) now being in the front line of war. The net effect of current events and the portrayal of “airmen” and their aircraft in popular culture meant that the effectiveness of airpower had taken on mythical proportions. For example, one of Canada’s most respected war heroes, Billy Bishop, who won the Victoria Cross for his exploits as a fighter pilot in the First World War, was quoted in a front page story of the *Toronto Star* in 1938 titled “Raining Death on Cities Seen [as] Plane’s Role in War” that: “Aviation’s major role in the next war will be ‘bombing of civilian populations, industrial plants and munitions factories. Breaking down the morale of civilian populations will be the major function of air fleets...’”¹⁴⁵ Added to the perceived destructive power of aerial bombardment was a fear that modern industrial society, made fragile by the Great Depression, was susceptible to being overthrown by “revolutionary forces.”¹⁴⁶

These perceptions contributed to an almost irrational fear of the “knock-out blow” from the air that lowered the will of many leaders to resist Hitler. The mood of the Chief of the Imperial General Staff, Edmund Ironside, writing in his diary at the height of the Munich crisis (22 September 1938), was typical of many British leaders at the time when he said, “... we cannot expose ourselves to a German attack. We simply commit suicide if we do... At no time could we stand up to German air bombing. ...What a mess we are in.”¹⁴⁷ Even though Germany, at the time, did not have bombers with the range necessary to attack Britain with any significant bomb load from their bases in Germany, the perception in Britain, and many other countries at the time, was that the bomber was all powerful and unstoppable.¹⁴⁸

For example, one of Britain’s leading politicians at the time and who served his third term as Prime Minister in the critical years from 1935 to 1937, Stanley Baldwin, told the House of Commons in 1932, “The bomber will always get through.”¹⁴⁹ The result of these ideas was that the RAF was given the lion’s share of Britain’s defence budget in the late 1930s. The RAF budget quadrupled between 1934 and 1938, and by 1939 the RAF was receiving almost 40% of the defence budget and an incredible 20% of total government expenses, most of which was being spent on bombers.¹⁵⁰ Furthermore, in anticipation of an aerial gas attack, by the beginning of 1938, Britain had 19.5 million gas mask filters (canisters) ready for use, it had produced 1.5 million gas masks for the civilian population, and it was assembling 150,000 masks per week.

A number of themes that emerge from the interwar period have a direct bearing on this discussion of influence operations. First of all, all the major interwar airpower theorists sought to describe the best way to influence the behaviour of various groups in their own society and other societies. The dominant theme in airpower theory was how to influence adversary, whether insurgents or other nations, behaviour through physical attacks or

¹⁴⁵ “Raining Death on Cities Seen Plane’s Role in War, [sic]” *Toronto Star*, 27 September 1938, 1.

¹⁴⁶ Smith, *British Air Strategy Between the Wars*, 47.

¹⁴⁷ Roderick Macleod and Denis Kelly, eds., *The Ironside Diaries 1937-40* (London: Constable, 1962), 62.

¹⁴⁸ Smith, *British Air Strategy Between the Wars*, 114-15, 174-5.

¹⁴⁹ Smith, *British Air Strategy Between the Wars*, 115.

¹⁵⁰ Smith, *British Air Strategy Between the Wars*, 336.

what might be called kinetic effects today. However, during this era there was also evidence of an understanding of the use of what might called psychological, or non-kinetic effects, to influence the behaviour of not just adversaries, but potential friends and neutrals, as well as domestic audiences – the epic voyage of Balbo’s seaplane armada in 1933 being a classic example of what might be called demonstration in the stratagems of influence operations.

A second theme, in the study of interwar airpower theorists is that they were all engaged in struggles in their home countries to shape the use of airpower as a military tool. In the three nations from which the major theorists came, aviators struggled with soldiers and sailors for resources; therefore, interwar airpower theorists emphasized how air forces could achieve results “independently” of the other two services.¹⁵¹ While air forces today are more engaged with other services and other agencies, especially in the areas of joint doctrine, air force doctrine, particularly US Air Force doctrine, continues to highlight the unique nature of airpower, as shown in this statement by the then-Chief of Staff of the US Air Force in the Foreword to US Basic Air Doctrine: “We must understand what it means to be an airman and be able to articulate what air and space power can bring to the joint fight. Air Force Doctrine Document 1, the Air Force’s premier statement of our beliefs, is the cornerstone from which all our other doctrine flows and expresses our Service’s identity.”¹⁵²

A third theme, that resonates today, in the interwar period concerning airpower theory is that, despite the common themes that ran through the writings of the major theorists, each theorist tailored his ideas to be congruent with national circumstances including such factors as culture, geographical location, political climate and economic resources. For example, RAF doctrine contained two major themes, one dealing with maintaining order in the British Empire through “air control” and the other focussed on dealing with adversaries in Europe by attacking their “vital centres.” US air doctrine, shared many basic tenets of RAF doctrine, but it was adapted to an isolationist political climate where potential adversaries were largely on other continents. Due to sensibilities in the American public, the US Army Air Corps could not use even the rather vague term “vital centres” because it could involve an attack on innocent civilians, but was forced to devise a theory that advocated an attack on adversaries’ industrial capacity through precision attacks on vulnerable physical nodes in their economies.

Finally, in the context of this discussion it is worth re-emphasizing that while interwar airpower theorists have often been characterized as bloodthirsty because they advocated massive devastating attacks on enemy populations, this was not the case. All interwar theorists believed that the essence of the air weapon was its ability to attack specific targets to influence decision makers in the target group. While the damage inflicted by these attacks might not seem large by today’s standards, by post-First World War standards they represented just enough damage to bring a conflict to a quick and decisive conclusion. Taken together, the views of the airpower theorists were so powerful that

¹⁵¹ See for example Smith, *British Air Strategy Between the Wars*, 76-105.

¹⁵² US Air Force, *Air Force Basic Doctrine* (1 Dec 2003), iii.

they had a significant effect on the conduct of operations for at least the first 12 months of the Second World War.

The Second World War. The literature on the influence of strategic bombing on populations and on the outcome of the war is vast and continues to grow. For the purposes of this study the key issues are summarized next. First of all, the fear of the “knock out blow” from the air, which had become so pervasive in the interwar years, led governments to limit the use of their bomber fleets against nations who had the power to retaliate against them.¹⁵³ Therefore, until the mistaken bombing of London by Luftwaffe during the Battle of Britain led to an end to these limitations, bombers were largely constrained to striking clearly military targets, like ports far from population centres in the case of the RAF, or cities, like Warsaw and Rotterdam, of countries who had no capacity to retaliate against Germany, in the case of the Luftwaffe.

The RAF chafed at the restrictions imposed upon it and waited impatiently until it could take the “gloves off” and bomb Berlin, hopefully in a quick war-ending series of strikes. Of course, once the gloves were off the effects of strategic bombing did not live up to the promises of its advocates. Even the massive combined Allied bomber offensive against Germany in the winter of 1943 did not bring Germany to her knees. Moreover, the inaccuracy of the bombing systems eventually led Britain, Germany and the US to resort to the area bombing of targets in the hope of destroying the material and morale of the enemy. However, to the surprise of the students of the pre-war bombing theorists, civilian populations proved to be incredibly resistant to bombing attacks.¹⁵⁴ Even the US raid on Tokyo on 10 March 1945, which killed 87,793 and injured 40,918, was not enough to convince the Japanese government to surrender. Considering that this raid was part of a strategic bombing campaign that attacked 66 of Japan's largest cities, destroyed an average of 43% of Japan's built up areas, and forced 8.5 million people, one quarter of Japan's urban population, to leave their communities, critics of strategic bombing concluded that the theories of Douhet and others were deeply flawed.¹⁵⁵

However, the dropping of the atomic bombs on Hiroshima and Nagasaki seemed to vindicate the pre-war airpower theorists. Even though the immediate number of dead from both bombs combined was less than the dead in the Mach raid against Tokyo on 10 March 1945, the psychological effect of the bombs was enough to convince the Japanese government to surrender.¹⁵⁶

In the new “new Air Atomic Age” ushered in by the first and only use of atomic weapons in war, many of the lessons of the Second World War regarding airpower were forgotten.

¹⁵³ Smith, *British Air Strategy Between the Wars*, 284-5.

¹⁵⁴ There is an extensive literature on the effects of strategic bombing in the Second World War. An excellent summary of the key issues and a source of more detailed references is David L. Bashow, “The Balance Sheet: The Costs and Gains of the Bombing Campaign,” *Canadian Military History* 15, nos. 3 & 4 (Summer-Autumn 2006), 43-70.

¹⁵⁵ Ronald Schaffer, *Wings of Judgment: American Bombing in World War II* (New York: Oxford Univ. Press, 1985), 148.

¹⁵⁶ Schaffer *Wings of Judgment*, 132; and Ian Beckett, “Total War,” in Lawrence Freedman, ed., *War* (Oxford: Oxford Univ. Press, 1994), 259.

Bernard Brodie, one of the leading post-Second World War strategists, in his classic book *Strategy in Missile Age*, noted the failings of Second World War strategic bombing campaigns, implying they might have been more successful if they had been directed at better targets. Nevertheless, as we have seen, Brodie considered that Douhet's theories to be applicable to the prospect of "general nuclear war" in the early Cold War era.¹⁵⁷

From the beginning of the "new Air Atomic Age" until the 1990s, air forces largely abandoned the field of the theoretical use of airpower to influence behaviour to academics and scientists whose theories of deterrence, which are discussed elsewhere, dominated that field. Removed from the realm of theory, many of those in air force uniforms, particularly the US Air Force, transformed aircraft or technical systems, rather than roles or missions, into ends in themselves.

Post-Modern Theories of Airpower.¹⁵⁸ During the Cold War, under the rule of the so-called "bomber barons" of Strategic Air Command, the US Air Force generally maintained a deterrence- and nuclear weapons-based strategic focus. However, some in the US Air Force, especially those in Tactical Air Command, were engaged in debates with the US Army over the proper way to employ air forces. While the US Army was struggling to re-define its role based on the operational level of war in the 1970s and 1980s, the US Air Force and many other Western air forces maintained their strategic orientation, even in their doctrine for the use of non-nuclear munitions in various operations around the world. The principal lesson that the US Air Force (and some in the US Navy's naval aviation community) drew from the Vietnam War was that the massive application of strategic airpower, during the Linebacker II campaign (18-29 December 1972), had single-handedly brought the war to a successful conclusion and that if airpower had been used correctly (i.e., strategically) in that conflict, it could have been ended eight years earlier.¹⁵⁹ In many ways Linebacker II's air campaign followed Douhetian precepts including the aim of influencing the behaviour of the North Vietnamese government, i.e., bringing its representatives to the negotiating table. For proponents of airpower, the massive application of airpower in Linebacker II was necessary to change the behaviour of a determined and recalcitrant enemy. They also saw parallels between the First World War and the American involvement in Vietnam, and like post-First World War airpower theorists, late modern and post modern airpower theorists saw the US ground forces involvement as wasteful of blood and treasure and entirely avoidable if airpower had been used correctly. These views are evident in the writings of some of today's airpower theorists who, as noted earlier, speak of the "strategic airman" who uses airpower to change the behaviour of adversaries to achieve victory.¹⁶⁰

¹⁵⁷ Brodie, *Strategy in the Missile Age*, 119, 124-5, 129, 137.

¹⁵⁸ This section is based on part of Allan English, Richard Gimblett and Howard Coombs, *Networked Operations and Transformation: Context and Canadian Contributions* (Montreal and Kingston: McGill-Queen's Univ. Press, in press).

¹⁵⁹ Raymond W. Leonard, "Learning from History: Linebacker II and US Air Force Doctrine," *Journal of Military History* 58 (April 1994), 267-303.

¹⁶⁰ Shaun Copelin and Andre Provoncha, "Emergent Capability: Influence Operations and the Strategic Airman," *Air and Space Power Journal* 19, no. 4 (Winter 2005). Available at <http://www.airpower.maxwell.af.mil/airchronicles/apj/apj05/win05/qlcopelin.html>. Accessed 13 Mar 2007.

The notion of the “strategic airman” has been constant throughout the writings of airpower theorists and has been used by Western air forces to challenge this army approaches to campaigning based on the operational art. An example of this challenge is found in RAF Air Commodore Andrew Vallance’s 1996 statement that: “There is no factual basis to the belief that, in land/air campaigns, the purpose of aviation forces must always be to support the land forces. Airpower can and often has acted as lead element in land/air as well as maritime/air operations, and - as capabilities grow - is likely to do so with increasing frequency.”¹⁶¹ Current US Air Force doctrine puts it this way: “Unlike surface forces, modern air and space forces do not normally need to sequentially achieve tactical objectives first before pursuing operational or strategic objectives. From the outset, air and space forces can pursue tactical, operational, or strategic objectives, in any combination, or all three simultaneously. From an airman’s perspective, then, the principle of the objective shapes priorities to allow air and space forces to concentrate on theater or campaign priorities and seeks to avoid the siphoning of force elements to fragmented objectives.”¹⁶²

These opinions represent conventional wisdom in many Western air forces, which has been reinforced in their view by air operations in the Balkans and in the recent Afghanistan campaign. Early in its first term, the Bush administration, particularly the Secretary of Defense, seemed to be favouring force structure changes that would embrace this air force view. Mackubin Thomas Owens, professor of strategy and force planning at the US Naval War College, stated in late 2002 that high ranking US government officials have accepted that: “traditional ground combat is a thing of the past and that future US power will be based on precision strikes delivered by air or space assets, perhaps coordinated and directed by a handful of special operations forces (SOF) soldiers.”¹⁶³ The air force view of war is also being used to challenge the army’s concept of the operational level of war as the focus for war fighting. But this is a relatively recent phenomenon, because, as was noted earlier, during the Cold War air forces focussed on technology to the neglect of doctrine. However, as James Mowbray has shown, enduring problems in institutionalizing the writing of US Air Force doctrine resulted in the air force paying little attention to its development, until the last decade of the 20th century. This has meant that until very recently the US Air Force, and other Western air forces, have been obliged to follow the lead of the most doctrinally up-to-date service, the US Army. Unlike the US Air Force, which has lately invested a great deal in its doctrinal renewal, the Canadian Air Force is only just starting to put its doctrinal house in order.¹⁶⁴

The primary US Air Force doctrinal challenge to US Army doctrinal dominance in the late 1980s and early 1990s was an effects-based approach to operations based on John

¹⁶¹ Andrew G.B. Vallance, *The Air Weapon: Doctrines of Air Power Strategy and Operational Art* (London: Macmillan, 1996), 91, cited in Hallion, “Airpower and the Changing Nature of War,” *Joint Forces Quarterly* (Autumn/Winter 1997-98), 42.

¹⁶² US Air Force, Air Force Doctrine Document (AFDD)-1, *Air Force Basic Doctrine* (Sep1997), 13.

¹⁶³ Mackubin Thomas Owens, “Reshaping Tilted Against the Army?” *The Washington Times*, 24 November 2002, at <http://www.washtimes.com/commentary/20021124-22611196.htm>.

¹⁶⁴ John Westrop, “Aerospace Doctrine Study,” unpublished report dated 30 April 2002, copy at Canadian Forces College library.

Warden's work, *The Air Campaign*.¹⁶⁵ One commentator described the US Air Force challenge this way: "The effects-based approach describes what effects are required to secure strategic objectives and then conduct military actions that would bring about the required effects. The US Air Force champions the effects-based approach and has developed it as a concept nested in a broader 'Rapid Decisive Operations' concept by Joint Forces Command."¹⁶⁶ An effects-based approach can be seen as an outcomes versus an outputs approach to operations. Recent writings by US Air Force commentators on influence operations continue to follow this outcomes versus outputs approach as they note that is not outputs (e.g., "well-crafted messages or delivered information") that "defines victory" but changes in "the behavior of the intended receiver."¹⁶⁷

Some commentators agree that the US Air Force approach is superior to the US Army approach. For example, a recent MA thesis written at the US Army Command and General Staff College concluded that the US Army still uses an "objectives-based approach to operations" and recommended that it adopt an "effects-based approach to operations."¹⁶⁸ However, there can be difficulties in trying to implement an effects-based approach to operations. A detailed study of command and control in the Gulf War found that senior commanders generally found it difficult during operations both to distinguish outputs from outcomes and to discover outcomes. In fact the inability to discern what were perceived at the time to be outcomes (e.g., damage to specific enemy capabilities) was usually the reason senior commanders often focussed on outputs (e.g., sortie rates) which did not necessarily have a direct bearing on the desired outcomes of the campaign.¹⁶⁹ Therefore, after the Gulf War, the US Air Force re-doubled its efforts to devise a truly effects-based approach to operations.

Effects Based Operations. The approach to operations championed by the US Air Force, now formally known as Effects Based Operations (EBO), has become another buzzword in the current debate on how war and other operations should be conducted and it is a term now used frequently in the joint arena.¹⁷⁰ A number of commentators have noted

¹⁶⁵ John A. Warden, III, *The Air Campaign: Planning for Combat* (Washington, DC: Pergamon-Brassey's, 1989).

¹⁶⁶ James K. Greer, "Operational Art for the Objective Force," *Military Review* 82, no. 5 (September-October 2002), 26. Greer is a former director of the US Army's School of Advanced Military Studies (SAMS).

¹⁶⁷ Shaun Copelin and Andre Provoncha, "Emergent Capability: Influence Operations and the Strategic Airman," *Air and Space Power Journal* 19, no. 4 (Winter 2005). Available at <http://www.airpower.maxwell.af.mil/airchronicles/apj/apj05/win05/qlcopelin.html>. Accessed 13 Mar 2007.

¹⁶⁸ John T. Harris, "Effects-Based Operations: Tactical Utility," US Army Command and General Staff College thesis (2004), iii.

¹⁶⁹ A detailed account of this example can be found in Mark D. Mandeles et al., *Managing "Command and Control" in the Persian Gulf War* (Westport, CT: Praeger, 1996), especially 1-8.

¹⁷⁰ One of the most detailed descriptions of EBO has been written by former USAF officer 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, Toulouse, France, 134-46, <http://www.aiai.ed.ac.uk/project/coalition/ksco/ksco-2002/pdf-parts/S-ksco-2002-paper-02-mccrabb.pdf>. A summary of the air force view of the evolution of effects based operations can be found in Phillip S. Meilinger, "The Origins of Effects-Based Operations," *Joint Force Quarterly* 35 (October 2004), 116-22.

that EBO has its roots in ancient (Sun Tzu) and classical (Clausewitz) theories of wars.¹⁷¹ However, the most recent branch on the EBO theory tree is the one based on the writings of Italian airpower theorist Giulio Douhet and Warden. Douhet, as we have seen, proposed solutions to the problems encountered by Western nations in the First World War where stalemate at sea and on land caused widespread devastation and loss. He advocated a new style of warfare whereby aircraft would directly attack enemy vital centres, what might be called centres of gravity today, and bring future wars to a quick and decisive conclusion.¹⁷² Ideas like these were modified or developed in parallel by airmen in the US and Britain to win or to maintain the “independence” of air forces from armies and navies from the 1920s through to the 1950s.¹⁷³ Therefore, Douhet’s vision of EBO is the one most commonly used in air force circles; however, Ho notes that there is no authoritative definition of EBO and he describes six different theoretical variants on the EBO theme.¹⁷⁴ One way of looking at EBO is that it is a type of influence operation if effects are defined in terms of how one wishes to influence target groups.

In general terms, EBO focuses on casual explanations to see if actions that are planned or taken actually result in the desired effects. The key to achieving success with EBO is in predicting how physical actions can result in behavioural outcomes. In many ways EBO is a new way of describing an old concept because it has been at the heart of theories of air warfare since the earliest airpower theorists who were almost always concerned with the effects as much as the means of applying airpower. For example, Douhet’s theories were based on the notion of using the physical action of bombing to effect behavioural changes in the leadership of a nation. Critics of EBO have, therefore, used the failures of airpower theorists to accurately predict the outcomes (effects) of aerial bombardment to illustrate why true EBO may not be possible.¹⁷⁵ Some of these criticisms are based on the chaotic nature of warfare and the fact that Chaos Theory tells us that second and third order effects, especially those associated with human behaviour, cannot be predicted with the accuracy necessary to achieve the results EBO enthusiasts have claimed.¹⁷⁶

While acknowledging non-combat aspects of EBO, some in the US Air Force still present it as largely a targeting exercise. For example Colonel Gary L. Crowder, the Chief of

¹⁷¹ See for example Joshua Ho, “The Advent of a New Way of War: Theory and Practice of Effects Based Operations” (Singapore: Institute of Defence and Strategic Studies, Working Paper no. 57, December 2003), 3-4.

¹⁷² See Claudio Segre, “Giulio Douhet: Strategist, Theorist, Prophet?” *Journal of Strategic Studies* 15 (Sept 1992), 351-66 for a summary of Douhet’s theories.

¹⁷³ These issues are discussed in detail in Phillip S. Meilinger, ed. *The Paths of Heaven: The Evolution of Airpower Theory* (Maxwell AL: Air University Press, 1997), Chapters 1-8.

¹⁷⁴ Ho, “The Advent of a New Way of War,” 5-10.

¹⁷⁵ There is an extensive literature on this topic. See for example Segre, “Giulio Douhet: Strategist, Theorist, Prophet?”; Robert A. Pape, *Bombing to Win: Air Power and Coercion in War* (Ithaca, NY: Cornell Univ Press, 1996); and W. Hays Park, “‘Precision’ and ‘Area’ Bombing: Who Did Which, and When?” *Journal of Strategic Studies* 18 (March 1995), 145-74.

¹⁷⁶ See for example John F. Schmitt, “Command and (out of) Control: The Military Implications of Complexity Theory,” *Marine Corps Gazette* 82, no. 9 (September 1998), 55-8; John D. Hall, “Decision making in the information age: moving beyond the MDMP military decision-making process,” *Field Artillery* (September-October 2000), 28-32; and Christian Rousseau, “Commanders, Complexity, and the Limits of Modern Battlespace Visualization,” unpublished paper written for AMSC 5, CFC, 2002, <http://wps.cfc.dnd.ca/papers/amsc/amsc5/rousseau.pdf>.

Strategy, Concepts and Doctrine of the US Air Force's Air Combat Command, in an article purporting to represent the US Air Force approach to applying airpower, focuses on the effects of new precision-guided munitions in executing EBO.¹⁷⁷ Those who favour this targeting approach to EBO have claimed that the initial "Shock and Awe" bombing campaign in Operation Iraqi Freedom (OIF) was an example of Rapid Decisive Operations (RDO). The "Shock and Awe" concept comes from a 1996 book written by military strategists Harlan Ullman and James Wade titled *Shock and Awe: Achieving Rapid Dominance*.¹⁷⁸ The theory appears to be very Douhetian in its concept of destroying the enemy will to resist by imposing "the non-nuclear equivalent of the impact of the atomic bombs dropped on" Japan, and very ambitious in its desire to: "...control the environment and to master all levels of an opponent's activities...resistance would be seen as futile." To many this prescription seemed to fit the description of what was attempted by air forces in the early stages of OIF. Ullman, however, stated that the air campaign in OIF "appears to come out of a book by strategic-air-power advocates, who have argued that you start at the center and work your way out to disrupt and destroy whatever," but that it was not what he envisaged as shock and awe. In his view, the coalition should have worked at once to "take away [Saddam's] ability to run the country and the ability to fight. . . As we theoretically envisaged it, we would have gone straight after the Republican Guard and its leadership and not just with precision-guided weapons."¹⁷⁹ More recently, Ullman stated that planning for the postwar period in Iraq would have been more effective if "the actual concept of shock and awe been applied with focus on starting with the end state or results to be achieved, such as a peaceful and stable Iraq rather on the rapid neutralization of the Iraqi army..."¹⁸⁰ Therefore, from Ullman's perspective, the US Air Force campaign did not focus on the right targets to achieve the desired effects or influence on the government of Iraq.

Eleven years after the publication of *Shock and Awe: Achieving Rapid Dominance*, Ullman elaborated on the "Shock and Awe" concept in a way that made it seem very much like an influence operation. In May 2007, he claimed that "Shock and Awe" (or RDO) was based on the ideas of Sun Tzu and Clausewitz, and that it was "a strategy based on the simple principle of getting people to do what we wanted, and, conversely, to stop doing things we did not want done. The goal was to affect, influence and potentially control will and perception. The means were shock and awe." He went on to say that, "Shock and awe were derived from all of the physical and psychological elements of power to convince, cajole or coerce an adversary to accept our will with minimum or perhaps even no use of force, following Sun Tzu's advice that the best way to win a war was by not fighting."¹⁸¹ And yet reading the 1996 work one can see why some believe that "Shock and Awe" was used in Operation Iraqi Freedom. In *Shock and Awe*:

¹⁷⁷ Gary L. Crowder, "Effects-Based Operations: The Impact of Precision Strike Weapons on Air Warfare Doctrines," *Military Technology* 27 no. 6 (Jun 2003), 16-25.

¹⁷⁸ Harlan K. Ullman and James P. Wade, *Shock and Awe, Achieving Rapid Dominance* (1996) available at <http://manybooks.net/titles/ullmanhaetext05skawe10.html>.

¹⁷⁹ Excerpt from "Introduction," Harlan Ullman and James Wade "Shock and Awe: Achieving Rapid Dominance" in *Washington Post* (30 Mar 2003), p. B03.

¹⁸⁰ Harlan Ullman, "Useful facts every journalist should know," *Washington Times* (16 May 2007) <http://washingtontimes.com/op-ed/20070515-083951-3312r.htm>. Accessed 16 May 2007.

¹⁸¹ Ullman, "Useful facts every journalist should know," np.

Achieving Rapid Dominance Ullman and Wade do say that “Rapid Dominance is based on affecting the adversary's will, perception, and knowledge through imposing sufficient Shock and Awe to overcome resistance, allowing us to achieve our aims.” They also state that, “The first priority of a doctrine of Rapid Dominance should be to deter, alter, or affect the will and therefore those actions that are either unacceptable to US national security interests or endanger the democratic community of states and access to free markets.” Furthermore, Ullman and Wade state that even though the doctrine of Rapid Dominance is most applicable to “major and lower regional conflict scenarios,” it could also be applied to “a variety of areas such as countering WMD, terrorism, and perhaps other tasks.” However, many of the examples they give of ways that “Shock and Awe” should be applied, infer that the concept is Douhetian in origin and depends a great deal on the use of force to exert influence, for example they say that:

Rapid Dominance expands the art of joint combined arms war fighting capabilities to a new level. Rapid Dominance requires a sophisticated, interconnected, and interoperable grid of netted intelligence, surveillance, reconnaissance, communications systems, data analysis, and real-time deliverable actionable information to the shooter. This network must provide total situational awareness and supporting nodal analysis that enables US forces to act inside the adversary's decision loop in a manner that on the high end produces Shock and Awe among the threat parties. Properly detailed nodal analysis of this knowledge grid will enable the shutting down of specific functions or all essential functions near simultaneously. This will often times be netted pieces of data where the sum of the parts gives the answer and the battlefield advantage to the force possessing this rapidly netted information.

The ‘rapid’ part of the equation becomes the ability to get real-time actionable targeting information to the appropriate shooter, whether the shooter is a tank division, an individual tank, an artillery battery, an individual rifle man, a naval battle group, an individual ship, an air wing/squadron, or an aircraft in flight. This means the need to have the right shooter in the right place; locating and identifying the target correctly and quickly; allocating and assigning targets rapidly; getting the “shoot” order or general authority to the shooter; and then assessing the battle damage accurately.¹⁸²

In discussing the “Operational Assumptions” of RDO it becomes clearer why many described Operation Iraqi Freedom as an example of “Shock and Awe,” because in this section of the book Ullman and Wade say that, if deterrence fails, the US response should initially be “air and missile strikes and special forces” missions, followed by “more massive power up to and including a joint task force of corps size” within ten days of the decision to act, followed by “a second corps” within 30 days of the decision to act.¹⁸³

¹⁸² Harlan K. Ullman and James P. Wade, *Shock and Awe: Achieving Rapid Dominance*, Chapter 3, Strategic, Policy, and Operational Application (Washington, DC: National Defense University, 1996), online version available at <http://www.ndu.edu/inss/books/books%20-%201996/Shock%20and%20Awe%20-%20Dec%2096/ch3.html>, np. Accessed 16 May 2007.

¹⁸³ Ullman and Wade, *Shock and Awe*, Chapter 3, Strategic, Policy, and Operational Application, np.

Given these assumptions for the use of RDO and “Shock and Awe” and despite recent disavowals to the contrary by Ullman, it is therefore understandable why many believe that the combat phase of Operation Iraqi Freedom, and even the first stage of Operation Enduring Freedom in Afghanistan, was an RDO based on the concept of “Shock and Awe.”

Critics of approaches to EBO that concentrate on targeting as a means of achieving outcomes caution that studying the theoretical foundations and historical examples of this type of EBO proves its futility as an approach to conducting operations. They note that strategic bombing theories, like those of Douhet and Warden, have underestimated the obstacles to achieving their goals because attempts to destroy an enemy’s will to resist by strategic bombing failed, unless much of his infrastructure was destroyed and at least some of his territory was physically occupied, as was the case in the Second World War. As for the recent shock and awe variant of EBO theory, Kagan asserts that those who advocate this approach to warfare ignore the fact that the destruction of targets and resultant killing of civilians necessary to achieve the desired effect may undermine the political objectives of the campaign.¹⁸⁴ The challenge for champions of EBO will be to see if modern theories, methods of analysis, and technology can make true EBO possible.¹⁸⁵

Many commentators have identified the need for more attention to be paid to the human dimension of EBO, but the complexity of this effort has been equated to “PhD level warfare.”¹⁸⁶ However, confusion over what EBO really means has led to a situation where “the concept is neither thoroughly nor evenly understood among military people” and as a result, “[o]nly now is EBO being tentatively and unevenly incorporated into service and joint doctrine.”¹⁸⁷

Throughout the history of airpower, an important focus of theorists and practitioners has been how to generate the greatest amount of influence with the least amount of effort. From its earliest days, theorists of airpower have had a keen interest in influencing the behaviour of adversaries, friends and neutrals. Like the naval theorists who have influenced them, airpower theorists have tried to avoid compartmentalizing their actions into categories like tactical, operational or strategic. They understood that tactical actions can be linked directly to strategic outcomes without the intervening operational level that armies find so necessary in many of their actions. Because of this air force approach to influence operations, the conceptualization of “intelligence” in air force doctrine has had different nuances than is often found in army or joint doctrine today. For example, while the airmen at ACTS were interested in details about the dimensions of the locks in various canals and the tonnage of shipping that passed through them, these facts by themselves were not of much use unless they were linked to higher level outcomes.

¹⁸⁴ Kagan, “War and Aftermath,” 5-8.

¹⁸⁵ For a discussion of this issue see Christopher D. Kolenda, “Transforming How We Fight: A Conceptual Approach,” *Naval War College Review* 56, no. 2 (Spring 2003), 100-21.

¹⁸⁶ Ho, “The Advent of a New Way of War,” 23-4.

¹⁸⁷ Edward Mann, Gary Endersby, Tom Searle, “Dominant Effects: Effects-Based Joint Operations,” *Aerospace Power Journal* 15, no. 3 (Fall 2001), 92-100,
<http://www.airpower.maxwell.af.mil/airchronicles/apj/apj01/fal01/vorfal01.html>

Therefore, the overall effect of how interrupting shipping through a particular canal might affect supplies to a theatre of war or might affect a nation's economy would be critical to an air force operation designed to influence an actor's behaviour. Moreover, air force planners might also want to know how interrupting shipping in a particular area might affect the perception of decision makers and the public both at home and abroad. These perceptions, as we saw during the interwar period, might in turn directly affect not only operations but doctrine on how to conduct operations.

The US Air Force still accepts that Douhet and his contemporaries were correct in their assessment of the effects airpower could have. This belief in Douhet was illustrated near the end of the first Gulf War when a banner was put up in the US Air Force's Air University cafeteria proclaiming "Douhet and Mitchell Were Right!" in reference to a view that airpower had been the decisive factor in winning that war.¹⁸⁸ This belief is also enshrined in current US doctrine, as this statement shows:

Early airpower advocates argued that airpower could be decisive and could achieve strategic effects. While this view of airpower was not proved during their lifetimes, the more recent history of air and space power application, especially since the 1991 Persian Gulf War, has proven that air and space power can be a dominant and frequently the decisive element of combat in modern warfare.¹⁸⁹

While new technology offers many novel opportunities for air forces to engage in influence operations, the fundamental precepts of the airpower theorists remain at the heart of current air force approaches to operations. These approaches, now encapsulated in the phrase Effects Based Operations, encompass all the stratagems of influence operations described earlier in the paper, in that EBO aims to effect the will, understanding and perceptions of others; can be applied to adversaries, third parties and allies; is used to cause the target to behave in specific manners; and does not require the use of violence.

"Air Control." While the theory and practice of "Air Control," has come to be associated with counterinsurgency operations or "small wars," the topic of the next section, Air Control is fundamentally a theory for the use of airpower in specific situations. Furthermore, it was developed specifically by the RAF as a way of convincing decision makers and public opinion at home that the RAF deserved to maintain its recently won "independence" from the other two services. Therefore, it will be discussed in the section on airpower.

The British experiment with "Air Control," sometimes called "air policing," in the 1920s and 1930s is an example of one of the earliest examples, in the twentieth century, of using a new technology as the centrepiece of operations intended to influence the behaviour of actors in what might be called an insurgency today, but at the time was referred to as a "small war." Clausewitz's discussions of war being an extension of

¹⁸⁸ Segre, "Giulio Douhet," 351.

¹⁸⁹ US Air Force, *Air Force Basic Doctrine* (1 Dec 2003), 18-19.

policy, but with a grammar all of its own applies particularly well to air control. Towards the end of the First World War, the British government had to consider the post-war international environment and its effects on the defence of the British Empire as well as the requirement for a “peace dividend” through a reduction of defence spending. Naturally, the latter would have an effect on the nature of the British defence establishment. The Royal Air Force (RAF) was established as an “independent” British fighting service in April 1918; however, both the Royal Navy and the British Army opposed this move at the time and continued to do so after the end of the First World War. Those two services wished to see the RAF broken up so that they could re-establish their own flying services, the Royal Naval Air Service and the Royal Flying Corps. To stave off the other two services’ actions, Air Marshal Hugh Trenchard, then the Chief of Air Staff, took measures to ensure the RAF’s continued independence.¹⁹⁰ And just before the end of the war, a suggestion was made in House of Commons that the RAF ought to be made responsible for the security of Britain’s overseas possessions due to its inherent ability, borne of its mobility, to project power overseas. In interwar Britain, the defence of the Empire remained a major concern and, as stated in the House of Commons in December 1919, some saw the RAF as the natural lead service to secure the postwar Empire: “. . . we have all those dependencies and possessions in our hands which existed before the War, and in addition we have large promises of new responsibilities to be placed upon us. The first duty of the Royal Air Force is to garrison the British Empire. . .”¹⁹¹ In 1918 and 1919, the Army was able to suppress such notions, but this changed in 1920. First, continued troubles in British Somaliland with Mohammed bin Abdullah Hassan (referred to in the British press as the “Mad Mullah”) led the Government to deploy a squadron of DH-9 reconnaissance / light bomber aircraft to support the African field force. With eight aircraft and the expenditure of roughly £80,000, the “Mad Mullah” was defeated. This led the Colonial Secretary, Winston Churchill, to opt to support such “air control” schemes in other parts of the British Empire.¹⁹² Only months later, Britain became responsible for the League of Nations Mandates over the Transjordan and Mesopotamia (now Jordan and Iraq). Naturally, the security of these newfound responsibilities was seen as a costly venture, and Trenchard offered the government the option of “air control” as a cheaper alternative to garrisoning Mesopotamia with land forces. Trenchard’s argument struck a chord with Government and elements of the British Army. A rebellion started in May 1920, and it took two divisions (60,000 troops in total) one year to crush the rebellion at a cost of roughly £100,000 and 2,000 lives. The General Officer Commanding, General Sir Aylmer Haldane, even supported Trenchard’s arguments after seeing RAF elements in action

¹⁹⁰ James Corum, “The Myth of Air Control: Reassessing the History,” *Aerospace Power Journal* 14, no. 4 (Winter 2000), 61; and S. Robertson, “The Development of Royal Air Force Strategic Bombing Doctrine between the Wars: A Revolution in Military Affairs?” *Airpower Journal* 12, no. 1 (Spring 1998), 6.

¹⁹¹ Britain, *Parliamentary Debates, 5th Series, House of Commons, Hansard*, Vol. 123, cols 137-140 (15 December 1919), cited in Hyde, *British Air Policy Between the Wars*, 73. See also B. Hoffman, *British Air Power in Peripheral Conflict, 1919-1976*, Report R-3749-AF (Santa Monica: RAND, 1989), 2; and S. Robertson, “The Development of Royal Air Force Strategic Bombing Doctrine between the Wars,” 6.

¹⁹² Corum, “The Myth of Air Control,” 63; Hoffman, *British Air Power in Peripheral Conflict*, 4, 7-10; Hyde, *British Air Policy Between the Wars*, 90; and David Omissi, *Air Power and Colonial Control: The Royal Air Force, 1919-1939* (Manchester: Manchester University Press, 1990), 20-3.

relieving one of the Army garrisons.¹⁹³ Winston Churchill, then the Air Minister, advocated the use of the RAF for trying to secure Mesopotamia, which is now Iraq:

. . . It is not intended that the force holding Mesopotamia should be sufficient to guard it against external invasion. It would be proportioned solely to the duty of maintaining internal security. . . It appears to me that this might well be obtained by having a series of defended areas in which air bases could be securely established. In these air bases, strong aerial forces could be maintained in safety and efficiency. An ample system of landing grounds judiciously selected would enable these air forces to operate in every part of the protectorate and to enforce control, now here, now there, without the need of maintaining long lines of communications eating up troops and money. . .¹⁹⁴

These ideas were the basis for the arrangements made in the March 1921 “Cairo Conference,” held to discuss Britain’s Middle Eastern commitments, at which the security of Iraq became the responsibility of the RAF Air Officer Commanding. The number of RAF squadrons increased from five to eight and the RAF also deployed several armoured car squadrons belonging to the RAF Regiment.¹⁹⁵

“Air Control” represented, at the policy level, the exploitation of a specific set of political and economic conditions. At the strategic and operational levels, it represented the use of joint operations as preventive measures to support the British Mandate and nascent Iraqi government. The following quotation from official RAF sources at the time is instructive:

Air action can be taken swiftly at the focus of trouble and before the disturbance against which it is directed has time to permeate a larger area.

It has the immense advantage that compared with the slow movements of ground forces over unfamiliar country it offers to the tribesmen no chance of loot or retaliation by ambush or concentration of small ground forces.¹⁹⁶

Through its inherent mobility and relative immunity from attack, RAF aircraft could be used to make demonstrations or to threaten the use of or use force against recalcitrant tribes or the Mandate’s neighbours. From safe bases, air forces operated over the skies of Iraq to exercise a form of control that was less risky and costly than conducting an occupation by land forces. This safety, borne of the inability of the tribesman to retaliate,

¹⁹³ Corum, “The Myth of Air Control,” 64; Peter W. Gray, “The Myths of Air Control and Realities of Imperial Policing,” *Aerospace Power Journal* 15, no. 3 (Fall 2001), 21-31; and Hoffman, *British Air Power in Peripheral Conflict*, 11-12.

¹⁹⁴ Winston Churchill cited in M. Gilbert, *Winston S. Churchill*, Vol. IV (London: Heinemann, 1975), 217 cited in Hyde, *British Air Policy Between the Wars*, 92.

¹⁹⁵ Hoffman, *British Air Power in Peripheral Conflict*, 12-14. The RAF Regiment were largely security forces raised to protect airfields.

¹⁹⁶ Air Ministry, “Note on the Method of Employment of the Air Arm in Iraq,” Command Document 2217 (1924) in Hyde, *British Air Policy Between the Wars*, 167-8.

was said to be the main reason for the success of the air control policy in the 1920s.¹⁹⁷ It should be noted, however, that British success with this influence operation was dependent of specific conditions. First, the combination of the climate and terrain favoured the choice of aircraft for security operations. Second, the necessity of timely intelligence cannot be understated. Both the RAF's armoured car squadrons and the human intelligence provided by colonial administrators provided this much needed intelligence. Third, force was used only to obtain compliance with existing legal regimes (i.e., to quell rebellions and to enforce the rule of law). Finally, the RAF sought to limit collateral damage to ensure the government's continued rule.¹⁹⁸ Corum notes, however, that air control's success declined with time as the insurgents became familiar with RAF's methods: "when exposed to regular doses of bombing the native populations did exactly what the European populations would do during the Second World War they adapted and carried on." As the native population learned to post lookouts, to create simple air raid signals and to build bomb shelters, Corum argues that they were able to maintain their will to fight and that "the psychological effects of bombing were highly overrated." Furthermore, while Air Control was relatively effective in Iraq, it was much less effective in other areas, especially those areas that had large urban population centres like Palestine.¹⁹⁹

Despite its weaknesses as an approach to fighting unconventional adversaries, "Air Control" did have certain advantages, particular its low cost relative to using ground forces and the fact that it could be conduct operations that were relatively immune from enemy attack. Air control, therefore, was the ancestor of other schemes involving airpower, such as the Air Interdiction Zones established during the Korean War and the No Fly Zones over Iraq and the former Yugoslavia during the 1990s, where the application of landpower or seapower was problematic.²⁰⁰

While army and navy doctrine can readily be adapted to fighting small wars, one of the leading writers on small wars, James Corum, has argued that this is not the case for air force doctrine. He contends that because many theories of airpower are based on attacking "vital centres" such as capital cities, industrial nodes, national command centres, and large conventional armies, they are not relevant to campaigns against guerrillas or insurgents. Corum concludes that: "air campaigns that are designed to shock and awe and demoralize a conventional enemy through the massive and precise application of airpower are basically irrelevant to small wars. In fact, employing

¹⁹⁷ Robertson cited in M. Smith, *British Air Strategy between the Wars* (Oxford: Clarendon Press, 1984), 6, 22-23. Quote from p. 6.

¹⁹⁸ Major Michael E. Tallent, *Air Occupation: An Environmental Impact Study*, AU/ACSC/0161A/97-03, (Maxwell AFB: Air Command and Staff College, 1997), 12-16. In 1922, RAF operations were used to cause some recalcitrants to pay their taxes.

¹⁹⁹ James S. Corum, "The Air Campaign of the Present and the Future – Using Airpower Against Insurgents and Terrorists," in Allan D. English, ed., *Air Campaigns in the New World Order*, Siler Dart Canadian Aerospace Studies Series, Vol. 2 (Winnipeg: Centre for Defence and Security Studies, 2005), 29-30. For a more extensive treatment of this topic see James S. Corum and Wray R. Johnson, *Airpower in Small Wars: Fighting Insurgents and Terrorists* (Lawrence, KS: University Press of Kansas, 2003).

²⁰⁰ Alexander Benard, "Lessons from Iraq and Bosnia on the Theory and Practice of No-fly Zones," *Journal of Strategic Studies* 27, no. 3 (September 2004), 455; and Thomas E. Griffith, Jr., "Air Pressure: Strategy for the New World Order?" *Airpower Journal* 8, no. 3 (Summer 1994), 18-26.

airpower in this favoured manner in a small war has historically proven to be counterproductive.”²⁰¹ Nevertheless, some applications of airpower against unconventional enemies have met with some success.

It could be argued that “Air Control” met all the criteria of influence operations. While its application was not as well coordinated at the strategic or operational levels as similar air operations today, it did use all instruments of British national power extant in Iraq during the Mandate to provide the military with sufficient information to allow those practising Air Control to decide when and how to act in response to political crises. This shows that coordination between the military and diplomatic instruments of power had been decentralized to lower levels and still remained effective.

While Air Control was often presented by its advocates, in theory, as a largely independent use of airpower in counterinsurgency operation, in practice airpower has been a vital component of joint counterinsurgency operations, or small wars, since the beginning of the 20th century. The notion of influence operations in small wars is discussed later. Another important aspect of Air Control was the notion of coercing recalcitrant tribesman to bend to imperial will; however, theories of coercion, which will be discussed next, were not formalized until the nuclear age.

The only use of nuclear weapons in human history was an influence operation. The dropping of two atomic bombs, the first on the Japanese city of Hiroshima and the second on Nagasaki, represented a demonstration of an American capability intended to cause the Japanese empire to surrender. In analyzing this influence operation it is important not to treat the Japanese government as a monolithic entity because the emperor, civilian officials and militarists in the government all reacted differently to the same events. For example, it was known at the time that the military members of the Japanese government would not accept surrender under any circumstances, but that the behaviour of the Emperor and the civilian members could be influenced. After the bombings, the civilian members of government sought the emperor’s blessing to accept the allied terms of surrender, including the retention of Hirohito as emperor. He assented to the surrender based on the combination of the effects of the atomic bombs, of the sea blockade of the Japanese islands, of Japanese defeats on all fronts, and of the Soviet declaration of war on Japan.²⁰² While all these effects played their part, the attacks with the atomic bombs forced Japanese leaders “to choose between further hostilities and the prospect of unlimited physical destruction.”²⁰³ This prospect convinced those who were amenable to be influenced, namely the emperor and the civilian members of the government. Some historians have advanced the argument that the use of nuclear weapons was also a demonstration of the American capability to their erstwhile ally, the Soviet Union, and not just an influence operation against Japan.²⁰⁴ Even though nuclear weapons were only

²⁰¹ Corum, “The Air Campaign of the Present and the Future,” 26.

²⁰² Donald Kagan, “Why America Dropped the Bomb,” *Commentary* (September 1995), 17-23.

²⁰³ Ronald Schaffer, *Wings of Judgment: American Bombing in World War II* (New York: Oxford University Press, 1985), 148. Schaffer provides an extensive analysis of the reasons for the American bombing of Japan including the use of the atomic bombs.

²⁰⁴ For details, see Gar Alperovitz, *Atomic Diplomacy: Hiroshima and Potsdam* (New York: Penguin Books, 1965).

used twice, and on a very limited scale, the potential for nuclear Armageddon spawned a number of bodies of thought, which will be discussed next.

The Coercion Theorists - The Heirs of the Airpower Theorists

Definition. Coercion is best described as the combined application of the diplomatic and military instruments of power in cases where violence or the threat thereof may be employed to attain national objectives by causing adversaries to make different decisions than they otherwise would have if coercion had not been used. Economic sanctions, a close cousin to coercion, are best described as the combined application of the economic and military instruments of power. The concept of coercion fits all four aforementioned criteria for an influence operation because coercion aims to effect the will, understanding and perceptions of others; it can be applied to adversaries, third parties and allies (although it might be used less frequently with allies); it is used to cause the target to behave in specific ways; and coercion does not necessarily require violence in its application. Coercion could be applicable to an ally or third party if one changed the mechanism of coercion from violence to “an act contrary to that state’s interests.”²⁰⁵

Origins. Coercion theory was created during the Cold War era, and there were two sources for the theory. The first was a reaction of the concept of total war, based on some of Clausewitz’s ideas, as it was understood at the time. In an obscure article written in 1955, a US Air Force officer noted that western democracies tended to fight “absolute” wars that sought to destroy the enemy’s military forces and that in this type of warfare political aims became secondary to military goals. This approach, he argued, meant that the political issues that led to a conflict were never resolved.²⁰⁶ Furthermore, if the destruction of the enemy force became the main goal of conflict, this strategy could lead to a nuclear exchange between the two superpowers resulting in Armageddon and the complete nullification of any rational political outcome. The second source of coercion theory was American strategic thought early in the Cold War which seemed to assure this outcome. The Eisenhower Administration’s policy of “Massive Retaliation,” where the United States would respond to communist aggression anywhere in the world with nuclear strikes on the Soviet Union and People’s Republic of China, seemed, to some, to render diplomacy in this period futile.²⁰⁷ However, others considered how force could be used selectively, in concert with diplomacy, to achieve political goals without leading to Armageddon.²⁰⁸ The results of their efforts became known as “limited war” theories and they influenced the Kennedy Administration’s nuclear policy of “Flexible Response.”²⁰⁹ The specific origins of coercion theories can be traced to one of the “limited war” theorists in particular, Thomas Schelling.

²⁰⁵ For example, allies or third parties could be coerced through the application or imposition of policies that reduced the possibility that the governments of those states would continue to rule, or harmed the national economic health and/or position on the world stage.

²⁰⁶ Edward M. Collins, “Clausewitz and Democracy’s Modern Wars,” *Military Affairs* 19, no. 1 (Spring 1955), 15-20.

²⁰⁷ For an insightful discussion on “massive retaliation,” see Lawrence Freedman, *The Evolution of Nuclear Strategy* (Basingstoke: Macmillan Press, 1988), 76-88.

²⁰⁸ James Nathan, “Force, Statecraft and Diplomacy,” *Polity* 28, no. 2 (Winter 1995), 237-40.

²⁰⁹ Cimbala, *Coercive Military Strategy*, 23. For examples of “limited war” theories, see Morton Halperin, *Limited War in the Nuclear Age* (New York: Wiley, 1963); William W. Kauffman, *The McNamara Strategy* (New York: Harper & Row, 1964); Henry Kissinger, *Nuclear Weapons and Foreign Policy* (New York: Harper & Row, 1957); and Robert Osgood, *Limited War: The Challenge to American Strategy* (Chicago: University of Chicago Press, 1957).

Schelling, a professor at Yale University, sought to challenge the prevailing belief that war and diplomacy were mutually exclusive. He noted that the nuclear-inspired stalemate of the Cold War had led to a situation where military power was used as a form of bargaining by the two superpowers.²¹⁰ To Schelling, although “total war” represented the application of “brute force,” all conflicts short of a “total war” were really exercises in communication:

There is a difference between taking what you want and making someone give it to you, between fending off assault and making someone afraid to assault you, between holding what people are trying to take and making them afraid to take it, between losing what someone can forcibly take and giving it up to avoid risk or damage. It is the difference between defense and deterrence, between brute force and intimidation, between conquest and blackmail, between action and threats. It is the difference between the unilateral, ‘undiplomatic’ recourse to strength, and coercive diplomacy based on the power to hurt . . . The purely ‘military’ or ‘undiplomatic’ recourse to forcible action is concerned with enemy strength, not enemy interests; the coercive use of the power to hurt, though, is the very exploitation of enemy wants and hurts.²¹¹

In this interpretation, coercion represented the manipulation of the enemy’s decisions through the power to hurt. This power is based on what pain the enemy believes can be inflicted immediately and in the future as well as what the enemy could do to make it stop.

Coercion theories in particular and theories of “limited war” in general were discredited as a result the Johnson Administration’s furtive attempts to apply “graduated pressure” (one of the variants of “limited war”) during the Vietnam War. They faded from view during the 1970s and 1980s but enjoyed resurgence in the 1990s as a result of the chaos that emerged at the end of the Cold War. In the “new world disorder,” coercion seemed to offer a solution for the Western problem of being confronted with conflicts that were important enough to act on in some way, but not vital enough to national interests to commit a nation to war. At the same time, based on the lopsided coalition victory in the 1991 Gulf War, which was attributed by some to air power, it seemed that air power could be a viable instrument of coercion.

Mechanism. The analogy of the “carrot and the stick” could be used to describe coercion with a heavy reliance on the “stick.” Intuitively, reward and punishment (the “carrot and the stick”) seem to offer the most fruitful approach to the behaviour modification posited by coercion theory. Using this analogy, one would reward compliance and punish intransigence, and this is why coercion can be seen as both a

²¹⁰ G. Snyder and P. Diesing, *Conflict Among Nations* (Princeton: Princeton University Press, 1977), 22-3; and Schelling, *Arms and Influence*, 79-80.

²¹¹ Schelling, *Arms and Influence*, 2-3.

diplomatic and military activity.²¹² The military element offers the “stick,” but it remains a diplomatic function to decide when and how to reward compliance.²¹³ As a result, the intent to influence and the actual effects of the influence on the will, as well as the issue of the understanding and perception of target groups are addressed by coercion theory. These factors were discussed by coercion theorists in the last decade of the 20th century.

There were two major schools of thought on coercion that emerged in the 1990s. These schools were based on a methodological (and a transatlantic) divide. The American school of thought was based on social science methodology and the British school of thought was based on a more historical approach to the matter.

Robert Pape was a leader in the American social science approach to coercion. His book, *Bombing to Win*, was the first major work of the 1990s that discussed issues surrounding coercion in detail. Pape took a scientific and somewhat reductionist approach to coercion in accordance with the practice of the social sciences in the United States. Using cases where airpower was used to conduct strategic bombing in war, he conceptualized the adversary’s choice in an equation, from which he could posit strategies:²¹⁴

$R = Bp(B) - Cp(C)$ where **R**: the degree of resistance, **B**: the benefits, **p(B)**: the probability of obtaining the benefits, **C**: the costs and **p(C)**: the probability of the costs.

Success occurs when $R < 0$.²¹⁵

This was essentially a refined cost-benefit analysis, and from this equation, he postulated that there were four basic coercion strategies:

- **“Punishment”** - elimination of will to fight by targeting of civilians -the increase of **C** by the coercer;
- **“Risk”** – a weakened form of punishment, that starts small and escalates -the increase of **p(C)** by the coercer;
- **“Denial”** - attacks intended to deny the enemy the ability to enact their strategy-the reduction or elimination of **p(B)** by the coercer; and
- **“Decapitation”** - elimination of will to fight by targeting the enemy leadership-the increase of **C** and reduction or elimination of **p(B)**.²¹⁶

²¹² Group Captain A. Lambert, RAF, “Air Power and Coercion,” in Group Captain S. Peach, RAF, ed., *Perspectives on Air Power: Air Power in Its Wider Context* (Bracknell: Joint Services Command and Staff College, 1999), 275.

²¹³ If coercion is expanded to threats of non-violent means, then other instruments of national power provide the proverbial “stick.”

²¹⁴ His cases included the Allied bombing of Germany, 1941-1945; the American bombing of Japan, 1944-1945; the Gulf War; and Operations ROLLING THUNDER and LINEBACKER in Vietnam. See also K. Mueller, “Strategies of Coercion: Denial, Punishment and the Future of Air Power,” *Security Studies*, 7, no. 3 (Spring 1998), 189.

²¹⁵ See Pape, *Bombing To Win*, 16-19. This assumes a degree of rationality on the part of the adversary.

²¹⁶ See Pape, *Bombing To Win*, 18-19; and Barry Watts, “Ignoring Reality: Problems of Theory and Evidence in Security Studies,” *Security Studies*, 7, no. 2 (Winter 1997/1998), 130.

These “strategies” were based on the manipulation of variables, and there are three ways of determining failure with this model. If the coercer stops before the coerced offers concessions, then the attempt has failed. If the coercer continues without concessions, then the attempt has failed. Failure also occurs if the total defeat of the coerced is the outcome.²¹⁷

Robert Pape’s model has significant limitations, however. He argued that a strategy of “denial” was the most likely to succeed, and airpower was, historically, frequently used as the means to execute a denial strategy. However, his advocacy of joint, theatre-wide uses of airpower implies that he believed that airpower could not serve as an instrument of coercion in isolation.²¹⁸ Because his cases were based on wartime experience where land forces were also employed in a war fighting capacity, it can be inferred, therefore, that most “denial” strategies are based on applications of both airpower and land forces in war. Yet this inference implies that coercion itself becomes futile as a “denial” strategy becomes a “control” strategy. Logically, this means that “denial” is the best instrument of war as opposed to coercion.²¹⁹

Karl Mueller attempted to address some of the problems with Pape’s model and shared many of the same assumptions and philosophical points of view. Unlike Pape, however, he appeared to favour a bounded rationality model of decision-making where subjective factors are related to the adversary’s perception of the situation. His equation appears as follows:

If $B_C - C_C > P_s(B_{SR} - C_{SR}) + (1 - P_s)(B_{UR} - C_{UR})$, then coercion succeeds

where **B**: benefits, **C**: costs, **c**: compliance, **SR** / **UR**: successful and unsuccessful resistance, **P_s**: probability of success.²²⁰

This equation is read as: “If the result of the Benefits of Compliance less the Costs of Compliance is greater than the sum of Probability of Success (a function of the Benefits of Successful Resistance less the Costs of Successful Resistance) and the Probability of not succeeding (a function of the Benefits of Unsuccessful Resistance less the Costs of Unsuccessful Resistance) then coercion succeeds.

Mueller also argued that there were three key elements to coercion, namely, credibility, capability and communication.²²¹ Analysts have tended to focus on communication as it can be quantified or observed, whereas an adversary’s perception of the coercer’s capability and credibility are difficult to assess in an objective manner. However, since the required communication with an individual or a group of individuals can be difficult to achieve except under ideal conditions, communication is often an exercise in human

²¹⁷ Pape, *Bombing To Win*, 15.

²¹⁸ Pape, *Bombing to Win*, 10; and Pape, “Coercion and Military Strategy,” 423-75.

²¹⁹ This argument was refuted in P. Bratton, “A Coherent Theory of Coercion? The Writings of Robert Pape,” *Comparative Strategy* 22, no. 4 (October / November 2003), 355-72.

²²⁰ Mueller, “The Essence of Coercive Air Power,” 10.

²²¹ Mueller, “The Essence of Coercive Air Power,” 4.

interaction at a physical and psychological distance.²²² The interaction can be actions or messages, but this leads to a methodological problem. The intent and meaning of actions are far less useful than publicly issued ultimatums or messages as actions can be difficult to discern and easy to refute. This situation implies that a degree of overtness of word and deed is crucial to the study of coercion, but not necessarily its practice.

The last contribution of note from the American school came from two researchers at the RAND Corporation. Daniel Byman and Matthew Waxman's works owe an intellectual debt to John Warden's theory of the enemy as a system as well as the Clausewitzian concept of the "centre of gravity."²²³ They argued that: "Although concessions can be gained by targeting a range of state interests, only by threatening the state's centre of gravity can a coercer compel the greatest concessions from the target State."²²⁴ This was a significant contribution to the debate, because they, like Mueller, recognized that coercion was a dynamic exchange between two or more actors.²²⁵

In contrast to the American approach described above, the British school of coercion has sought to explain the process without the use of equations. Michael Clarke, of the Centre of Defence Studies of the University of London, offered a different means by which to examine coercion without becoming mired in theory. His contribution, which appeared as an article in a 1996 Royal Air Force-sponsored book, *The Dynamics of Air Power*, enunciated a set of criteria for judging policy success or failure. His list of criteria included the following questions:

- What did the coercer want the coerced to do?
- What behaviour will lead to the removal of the threat?
- What does the coerced's decision calculus look like?
- How (and by whom) are decisions made so that they match the policy direction and extent desired?
- Has the threat and desired behaviour been communicated clearly?²²⁶

This subjective framework allows for an analysis within a particular context as opposed to the reduction of context in order to arrive at a predictive equation. Clarke also took into account the fact that coercion was an exercise in communication.²²⁷ Because it did

²²² Gates, "Air Power and the Theory and Practise of Coercion," 246.

²²³ The concept was derived from Clausewitz, 465-6. The US Department of Defense dictionary definition of centre of gravity is: "Those characteristics, capabilities, or sources of power from which a military force derives its freedom of action, physical strength, or will to fight." See <http://www.dtic.mil/doctrine/jel/doddict/data/c/00875.html>.

²²⁴ D. Byman, K. Pollack, and M. Waxman, "Coercing Saddam Hussein: Lessons from the Past," *Survival* 40, no. 3 (Autumn 1998), 127-8.

²²⁵ D. Byman and M. Waxman, *Confronting Iraq: U.S. Policy and the Use of Force Since the Gulf War* (Washington, DC: RAND, 2000), 5.

²²⁶ Michael Clarke, "Air Power, Force, and Coercion," in Group Captain A. Lambert, RAF and A. Williamson, eds., *The Dynamics of Air Power* (Bracknell: RAF Staff College, 1996), 70-1 and 73.

²²⁷ Clarke, "Air Power, Force, and Coercion," 70, 72-3.

not attempt to prescribe strategies or particular visions of airpower, Clarke's work did not attract the same degree of criticism as *Bombing to Win* attracted.

Similar to Clarke, and unlike some who used evidence to sustain a particular theoretical argument, Lawrence Freedman has attempted to put the concept of coercion into an appropriate context. Freedman's works on coercion have sought to bring clarity to the disjointed body of knowledge on the subject through an examination of coercion's application to strategic studies and the use of force in international relations from the Cold War to the present. For example, he explained that the ossification of deterrence theory in the 1960s, when it was reduced to mere calculations of military balance, occurred because many theorists discarded other factors crucial to the understanding of the concept.²²⁸ More importantly, Freedman introduced the key concept that could be used to distinguish between war and attempts to influence an adversary's decision calculus with threats or discrete use of force - the ability of the adversary to make a choice. As noted earlier, where choice is denied to the adversary by the use of overwhelming force in an attempt to impose one's will on an adversary, this is an attempt at control not coercion.²²⁹

Taxonomy. One of the problems with the literature on coercion is that there are multiple terms in use that have similar meanings; therefore, it is easy to apply a term pertaining to coercion incorrectly. Some commentators have argued that coercion is merely an umbrella concept that can be subdivided, and they typically divide the concept based on a distinction between whether or not the desired effect is the maintenance of the status quo against a potential future action (deterrence) or the rescinding of an action already taken (compellence).²³⁰ Others have argued that coercive diplomacy should be considered as part of the coercion calculus. Therefore, coercive diplomacy, along with compellence, and deterrence, will be described next in an attempt to better understand the relationship among these concepts.

Coercive Diplomacy. Coercive diplomacy is similar to coercion in that the intent to use force or the threat to use force remains the same as with coercion, i.e., threats or discrete uses of force are employed to obtain a particular form of behaviour from an adversary. However, coercive diplomacy is different from coercion in that coercive diplomacy always occurs outside the bounds of war, while compellence or deterrence may apply to both states of war and peace. For example, it has been argued that:

. . . Force is used in an exemplary, demonstrative manner, in discrete and controlled increments to induce the opponent to revise his calculations and agree to a mutually acceptable termination of the conflict . . . force is subordinated to what is essentially not a military strategy but rather a

²²⁸ Lawrence Freedman, "Indignation, Influence and Strategic Studies," *International Affairs* 6, no. 2 (Spring 1984), 214-15.

²²⁹ Freedman, "Strategic Coercion," 16-17.

²³⁰ Lambert, "Coercion and Air Power," 444. See also: P. Viggo Jakobsen, *Western Use of Coercive Diplomacy After the Cold War: A Challenge for Theory and Practice* (Basingstoke: Macmillan, 1998), 12-13, and Mueller, "The Essence of Coercive Air Power," 1.

political-diplomatic strategy for resolving or reconciling a conflict of interests with the opponent . . .²³¹

This argument suggests that a coercer will conduct a controlled “trial and error” process until the desired results are achieved or the coercer has to resort to war. Some see the term coercive diplomacy as a form of hair-splitting to separate those cases where war is part of the context from those where war is not part of the context.

Deterrence. Traditionally, the concept of deterrence has been associated with strategic nuclear war.²³² Alexander George and Richard Smoke argued that: “. . . deterrence is simply the persuasion of one’s opponent that the costs and/or risks of a given course of action he might take outweigh its benefits. . .”²³³ Like coercion, it is a psychological concept, but its application is intended to prevent any attempt by the adversary to change the *status quo*.²³⁴ Deterrence, as a body of theory, is also reliant on a rational decision-making model.²³⁵ This reliance on rationality may be due to a subconscious desire on the part of analysts to reduce cognitive dissonance over the potential for human folly involving nuclear weaponry. It is more likely, however, that rationality was a parsimonious theory that explained the behaviour of states given the complex command and control mechanisms associated with nuclear weapons release.

The assumption of rationality notwithstanding, the nature of deterrence creates some difficulties for the taxonomy, as the theory of deterrence requires a complete understanding of the adversary’s intent. Therefore, it is possible to apply a strategy of deterrence and still not have a deterrence situation, because, as Richard Ned Lebow noted: “. . . it is important to distinguish between the theory of deterrence and the strategy of deterrence. The former pertains to the logical postulates of deterrence and the assumptions on which they are based . . . Deterrence strategy is concerned with applying the theory of deterrence . . .”²³⁶ In the theoretical sense, a deterrence situation cannot exist without conclusive proof that the adversary sought to alter the status quo, and, “. . . in pure deterrence one cannot deter someone who is giving no thought to an attack . . .”²³⁷ The question, in theory, then becomes: How can one identify a deterrence situation without asking the adversary decision-makers what their intentions are? This is a significant limitation on the theoretical concept of deterrence, because an empirical identification of a failure of deterrence would require evidence of all of these conditions: 1) a communication from the deterrer to the deterree, 2) the intent by one state to alter the status quo, and 3) proof that the communication from the deterrer led to a change in decisions by the deterree.

²³¹ A. George, *The Limits of Coercive Diplomacy* (Boston: Little, Brown and Company, 1971), 18.

²³² For details, see Freedman, *Evolution*, 1-89

²³³ A. George and R. Smoke, *Deterrence in American Foreign Policy* (New York: Columbia University Press, 1974), 11.

²³⁴ R. Lebow, “Deterrence: A Political and Psychological Critique,” in P. Stern, R. Axelrod, R. Jervis and R. Radner, eds., *Perspectives on Deterrence* (Oxford: Oxford University Press, 1989), 25.

²³⁵ P. Huth and B. Russett, “Testing Deterrence Theory: Rigor Makes a Difference,” *World Politics* 4 (July 1990), 469.

²³⁶ Lebow, “Deterrence: A Political and Psychological Critique,” 25.

²³⁷ P. Morgan, *Deterrence: A Conceptual Analysis* (London: SAGE, 1978), 33.

Compellence. Compellence differs from deterrence in that it refers to a subset of coercion where actions are aimed at convincing the adversary to alter the *status quo*.²³⁸ The intellectual roots of this concept are based on game theory problems that Schelling wished to address.²³⁹ Robert Pape has argued that coercion was fundamentally distinct from deterrence because the latter sought to maintain the *status quo*. Pape therefore posited that coercion (i.e., compellence) was harder to achieve because it involved changing the *status quo*.²⁴⁰ Pape's argument is somewhat weakened by the fact that all of his case studies came from wars. The purpose of compellence nevertheless provides an insight into the logic of coercion. Lambert, for example, noted that: "... the purpose of compellence is to obtain an outcome without having to pay the full costs of military involvement. . . ."²⁴¹ The term "full costs," here implies "total war" as opposed to "limited war." This brings us back to the original issue of whether or not to consider coercion as a concept that includes compellence, deterrence and coercive diplomacy or whether it is simply coercive diplomacy by itself.

Issues. There are a number of issues in the literature on coercion that affect our discussion on influence operations. First is the definitional concern about whether or not coercion can be applied in war, based on the criterion of choice. Second is the reliance on rationality in a great deal of coercion theory. Finally, there is the question of how coercion relates to concepts like influence operations.

One of the debates in the literature on coercion theories is the question of whether or not coercion can occur during a major conflict or war. Karl Mueller argued that:

... most warfare is to a greater or lesser degree coercive. States usually seek the capitulation of their enemies rather than their complete incapacitation . . . The reasons are obvious: bringing the contest to an end while the enemy still has the means to resist offers the prospect of conflicts that are less expensive for the coercer and probably for the enemy as well, and successful coercion may avert warfare altogether through deterrence or compellence that relies on threats rather than the actual use of force. Often states pursue coercion in situations where they would never consider seeking victories through pure force because the costs of doing so would be prohibitively high.²⁴²

There is a danger with this argument, however, as Mueller can be accused of confusing strategic attrition, through the application of "brute force" in war to erode an enemy's will and/or capability to fight, with trying to influence an adversary's decisions. Both war and coercion include threats and/or the use of force in order to alter an adversary's decision calculus. Yet there is a critical distinction to make between coercion (an

²³⁸ G. Schaub, "Compellence: Resuscitating the Concept," in Freedman, ed., *Strategic Coercion*, 42.

²³⁹ Viggo Jakobsen, *Western Use of Coercive Diplomacy After the Cold War*, 17-18.

²⁴⁰ Robert Pape, *Bombing To Win* (Ithaca: Cornell University Press, 1996), 4, 6 and 12.

²⁴¹ Lambert, "Coercion and Air Power," 446.

²⁴² K. Mueller, "The Essence of Coercive Air Power: A Primer for Military Strategists," *Aerospace Power Chronicles*, (17 September 2001), 3. Available at <http://www.airpower.maxwell.af.mil/airchronicles/cc/mueller.html>. Accessed 25 Jul 2007.

application or threat of force for distinct political purposes based on altering the adversary's choice in accordance with the national will) and "control" (an application of force in order to impose the national will).²⁴³ The ability of the adversary to choose a course of action (in the case of coercion) or not (in the case of "control") is key to distinguishing between coercion and "control." This distinction is significant taxonomically, because many believe that coercion can be employed in both peace and war, but "control" remains a form of war.

Another important debate in the coercion literature is the reliance of coercion theory on rationality. The aforementioned "carrot and stick" analogy is at the heart of the rational decision-making model, as a decision-maker is assumed to weigh the costs and benefits of any given action before making a decision and then acting on it. This is a simplistic approach, however, because we know that humans are not, by nature, completely rational beings.²⁴⁴ Moreover, there are other factors that complicate the issue. Michael Clarke noted that decision-making is culturally dependent and possibly even individually dependent. He argued that these dependencies make any exercise in coercion rather difficult and recommended that coercers therefore target one of three groups - leadership, population or armed forces.²⁴⁵ If one accepts these limitations, one can then argue that rationality is bounded and coercion is therefore an attempt to alter an adversary's cost-benefit analysis based on an image²⁴⁶ of the adversary decision-makers' behaviour and their attachment to target sets.²⁴⁷ In the end though, coercion in general suffers from the same analytical ailment as deterrence - it is difficult, if not impossible, to obtain perfect information about adversaries' possible reactions to coercion, and any success with coercion strategies may depend on good luck as much as any other factor.

The final point to be discussed here is how coercion relates to influence operations. The works of coercion theorists are not particularly helpful in answering this question because they have focused on describing the phenomenon of coercion and have not spent as much effort on the methods used in coercion, with the notable exception of strategic airpower. Some answers to how coercion relates to influence operations can be discerned using the upper right hand quadrant of Figure 1 - Stratagems of Influence Operations, above. Deterrence appears therein, but coercive diplomacy and compellence do not. However, compellence may be achieved through a demonstration, a threat, demarche or ultimatum, or even a discrete use of force. And coercive diplomacy rests on the use of threats, demarches and ultimatums, and possibly force, although in very limited measures.

In summary, despite the weaknesses in coercion theory, the act of coercion definitely constitutes an influence operation for these reasons: an act of coercion is intended to

²⁴³ Freedman, "Strategic Coercion," 25.

²⁴⁴ D. Kahneman, P. Slovic, and A. Tversky, eds., *Judgement Under Uncertainty: Heuristics and Biases* (Cambridge: Cambridge Univ. Press, 1982).

²⁴⁵ Clarke, "Air Power, Force, and Coercion," 70-2.

²⁴⁶ "Image" in this context can be defined as "a heuristic device to describe an estimate of causality." The term "image" entered the political science lexicon in 1954 with the publication of Kenneth Waltz's *Man, the State and War: A Theoretical Analysis* (New York: Columbia University Press, 1954), 12.

²⁴⁷ Clarke, "Air Power, Force, and Coercion," 83-4. See also Gates, "Air Power and the Theory and Practise of Coercion," 246-7.

generate a deliberate effect on the will, understanding or perception of others; it may be applied to adversaries, third parties and allies alike, although in the case of the last two, it should be non-violent in nature; it is used to cause the target to behave in specific ways; and coercion does not necessarily require violence in its application.

Influence Operations in Small Wars

British Small Wars: Influence Operations in Theory and Practice

Small war is a term which has come largely into use of late years, and which is admittedly somewhat difficult to define. Practically it may be said to include all campaigns other than where both the opposing sides consist of regular troops...

The expression 'small war' has in reality no particular connection with the scale on which any campaign may be carried out; it is simply used to denote, in default of a better, operations of regular armies against irregular, or comparatively speaking irregular, forces.²⁴⁸

Colonel C.E. Callwell

Small wars were a type of imperial warfare and were the legacy of numerous nineteenth century military expeditions to maintain colonies.²⁴⁹ The successful execution of "small wars" operations relied on the decisive and precise application of military force by vastly outnumbered British forces to eliminate any thought or vestige of resistance in the far outreaches of the Empire. In a similar fashion to the Melian Dialogues, recorded by Thucydides, the remainder of the subject population took heed of the example made by these military actions and tended to behave in a manner amenable to the wishes of the British. While today's version of "small wars," eschews the use of violence, except where absolutely necessary, the need to influence target audiences through a variety of means remains.

Callwell was well aware of the effects "decisive action" had in affecting the size of insurgent forces; therefore, he advocated the use of military force to achieve a "moral [or psychological] effect" in discouraging local populations from joining insurgent forces:

There is one very important point in which the hostile forces met with in small wars differ from those met in great campaigns. They swell and contract according to the moral effect which is produced, and quite apart from losses in action or the exigencies of the conflict.²⁵⁰

The "moral effect" of disciplined and well equipped troops is reinforced time and again in Callwell's work. For instance, he noted that instead of keeping an army together it was best to divide one's force into columns and flood them into an opponent's territory. This would have the effect of "impressing the enemy with a sense of his inferiority."²⁵¹

²⁴⁸ C.E. Callwell, *Small Wars: Their Principles and Practice*, 3rd ed. (London: Her Majesty's Stationary Office, 1906; Reprint, Lincoln: University of Nebraska Press, 1996), 21.

²⁴⁹ See "Appendix II: The Little Wars" in Byron Farwell, *Queen Victoria's Little Wars* (New York and London: W.W. Norton and Company, 1972; reprint 1985), 364-71.

²⁵⁰ Callwell, *Small Wars*, 76.

²⁵¹ *Ibid.*, 109.

While direct action by regular forces was the primary means of achieving the effects envisioned by Callwell in *Small Wars*, T. E. Lawrence or “Lawrence of Arabia,” came to see the use of indirect actions by irregulars as the most effective way to achieve effects in his circumstances. He found that countering regular Turkish troops with native tribesman required an intellectual bridge from the machinations of interstate conflict espoused by nineteenth century theorist Carl von Clausewitz and other European theorists to the war in which he was currently engaged.²⁵²

Lawrence realized that, for him, Clausewitz’s utility lay in understanding the nature of war:

...war is not merely an act of policy but a true political instrument, a continuation of political intercourse carried on with other means. What remains peculiar to war is simply the peculiar nature of its means. War in general, and the commander in any specific instance, is entitled to require that the trend and designs of policy shall not be inconsistent with these means...The political object is the goal, war is the means of reaching it, and the means can never be considered in isolation from their purpose.²⁵³

Nonetheless, he also understood that with lightly armed irregular forces he could not successfully use the force on force tactics of the Napoleonic battlefield. Where possible his victories needed to be attained without direct confrontation. He came to the conclusion that, “‘killing Turks’ would never be an excuse or an aim. If they would go quietly, our war would end.” Victory could be achieved without bloodshed.²⁵⁴ In this respect Lawrence referred to the earlier works of pre-Napoleonic generals, like Marshal Maurice de Saxe, who at times avoided fighting as the method to gain military success. Saxe suggested that “a skilful general could make war all his life without being forced into one.”²⁵⁵

Lawrence further refined these thoughts to include a psychological component of his operations, of which he saw propaganda as a small and crude part. He suggested that there were different facets to the cognitive domain, the enemy and his people, sympathetic forces and their nations, as well as the population of neutral states:

Some of it concerns the crowd, the adjustment of spirit to the point where it becomes fit to exploit in action, the prearrangement of a changing opinion to a certain end. Some of it deals with individuals, and then it becomes a rare art of human kindness, transcending by purposeful emotion, the gradual logical sequence of our minds. It considers the capacity for mood of our men, their

²⁵² T.E. Lawrence, “CSI Reprint: The Evolution of a Revolt” (Fort Leavenworth, KS: United States Army Command and General Staff College Combat Studies Institute, 1990), 5.

²⁵³ Carl Von Clausewitz, *On War*, ed. and trans by Michael Howard and Peter Paret, (Princeton: Princeton University Press, 1976; reprint, 1989), 86-7.

²⁵⁴ Lawrence, “The Evolution of a Revolt,” 7.

²⁵⁵ Lawrence, “The Evolution of a Revolt,” 5; and Marshal Maurice de Saxe, “My Reveries Upon The Art of War” (1732) in T.R. Phillips, ed., *Roots of Strategy: The 5 Greatest Military Classics of All Time* (Harrisburg, PA: Military Svc Pub. Co., 1940; reprint, Harrisburg, PA: Stackpole Books, 1985), 298.

complexities and mutability, and the cultivation of what in them profits the intention. We had to arrange their minds in order of battle, just as carefully and as formally as other officers arranged their bodies: and not only our own men's minds, through them first: the minds of the enemy, so far as we could reach them: and thirdly, the mind of the nation supporting us behind the firing-line, and the mind of the hostile nation waiting the verdict, and the neutrals looking on.²⁵⁶

The eminent British military theorist J.F.C. Fuller provided a more direct version of Lawrence's ideas almost forty years later in *The Conduct of War 1789-1961*:

War by propaganda is pre-eminently a democratic instrument, fashioned to dominate the mass-mind – Rousseau's 'general will.' Its purposes are: (1) to stimulate the mass-mind on the home front; (2) to win one's support the mass-minds of neutral nations; and (3) to subvert the mass-mind on the enemy's inner front.²⁵⁷

Therefore, both Lawrence and Fuller recognized the potentially powerful effect of shaping the consciousness of a target audience in order to create desired results.

Lawrence put these ideas to great result during the Turkish campaign to "reach victory without battle by pressing our [Arab] advantages mathematical and psychological." He understood that his strength lay in avoiding direct confrontation with the enemy and instead he used all manner of other stratagems to fix the Turkish army in outposts throughout the Middle East. At the same time he allowed the Turks a trickle of supplies, which was sufficient for them to continue an extended form of strategic defence but not enough to conduct offensive tactical operations. In this fashion they were rendered irrelevant without large expenditures of Allied resources.²⁵⁸ These activities form the basis of the myths surrounding Lawrence's deeds during the First World War.

A similarly legendary figure from the Second World War was Major General Orde Wingate, whose special operations exploits ranged from pre-war Palestine to the North African and Burma theatres. Unlike Lawrence, Wingate did not survive his war or leave first hand accounts of his exploits. However, the lessons that his form of warfare inculcated in senior commanders are contained in Field Marshal Viscount William Slim's seminal account of the China-Burma-India Theatre of Operations, *Defeat into Victory: Battling Japan in Burma and India, 1942-1945*.

²⁵⁶ Lawrence, "The Evolution of a Revolt," 11.

²⁵⁷ J.F.C. Fuller, *The Conduct of War, 1789-1961: A Study of the Impact of the French, Industrial, and Russian Revolutions on War and Its Conduct* (New Brunswick, NJ: Rutgers University Press, 1961; reprint, Cambridge and New York: Da Capo Press, 1992), 179.

²⁵⁸ T.E. Lawrence, *Revolt in the Desert* (United States: Doran, 1926; reprint, United States: Tess Press, 2004), 76-78; quote from page 76.

A large part of Slim's memoirs deal with the necessity of building up and maintaining the psychological aspects of a military force that had been mauled by the Japanese.²⁵⁹ Therefore his general observations concerning Wingate were made with an understanding that warfare was multidimensional, encompassing more than combat. As a result, Slim did not think much of Wingate's special forces operational concepts:

The strategic idea that a penetrating formation, operating behind the enemy, could be the decisive force was by no means new or unsound – I used it myself in the great Mandalay-Meiktila battle of 1945 – but what would have been unsound was to attempt it with his present force and with our present air resources.²⁶⁰

However, Slim did note that there could be great cognitive effects from the guerrilla operations conducted by Wingate's forces. While describing a May 1942 raid that was a tactical failure, he observed on positive strategic results:

Whilst, like the Arakan offensive [April 1942], it was a failure, there was a dramatic quality about this raid, which, with the undoubted fact that it had penetrated far behind the Japanese lines and returned lent itself to presentation as a triumph of British jungle fighting over the Japanese. Skilfully handled, the press of the Allied world took up the tale, and everywhere the story ran that we had beaten the Japanese at their own game. This not only distracted attention from our failure in Arakan, but was important in itself for our own people at home, for our allies, and above all for our troops on the Burma front.²⁶¹

For Slim the value in specialists such as Wingate lay in the cognitive, rather than the physical, sphere. His post-war musings on the value of special forces indicated that he thought that they were of little value except for small highly trained groups who would operate far behind the lines in enemy held territory, "to sabotage vital installations, to spread rumours, to misdirect the enemy, to transmit intelligence, to kill or kidnap individuals, and to inspire resistance movements." These forces would be controlled at the highest levels practicable to achieve strategic results through creating confusion and misdirection.²⁶²

The concrete results of these Second World War experiences took form in Malaya from 1948-1960 and manifested themselves in the most successful western counterinsurgency of the twentieth century. Of greatest interest for this study from this period are the psychological and information types of operations that were conducted. For current military researchers and doctrine writers these aspects of the Malaya campaign provide a

²⁵⁹ David W. Hogan Jr., "Introduction," in Field Marshall Viscount William Slim, *Defeat Into Victory: Battling Japan in Burma and India, 1942-1945* (London: Cassell & Co, 1956; reprint, New York: Cooper Square Press, 2000), xi.

²⁶⁰ Ibid, 218.

²⁶¹ Ibid., 163.

²⁶² Ibid., 546-549; quote from page 548.

great deal evidence that well orchestrated and effective military operations must consist of activities that are both lethal and non-lethal.²⁶³

In Malaya, psychological and information warfare was used against the insurgents to break down their will to fight and cause them to surrender. However, these programs took years to be effectual and were directed at reinforcing themes of self-government and improved living conditions, as well as capitalizing of the successes of the counterinsurgency campaign. Additionally, the United Kingdom and Malayan governments used a variety of means to influence not only the Malayan population, to gain and maintain their support, but also the British public, in order to minimize any criticism of the war. In the end, the counterinsurgency effort was successful through a well-coordinated combination of programs and activities across the civil-military sphere. Consequently, Malaya demonstrated the utility of programs that target the mind of the enemy.²⁶⁴

By the 1980s the British military formally embodied the cognitive domain in doctrine through manoeuvre warfare theory that came to be the foundation of their military doctrine. This philosophy is predicated on a particular state of mind or manner of thinking rather than tactical or operational techniques and procedures. It is a warfighting philosophy that strives to defeat an adversary by destroying that which provides him the ability to effectively fight.²⁶⁵ Such objectives can be physical, psychological or cybernetic. British theorist, Richard E. Simpkin, explored these issues in *Race to the Swift: Thoughts on Twenty-First Century Warfare*, emphasizing that manoeuvre warfare was psychological, fluid and characterized by decentralized authority, in contrast to attritional conflict which was physical, positional and utilized centralized command and control.²⁶⁶ Simpkin reinforced the notion of war as a “clash of wills,” arguing that “moral [or psychological] surprise” was more valuable than “material surprise” on both the physical and psychological planes. He also noted the importance of deception as one “stratagem” to enable this activity.²⁶⁷ Simpkin suggested that the aim of opposing commanders during this “clash of wills” was “the creation of a picture of defeat in each others’ minds.” For Simpkin, the physical situation created in the pursuit of this objective was only germane insofar as it furthered this purpose: “The outcome turns neither on the

²⁶³ See R.W. Komer, *The Malayan Emergency in Retrospect: Organization of A Successful Counterinsurgency Effort* (Santa Monica, Ca.: RAND, February 1972), 69-75. The author headed the pacification efforts of the US Military Assistance Command Vietnam in the late 1960s.

²⁶⁴ Ibid., 69 and 76. One must, however, be careful not to make the error that the model used in Malaya, due to specific conditions associated with that conflict, is universally applicable. Also, the British counterinsurgency actions in Malaya were not always considered a success until well after the actions were conducted. Furthermore, British attempts to convince their allies on the utility of their methods were sometimes met with resistance. See for example Peter Busch, “Killing the ‘Vietcong’: The British Advisory Mission and the Strategic Hamlet Programme,” *Journal of Strategic Studies* 25, no. 1 (March 2002), 135-62.

²⁶⁵ Roman J. Jarymowycz, “Doctrine and Canada’s Army,” *The Army Doctrine & Training Bulletin Canada’s Professional Journal on Army* 2, no. 3 (August 1999), 50.

²⁶⁶ Simpkin describes these qualities as the parameters of command. See Richard E. Simpkin, *Race to the Swift: Thoughts on Twenty-First Century Warfare* (London: Brassey’s Defence Publishers, 1985; reprint, 2000), 229.

²⁶⁷ Ibid., 184-185 and 189-194.

seizing and holding of ground nor the dislocation or disruption of forces and resources, but on the pictures in opposing commanders' minds."²⁶⁸

Simpkin was also acutely aware of the psychosocial aspects of military operations within the psyches of civilian populations and governments. He said that to achieve "strategic moral surprise" against an enemy population and abrogate any potential support of military action, one needed to pre-empt the mobilization of public opinion by imposing, "an immediate and severe threat without being spotted..." In this fashion the attacker could achieve his demands before popular opinion or political will had been generated against him. Simpkin also applied this type of analysis to military operations suggesting that spirit and moral courage were vital.²⁶⁹

Concepts of manoeuvre warfare, along with the experiences of the late modern era produced in British military thought perspectives on conflict that relied on more than violence to achieve military goals. Therefore, many British senior officers today are concerned with the necessity of shaping the contemporary security environment by means other than military force. General Sir Rupert Smith, in his *The Utility of Force: The Art of War in the Modern World*, argues that with the waxing of people's wars and the waning of traditional inter-state conflict, military force in the conventional sense has become outmoded and its "utility" is no longer understood by politicians and military commanders.²⁷⁰ Consequently, for him, the use of military force must be reinterpreted in light of the complex dilemmas of the postmodern age. According to Smith, contemporary conflict is not simply a matter of violence:

For unlike industrial war, in war amongst the people no act of force will ever be decisive: winning the trial of strength will not deliver the will of the people, and at base that is the only true aim of any use of force in our modern conflicts.²⁷¹

Smith argues throughout *The Utility of Force* that it has been his experience that the use of actions to "deliver the will of the people," while acknowledged, is neither well understood nor frequently implemented. Nevertheless, ideas of strategic influence are contained in draft United Kingdom joint doctrine and reflect the need to influence allies and national decision makers at the national or grand strategic level. But this doctrine does tie influence to troop contributions: "In all circumstances the ability to exert influence is underpinned by the contribution of credible and robust military forces." There is also discussion of the need to discern and target adversarial populations, ruling elites and leadership in this document.²⁷² However, there is little detail in its wide ranging discussion except to suggest that:

²⁶⁸ Ibid., 225.

²⁶⁹ Ibid., 211-226; quotes from page 213.

²⁷⁰ General Sir Rupert Smith, *The Utility of Force: The Art of War in the Modern World* (London: Penguin Books Ltd., 2005), 1-26.

²⁷¹ Ibid., 331.

²⁷² United Kingdom, Director General Joint Doctrine and Concepts, *JDP 01 Joint Operations (Study Draft)* (25/10/03), paragraph 293. b. and paragraph 225. c. Quote from paragraph 293. b.

Military history offers accounts of problems and options and the reasons for success and failure and should not be used selectively to prove a theory or support a particular course of action. Sir Michael Howard recommends that military history should be studied, not to provide universal remedies, but:

‘In depth to get beneath the historian’s necessarily imposed pattern of seeming orderliness and to try and understand what war is really like – to get an idea of the confused nature of fighting. In breadth so that the development of war over a long period can be understood. And in context to appreciate the political, social and economic factors that exercises important *influences* [emphasis added] on the military part of the equation.’²⁷³

Given this acknowledgement of the importance of understanding influence at the strategic level of war combined with the British tradition of manoeuvre warfare, it is not surprising that British operational doctrine puts such emphasis on this aspect of the cognitive domain. Within information operations two subtopics are highlighted as key in British doctrine. These are “Influence Activities” and “Counter-Command Activities.” The former describes actions taken to influence “Will” and uses primarily, “Psychological Operations (PSYOPS), deception, Electronic Warfare (EW), specifically targeted physical destruction and Computer Network Operations (CNO).” “Influence Activities” can also include facets of operational manoeuvre like “force presence, posture and profile” and other related activities like “Media Ops and CIMIC.” While the latter, “Counter-Command Activity,” commonly utilizes “targeted physical destruction, the use of emerging technology, offensive EW and CNO” to affect an adversary.²⁷⁴

By the end of the twentieth century the legacy of the British experience of small wars was a consensus among British military thinkers that the defeat of an opponent depends on many harmonized activities, some lethal and others not. While the place of force in creating a desired effect is well understood by military commanders, less so are the non-lethal aspects of war. However, through historical experiences, embodied in warfare theory and doctrine, great strides have been made in acknowledging these deficiencies and posing questions concerning the necessary cross-spectrum conduct and coordination of postmodern military operations. The British approach to small wars in the 20th and 21st centuries has used all the stratagems of influence operations described earlier in the paper. While not explicitly employing a model similar to the one presented here, the British in fighting small wars have conducted activities to generate psychological or cognitive effects; have coordinated these activities, at least to some extent, at the strategic

²⁷³ Ibid., paragraph 233.

²⁷⁴ British information operations doctrine is linked to concepts contained in AJP 3.10 – *Information Operations*. See United Kingdom, Director General Joint Doctrine and Concepts, *JWP 3-80 Information Operations* (June 2002), pp. iii-iv, 2-6, Glossary-2 and Glossary-3; quotations from p. 2-6. The British position, including the link to AJP 3.10, also reflects the cotemporary Canadian vision of influence activities. For further discussion see Land Force Doctrine and Training System Directorate of Army Doctrine, *Conduct of Land Operations – Operational Level Doctrine for the Canadian Army (B-GL-300-001/FP-000)* “Chapter 5 – Application of Combat Power” *DRAFT* in possession of authors.

or operational levels; and have used the activities to influence adversaries, third parties and allies alike.

American Small Wars: Influence Operations in Theory and Practice

The term “Small War” is often a vague name for any one of a great variety of military operations. As applied to the United States, small wars are operations undertaken under executive authority, wherein military force is combined with diplomatic pressure in the internal or external affairs of another state whose government is unstable, inadequate, or unsatisfactory in the preservation of life and of such interests as are determined by the foreign policy of our nation.²⁷⁵

Small Wars Manual (1940)

Small Wars involve a wide range of military operations in conflicts *involving states or non-traditional actors*, generally over a *protracted timeline*, characterized by a combination of physical violence and non-kinetic forms of *influence* requiring the *tightly integrated* application of diplomatic, informational, economic and military means. [emphasis in original]²⁷⁶

Small Wars/21st Century (2005)

These two definitions, while originating with the US Marine Corps reflect the American experience during the past century. American knowledge of small wars comes from a variety of conflicts that run the gamut of experience, from the Spanish American War at the end of the ninetieth century, through the American experience of imperial-style warfare in the years prior to the Second World War through the US interventions of the latter decades of the twentieth century to the initiation of the so-called “Global War On Terror” (GWOT). During the Cold War period, however, there was limited interest in the concept of small wars in the US military. The catalyst for this renewed American interest in small wars stems from what has been described as a lack of a “clear strategy and a defined chain of command” as well as a lack of “sufficient integration and coordination” between “military and political tasks” in the GWOT, especially the campaign in Iraq.²⁷⁷ Based on the American experience, US military concepts of small wars have moved from ideas of limited war for limited objectives to a much broader concept encompassing all elements of national power and the application of a wide variety of means to influence a

²⁷⁵ United States Marine Corps, FMFRP 12-15 *Small Wars Manual* (originally NAV 2890 *Small Wars Manual*) (Washington, DC: Government Printing Office, 1940; Reprint Quantico, Virginia: Marine Corps Combat Development Command, 22 December 1990), p. 1-1.

²⁷⁶ United States Marine Corps, *Small Wars/21st Century* (Quantico, Virginia: Marine Corps Combat Development Command, 2005), 3.

²⁷⁷ See for example, Howard Lafranchi, “The Missing Player: A 'Czar' to Manage the Iraq War,” *The Christian Science Monitor* (26 April 2007), online edition www.csmonitor.com/2007/0426/p01s02-usfp.html, accessed 26 Apr 2007.

variety of target audiences. These new concepts have now taken form in current US military doctrine.

The historical context of American small wars is best provided by American journalist Max Boot, in his *The Savage Wars of Peace: Small Wars and the Rise of American Power*. Boot examines the contribution of small wars to the creation of American hegemony in the 20th century and at the same time depicts the evolution of the American approach to these limited conflicts. In doing so, Boot provides some insights into the historical underpinnings to American forms of influence.²⁷⁸

According to Boot, the period from 1898 to 1941 was marked by small wars that announced the emergence of the US as a “Great Power.” They included interventions across the globe geared to a foreign policy aim of maintaining free trade.²⁷⁹ Nevertheless, in some cases these confrontations resulted in the formation and long term maintenance of foreign administrations that supported American interests. The expeditionary experience of the US Marine Corps in these wars was captured in its 1940 edition of the *Small Wars Manual*.

This early version of American small wars doctrine stressed the need for military operations to take place in accordance with foreign policy objectives and that the operations should be conducted in cooperation with other US agencies. The manual emphasized that American forces must contribute to the political and economic aspects of the peace that was to be established after any military intervention. In order to ensure that Marine officers understood national goals and the role of government officials, the manual laid out explicit guidelines for the officials’ roles in these operations, particularly the roles of State Department officials.²⁸⁰

Ideas of influence are expressed throughout the 1940 *Small Wars Manual*, but especially through its discussion of “Psychology.” As a result of the US expeditionary experience of the first part of the twentieth century, the manual said that it was necessary to understand the psychology of one’s own forces because they would be employed in a distributed fashion outside the immediate supervision of military authorities. Consequently, these commanders would have little control over the actions and subsequent effects produced by these dispersed forces:

This difficulty of immediate control and personal influence is even more pronounced in small wars on account of the decentralized nature of these operations. This fact is further emphasized because in the small wars we are dealing not only with our own forces, but also with the civil population which frequently contains elements of doubtful or antagonistic sentiments. The very nature of our own policy and attitude toward the opposing forces and normal

²⁷⁸ Max Boot, *The Savage Wars of Peace: Small Wars and the Rise of American Power* (New York: Basic Books, 2002).

²⁷⁹ Ibid., xvii.

²⁸⁰ United States Marine Corps, *Small Wars Manual*, pp. 1-7 to 1-9.

contacts with them enable the personnel of our Force to secure material advantages through the knowledge and application of psychological principles.²⁸¹

An understanding of human nature was required, according to the manual, in order to influence not only one's own troops, but also the inhabitants of the country in which the operation was being conducted. The authors of the manual believed that with careful study and application of psychology, the objectives of the conflict could be attained with minimal violence. Therefore, it was necessary to promote themes of "civilization, the security and sanctity of life and property, and individual liberty" to create good governance and a secure environment.²⁸²

The US experience of the superpower era, from 1941 to the present, reinforced and refined these concepts, according to Boot.²⁸³ As the leader of the Western bloc of nations in the bi-polar Cold War world and, later, when as the world superpower of the postmodern age, the US has recognized the need for it to utilize all its instruments of power to project its global influence. Consequently, the 2005 edition of the *Small Wars Manual*, titled *Small Wars/21st Century*, deals extensively with non-lethal forms of influence.²⁸⁴

Small Wars/21st Century proposes that small wars use a wide variety of options, not just force, to influence various actors. These options include, "engagement activities, information operations, humanitarian assistance, peacekeeping, peace enforcement, and conventional combat operations." This expansion of options from the 1940 version of the manual provides "political leaders with a range of military options beyond just physical violence with which to further political objectives."²⁸⁵ These options build on the experience of the past, but are adapted to the contemporary environment of conflict,²⁸⁶ providing political and military leaders with choices of activities to sway adversarial, friendly and neutral audiences. These activities are designed to create particular cognitive and physical effects using a variety of means to influence behaviours. *Small Wars/21st Century* specifically outlines the use of civil-military operations and information operations as the ways in which this influence will occur.²⁸⁷ In this context, activities like civil-military operations are considered to be shaping and/or decisive military activities

²⁸¹ Ibid., p. 1-10.

²⁸² Ibid., pp. 1-10 to 1-17; quote from p. 1-17. For a discussion of these ideas in today's context see United States Marine Corps, "Marine Corps Operations in Complex and Distributed Environments," (Quantico, Virginia: United States Marine Corps Combat Development Command, 11 January 2007) [paper on-line], available at http://www.mcwl.usmc.mil/file_download.cfm?filesource=c:%5CMCWL_Files%5CC_P%5CDistributed%20Operations%20Summary%20dtd%20011107.pdf. Accessed 13 March 2007.

²⁸³ Boot, *The Savage Wars of Peace*, xix-xx.

²⁸⁴ Discussion of the type of war fought in Vietnam is contained in Boot, *The Savage Wars of Peace*, 285, 313-16. For primary source documentation concerning military strategy in the same conflict see John M. Carland, "Documents of Note: Winning the Vietnam War: Westmoreland's Approach in Two Documents," *The Journal of Military History* 68, no. 2 (April 2004), 553-74.

²⁸⁵ United States Marine Corps, *Small Wars/21st Century*, 4-5.

²⁸⁶ For discussion of contemporary conflict see Ibid., 18-23.

²⁸⁷ Ibid., 99-104. Civil-military operations consist of all attempts "to build and use associations with civilians in order to facilitate our primary military actions."

and must be incorporated into all planning and execution, not simply treated as an “add-on.”

According to *Small Wars/21st Century*, civil-military operations consist of all attempts “to build and use associations with civilians in order to facilitate our primary military actions.” These efforts, the manual argues, must be incorporated into all planning and execution, not simply treated as an add-on useful only during the conflict or post-conflict phases of operations.²⁸⁸

In a similar vein, information operations are portrayed in *Small Wars/21st Century* as part of the small wars struggle “of ideas and battles for the perceptions and attitudes of target populations.”²⁸⁹ Like civil-military operations they must be fully integrated into all aspects of military plans and actions and include “actions taken to affect an enemy’s information and information systems while defending one’s own information and information systems in order to achieve specific objectives.”²⁹⁰ The audiences targeted will include enemy, hostile, neutral, supporting and allied populations. Information operations are a combination of the effects produced by a variety of functions including, electronic warfare, computer network operations, psychological operations and other related actions.²⁹¹

With its emphasis on civil military operations and information operations, *Small Wars/21st Century* has already had a significant impact on the most recent US joint doctrine, such as Joint Publication 3-0 *Joint Operations*. While the term “influence” is used in various contexts and nuances within this publication, the bulk refer back to concepts similar to those outlined in *Small Wars/21st Century*. For example, *Joint Operations* provides for kinetic and non-kinetic options in the contemporary Joint Force Commander’s operational environment,²⁹² which it describes as:

...the composite of the conditions, circumstances, and influences that affect the employment of capabilities and bear on the decisions of the commander. It encompasses *physical areas and factors* (of the air, land, maritime, and space domains) and the *information environment*. Included within these are the *adversary, friendly, and neutral systems* that are relevant to a specific joint operation.²⁹³ [emphasis in original]

The American small wars experience of the last century has emphasized the necessity to expand non-lethal approaches to military operations. Historical knowledge has coalesced into methodology necessary for a coordinated and comprehensive approach to affect

²⁸⁸ Ibid., 78.

²⁸⁹ Ibid., 79.

²⁹⁰ Ibid., 99.

²⁹¹ Ibid., 100-104.

²⁹² Each service in the American military has specific doctrine that is linked to joint doctrine, which is taken as authority when determining practices at joint strategic and operational levels of war. To a greater or lesser extent they contain the types of influence activities outlined in *Small Wars/21st Century*.

²⁹³ United States, Department of Defense, JP 3-0 *Joint Operations* (Washington: Joint Chiefs of Staff, 17 September 2006), xvi.

target audiences. While the idea of influence is mentioned repeatedly and captured holistically through various service and joint manuals it is still very much an evolving concept that requires further study and examination in order to precisely delineate, select and apply the appropriate combination of means to the create desired outcomes within the contemporary environment. The American approach to small wars in the 20th and 21st centuries, like the British approach to these wars, has used all the stratagems of influence operations described earlier in the paper. However, it could be argued that while the American approach generated psychological or cognitive effects and influenced adversaries, third parties and allies alike; however, lacking the worldview that their imperial experience imparted to British decision makers, it could be argued that until fairly recently the American approach to small wars has not been well coordinated at the strategic or operational levels.

While the US military has only recently invested a great deal of effort into studying the practice of small wars, some theorists have been examining this issue for many years. One of the leading current American theories of small wars is based on the concept of Fourth Generation Warfare (often abbreviated as 4GW). In 1989 William Lind and four co-authors coined the term, and despite its shortcomings as a model as identified by some,²⁹⁴ it has gained some currency in debates about how small wars should be conceptualized. At that time Lind *et al* identified three historical generations of warfare with two possible future fourth generations. The authors categorized the first three generations of war as follows: First Generation War (1648-1865) was fought by state armies using line and column tactics; Second Generation Warfare (2GW) relied on firepower to cause attrition and was described as “war by body count”; and Third Generation Warfare they portrayed as a German product, fought more in time than in place, and based on speed and manoeuvre.²⁹⁵ Lind characterizes the American way of war, even today, as Second Generation Warfare because its goal is still “victory through attrition,” and because the new technology (like the B-2 Stealth bomber and the Predator UAV [unmanned aerial vehicle]) in the current US transformation strategy is only designed to make firepower more efficient or more “precise.”²⁹⁶

In the 1989 article Lind provided two possible models for 4GW: Technology-Driven warfare and Idea-Driven Future Warfare. The first type of Fourth Generation Warfare Lind hypothesized was Technology-Driven warfare where technologies like directed energy weapons and robotics would allow small, highly mobile forces combined with information operations to attack an enemy’s centre of gravity, defined as the enemy population’s support of its government and the war. This type of 4GW was similar in many ways to the type of war visualized by the airpower theorists, as described above, and it posited a state versus state conflict, but recent events have caused Lind and others to focus on his second hypothesis for 4GW.

²⁹⁴ See for example McKenzie, “Elegant Irrelevance: Fourth Generation Warfare,” 51-60.

²⁹⁵ William S. Lind, Keith Nightengale, John F. Schmitt, Joseph W. Sutton, and Gary I. Wilson, “The Changing Face of War: Into the Fourth Generation,” *Marine Corps Gazette* (October 1989), 22-6.

²⁹⁶ William S. Lind, “All War All the Time: The military game has changed and the US isn’t ready,” *San Francisco Chronicle* (6 July 2003), np. Available at www.sfgate.com. Accessed 6 July 2003.

Noting that the events in Iraq in 2003-2004 have marked “the end of the state’s monopoly on war,”²⁹⁷ Lind and others have turned their attention to Idea-Driven Warfare, which according to Wilson *et al* was cited in an al-Qaeda-affiliated internet magazine as the foundation of al-Qaeda’s military doctrine.²⁹⁸ In the 1989 article, Lind *et al* asserted that even though terrorism is neither new nor particularly effective, if combined with new technology it could be extremely potent. A number of others were also aware, pre-9/11, in general terms, of possible terrorist threats. For example, in the early 1990s Martin van Creveld observed that since 1945 most wars were fought by small, concealed, dispersed groups of terrorist organizations without a clear territorial base and which could not be targeted by modern technology.²⁹⁹ And others note that the concept of “small wars,” or guerrilla warfare, have ancient origins and modern roots in the Napoleonic Wars where the term guerrilla (the Spanish diminutive of *guerra* (war) was coined).³⁰⁰ Many observers now agree that Idea-Driven Warfare is commonplace around the world and that 4GW foes can attack the entire social order by using the target society’s very organization, laws, technology, conventional forces and tactics against that society. Opponents are therefore using 4GW concepts to leverage the Western dependence on technology and to avoid a decisive fight using “4GW judo” to keep large Western security, military, and legal bureaucracies off balance.

Yet how the West can deal with foes using 4GW concepts, where the tactics of the weak confound the tactics of the strong, is still not well understood. A number of commentators argue that Western “targeteers” (using 2GW) are defining and attacking artificial, physical enemy centres of gravity with precision weapons - bringing to mind an old adage that when your only tool is a hammer, all your problems look like nails - when the real centre of gravity is a shared religious/ideological goal where common purpose and zealotry replace military equipment and command structure. Wilson, one of Lind’s co-authors in the 1989 4GW article, concludes that: “...as technophiles Westerners are enraptured by weapons of great precision but have lost sight of the fact that people and ideas are the essence of why wars are fought and for how long.”³⁰¹

It is important to recall, however, that when the 4GW theory was first published, it was unclear whether future conflict would be against peer or near-peer state competitors using symmetric technologies or against non-state actors who used asymmetric means to attack nation states. In hindsight we can see that Idea-Driven Future Warfare has come to be the dominant form of conflict at the beginning of the 21st century, but when considering future influence operations, we should not forget that Technology-Driven Warfare may

²⁹⁷ Lind, “All War All the Time.”

²⁹⁸ G.I. Wilson, John P. Sullivan, and Hal Kempfer, “4GW – Tactics of the Weak Confound the Strong,” Military.com, 8 September 2003, np. Available at http://www.military.com/NewContent/0,13190,Wilson_090803,00.html. Accessed 26 Jul 2007.

²⁹⁹ Martin van Creveld, “High technology and the Transformation of War, Part 2,” *JRUSI* 137, no. 6 (December 1992), 61-4.

³⁰⁰ *The Concise Oxford Dictionary*, 6th ed., 477. For descriptions of variations on “small wars” see Porch, “Bugeaud, Galliéni, Lyautey,” 408-43; and Shy and Collier, “Revolutionary War,” 815-62, in Paret, ed., *Makers of Modern Strategy*. For another view and commentary on more recent “small wars” see Corum, and Johnson, *Airpower in Small Wars*.

³⁰¹ Wilson *et al*, “4GW – Tactics of the Weak Confound the Strong.”

some day become necessary.

The Other Side of the Fence: Some Asian Views on Small Wars

Some of the most well known perspectives on small wars, from the standpoint of the insurgents, come from China and Vietnam. The theory and practice of small wars from their perspective follows.

Twentieth and 21st Chinese century military thought is based on Chinese cultural influences, such as Confucianism and Daoism, as well as a number of ancient Chinese texts, including those written by Sun Tzu.³⁰² Like Sun Tzu, the most famous Asian military theorists and practitioners of the twentieth century, Mao Tse-tung and Ho Chi Minh, do not discuss influence operations explicitly. And while they were well aware that it was necessary to gain the support of the people in a protracted struggle, little specific guidance is provided by them in their works on how to use influence operations, in the sense that they are understood in the West today, to achieve that support. It is only in the recent past that there have been writings, particularly from the China Peoples Liberation Army (PLA), that explicitly address influence initiatives.

Mao emphasised the need for the people and the conflict to be united in a war of resistance and, in a similar fashion, so did Ho.³⁰³ The means by which this fusion occurs is via the ideology of revolution, and, in a fashion similar to later *foco theory*, these beliefs were to be actualized by insurgency and subsume the people.³⁰⁴ Historically, the importance of propaganda in putting forward revolutionary themes in both the Chinese and Vietnamese experiences does not seem to have been well analyzed through western sources.³⁰⁵ A notable exception is the work of American military researcher Douglas Pike who, in *PAVN: Peoples Army of Vietnam*, analyzed the components of the conflict waged by the North Vietnamese during the Vietnam War and explained how its vision of warfare was derived from the Maoist model. Pike wrote that revolutionary war, or struggle, as waged by the Vietnamese, was of two types - Armed *Dau Tranh* and Political *Dau Tranh*. The former consisted of those activities associated with violence, but it is the

³⁰² See Ross Struthers, "Mao Zedong: A Peasant who Learned from History," in Allan D. English, ed., *The Changing Face of War: Learning from History* (Montreal and Kingston: McGill-Queen's Univ. Press, 1998), 105-19, for a more detailed discussion of the influences from China's past on Mao's thought.

³⁰³ United States Marine Corps, FMFRP 12-18 *Mao Tse-tung on Guerrilla Warfare* (originally *Mao Tse-tung on Guerrilla Warfare*), trans. by Samuel B. Griffith, (New York: Praeger Publishers, 1961; reprint, Quantico, Virginia: United States Marine Corps Combat Development Command, 5 April 1989), 44; and Bernard Fall, ed., *Ho Chi Minh on Revolution: Selected Writings, 1920-66* (Toronto: The New American Library of Canada, Limited, 1967), 140.

³⁰⁴ Ernesto "Che" Guevara, *Guerrilla Warfare* (London: Souvenir Press Ltd, 1961) [book on-line], available at <http://social.chass.ncsu.edu/slatta/hi216/documents/che.htm>. Accessed 14 March 2007.

³⁰⁵ The relationship of ideology with regards to influence types of activities requires further exploration. One perspective which may be of use concerning this subject is that of Eric Hoffer, *The True Believer: Thoughts on the Nature of Mass Movements* (New York: Harper & Row Publishers, Inc., 1951; reprint, New York: HarperCollins Publishers, 2002).

latter that is related to modern influence operations.³⁰⁶ Figure 2 shows both *Dau Tranh*, their relationship to each other, and with various subcomponents in the concept.

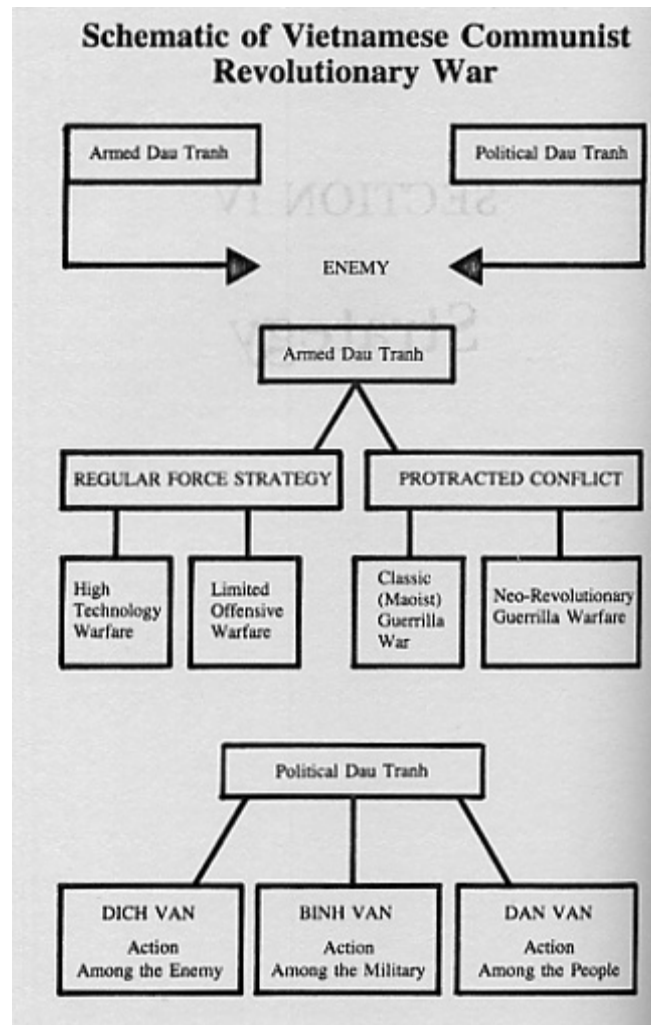


Figure 2 – Vietnamese Communist Revolutionary War³⁰⁷

While complementary to *Armed Dau Tranh*, *Political Dau Tranh* consists of the non-violent aspects of the struggle and was composed of three action programs to change theory into reality. Firstly, *dich van*, or action amongst the enemy, consisted of activities amongst the people in areas controlled by South Vietnam. Despite some media-based propaganda the preponderance of the *dich van* activities consisted of creating resistance to the South Vietnamese government from within its society through ideology, protest and political action. These activities were aimed at producing strategic and tactical

³⁰⁶ Douglas Pike, *PAVN: People's Army of Vietnam* (Novato, CA: Presidio Press, 1986), 215-20.

³⁰⁷ From, *Ibid.*, 212.

outcomes. Strategically, the goal was to convince the US that it could not win the war. Tactically, the objective was to limit the ability of all elements of the American government, military and others, to act effectively in Vietnam.³⁰⁸

Secondly, *binh van*, or action amongst the military, aimed at negating the abilities of the South Vietnamese government and military through non-military activity. In the main this consisted of encouraging desertion or defection amongst the South Vietnamese military or, if this was not successful, attempting to lower the morale of individuals so they would not pursue their duties efficiently. Various techniques were utilized to accomplish these aims, from lenient treatment of captured South Vietnamese personnel, through provision of rewards for defectors, to intimidation, disinformation and coercion.³⁰⁹

Lastly, *dan van*, or action amongst the people of South Vietnam in areas controlled by North Vietnam, was composed of three parts: organizational, recruitment and financial. In order to effectively administer these regions and use them as safe areas, it was necessary for North Vietnam to create a web of governing organizations that would absorb the indigenous inhabitants and frustrate any attempts by South Vietnam to regain control of the area. Recruitment was directed at attracting members of the population to the PAVN or into civilian groups that supported North Vietnamese activities. The last element was the generation of financial support through taxation or extortion.³¹⁰

In last decade or so, there have been indications that in China the PLA has created influence-type strategies through information and other operations. The creation of these strategies was prompted by the development of these capabilities by potential peer competitors like the US. In the late 1990s there were public indications that efforts to build these capabilities had commenced.³¹¹ One senior PLA commander suggested:

Information warfare and electronic warfare are of key importance, while fighting on the ground can only serve to exploit the victory. Hence China is more convinced (than ever) that as far as the PLA is concerned, a military revolution with information warfare as the core has reached the stage where efforts must be made to catch up with and overtake rivals.³¹²

In 1999 these initial ideas were refined and published by PLA Colonels Qiao Liang and Wang Xiangsui in *Unrestricted Warfare*, which advocates warfare with methods other than military force. Somewhat analogous to Smith in *The Utility of Force*, they argue that

³⁰⁸ Ibid., 235-239.

³⁰⁹ Ibid., 244-245.

³¹⁰ Ibid., 245.

³¹¹ William C. Triplett II, "Potential Applications of PLA Information Warfare Capabilities to Critical Infrastructure," in *Peoples Liberation Army After Next*, Susan M. Puska, ed. (Carlisle, PA.: United States Army War College Strategic Studies Institute, August 2000), 79-106.

³¹² Ibid., 82.

waging war through military force alone is ineffective.³¹³ Qiao and Wang suggest that, in future conflict, international political action, economic warfare, network warfare (such as computer network attack) and terrorism will be more effective than military confrontation. In many ways these ideas mirror western thoughts and sources concerning the need to wage war in an all-encompassing and coordinated manner. However, their focus is more on the practical than the theoretical and this can be seen in their perception of information warfare. They declare that the term “information warfare” is a notion “whose intent is to use the broad concept of technology to replace the concept of specific weapons, using a fuzzy-learning approach to resolve this knotty problem.”³¹⁴

Accordingly, while there seems to be a well developed body of twentieth century Asian military knowledge that pertains to influencing particular audiences, this knowledge is attributable to an Asian way of war based on revolutionary ideology. While there are reports of PLA advances in warfare theory and practice similar to that of Western countries it seems as if the PLA has renounced the abstract for the concrete, thus potentially limiting PLA research paths to those most likely to yield practical applications. In a similar fashion to the contemporary experience of the West, in the East there are likely more questions than solutions concerning influence theories at this point in time. The Asian approach to small wars has used all the stratagems of influence operations described earlier in the paper; however, they are not explicitly articulated in the same way that these stratagems are articulated in Western writings. The reasons for this lack of specificity need to be explored in more detail, but it is likely that some of them are to be found in the historical experience and culture of the Orient.

³¹³ Qiao Liang and Wang Xiangsui, *Unrestricted Warfare* (Beijing: PLA Literature and Arts Publishing House, February 1999) [book on-line], available at <http://www.terrorism.com/documents/TRC-Analysis/unrestricted.pdf>. Accessed 14 March 2007.

³¹⁴ Ibid., 16.

Canadian Approaches to Influence Operations

The final part of this section will discuss some examples of Canadian approaches to influence operations in the last half of the 20th century and the early years of the 21st century. First we will examine the basis of Canadian foreign and security policy after the Second World War, which employed a variety of influence activities to establish and to maintain Canada's position as a "middle power" with "a place at the table" in various alliances and international organizations. Next we will examine post-Cold war influence activities of senior Canadian commanders in their leadership roles in various alliance and coalition operations in the new security and defence environment, because, in the absence of formal doctrine, their actions define current Canadian approaches to influence operations.

Maintaining Saliency through Influence: Canada and Internationalism since the Second World War

The last half of the 20th century was characterized not only by omnipresent violence, but also by international tension and the threat of nuclear war. Although the formal cessation of hostilities in 1945 had concluded a worldwide struggle against fascism, it also marked the end of an uneasy wartime alliance of two other differing ideologies, those of communism and capitalism. In his 1949 preface to the 4th edition of his seminal work *Colony to Nation: A History of Canada*, eminent Canadian historian Arthur Lower accurately captured the tensions that were present in the bipolar world of the late modern era and that threatened Canada's, and the world's, security and very existence:

It is from the outside world that the storms threaten. Two states of unparalleled power face each other in an uneasy 'peace.' Two ways of life, which is not too much to call religions, clash in mutual denunciations. State and religion in each case coincide. The atomic bomb hangs over humanity like Damocles' sword.³¹⁵

Others, like Canadian diplomat Escott Reid, noted that in this new world order the American Republic and the alliance of western states had supplanted Britain and the Empire.³¹⁶ In this situation it seemed reasonable to most that Canada's relationship to the ascendant United States would be marked by shifting allegiance to the US and severing the last ties that bound the nation to Britain. Given Canada's struggle for recognition of her wartime contribution, the Canadian government believed that this association with the US and its allies would reflect Canada's status as a nation state in the postwar global community - not co-equal with the major powers, but a country with a degree of influence. Lester Pearson, then at the Department of External Affairs, expressed the precursor of these nascent desires in May 1944, noting that, while Canada's participation

³¹⁵ Arthur R.M. Lower, *Colony to Nation: A History of Canada*, 4th ed. (Toronto: T.H. Best Printing Co., Limited, 1951), xiii-iv.

³¹⁶ Top Secret Draft Memorandum by Escott Reid, Head, Second Political Division, External Affairs, "The United States and Soviet Union: A Study of the Possibility of War and Some Implications for Canadian Policy," Ottawa, 30 August 1947, in Norman Hillmer and Donald Page, eds., *Documents on Canadian External Relations*, vol. 13 (1947) (Ottawa: Canada Communication Group, 1993), 380-1.

amongst the allied powers in the Second World War was vital for the successful prosecution of the global conflict, at the same time, she was not considered to be among the “Big Four,” the US, Britain, the Soviet Union and China.³¹⁷ Accordingly, Pearson believed that Canada fell into the category of an “in-between state,” a country with power and responsibility, but unable to control or direct the actions of the allies in the war. Nevertheless, there were concerns that the great powers were not adequately acknowledging Canadian efforts towards winning the war by permitting its participation in the decision-making bodies of the wartime alliance.³¹⁸ Initial attempts to be included in these forums were rebuffed on the grounds that if an exception were made for Canada, other smaller allies would wish to participate as well, and the principle of “inclusiveness” if extended to the decision-making process would then make the process of grand strategy formation too complex and time consuming. However, Canada’s persistence in advocating for representation eventually resulted in the adoption of the “functional” principle of representation among the allies, whereby smaller nations would be accorded representation on decision-making bodies in areas where they had expertise or substantial interests.³¹⁹ In other words, relevance or “salience” within the alliance permitted representation in wartime councils and permitted smaller countries a degree of influence proportionate to their contributions. This was an enduring lesson to Canadian statesmen and it shaped Canadian activities during the postwar period.³²⁰

As a result of this wartime experience, in 1945 Ottawa embraced the term “middle power” to describe Canada’s status as a smaller nation that had earned the right to participate in and influence international affairs. Pearson gave this idea form by suggesting that “our strength and resources as a middle power” should permit Canada to partake of some of the “rights and privileges” within the realm of international politics that the larger nations had abrogated unto themselves. This philosophy was first utilized in an effort to ensure that the leaders of the victorious allies did not dominate the new United Nations organization. Thereafter, Canada sought greater recognition for smaller countries in the postwar world and promoted the view that middle powers had a role to play in the maintenance of international peace.³²¹

By the end of the Second World War it was evident that acceptance by others of Canada’s status as a middle power lay in its ability to establish salience on the international stage by participating in constructive international action through multilateral organizations. International influence could only be achieved through membership in alliances, particularly in NATO and the North American Air Defence

³¹⁷ The activities that enable a nation to exert power are normally diplomatic, informational, military and economic in nature often abbreviated as DIME.

³¹⁸ For a discussion of the intricacies of alliance between Britain and the United States during the Second World War see Christopher Thorne, *Allies of a Kind: The United States, Britain, and the War Against Japan, 1941-1945* (Oxford: Oxford University Press 1978; paperback edition, 1979).

³¹⁹ Kim Richard Nossal, *The Politics of Canadian Foreign Policy* (Scarborough: Prentice-Hall Canada Inc., 1985), 10-11. Quotes from p. 11.

³²⁰ This Canadian idea of achieving relevance, or salience, within alliances has been explored at length in Bernd Horn, ed., *The Canadian Way of War: Serving the National Interest* (Toronto: Dundurn Press Limited, 2006).

³²¹ Quoted in Nossal, *The Politics of Canadian Foreign Policy*, 11.

Command (NORAD),³²² and to a lesser extent the UN. Consequently, the necessity of constructing salience within these alliances *de facto* determined how Canada would demonstrate commitment as a member of the western aligned states.

The groundwork of Canadian national strategy during the Cold War was provided in a 1947 address at the University of Toronto by Louis St Laurent, then Secretary of State for External Affairs and later Prime Minister from 1948 to 1957. St. Laurent's speech placed Canada firmly in the same camp as the Western allies and outlined how salience within that alliance would be achieved. First, he proposed that Canadian foreign policy would act as a unifying influence within the country and it could do this best by reflecting the values and ideals of Canadian society, as, "The role of this country in world affairs will prosper only as we maintain this principle, for a disunited Canada will be a powerless one." Second, Canada should support political liberty, thus "a threat to the liberty of Western Europe, where our political ideas were nurtured, was a threat to our way of life." Third, Canadian foreign policy should support the rule of law and St Laurent, in an allusion to the state of affairs within the Soviet Union, suggested that a lesson could be learned from "the hideous example of the fascist states of the evil that befalls a nation when the government sets itself above the law." Fourth, foreign policy should be based on "some conception of human values." St Laurent argued that Canada should "protect and nurture" these values and he emphasized that the rights of the individual should not be determined by considerations of material wealth. Last, arising from the desire to enact policy that was in keeping with the previous principle, Canada had an imperative to take on external responsibilities because the "security for this country lies in the development of a structure of international organizations." Unlike the devastated countries of Europe, Canada was intact and should act in concert with a number of like-minded countries, a list from which the Soviet Union was glaringly absent. The speech stressed the value of Canada's numerous treaties and agreements, and it attempted to steer clear of advocating too close a relationship with Great Britain to avoid criticisms from French-speaking Canadians. St Laurent said that Canada would avoid regionalism, but he acknowledged that this country had a close connection with the US complicated by the fact that a "relationship between a great and powerful neighbour and its smaller neighbour is at best far from simple." St. Laurent also stressed proportionality in Canada's policies because Canada was "a secondary power" and would cooperate in "constructive international action," but he could and would not advocate activities that only larger countries could undertake, saying that, "There is little point in a country of our stature recommending international action, if those who must carry the major burden of whatever action is taken are not in sympathy."³²³ He further argued that Canada would act internationally in concert with allies and partners, which became the prelude to Canadian involvement in NATO and NORAD. Interestingly, these international actions were not at first seen to include the UN.

³²² In 1981, the "A" in NORAD changed from "Air" to "Aerospace" in recognition of the growing importance of space to continental defence.

³²³ Robert Bothwell, *The Big Chill: Canada and the Cold War*, Contemporary Affairs Number 1 (Concord, Ontario: Irwin Publishing, 1998), 20-2; and Louis St. Laurent, "The Foundations of Canadian Policy in World Affairs," Duncan and John Gray Memorial Lecture, presented at the University of Toronto, Toronto, 13 January 1947 [presentation on-line] available at <http://www.geocities.com/rwvong/future/stlaurent.html>. Accessed 10 May 2007.

Although the formation of the UN in 1945 had been met with high expectations, the effectiveness of the international body was soon in doubt. In September 1946, St Laurent characterized the UN as “impotent” and not a venue through which Canada could make an appropriate contribution to international security.³²⁴ The UN was viewed, by some, as ineffective as long as the Soviets had a veto in the Security Council, as British official Sir Brian Urquhart, who was present during the creation of the UN and later the Under Secretary-General for Special Political Affairs, stated:

The Charter had been based on the concept of an extension of the wartime alliance into peacetime. The ‘United’ in UN came from the Atlantic Charter of 1941 and referred to nations united in war, not in peace. The permanent members of the Security Council with the power of veto were the leaders of a victorious wartime alliance, and the Charter assumed, with a stunning lack of political realism, that they would stay united in supervising, and if necessary, enforcing, world peace.³²⁵

Canadian External Affairs officials believed Western nation states should provide a united front at the UN but not attempt to make changes to the UN Charter that would cause the Soviets to withdraw from the UN and isolate themselves.³²⁶ In Canadian eyes, the Cold War threatened middle power states and the UN provided a venue for dialogue regarding potential causes of friction and a way to avoid outright conflict among the major powers.³²⁷

Inability to achieve consensus in the UN Security Council led to an assessment of alternative forms of collective security by the US and her allies, including Canada. The “Truman Doctrine” of March 1947 committed the US to provide assistance to any country attempting to maintain its sovereignty and self-governance when menaced by totalitarian aggression.³²⁸ Reflecting notions of “containment” advocated by George Kennan, an analyst with the State Department, this American policy was designed to discourage the Soviet Union from attempting to establish communism worldwide: “The main element of any US policy toward the Soviet Union must be that of a long-term, patient but firm and vigilant containment of Russian expansionist tendencies.”³²⁹ The philosophy of containment was supported by officials of Canada’s Department of External Affairs, and one of them, Escott Reid, believed that an overwhelming

³²⁴ Quoted in Bothwell, *The Big Chill*, 14.

³²⁵ Quoted in John Hillen, “Peace(keeping) in Our Time: The UN as a Professional Military Manager,” *Parameters* 26, no. 3 (Autumn 1996), 19.

³²⁶ Escott Reid, Head, Second Political Division, “United States and Soviet Union: A Study of the Possibility of War and Some Implications for Canadian Policy,” Top Secret Draft Memorandum, Ottawa, 30 August 1947, in Hillmer and Page, *Documents on Canadian External Relations*, 380-1.

³²⁷ John Hilliker and Donald Barry, *Canada’s Department of External Affairs: Volume II Coming of Age, 1946-1968* (Canadian Public Administration Series. Montreal & Kingston: McGill-Queen’s University Press, 1995), 29-30.

³²⁸ *Ibid.*, 33-4.

³²⁹ George Kennan, “The Sources of Soviet Conduct,” *Foreign Affairs* 25, no. 4 (July 1947), 575.

preponderance of force, instead of a more pacifistic solution, was the most appropriate approach to the Soviet challenge. This strategic approach combined military force, economic measures and public diplomacy, and its effectiveness was to be increased through Canada's participation in alliances, in the view of many at External Affairs.³³⁰

The policy of containment led to the creation of an Atlantic community led by the US, and Soviet-American antagonism became the pivotal feature of postwar international relations. As a result of this burgeoning friction, informal discussions commenced between American, British and Canadian officials in the fall of 1947 regarding a mutual security assistance agreement.³³¹ The February 1948 Soviet takeover of Czechoslovakia and the Berlin blockade later that year prompted further consultation and provided more impetus for the signing of a military mutual assistance treaty amongst the North Atlantic nations on 4 April 1949. The military aspects of NATO quickly developed when in June 1950, as a result of the onset of the Korean War, the signatories decided to create a standing military force to deter and counter Soviet aggression. By 1951, as a result of these NATO commitments, substantial Canadian military forces were stationed in Europe.³³²

In conjunction with the environment of the Cold War and a desire to establish and act within alliances, NATO became a natural extension of previously brokered American-Canadian security agreements.³³³ Despite the dangers of such arrangements to Canadian sovereignty, in the absence of a national security strategy, Canadian participation in NATO became *defacto* foreign policy.³³⁴

³³⁰ Escott Reid cites prominent American Sovietologist George Kennan's ideas of containment as the most appropriate manner of dealing with Soviet expansionist tendencies, as well as providing thoughts on the role of the United States as a leader in western efforts to limit the Soviet Union's global aspirations. Escott Reid, Head, Second Political Division, "United States and Soviet Union: A Study of the Possibility of War and Some Implications for Canadian Policy," Top Secret Draft Memorandum, Ottawa, 30 August 1947 in Hillmer and Page, *Documents on Canadian External Relations*, 377-9; and Escott Reid, Head, Second Political Division, "Developments in the UN during the Next Year," Secret Memorandum to the High Commissioner in the United Kingdom, 29 October 1947, in *Ibid.*, 683.

³³¹ Hilliker and Barry, *Canada's Department of External Affairs*, 33.

³³² About 10,000 troops were based in West Germany and France. In the early years, Canada's NATO commitment was an infantry brigade group of 6670, an air division of 12 squadrons (up to 300 aircraft), approximately 40 warships, and reinforcements in time of war. Dean L. Oliver, *Dispatches, Issue 9: Canada and NATO* [paper on-line]; available from http://www.civilization.ca/cwm/disp/dis009_e.html. Accessed 10 May 2007.

³³³ Escott Reid suggested that such a defence cooperation agreement would facilitate the continuance of present defensive arrangements with the United States. Escott Reid, Head, Second Political Division, Letter to Hume Wrong, Ambassador in the United States, Ottawa, 27 October 1947, in Hillmer and Page, *Documents on Canadian External Relations*, 680.

³³⁴ It has been suggested that to have a convergence of defence and foreign policy in small and middle states, clear and consistent direction is required from government. If this direction does not transpire, foreign policy may become predicated on defence. However, even when policy makers attempt to align foreign and defence policy a mismatch of resources may cause military divergence in order to maintain what they view as freedom of action. This seems to have reflected the Canadian experience of the NATO years. D. Stairs, "The Military as an Instrument of Canadian Foreign Policy," in Hector J. Massey, ed., *The Canadian Military: A Profile* (Canada: The Copp Clark Publishing Company, 1972), 88-90. The alliance was originally viewed as more than merely a defensive arrangement between member states, in that it should: "encourage cooperative efforts between any or all of them to promote the general welfare through

Canadian involvement in the Korean War also followed a similar pattern of maintaining alliances. While the war did not directly concern NATO, the conflict was viewed by the US as an expansion of communism and American forces were immediately ordered to the support of South Korea. Concurrently, the US called upon the other members of the UN Security Council to assist South Korea. By early July, the Security Council had passed resolutions that offered help to South Korea and empowered the US as force commander. In an effort to avoid becoming enmeshed in a Korean morass St Laurent attempted to escape committing the Canadian military, particularly ground forces, to that conflict.³³⁵ Under pressure from the UN and the US, a pattern that was to become increasingly familiar over the next decades emerged that month with the despatch of three Canadian destroyers to the Korean coast.³³⁶ The commitment of the Royal Canadian Navy (RCN) provided an immediate military response in order to appease demands for a Canadian commitment and gave the government a period of grace in which to formulate a decision as to Canada's role in Korea.³³⁷ Soon after the departure of the Canadian vessels, the Secretary General of the UN, Trygve Lie, formally requested more combat forces from Canada, particularly ground forces. Almost simultaneously a similar American request was received and provoked an embarrassing situation, as the Canadian government neither had troops to send nor was it prepared to make a decision in this matter. To compound the dilemma the Secretary-General's appeal had been released to the press and therefore needed a public answer.³³⁸ In response, the Government announced the commitment of a Royal Canadian Air Force (RCAF) transport squadron to support the Korean conflict. All the same, debate continued regarding the contribution of army units with public opinion and international pressure finally prompting the establishment of the Canadian Army Special Force with the intent that it would serve as Canada's expeditionary force in Korea. In a note dated 25 September 1950 the service of this formation of brigade size was formally offered to the Secretary-General of the UN.³³⁹ A pragmatic comment on the debate as to the creation of this expeditionary force was offered by Escott Reid, who suggested: "it was a pity we did not act sooner and send fewer men. My motto in this sort of thing is 'Get there fastest, with the fewest.' We would have got more credit with the United States for sending a battalion almost

collaboration in the cultural, economic and social fields." Washington to Ottawa, December 24, 1948, telegram WA-3237, Department of External Affairs file 283(s) in Hilliker and Barry, *Canada's Department of External Affairs*, 76-7. Quote from p. 77.

³³⁵ Denis Stairs, *The Diplomacy of Constraint: Canada, the Korean War, and the United States* (Toronto: University of Toronto Press, 1974), 62-3.

³³⁶ Due to efforts to serve with her American counterpart the RCN "by the time of the Korean War, was perhaps the only navy in the world capable of working effectively and easily alongside the USN." Marc Milner, *Canada's Navy: The First Century* (Toronto: University of Toronto Press, 1999), 169.

³³⁷ Canada, Department of National Defence, Thor Thorginsson and E.C. Russell, *Canadian Naval Operations in Korean Waters 1950-1955* (Ottawa: Naval Historical Section, Canadian Forces Headquarters, 1965), 3; and Denis Stairs, *The Diplomacy of Constraint*, 71.

³³⁸ The public American request to commit Canadian ground forces put the Government in a difficult position because it created expectations – both international and domestic – that Canada would send soldiers. Stairs, *The Diplomacy of Constraint*, 71.

³³⁹ Canada, Department of National Defence, Directorate of History and Heritage (DHH), "Report No. 62: "Canadian Participation in the Korean War, Part I: 22 Jun 50-31 Mar 52," *Army Headquarters Reports* (21 May 1953), 15-16 and 31.

immediately than sending a big brigade group after a considerable delay.”³⁴⁰ While the process by which Canada’s military was committed to the Korean conflict was cautious and demonstrated a singular lack of political vision, it did provide the means to act with alliances such as NATO and international bodies such as the UN and thereby maintain Canada’s salience internationally.

The end of the Korean War also marked an increased western fear of Soviet nuclear and conventional forces. The Canadian relationship with the US at that time therefore became defined through the bipolar world of the Cold War and as a result Canada expanded its defence establishment to meet this new threat with Canada’s NATO contributions solidifying Canada’s self image as a staunch ally.³⁴¹ Participation in the alliance thus became a means unto an end and this impacted greatly on the style and content of Canadian diplomacy.

RCAF participation in NORAD also exemplified this tendency. NORAD had developed from the Military Cooperation Committee-sponsored Joint Canadian-US Basic Security Plan of 5 June 1946 that, in turn, had evolved almost unchanged from bilateral wartime arrangements. This operational plan committed the air forces of both countries to a common air defence system, as well as the provision of air intercept capabilities for the protection of critical areas.³⁴² The NORAD agreement, signed in 1957 by the newly elected Prime Minister John Diefenbaker and his Minister of National Defence, Major General George Pearkes, enmeshed the Canadian military in a highly centralized continental defence system that permitted NORAD to order forces into action without Canadian government approval. As historian Desmond Morton observes, “If politicians such as Robert Borden and Mackenzie King had struggled for Canada’s right to control its destiny, Diefenbaker had unwittingly signed away his country’s control of when it would declare war.”³⁴³ All these actions were made, however, in an effort to maintain Canada’s relevancy as a middle power.

In the context of these events, Canada’s participation in UN missions gives lie to the populist myth of the Canadian altruistic peacekeeper.³⁴⁴ Peacekeeping, although it did have its altruistic dimensions, in fact was used principally by Canada to reinforce its relevance, and therefore influence, within NATO and NORAD through furthering the interests of the western states in peacekeeping operations. UN operations permitted Canada to be both a committed member of the western alliance and “an international

³⁴⁰ Quoted in Stairs, *The Diplomacy of Constraint*, 86-7.

³⁴¹ Bothwell, *The Big Chill*, 39-41.

³⁴² The original wartime Joint Canadian-United States Basic Defence Plan No. 2 (Short Title ABC-22), 28 July 1941, is replicated in Paul Bridle, ed., *Documents on Relations between Canada and Newfoundland Volume I: 1935-1949* (Ottawa: Information Canada, 1974), 894-9. The updated plan is reproduced in James Eayrs, *In Defence of Canada*, vol. III, *Peacemaking and Deterrence* (Toronto: University of Toronto Press, 1972), 381-8.

³⁴³ Desmond Morton, *A Military History of Canada From Champlain to Kosovo*, 4th ed. (Toronto: McClelland & Stewart Inc., 1999), 242.

³⁴⁴ See Eric Wagner, “The Peaceable Kingdom? The National Myth of Canadian Peacekeeping and the Cold War,” *Canadian Military Journal* 7, no. 4 (Winter 2006-2007), 45-54.

arbiter with sufficient freedom to act decisively in the cause of peace.”³⁴⁵ In a 1965 report on peacekeeping J.L. Granatstein wrote:

Canadian isolationism is dead, and its resurrection seems most unlikely. The shrinking of the world has given new responsibilities to every nation, but very few are willing to pick up the burden. If peace is maintained and a nuclear holocaust averted, the credit may well go to those nations that took steps to prevent wars. Canadians can take justifiable pride in the role they have played.³⁴⁶

Nevertheless, a letter from Louis St Laurent to Brooke Claxton, the Minister of National Defence, captures the reserved Canadian reception to peacekeeping in some quarters:

There was little enthusiasm in meeting this request [to contribute to the Military Observer Group for India and Pakistan December 1948]. The matter was referred to the Cabinet by Hon. Brooke Claxton, and in his words the Cabinet was ‘allergic’ to the proposal, wondering why Canada had been asked and who else had accepted... The decision as to whether or not Canada should participate was left up to the Prime Minister and the S.S.E.A. [Secretary of State for External Affairs]... There can be no doubt that Mr. Pearson [the S.S.E.A.] carried the day. He even offered to have External Affairs pay the costs for two of the four officers requested.³⁴⁷

Despite the pessimism shown by some, Canada’s formalized military contributions to the UN commenced in 1949 and since then Canada has contributed to almost all UN missions. Regardless of the initial hesitancy, peacekeeping was soon embraced as a means of maintaining Canada’s status as a middle power with strong bilateral ties to the US, which also provided considerable support to the UN. For example, the airlift for the 1960 UN Congo operation was only possible with American support and even Canadian involvement with the pioneering 1956 intervention in the Suez was in part response to Canada’s desire to support American interests.³⁴⁸ Additionally, the US provided financial aid and very public political support throughout that latter operation. Furthermore, Canadian involvement in UN peacekeeping in Cyprus was not entirely altruistic but was entered into as a member of NATO to prevent conflict between two alliance members, Greece and Turkey. Likewise, as an anti-communist western nation, Canada was chosen in 1954 to serve on the International Commission for Supervision and Control (ICSC)

³⁴⁵ Norman Hillmer, “Peacemakers, Blessed and Otherwise,” *Canadian Defence Quarterly* 19, no. 1 (Summer 1989), 57.

³⁴⁶ Canada, Department of National Defence, Directorate of History and Heritage, Lieutenant J.L. Granatstein, *Report No. 4 Directorate of History: Canada and Peace-keeping Operations*, (Ottawa: Canadian Forces Headquarters, 22 October 1965), 25.

³⁴⁷ Letter from Secretary of State of External Affairs to the Minister of National Defence, 18 January 1948. Quoted in *Ibid.*, 9.

³⁴⁸ For a brief discussion of American interests concerning the 1956 Suez Crisis see Geoffrey A.H. Pearson, *Seize the Day: Lester B. Pearson and Crisis Diplomacy* (Ottawa: Carleton University Press 1993), 137-55.

until 1972.³⁴⁹ The three nations of the ICSC represented all major interests: Poland the East bloc nations, Canada the West bloc, and India as the neutral arbitrator. Although peacekeeping may seem to have little direct connection with Canadian-US defence activities, there was sometimes considerable pressure on Canada as part of the Canada-US defence partnership to undertake certain missions to represent western interests, such as service on the International Commission of Control and Supervision (ICCS) after the 1973 Vietnam Peace Agreement.³⁵⁰ There can be little doubt that participation in peacekeeping provided a degree of forward security within the context of the alliances of the western *Pax Americana*. Consequently, peacekeeping, like participation in NATO and NORAD, can be seen as a method of creating strategic influence, and its unspoken objectives reflected a matter-of-fact view of the world not normally attributed to Canada when examining its involvement with the UN.

Currently, Canada continues to maintain this tradition of seeking opportunities to demonstrate international salience. It has been argued by some that Canada's involvement in Afghanistan was in part due to a desire to be seen as relevant within NATO and, in particular, to the US. The following statement by Prime Minister Jean Chretien made on 7 October 2001 provides the context for Canada's ongoing commitment in Afghanistan:

On Sept. 11, 2001, Canada and the world looked on in shock and disbelief as the deadliest terrorist attack in history was carried out against thousands of defenceless victims in New York and Washington.

This was an act of premeditated murder on a massive scale with no possible justification or explanation -- an attack not just on our closest friend and partner, the United States, but against the values and the way of life of all free and civilized people around the world.

From the moment of the attack, I have been in close communication with President George Bush who has been a symbol to the world of calm, courage, resolve and wisdom. I told him that Canada stands shoulder to shoulder with him and the American people. We are part of an unprecedented coalition of nations that has come together to fight the threat of terrorism. A coalition that will act on a broad front that includes military humanitarian, diplomatic, financial, legislative and domestic security initiatives.³⁵¹

³⁴⁹ James Earyrs argues that Canada committed to mutually exclusive roles in Indochina by the acceptance of the ICSC mission. One role was that of supervisor of the Geneva Accords while the other was as protector of American interests in the region. James Earyrs, *In Defence of Canada*, vol. V, *Indochina: Roots of Complicity* (Toronto: University of Toronto Press, 1983).

³⁵⁰ Hillmer, "Peacemakers, Blessed and Otherwise," 55-7.

³⁵¹ "Chretien: Cdn troops 'will do Canada proud,'" *CTV.ca*, 7 October 2001 [article on-line] Available from http://www.ctv.ca/servlet/ArticleNews/story/CTVNews/1025062429054_20471629. Accessed 10 May 2007.

Another example of a post-Cold War “integrated” Canadian influence activity has recently come to light as, according to a press report, “a horde of Canadian soldiers, judges and police” have had great success in “turning the Northern Ireland peace agreements of the 1990s into ground-level reality.”³⁵² While this example of a Canadian influence activity remains largely undocumented, it follows in the tradition of the Pearsonian model of achieving influence on the world stage, and among western allies, by being salient. The Northern Ireland case also shows how Canadian influence activities, in some circumstances, have become more integrated as they include representatives of many different organizations all of whom have a particular skill set to contribute to the activity.

Canada’s armed forces have been called upon to engage in missions ranging from war to peacekeeping to military assistance activities in the post-Second World War era as part of her actions designed to attain strategic influence on the world stage. In the post-9/11 era, the CF’s missions have been wide ranging and largely undocumented in the literature. The next section describes some of the recent influence activities conducted by senior Canadian commanders in various alliance and coalition operations in the new security and defence environment, based on interviews with them, as one way of gaining an awareness of some current Canadian approaches to influence activities.

Post-Cold War Influence Activities of Senior Canadian Commanders

Introduction. The physical and cultural settings in which armed forces operate, as has been noted in a recent book on networked operations, have a major impact on how they conduct operations.³⁵³ Unfortunately, the post-Cold War experiences of senior Canadian commanders with influence operations have not been captured or documented in any systematic way. However, some of their experiences can be inferred from a report written for DRDC-Toronto on their experiences with network enabled operations as well as other sources.³⁵⁴ In this report, a Canadian commander, who recently worked closely with American forces on operations in Afghanistan, illustrated how different cultures affect approaches to operations in an interview conducted for a DRDC report. He claimed that the Americans use information operations to fight in the physical domain, to enhance their decision-making capabilities so they can give sensor-to-shooter information to those on the ground. Their opponents in Afghanistan and elsewhere, on the other hand, he says, “are using information to affect the physical domain.” The difference, according to this observer, is that their opponents are using information to enable human networks, whereas the Americans, and some other Western militaries, tend to use information to

³⁵² Doug Saunders, “Unity in Belfast and the circle of Canadians behind it: How a group of foreign soldiers, judges and police helped the peace process along,” *The Globe and Mail* (8 May 2007), p. A15.

³⁵³ Allan English, Richard Gimblett, and Howard Coombs, *Networked Operations and Transformation: Context and Canadian Contributions* (Montreal & Kingston: McGill-Queen’s University Press, in press), 13, 28-94.

³⁵⁴ The DRDC report is G.E. (Joe) Sharpe and Allan English, “Network Enabled Operations: The Experiences of Senior Canadian Commanders,” Defence Research and Development Canada - Toronto, report CR 2006-112, 31 March 2006. Available at <http://cradpdf.drdc.gc.ca/PDFS/unc54/p526467.pdf>. Accessed 26 Jul 2007.

maximize the physical effects of weapons. He argued that “we should be thinking more like” our opponents and be using technical systems to enable human networks.³⁵⁵

The nature of Canadian military operations in the post-Cold War environment, particularly the Army’s stabilization efforts in post-conflict Afghanistan and the Navy’s command of coalition operations in the Arabian Sea, has reflected the CF’s culture, as situated within a larger Canadian culture.³⁵⁶ In post-Cold War era the CF has often been sent into complex security environments without clear strategic objectives save for the imperative to establish a “secure environment.”³⁵⁷ The Canadian approach in these circumstances might be characterized as “influence operations.”

The lack of clear strategic objectives, a unifying concept of operations, and the resources of larger countries has forced the CF, in many cases, to construct hybrid human-technical networks in order to allow for interaction and to create cooperation among the numerous diverse groups involved in a particular mission. As noted earlier here, the post-Cold War Canadian naval experience has indicated that future operations at sea will likely be composed of *ad hoc* “coalitions of the willing,” where the differences in culture, technology, capabilities, and command relationships in such coalitions dictate that “cooperation and coordination” replace “command and control” in the C² lexicon. This new paradigm of “cooperation and coordination” depends on leadership or influence behaviours among peers more than traditional concepts of command involving the exercise of authority over subordinates. From a Canadian Army perspective, successful commanders have had to place much greater emphasis on the creation of shared awareness in order to overcome the ambiguity and corresponding friction found in current operating environments. While mission command is practised differently in the land and sea environments, both the Army and the Navy have recognized the need to create shared awareness among all actors using mission command or command-by-influence. Therefore, operations in an “integrated” or JIMP context will require the use of influence activities to create the effective social networks necessary for success. A significant challenge to achieving a common understanding of networked operations in these circumstances is that there is no standard model for a networked system, because different missions and different operating environments require different types of networks.³⁵⁸

Integrated Operations. A key point to emerge from DRDC report on networked operations based on interviews with senior Canadian commanders is that the CF is already involved in “integrated” operations consisting of co-ordinated actions by many different agencies, such as the military, police forces, other government departments (OGDs) and non-governmental organizations (NGOs), where influence activities were essential to success.

³⁵⁵ Sharpe and English, “Network Enabled Operations,” 6.

³⁵⁶ English, et al., *Networked Operations and Transformation*, 132-3, 136-8.

³⁵⁷ Howard G. Coombs and General Rick Hillier, “Planning For Success: The Challenge of Applying Operational Art in Post-Conflict Afghanistan,” *Canadian Military Journal* 6, no. 3 (Autumn 2005), 5-14.

³⁵⁸ Sharpe and English, “Network Enabled Operations,” 22.

For example Brigadier-General (now Major-General) Peter Devlin, Force Commander from 2003-2004 of the Kabul Multinational Brigade in Afghanistan, as part of the International Security Assistance Force, noted that with the Provincial Reconstruction Teams (PRTs) in Kandahar the Canadian military was working along side the Department of Foreign Affairs and International Trade, the Canadian International Development Agency, “some economic development folks, maybe some Treasury Board folks, maybe some infrastructure folks.” All those working together in this group, according to Devlin, shared “the information that’s necessary for them to be able to make decisions, give some direction and then assess the results of that direction.”³⁵⁹

Trust and Influence. The networks established by Devlin in Afghanistan in 2003 were limited technologically and diverse in composition. Therefore, to be successful he and his team needed strong “people skills” to influence various actors by creating the relationships necessary to build the common intent that was critical to exploiting those limited networks, according to Devlin. For example, with intelligence information, he wanted more than just data; he wanted an assessment of the data. Devlin found that establishing trust was key to accepting an intelligence assessment, and that establishing personal relationships and command relationships were key to building trust in that environment. He put it this way, “It was important to look folks in the eyes and be able to relay how important this change was and what the mission was...”; Devlin said this method was vital in a multinational environment, and that back briefs and giving orders face-to-face were vital in the effort to influence others’ behaviour.

Establishing trust was equally important in a multinational naval operating environment, according to Commodore (now Rear-Admiral) Roger Girouard, commander of Task Force 151 from January to June 2003 during Operation Apollo/Enduring Freedom. He said: “It is about trust. It is about getting out there, certainly as a Mission Commander, getting out there and looking [in] your bosses’ eyeballs and getting out there and doing that wonderful Nelsonian thing, looking in the eyeballs of your Captains.” In his experience, this personal contact enabled him to talk frankly with his superiors and subordinates about issues and concerns in ways that would not be possible in message form or even in “chat” on the internet. With the pace and the risk (including political risk) involved in today’s operations, he added, “trust matters more today than it ever has...”³⁶⁰

Influence and Command Style. One of the key issues in influence operations in coalition and “integrated” operations is using the command style appropriate to achieve the desired influence among partners and colleagues. Based on the experience of Canadian commanders like Girouard, we have seen that in *ad hoc* “coalitions of the willing” C² is taken to mean “cooperation and coordination.” This change reflects the reality of command in coalition, and arguably “integrated,” operations where leadership or influence behaviours among peers has come to replace traditional concepts of command involving the exercise of authority over subordinates. Therefore, in these operations influencing others based on concepts such as emergent leadership and distributed leadership may be more useful than attempting to influence others based on

³⁵⁹ Sharpe and English, “Network Enabled Operations,” 4.

³⁶⁰ Sharpe and English, “Network Enabled Operations,” 5.

concepts of authority.³⁶¹ In fact one might see the high reputation that senior Canadian naval officers have earned in certain coalition operational command positions as a type of emergent leadership based on three sub-classes of personal power (i.e., expert, referent, and connection), rather than position power.³⁶² Girouard said that Canadian senior naval officers established personal power in coalition operations by establishing trust among coalition partners to make the coalition function effectively, but he stressed that trust in partners “isn’t a miracle that happens.” He said that trust is built by working on relationships and by sorting out various procedures to ensure that all partners have the information they require to do their jobs within the limitations imposed by differences in technology and security and access rules.³⁶³

To maximize influence opportunities in these types of operations, Brigadier-General (now Major-General) Daniel Gosselin, who served as Chief of Staff of Joint Task Force South-West Asia and as Commanding Officer of the National Command Element during Operation Apollo, stressed the importance of working with a team of people that is known to the commander to ensure that commander’s intent is well communicated. Based on his experience, he found that common intent is established more quickly and more easily in the early stages of an operation if the team is made up of people who have worked together with each other and with the commander before the operation has started.³⁶⁴

Another way of establishing common intent and trust employed by almost all of those interviewed was the use of liaison officers to meet with coalition partners personally and to thereby supplement the technical network. Colonel Pat Stogran, based on his experiences in command of 3 PPCLI in combat operations in Afghanistan during Operation Apollo/Enduring Freedom in 2002, believed that, by using a human network of liaison officers in Afghanistan, he was more informed on some issues than the American general he worked for who did not use liaison officers as effectively as he did. Similarly, Gosselin said that the most important lesson that he learned working in a networked environment was the importance of placing sufficient numbers of liaison officers at sufficiently high rank levels in as many locations as possible. Although this practice is often resisted by those who like to build hierarchical organizations, Gosselin recommended putting liaison officers “everywhere” to help build situational awareness. He believed that the personal interpretation and context that liaison officers could provide was critical to making informed decisions.³⁶⁵

Some Canadian commanders, in the spirit of mission command, deliberately limited their influence on others. For example, while Brigadier-General Dennis Tabbernor, who was Commander Canadian Joint Task Force South-West Asia based in Tampa, Florida during

³⁶¹ In the CF, leadership is defined as “the process of directly or indirectly influencing others, by means of formal authority or personal attributes, to act in accordance with one’s intent or a shared purpose.” Canada, Department of National Defence, *Leadership in the Canadian Forces: Conceptual Foundations* (Kingston, ON: Canadian Defence Academy, 2005), 131.

³⁶² English, et al., *Networked Operations and Transformation*, 53.

³⁶³ Sharpe and English, “Network Enabled Operations,” 16.

³⁶⁴ Sharpe and English, “Network Enabled Operations,” 6.

³⁶⁵ Sharpe and English, “Network Enabled Operations,” 20.

2003, felt strongly that “command is a face-to-face matter” and that at some point commanders needed to spend time with their subordinates to establish common intent and trust, he only went into theatre about once every five weeks because he did not want to appear to be interfering in the tactical level of command.³⁶⁶ Despite his best efforts, he found that a lack of face-to-face communications caused misunderstandings between the various levels of command, i.e., tactical, operational, and strategic. He found that misperceptions among the levels of command “had a huge impact on the people on the ground” in theatre, and he cautioned against an over-reliance on technologically-based systems in the exercise of command.³⁶⁷

However, not all Canadian commanders exercised the same restraint that Tabbernor did in interacting with their subordinates. Gosselin found that if commanders were not clear in their own minds what information they needed to see to practise mission command, “the temptation is to say give it all to me. I’m not too sure, but give it all to me. ... I think it’s critical that [commanders] just don’t get...all [the information]. ... commanders [should] state what they need and let the staff do the sorting and the analysis...Most commanders... won’t take the time to...really state their requirements and without doing that, you get everything.” He concluded that with the sheer quantity of information available in a networked environment, commanders had to develop the ability to “be comfortable in not seeing everything and knowing everything.”

Closely related to the issue of information requirements, according to Gosselin, is the necessity to improve the willingness of senior leaders to delegate decision making authority. He believes that while accountability remains with commanders, delegation of authority must be practised more frequently: “...you need to ask yourself very clearly; why do I have to make that decision? And [the reason given] should not be because the...[person] before me did it.”³⁶⁸

In summary, it was noted in the DRDC report on networked systems based on interviews with senior Canadian commanders that they experienced significant differences in approaches to command based on who was in command. For example, one commander found that one of his superiors constantly requested detailed information, while another superior practised mission command and gave him “a huge amount of slack.” Furthermore, some senior Canadian naval commanders have drawn our attention to significant differences in approaches to command in a networked environment based on systemic cultural biases. Based on the research conducted to date, it is difficult to know what the specific causes of these various personal and cultural differences were, but they could be a combination of such factors as personality, education, experience, culture, and the physical operating environment.³⁶⁹

“Actionable Metrics” for Influence Operations. Little has been published on the use of metrics in influence operations. One Canadian senior officer, Major-General (now

³⁶⁶ Sharpe and English, “Network Enabled Operations,” 7, 20.

³⁶⁷ Sharpe and English, “Network Enabled Operations,” 6.

³⁶⁸ Sharpe and English, “Network Enabled Operations,” 20.

³⁶⁹ Sharpe and English, “Network Enabled Operations,” 14-15.

Lieutenant-General) Walter Natynczyk, who has had extensive experience with influence and networked operations, commented on his experience with metrics in some of these operations. Natynczyk was appointed Deputy Commanding General, III Corps US Army in June 2002. In January 2004, he deployed to Baghdad with III Corps in support of Operation Iraqi Freedom, serving first as the Deputy Director of Strategy, Policy and Plans and subsequently as the Deputy Commanding General of the Multi-National Corps Iraq.

Based on his experience with the US Army, Natynczyk stated that a major advantage of networked operations was that "...now the senior commander can see this incredibly complex theatre" and, when necessary, focus on just a few elements or indicators that "could really turn the tide between success and failure." He referred to these elements or indicators as "Actionable Metrics," which he described as "performance measurement tools that you can now apply based upon all of the inputs from the technology ... to be able to see what kind of attacks were occurring [and] when." Actionable Metrics, according to Natynczyk, allowed the US Army in Iraq to establish trends and to see how the enemy changed tactics, and then respond to changes in enemy tactics.³⁷⁰

Natynczyk gave an example of using Actionable Metrics at the section and platoon level from his experience in Iraq where "in six hours from the first incident soldiers changed their tactics, techniques and procedures because the enemy [had] adjusted their attack profiles." In this example soldiers had been removing posters of Saddam Hussein as they had been told to remove any open signs of support for him. At one point it was found that plastic explosives were being put behind these signs which were severely injuring those removing the signs. After only a couple of cases of these booby trapped signs, junior leaders immediately got on to the tactical "chat room" to make that information available, and "within six hours that observation had been validated and ... direction was put out that if you saw this kind of thing, do not touch the posters, call the explosive ordinance disposal people...and they would remove it."³⁷¹

Technology and Influence Operations. An important, and likely ongoing, issue with influence operations will be the degree to which technology will determine the nature of influence operations in a particular situation. We have seen that much of US doctrine on information and influence operations has a technological bias. Natynczyk's experience confirms that the US Army relies heavily on technology in some of its operations; however, he observed that even among units in the US Army there were different levels of sophistication in the technology available to employ networked operations.³⁷² This disparity among technological capabilities was even more pronounced when working in coalition operations. For example, Stogran, based on his experiences in the former Yugoslavia in the 1990s as well as his experiences in Afghanistan during Operation Apollo/Enduring Freedom in 2002, noted that, at the time he was interviewed in early 2006, Canadian other government departments did not have networked systems that

³⁷⁰ Sharpe and English, "Network Enabled Operations," 6.

³⁷¹ Sharpe and English, "Network Enabled Operations," 7.

³⁷² Sharpe and English, "Network Enabled Operations," 16.

could match the technical capabilities of CF systems; therefore, human networks were critical to making integrated operations work.³⁷³

Vice-Admiral J.C. J.Y. Forcier, Commander of Canada Command from 1 July 2005 to 16 May 2006, expressed concerns about how technology was being used in the CF and how it impacted on operations when it was standing up Canada Command. He worried that, based on displays that were fed by networked systems, some in the CF conceived of operations “as being more dots on the screen and less background information.” Based on his experience with Canada Command, Forcier expressed some frustration with the evolution of CF doctrine and processes because he said, “we’ve become fascinated with dots on the screen...the network-centric approach of yesterday [that is] still permeating our system today is a simplistic view of quantitative versus qualitative” information. In other words, some still are working to increase the volume of information on the network without much regard for its quality. He went on to say that “...the biggest challenge...I have to be quite candid, is that there still is a huge number of people in Ottawa that are looking at dots. And I’m looking at information...and...that’s my challenge in using network-enabled philosophy in the Canadian context because people are happier to see dots on the screen.”³⁷⁴

During his tour with the US Army in Iraq, Natynczyk found that III Corps personnel were using the information from their networks effectively to influence operations at critical points. He observed that “network enabling technologies allow commanders at all levels from section...up to corps to be able to see the battlefield ... [to] assist in [their] decision making, [and to] allow them to figure out where to focus. And when they did focus they ventured out on the ground to talk to divisional commanders, brigade commanders, battalion commanders, and below.” Given the size of a theatre like Iraq, it was impossible for the corps commander to be everywhere; therefore, it was important for him to know where it was critical “to go out on the ground to see the problems, talk to the leaders” face-to-face, to give them amplifying direction, and to put their specific operation into a broader context. This “battlefield circulation” allowed “commanders come back to empower the staff with updated information knowledge and context,” and this helped commanders to modify their commander’s intent and to issue the orders to enable that intent. “This balance between...technological enablers and...human interaction...is essential,” he concluded.³⁷⁵

The only feasible way for Canada to acquire capabilities similar to sophisticated US systems relatively quickly, while mitigating the risk of acquiring new technology, Natynczyk suggested, is to buy proven, interoperable products that are user friendly because Canada does not have enough money to invest in creating leading edge technology itself. Once the equipment is acquired, he emphasized that it is essential to educate and train everyone in its use from private all the way up to general officer.³⁷⁶

³⁷³ Sharpe and English, “Network Enabled Operations,” 15.

³⁷⁴ Sharpe and English, “Network Enabled Operations,” 7.

³⁷⁵ Sharpe and English, “Network Enabled Operations,” 21.

³⁷⁶ Sharpe and English, “Network Enabled Operations,” 21.

However, Natynczyk noted that in the CF there has been resistance to technology based on the culture of Canada's military.³⁷⁷

The DRDC report on networked systems based on interviews with senior Canadian commanders concluded that the existence of a fully functioning network-enabled environment does not negate the need for more human networks that are enabled by human relationships built on trust fostered by face-to-face meetings. Furthermore, the technological network must be used in such a way that it enables rather than detracts from the chain of command.³⁷⁸ In summary, those interviewed believed that it is critical to establish a balance between human networks and technical networks, ensuring that the technical network remains a tool.³⁷⁹ Virtually everyone interviewed for the networked operations report agreed that, given the operational necessity of working within coalitions and alliance arrangements where not everyone will possess the same degree of technological sophistication, networked operations require a combination of both technical systems and personal relationships. And a key tool to creating, maintaining and expanding these networks will be influence activities conducted to shape the behaviour of peers, subordinates, allies and other actors.

Commanders and Technical Competencies. While most of those interviewed for the networked operations report felt that human networks and the interpersonal competencies required to establish and maintain them were vital competencies for successful commanders to possess,³⁸⁰ many also felt that commanders must have some understanding of the technical dimensions of networks so that they could better specify their needs to those providing technical support to them. This issue is also relevant in a discussion of influence operations or activities as many of their aspects have important technical dimensions.

Gosselin, for example, felt strongly that commanders must have the same degree of technical understanding of their supporting network technology as they do of any other major combat system so that they can specify their requirements in operational terms. Once commanders have defined their needs in operational terms, e.g., secure access to all liaison officers, it is the job of the technical experts to meet those needs. Unfortunately, according to Gosselin, the CF tends to take the reverse approach, whereby commanders ask technical specialists what they can provide in the way of capabilities and then commanders select from the menu of capabilities provided by the specialists. Gosselin blames senior leaders for this state of affairs because many commanders and senior staff often cannot articulate their C² needs adequately. He concluded that: "If you don't understand what it [technology] can do for you, if you don't take the time to ask the questions, then you're not helping. It's like if you don't understand the capability of your combat system..."

³⁷⁷ Sharpe and English, "Network Enabled Operations," 7.

³⁷⁸ Sharpe and English, "Network Enabled Operations," 9.

³⁷⁹ Sharpe and English, "Network Enabled Operations," 10.

³⁸⁰ See Ross Pigeau and Carol McCann, "Re-conceptualizing Command and Control," *Canadian Military Journal* 3, no. 1 (Spring 2002), 53-63 for a discussion of a commander's interpersonal competencies.

Natynczyk implied that the Canadian Army did not understand enough of the technical dimensions of network-enabled systems to succeed in its transformation because, in his view, the technological aspect of Canadian Army transformation “to be quite frank has been a dismal failure” due to the kind of technology that was bought. The equipment that was purchased has not given the Army the ability to create the effects that it desires, he continued. Whereas, he suggested that the Canadian Navy is “much better off because they have an imperative to be interoperable with the US Navy,” and the Canadian Air Force has essentially the same interoperability needs as the Canadian Navy because of the Air Force’s close integration with the US Air Force in such organizations as NORAD.³⁸¹

Girouard expressed a sense of unease with the growing centralization of the control of communications technology in the CF, and, therefore the potential loss of influence by the operational chain of command on shaping that technology. He believed that, in some cases, technical experts exert too much control on the content that is added to the communications network. This trend was particularly worrisome to him in the context of the creation of networked systems and who decides which person gets what information. Too often he found that the technical experts’ desire to keep a close hold on information was overriding operational requirements. He put the dilemma this way, “Is the distribution of information about timeliness and effectiveness in keeping folks safe, or is it about security and keeping...controls as a default? ... I think a one size fits all answer to that [question] is inappropriate. ... But I don’t think that systemically we’ve sat down and had this conversation. ... I think there’s a growing tendency to centralization as I see things like the IM [Information Management] Group taking the comms and that concerns me. I think that runs counter to effectiveness of the operation philosophically.”³⁸²

Tabbemor found that when there were problems with technical systems in the field, it was the ability of humans to adapt the technical systems to overcome situations that could not be predicted by designers of technical systems that was critical. Girouard agreed that human capabilities to adapt technical systems were critical to meeting the operational need. Therefore, he expressed concern that centralization of decision making on technical systems was hampering the ability of humans to make adaptations to technology to meet the requirements of commanders conducting operations.

Girouard also noted that there has been significant progress in the connectivity, timeliness, rapidity of information transfer, and fidelity of networked systems. However, in his opinion, the challenge today is to present the commander with a manageable amount of information by sorting the relevant from the irrelevant. A combination of technological awareness and an awareness of the human dimension of command is required by commanders to discriminate between useful and irrelevant information provided by the network, according to Girouard. He did not think that either technical systems or those running them should be responsible for determining the value of information; he believed that the intelligence community and the operators had that responsibility. However, he did not believe that they were always as effective as they

³⁸¹ Sharpe and English, “Network Enabled Operations,” 17.

³⁸² Sharpe and English, “Network Enabled Operations,” 18-19.

should be in discharging that responsibility, and that sometimes technical concerns were allowed to take precedence over operational imperatives. He concluded that getting “the right stuff at the right time to the right guy in need” is the “holy grail” of networked operations today. One way to approach this ideal is to take better advantage of the competencies of all of those, including NCMs, who are nodes in the network, and to encourage them to be disciplined and to provide commanders with the information that the commanders need based on their understanding of commander’s intent. He elaborated on this idea by saying that individuals needed the competencies to understand where they fit into both the human and the technical networks, and, based on commander’s intent, take the initiative to select what information the commander needed to focus on among the mass of data available and then make judgements about when to engage superiors with relevant information.³⁸³

Those with experience in recent Canadian operations expressed a number of concerns about how and by whom new communications technology was developed and procured. Most of them believed that commanders needed to know enough about technical systems so that they could influence this process. Otherwise, by default, technical specialists might dominate the process and procure systems that might not be entirely appropriate for operational requirements. Perhaps even more importantly, lacking effective oversight from technical savvy commanders, technical issues might adversely influence the content or format of information required for influence operations.

Intelligence and Influence Operations. A key issue in most discussions of influence operations is the nature of intelligence and how that intelligence is used in influence operations. However, there is little discussion in doctrine or in the literature about the different types of intelligence required by different forces, depending on the environment in which they are operating.

Some senior Canadian naval commanders have drawn our attention to the significant differences in approaches to gathering and using intelligence in this context. For example, Girouard found that the Canadian approach to intelligence is still largely army-oriented, and this resulted in “Reams and reams... of data being pushed at you that really had no pertinence to the work that you were doing [in a maritime environment]...”³⁸⁴ Because of the Canadian intelligence system’s inability to adapt fully to maritime forces’ needs, Commodore Eric Lerhe, who was Girouard’s predecessor as commander of Task Force 151 during Operation Apollo during 2002, found that it took him a month to get his intelligence officer, who was “trained the CF way,” to understand what Lerhe’s priorities were in theatre.³⁸⁵

Natynczyk offered a somewhat different viewpoint on intelligence, based on his experience with the US Army in Iraq. He found that when fighting insurgents that it was important to deal quickly with “actionable intelligence.” However, from an army

³⁸³ Sharpe and English, “Network Enabled Operations,” 19.

³⁸⁴ Transcript of an interview with Commodore (retired) Eric Lerhe by Richard Gimblett in Ottawa, Ontario, 22 of February 2006, 5.

³⁸⁵ Sharpe and English, “Network Enabled Operations,” 14.

perspective, to ensure precision and to minimize collateral damage in a more complex physical environment than the navy's, detailed knowledge of potential targets is required. The only way, in Natynczyk's view, to act on intelligence in a timely way in counter-insurgency operations is to use technology "to collect the information... [and] turn it around into actionable intelligence to exploit..." especially if the target is a sensitive one requiring various levels of ratification to engage.³⁸⁶

Another issue regarding the use of intelligence in influence operations was raised by Devlin who found that establishing networks in a multinational coalition could be difficult given the access (or security) issue. Devlin noted that it was sometimes easier to share resources than information, because information is "one of the most difficult things to share." He added that it was "painful" to see how unwilling some nations were to share information, but that the human network could allow coalition partners to share necessary sensitive information if "trust...understanding...[and] confidence" had been created among coalition partners. He explained, that, if present, these factors could make one nation comfortable about sharing sensitive information with another nation in the coalition.³⁸⁷

However, according to Gosselin, there is still a culture of secrecy in some parts of the CF. Too often sensitive information is kept within a small circle of "need to know" individuals, he observed. Gosselin contrasted this CF approach to sharing information with the Canadian Foreign Affairs approach where sensitive information is disseminated much more quickly to a larger group of people. As he sees it, this CF tendency to restrict unnecessarily the dissemination of sensitive information makes integrated operations difficult to conduct properly.³⁸⁸

The Effects of Military Culture on Influence Operations. In the post-9/11 era there is a greater focus on the cultures of adversaries as part of an attempt to understand what methods could be most effective in achieving national security and defence objectives. There is, however, a very limited amount of published research on the effects of our, or our allies', military culture on our ability to achieve these objectives.³⁸⁹ Nonetheless, it is just as important to understand how our culture affects our ability to undertake various types of influence activities as it is to understand how others' cultures might affect their reactions to our influence activities, if we are to successfully meet future challenges in the security and defence realm.

The following comments give the insights of an American analyst on how American culture affects the ability of the US to conduct operations in the cognitive domain. His comments are followed by the views of some senior Canadian military officers on the effects of Canadian military culture on Canadian operations.

³⁸⁶ Sharpe and English, "Network Enabled Operations," 14-15.

³⁸⁷ Sharpe and English, "Network Enabled Operations," 16.

³⁸⁸ Sharpe and English, "Network Enabled Operations," 19.

³⁸⁹ For an overview of issues related to Canadian and American military culture see Allan English, *Understanding Military Culture: A Canadian Perspective* (Montreal & Kingston: McGill-Queen's University Press, 2004).

An expert on military intelligence and counter-terrorism and former US Army officer, cited at the beginning of this report, offers these insights into the influence of American culture on how the US armed forces conduct operations in the post-9/11 era:

Americans seem to be poorly equipped to engage in campaigns in the cognitive domain. Our culture is a material one; and this causes us to think in physical terms. Orders of Battle are relatively easy to tally. The inherent difficulty of tracking and assessing perceptions offends our fetish for the quantitative. In spite of W. Edwards Denning's exhortation that "The most important numbers are unknown and unknowable," many feel that "If it can't be measured, it's not worth knowing." It is common for people and institutions to simply ignore that which is not intuitively obvious or readily quantifiable.

Being consciously pluralistic and multicultural, our society reflexively avoids matters of culture. Even thinking about or discussing culture and values is often viewed as vaguely impolite, or possibly even subversive (the question of subversive of what remains an interesting paradox). We make a point of not noticing or acknowledging culture or values; and we are dutifully oblivious to them as they change around us, vigorously eschewing any efforts to consciously manipulate them. Our pluralism often results in abrupt shifts in foreign and military policies, which makes it difficult to maintain the consistency that is the necessary basis of successful strategy, most especially in the cognitive domain.

Americans, God love us, are a provincial people. As such, we tend to assume that that which we know is necessarily universal. Accordingly, we assume that other people are largely as we are, and largely share our values. Because of this, we generally seek to influence foreign peoples as we ourselves would be influenced. We see others through a "mirror image"; and we attempt to interact with them according to the rules that govern our paradigm. We routinely fail at this, or we ultimately succeed only at enormous and unnecessary expense. Trusting in faith and not in history, we do this again and again. Like any rational actor that finds themselves working on an unproductive path, but unaware of the existence (or even possibility) of any alternative path, when we determine that our efforts are fruitless, we redouble them. Thus, we find ourselves disposing of the world's largest economy and defense budget, striding the world like a colossus, the world's only "hyperpower," able to humble any armed force anywhere in the world, but unable to pacify occupied territories or persuade small groups of lightly armed people that we are not their enemies and that random killing innocent civilians is not a legitimate expression of religious devotion.

Recent advances in information technologies have enabled us to enhance our ability to transmit data; but here too, we do so in the almost total absence of consciousness of the cultural content or impact of that data, except at the lowest and most superficial levels (such as commercial product advertising). These facts have led us to focus on and dominate the physical and information domains; but

to remain oblivious to actions in, and often even the existence of, the cognitive domain.

Most of our efforts and resources dedicated to conflict are only tangentially relevant to the central nature of conflict, especially the types of conflict that we now face. Human action is shaped, and wars are ultimately won and lost, in the cognitive domain. In view of this, all of our warfighting efforts should focus on ultimately achieving victory in that domain. Our existing doctrine and concept development work acknowledge the cognitive domain in passing; but do not focus on it, or acknowledge its primacy in war. As a consequence of this, there tend to be huge gaps in our offensive and defensive preparations for war and for military operations other than war, especially in the area of information operations (in its broadest sense). All of our preparations for conflict, starting with concept and doctrine development, should be structured with the need to dominate and win in the cognitive domain as both the point of departure and the ultimate goal.³⁹⁰

Natynczyk, who has extensive experience with US and coalition forces, offers views on the effects of Canadian national and military culture on Canadian participation in coalitions that complement the insights of the previously cited American expert on military intelligence and counter-terrorism. Natynczyk said that, “I think we have a culture in the community and the military, perhaps in Canadian society [of being]...self depreciating...[because] we continue to demonstrate this lack of confidence in ourselves. And yet every time we send troops into whatever theatre or situation, be it domestically at home...we come out recognizing that we are the best, if not among the best of services in the *world*! [emphasis in original]” One of the reasons for the proficiency of Canadian military personnel is the personal qualities of junior leaders in the CF. To maintain this proficiency Natynczyk argued that “...the key [is] focusing on junior leaders [to] ensure that they have cohesion, the knowledge, but very importantly the confidence that they be trained to high standards have a self-discipline and are physically fit.” He went on to say, “...I would put them man for man, woman for woman, unit for unit against any comparable organization or individual from any other country in the world within our competency...because we have high standards. And whatever service we have, our culture is to set very high standards. And we hold people to those standards. We fail people if they don’t measure up to those standards. And we tell them to take a new direction. We have incredible discipline. It’s a factor of our culture and our heritage. And as a result of those two combinations, we can put people into harm’s way, and with the knowledge that they have, they can be flexible to adapt their knowledge to the new circumstances on the ground.”³⁹¹

If one accepts these, and others’, observations, perhaps Canada has certain advantages compared to the US in coalition operations based on the self-deprecating nature of Canadians combined with Canada’s traditions of bilingualism and multiculturalism; Canada’s military culture with its history of alliance and UN operations and its focus on

³⁹⁰ Norman Conquest [pseudonym], “Massacre in Fallujah,” 4.

³⁹¹ Sharpe and English, “Network Enabled Operations,” 21.

operational and command competence, enlightened leadership and management techniques; and the CF's judicious exploitation of available technology.³⁹²

Despite these advantages conferred by Canadian culture, some aspects of CF culture interfere with the ability of commanders to optimize their performance in a networked environment because some commanders want to see all the information possible, rather than letting their staff filter the information for them, as Gosselin noted previously. Sometimes this situation arises from a lack of technical understanding of networked systems, as described above, and sometimes it arises because of a culture of micromanagement in the CF where some CF commanders are not able to practice mission command effectively.³⁹³

Emerging Canadian Approaches to Influence Operations. Although Canada has yet to develop a comprehensive approach to the challenges of the post-Cold War security and defence environment, practice, as described in some sources, gives us an idea of the Canadian philosophy towards operations at the beginning of the 21st century. Aspects of this philosophy were articulated in 2004 by General Rick Hillier (now CDS) when he was commander of the International Security Assistance Force:

In normal operations one attempts to overwhelm the enemy. There is an attempt to tear the enemy down instead of build yourself up. *In post conflict environments one must constrain the growth of the threat forces and manage the perceptions that there is an increase in measurable government capacity.* The military component is just one element of the overall campaign [emphasis added].³⁹⁴

Hillier's words continue to remain relevant three years later. The figure below illustrates the difference that Hillier saw in the main effort between kinetic and post-conflict operations. His emphasis on shaping the contemporary environment by means other than military force echo those of Smith, in his *The Utility of Force*.³⁹⁵ The implications of this approach to post-conflict operations are now evident in the experiences of Canada and her allies in both Afghanistan and Iraq. It is evident that, while victory over organized enemy forces can be achieved by military action in these countries, the provision of a secure post-war environment amongst a fractured population must be deliberately planned and implemented utilizing a myriad of means. This sentiment was best captured by J.F.C. Fuller when he said, "...the true aim of war is peace and not victory; therefore that peace should be the ruling idea of policy, and victory only the

³⁹² These issues were raised in a naval context in English, et al., *Networked Operations and Transformation*, 56.

³⁹³ For a more detailed analysis of these issues see Daniel Gosselin, "The Loss of Mission Command For Canadian Expeditionary Operations: A Casualty of Modern Conflict?" in Allan English, ed., *The Operational Art - Canadian Perspectives: Leadership and Command* (Kingston, ON: Canadian Defence Academy Press, 2006), 193-228.

³⁹⁴ Lieutenant General (now General) Rick Hillier, Commander International Security Assistance Force (ISAF), interview by Howard G. Coombs, Headquarters ISAF, Kabul, Afghanistan, 20 July 2004.

³⁹⁵ Smith, *The Utility of Force*, 1-26.

means toward its achievement.”³⁹⁶ The most significant lesson of Operation Iraqi Freedom is that the successful conclusion of combat operations within a theatre of war does not necessarily lead to a strategically certain result or a complete cessation of hostilities between the nations or groups involved. Despite the success of the military campaign, a tenuous and fractured peace in both Afghanistan and Iraq has highlighted the difficulties inherent in the re-establishment of a nation and confirmed the importance of strategic analysis and interagency planning, as well as the necessity of obtaining the support of the people – or at least winning their “hearts and minds.”

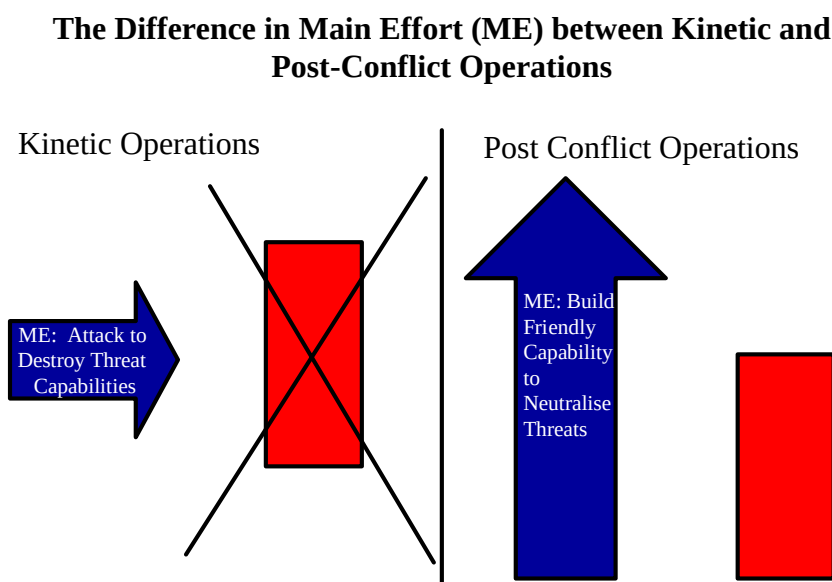


Figure 3 - The Difference in Main Effort (ME) between Kinetic and Post-Conflict Operations³⁹⁷

In an attempt to address the issues raised by Hillier, the Canadian Army has sought an immediate solution by adopting doctrine concerning influence activities that mirrors NATO doctrine, but, as noted at the beginning of this report, the NATO doctrine is based on concepts promulgated by the United Kingdom.

While this approach provides an immediate solution to the dilemmas presented in the contemporary environment of conflict, there is significant risk in adopting alliance or other nations' doctrine without careful analysis of one's own national experience. For

³⁹⁶ Fuller believed that the ultimate weakness of Clausewitzian theory to be its misunderstanding of the role that peace played in shaping warfare and that the violence of conflict disconnected from the strategy required for the establishment of a lasting peace results in nothing more than a temporary cessation of hostilities. Fuller, *The Conduct of War, 1789-1961*, 76.

³⁹⁷ Hillier Interview, 20 July 2004, ISAF HQ Kabul, Afghanistan.

example, despite being taught in PME, this doctrine could be ignored and later discarded without ever being used, if, as noted earlier in this report, it does not reflect our national practice or if it is not congruent with our national or military cultures. Effective CF doctrine should be derived from an analysis of past CF operations to deduce reoccurring trends and to formulate hypotheses on which the body of material that constitutes doctrine can be based. At this point in time, while the CF has a great deal of operational experience based on its activities in the Balkans and Afghanistan, there has been no systematic and rigorous analysis of this experience. In many ways, like the Canadian application of operational art, our ideas of influence may be unique to the Canadian experience and therefore need to be recognized as such. One thing that stands out clearly in this emerging Canadian approach to operations is that in order to “manage perceptions,” as Hillier put it, there will be a need for CF influence activities in the future.

Enhanced Influence Operations Workshop

A workshop on the topic of Enhanced Influence Operations was held at DRDC Toronto 23-24 May 2007. About 30 participants with an interest in this topic were invited from the CF, DND and organizations in the UK and Australia. The aims of the workshop were 1) to enable discussion between researchers, subject matter experts, and practitioners relating to the development of influence concepts and their application within future military operations; 2) to support DRDC Toronto in defining research requirements in support of enhanced CF influence operations; 3) to provide an opportunity for project stakeholders to contribute to this process; and 4) to consider the potential for future research collaboration in the area of influence. A synopsis of the workshop activities are at Annex A to this report.

Some key issues that were discussed at the workshop are briefly discussed next. Perhaps the most problematic issue raised at the workshop was that there are competing doctrinal constructs of information operations and influence operations, and, therefore definitions and terminology relating to these topics are not consistent.

Another important issue that was raised frequently during the workshop was the importance of the cultural dimension to influence activities, both our own culture and targets' cultures.

A great deal of discussion revolved around the issue of suitable measures of effects/effectiveness (MOEs). There was consensus that MOE tools are required to support influence operations, but, at the moment there is limited scientific research on MOEs to support influence activities.

Military participants at the workshop were concerned that future research on influence activities has practical applicability to real-world operations. For example, there is a requirement to create campaign design tools that incorporate influence operations

explicitly and more completely into campaign design than is currently the case with existing tools.

The final section of this paper, on future research, suggests ways of addressing these, and other, issues.

PART III – CONCLUDING MATERIAL

Multi-Agency Planning in the Contemporary Environment³⁹⁸

Military operations, to be deemed successful in the new security and defence environment, must assist with creating the conditions for a durable and lasting peace in joint, multinational and multi-agency efforts which involve numerous state and non-state actors. The military contribution to these efforts is exceedingly complex and involves various influence activities. In Canada, it has been acknowledged that it is necessary for the Canadian Forces to establish strong connections with the Department of Foreign Affairs and International Trade and the Canadian International and Development Agency, as well as other organizations, to address the modern dilemmas of post-conflict environments, such as Afghanistan. This idea has been formalized in the paradigm that has become known as “3-D + C.”

The 3D + C approach, involving defence, diplomacy, development and commerce requires an increased level of interoperability among agencies that often lack a common coordinating infrastructure or planning methodology. In the absence of shared conceptual approaches and procedures the results of from the use of the 3D + C approach have at times been less than optimal because the language and methodology of current military doctrine does not fully meet that interoperability requirement.

Current Canadian operations in Afghanistan have created an unprecedented desire to achieve interdepartmental and interagency cooperation and coordination. Ideas of influence, coupled with systems analysis and effects-based approaches to planning, may provide a holistic methodology for envisioning the complex problems within the contemporary environment and creating viable options to address those problems. One possible model for incorporating influence activities into campaign planning is shown at Figure 4.

³⁹⁸ The authors would like to thank Lieutenant-Colonel William Cummings, The Royal Canadian Regiment, for his assistance in the formulation of this discussion.

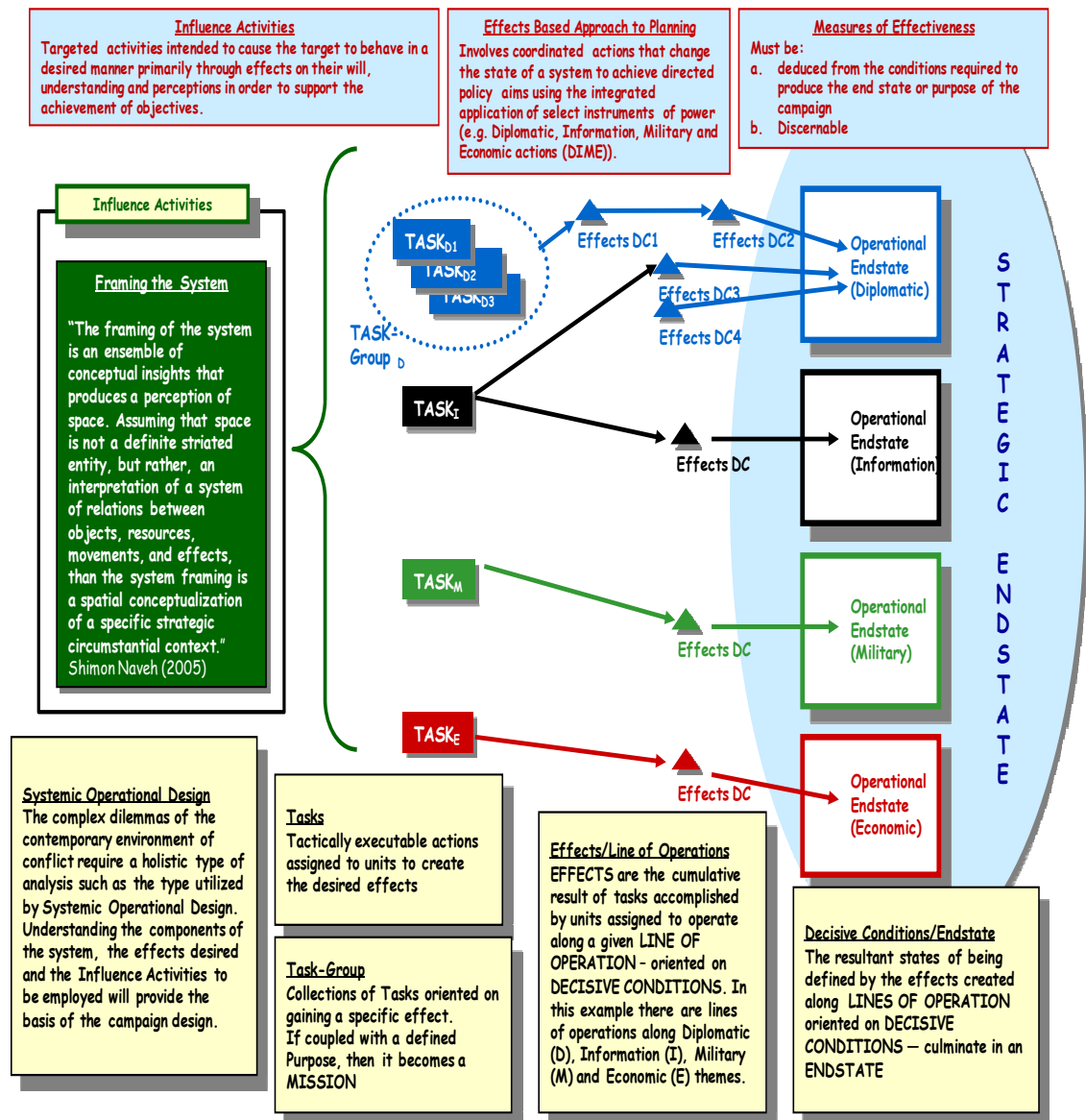


Figure 4 - Influence Activities and the Campaign Plan

Western doctrinal methods of problem analysis and generating options to construct enduring plans are currently derived from theories put forward by classical military theorists, such as Clausewitz, who was discussed earlier in this paper. While still usable, these doctrinal approaches are more suited for application in an environment where the

predominant form of conflict is between nation states. Therefore, these models are of limited utility in current times where one's opponent is often transnational and robustly networked, as well as difficult to detect, discern and destroy. Furthermore, schemes of analysis derived from military theoreticians are not attractive tools for non-military partners. As a result, ideas and methods that are understandable and are acceptable to all involved must be devised and utilized to coordinate a myriad of actors and activities across all elements of alliance or national power to successfully address exceedingly difficult challenges.

Of all the current approaches to strategic and operational planning, systems analysis and effects-based approaches to operations seem to offer the best options for acceptable whole-of-government, or multi-agency, processes that address the intricate problems of the contemporary environment. Systems analysis has been advocated in recent years by Israeli military theorist, Shimon Naveh, who has researched and written extensively on the topic, under the rubric of "Systemic Operational Design," and discussed its usefulness in creating military plans. Simplistically, systems analysis is a heuristic dialectical method which permits one to frame a problem in terms of the multitude of systems that comprise it. Paramount in this approach is an understanding of all actors in the environment and their relationship to each other. Broad perceptions of influence are particularly useful in understanding these connections. For example, as part of the systems analysis one would attempt to understand the effects that should be created within those systems to shape desired outcomes.³⁹⁹

Systems analysis, and the related ideas of influence and effects, are actualized by an effects-based approach to planning that incorporates the outputs of this examination of the problem in a manner that links desired effects and the actions, including detailed influence activities, required to attain them.⁴⁰⁰ These actions are then assigned as tasks to a multitude of agencies that will carry them out. The creation of shared vision and trust amongst the participating agencies is extremely important in this methodology. Therefore, utilizing models and theoretical approaches that are not tied to military campaign planning, along with the universal language of systems analysis and effects-based planning, may break down barriers and facilitate shared understanding and common intent among the diverse multi-agency groups using the 3D + C approach. However, while analysis and design are extremely important in this approach, the key to

³⁹⁹ For elaboration of systemic operational design see Shimon Naveh, *In Pursuit of Military Excellence: The Evolution of Operational Theory* (London: Frank Cass Publishers, 1997); and Lecture by Dr Brigadier (Reserve) Shimon Naveh, The Aharon Yariv Institute for Operational Studies, Department of Operations, General Staff, Israeli Defence Force, "Discursive Command – Operators – Systemic Operational Design: A New Framework for Strategic Epistemology" (n.d. 2005?) (in possession of Coombs). Also, for a practical approach to operational planning using systems analysis refer to John F. Schmitt, "A Systemic Concept for Operational Design," [paper on-line] available at <http://www.mcwl.usmc.mil/concepts/home.cfm>. Accessed 25 June 2007.

⁴⁰⁰ For the effects-based approach that was used to create the example included with this discussion see United Kingdom, Ministry of Defence, "Joint Doctrine Note 7/06: Incorporating and Extending the UK Military Effects-Based Approach," (September 2006). For an effects-based approach to planning that still incorporates some traditional methods of operational design see United States Joint Forces Command, *Commander's Handbook for an Effects-Based Approach to Joint Operations* (Suffolk, VA: Joint Warfighting Center, 24 February 2006).

the practical implementation and continual assessment and reassessment of any chosen option is the selection of relevant measures of effectiveness that can be collected and analyzed in a systematic and accurate manner. A great deal of practical work in this regard has already been done in recent years by operational research scientists employed with the International Security Assistance Force in Afghanistan.⁴⁰¹

In summary, because we are not dealing with “son of Desert Storm” but rather the “stepchild of Chechnya,” any cooperative process that is utilized to devise feasible and suitable solutions to security problems today must be capable of dealing with complex and chaotic environments and be acceptable to a myriad of participants. Therefore, systems theory, as well as ideas of influence and effects, provide the basis for a potentially valuable approach to strategic and operational campaign planning in the contemporary environment. These conceptual methods can also be used to create tools for analysis, design and assessment by all those multi-agency actors, both military and non-military, who share the responsibility of addressing the incredibly intricate challenges posed in places like Afghanistan and Iraq.

Conclusions

The notion of influencing adversaries, allies and neutrals to achieve one’s goals with the minimum cost in blood and treasure is an ancient one. The writings of Sun Tzu and Thucydides, which are still used widely today in senior officer professional military education, show that actions like feints or demonstrations, threats and ultimatums, as forms of coercion and deterrence, were all used as stratagems to influence adversaries, friends and neutrals. The ancients did not construct any specific models for applying their stratagems of influence; however, they used the stratagems regularly to achieve their goals while minimizing their losses, when possible.

Two of the most influential classical military thinkers, Clausewitz and Corbett, were examined because their work provides the foundation for much of military thought today on aspects of influencing the behaviour of other actors in the security and defence realm. While Clausewitz’s ideas do not fit very well the criteria for influence operations used here, he did put forward some basic notions that underpin the use of influence today, namely the primacy of political aims in the conduct of war, the importance of moral (or psychological) factors in warfare, and the possibility of using various stratagems that we would consider as influence operations, such as demonstrations and threats, as legitimate

⁴⁰¹ Presentation by Rob Grossman-Vermass “Chasing the White Rabbit: CD&E, NATO HQ ISAF and Operations in Afghanistan,” given at Defence Research and Development Toronto, 30 January 2007. For more on the issue of measures of effectiveness see Colonel J.F. Cottingham, “Effects-Based Operations: An Evolving Revolution,” unpublished paper written as part of the MA in War Studies program, Royal Military College of Canada, July 2004, 27, 41; See for instance Desmond Saunders-Newton and Aaron B. Frank, “Effects Based Operations: Building the Analytic Tools,” *Defense Horizons* no. 19 (October 2002); available at http://www.ndu.edu/inss/DefHor/DH19/DH_19.htm; accessed 26 Jul 2007; and Kevin B. Glen, “The Challenge of Assessing Effects-Based Operations in Air Warfare,” *Air & Space Power Chronicles* (24 April 2002). Available at <http://www.airpower.maxwell.af.mil/airchronicles/bookrev/glenn.html>. Accessed 26 Jul 2007.

ways to achieve political aims economically. As a student of Clausewitz, Corbett's work builds on that of the Prussian master. Furthermore, since Corbett was writing in the era when modern technology was revolutionizing some aspects of warfare, his work is closer to the modern concepts of influence operations. Corbett's work is particularly relevant in describing the need to coordinate the instruments of national power and various means to effect change in actors' behaviour.

The Soviets showed themselves to be Clausewitz's intellectual heirs, insisting that all warfare was political and that all instruments of power should be dedicated to victory. The Soviet writings on influence are difficult to access because of the lack of translations of many of them. However, while not speaking of influence operations directly, Soviet theorists clearly referred to certain aspects of influence operations today, such as surprise, deception, disinformation, and "reflexive control," in their works. In fact, one could argue that the idea of influence was embedded in all Soviet strategies, as the very purpose of any war, in their eyes, was to achieve influence over others.

In some ways the modern era of influence operations began with writings of the airpower theorists in the early 20th century and then evolved in the writings of their successors in the late 20th and early 21st centuries. A number of themes found in the writings of the early airpower theorists have had a substantial impact on discussions of how to best influence the behaviour of adversaries and others. The most important of these themes was that airpower theorists were concerned with influencing the behaviour of all actors, not just adversaries; that, while they focussed on kinetic means, they were aware of and used non-kinetic means to achieve their effects; that the theorists' emphasis on aircraft acting "independently" to achieve effects was more related to their struggle for resources with other services than any empirical data; and that each theorist's ideas were adapted to be accepted by the particular national and service audience for which he was writing. Finally, the lurid nature of some of the airpower theorists' writings, the sensational depiction of their ideas in popular culture, and the devastation caused by Second World War bombing campaigns led many to characterize their theories as advocating massive destruction of societies to achieve their ends. However, in fairness to the airpower theorists, it should be remembered that even if their methods entailed some destruction, their goal was to use airpower to bring a quick and efficient end to conflict. The heirs of Douhet and other early 20th century airpower theorists now use the term Effects Based Operations to describe their approach to conflict. At the heart of EBO is the intent to achieve effects by influencing a variety of actors in various ways, both kinetic and non-kinetic.

"Air Control" was an approach to what was sometimes called "imperial policing" that met all the criteria of influence operations. Theories of Air Control, based on the ideas of some airpower theorists and involving coercing recalcitrant tribesmen to submit to British rule, despite their weaknesses are the basis for some forms of influence activities today including establishing no-fly zones and air operations, like Operation Allied Force in 1999, to coerce adversaries to change their behaviour.

The application of airpower in the Second World War seemed to disprove the airpower theorists' ideas, especially the idea of the "knockout blow from the air," as even unprecedented destruction in a number of countries did not bring the war to a quick conclusion. The theorists' ideas were resurrected in the "Air Atomic Age," however, based on the effect of the atomic bombs on Japan and the power of atomic bomb and then the hydrogen bomb which increased the destructive capabilities of air-delivered weapons to unimaginable size.

The nuclear age spawned a host of theories based on influencing various actors in different ways. As airpower practitioners focused on the technical application of the early airpower theories, a whole new field of study related to influence arose, which was dominated by academics and scientists. The main influence theories in nuclear age are now classified under the rubric of coercion theory, which is comprised of compellence, deterrence and coercive diplomacy. The coercion theorists postulated that victory through political concessions could be attained by the use of threats or discrete uses of force without having to resort to war. Coercion theories tend to be broken into two schools of thought – the largely American technical approach and the metaphysical approach. The analysis here suggests that, given the current state of knowledge, the technical approach has limited utility to the practical applications of influence operations. However, despite its limitations, the metaphysical approach, because some of its intellectual roots come from such ideas as John Warden's theory of the enemy as a system as well as the Clausewitzian concept of the centre of gravity, may be more appealing to military professionals.

The use of influence to achieve objectives is a constant theme in the "small wars" examined here. The British approach to small wars has evolved since the 19th century so that non-kinetic effects have gradually replaced kinetic effects in the attempt to influence others. The American approach to small wars, while different in detail, is generally similar to the British approach. Both these approaches have come to rely on technology and explicit articulation of influence operation doctrine. The Asian approaches to small wars that were examined here use all the stratagems of influence operations, but the Asian approaches do not rely on technology or explicit statements of influence operation doctrine to the same extent that Western armed forces do. In fact, for Chinese and Vietnamese practitioners of small wars, the idea that influence would be limited by an "operation" might seem foreign to them, as the use of influence is implied throughout the whole of their political and military discourse.

Currently, the term "influence operations" is being used to define a fairly narrow set of activities, largely in a land force context, at the operational-level and tactical-level. However, from the doctrinal review conducted for this report, it can be seen that there is a lack consistency among current conceptual models and ideas related to "influence operations," even in US joint and service doctrine. Some commonality is, nevertheless, visible in some Western doctrine on influence operations. While British doctrine uses the less restrictive term "activity," instead of the more restrictive term "operation" found in most US doctrine, the general notion of influence activities is compatible in many ways with the US term. Furthermore, the framework to coordinate all activities related to

influencing a target audience within a theatre of operations is based on ubiquitous US doctrine.

How influence is characterized by various organizations or writers is a function of culture and historical experience, both national and service. For example, the practice of describing influence in terms of an operation, as in the term “influence operation,” is common in armies who, since the last two decades of the 20th century, have been strongly influenced by the paradigm of operational art. In this army paradigm, campaigns are sequenced with the conduct of various operations, which are limited by time and resources.

Navies, on the other hand, see the application of influence differently. From their perspective, naval assets are constantly exerting influence. Whether from a ship’s visit to a foreign port with a trade delegation aboard, to blockades, to full scale warfare, navies see themselves as constantly exercising influence along a continuum of violence.

Western air forces, particular the US Air Force and RAF, also view influence differently from armies because air forces have traditionally sought to link tactical actions (or outputs) to strategic outcomes with relatively small forces, compared to armies, and without necessarily applying the operational art. For most Western air forces their current approach to operations, Effects Based Operations, is essentially about influencing various actors based on experience and theories that have evolved from the beginning of the 20th century. As noted above, the most recent NATO information operations doctrine appears to accept applying EBO to IO; however, US and Canadian land forces have not wholeheartedly done so. And their adoption of the term Effects Based Approach to Operations is a deliberate doctrinal statement to distance themselves from the air force EBO concept.

Canadian perspectives of attaining strategic influence arose from the crucible of the Second World War and are grounded in the historical experience of earning membership in a wartime alliance. During that conflict Canada’s statesmen learned the *realpolitik* of grand and national strategy. They recognized the manner in which smaller countries could contribute and optimize their voice within alliances or international organizations and have consistently done so throughout the 20th and 21st centuries. Bilateral arrangements with the US, membership in NATO, NORAD and the UN, as well as recognizing individual opportunities to reinforce national interests, have provided the means through by which Canada achieves relevancy. In the final analysis, one can argue that despite popular images of Canada as an unbiased and neutral nation, the reality of Canadian participation in the international community is grounded in pragmatism and a desire to maintain influence with global reach.

The experience of senior Canadian commanders in recent influence activities has been diverse, depending on the physical environment and the coalition or other organization in which the experience took place. Despite this diversity of experience, there are some common threads in it, including Canada’s ready acceptance into coalition leadership positions based on competence, enlightened leadership and management techniques; the

value of Canadian national culture with its characteristics of accepting diverse cultures associated with its traditions of bilingualism and multiculturalism; and the value of Canada's military culture with its history of alliance and UN operations and its judicious exploitation of available technology.

Despite the significant experience of senior Canadian commanders in the domain of influence activities, Canadian doctrine on influence operations is immature and largely based on the doctrine of Britain and the US. Recent actions and comments by General Hiller, based on his Afghanistan ISAF experience and Canadian involvement in Afghanistan since then, point to an emerging Canadian approach to influence operations, but until there is rigorous study of this approach, it is unlikely to become part of Canadian doctrine.

The working definition contained in this paper provided four criteria to describe what might constitute an influence operation. In the paper, a pattern emerged from the identification of the criteria in relation to each contribution to the thought surrounding influence operations. Two of the criteria appeared to be covered by all cases in some form, those being the effects on the will, understanding or perceptions and the intent to create such effects as the primary goal of an action. The other two criteria, namely the universal applicability of influence operations and no necessity for the use of violence, were present in some cases but not all.

Future Research

Based on this report and input received at the Enhanced Influence Operations Workshop (see above), the following areas seem to offer the most potential for future research.

Clarification of Concepts. The general confusion in terminology concerning a number of concepts of war and of other operations extends to the term influence operations. Consequently, one vital area for future research lies in clarifying these concepts and then identifying how influence operations or influence activities might fit within a more rigorous lexicon. One suggestion, based on research to date, is that influence is more appropriately seen as a philosophy or concept of operations rather than an "operation" or even an "effect."

Cultural Issues. Another crucial issue is the importance of the cultural dimension to influence activities, both our own culture and targets' cultures. Specifically, research should focus on our own culture, culture in the environments in which the CF is operating or expects to operate in, and cultural change.

Measures of Effects/Effectiveness. Given the limited amount of scientific research on measures of effects/effectiveness (MOEs) to support influence activities, this appears to be a fruitful area for future research.⁴⁰²

⁴⁰² In Sharpe and English, "Network Enabled Operations," 6, and above, Natynczyk gave an example of using Actionable Metrics at the section and platoon level from his experience in Iraq. However, these metrics were more oriented towards tactical operations than influence operations.

Influence Operations and Operational Art. One concept that dominates current military missions is the operational art; therefore, some research effort should be devoted to seeing how influence operations could fit into the operational art paradigm. For example, there is a requirement to create campaign design tools that incorporate influence operations explicitly and more completely into campaign design process than is currently the case with existing tools.

Canadian Experience with Influence Activities. Another area where profitable research could be conducted by DRDC would be to document and analyze the experiences of senior Canadian commanders with influence activities, particularly in the post-9/11 era.

Relevance of Research. Users of research related to influence activities, especially members of the CF, emphasized that future research on influence activities should have practical applicability to real-world operations.

**ANNEX A TO
INFLUENCE OPERATIONS:
HISTORICAL AND
CONTEMPORARY DIMENSIONS
DATED 31 JUL 2007**

**Enhanced Influence Operations Workshop
23-24 May 2007 DRDC Toronto
Synopsis**

INTRODUCTION

General. A workshop on the topic of Enhanced Influence Operations was held at DRDC Toronto 23-24 May 2007. About 30 participants with an interest in this topic were invited from the CF, DND and organizations in the UK and Australia. In order to encourage a high degree of participation from those attending, the workshop format consisted of not only formal presentations, but also a series of syndicate and plenary discussions.

The aims of the workshop were 1) to enable discussion between researchers, subject matter experts, and practitioners relating to the development of influence concepts and their application within future military operations; 2) to support DRDC Toronto in defining research requirements in support of enhanced CF influence operations; 3) to provide an opportunity for project stakeholders to contribute to this process; and 4) to consider the potential for future research collaboration in the area of influence.

Aim. The aim of this report is to provide a synopsis of the main issues that arose from the syndicate and plenary sessions during the DRDC-sponsored workshop on Enhanced Influence Operations.

SYNOPSIS

Session 1 – Introduction and Concept Paper

The intent of this syndicate session was to discuss the introductory presentation given by Keith Stewart and to explore the concepts contained in the draft KMG paper, “Influence Operations: Historical and Contemporary Dimensions dated 29 March 2007.

Critiques of the Influence Operations Model in the Paper. The model and definition presented in the paper are below.

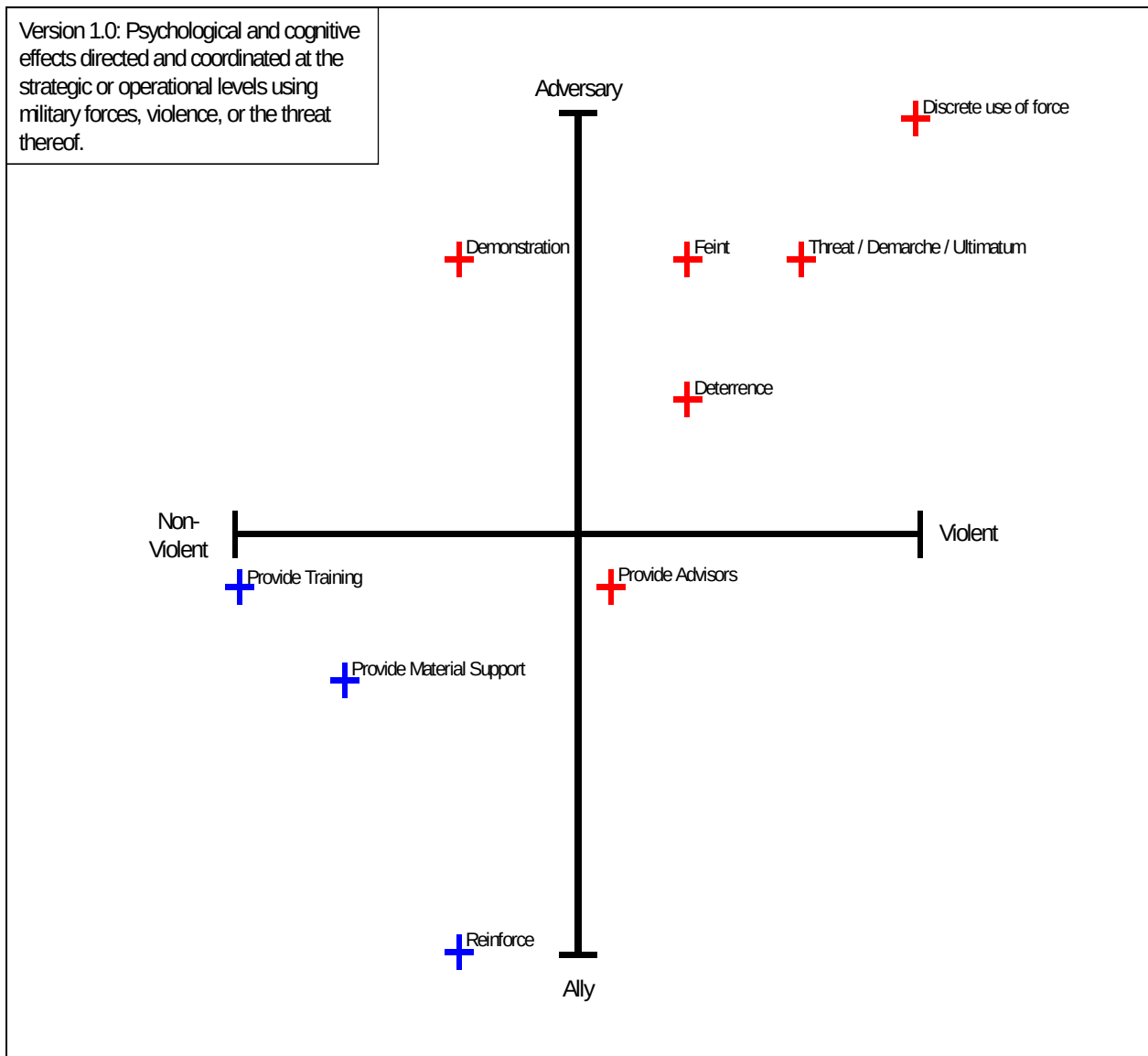


Figure 1- Stratagems of Influence Operations

A specific critique of the model presented in the KMG paper, particularly the diagram in Figure 1- Stratagems of Influence Operations, was that the diagram needed to illustrate the importance of influence operations targeting third parties to prevent them from slipping into the adversary's orbit and causing them to ally themselves with or to pursue the same goals as the friendly forces. Another critique of the definition noted that even if adversaries or neutrals were the target of an influence operation that a domestic audience might receive messages as well. The question was raised if this should be a concern, in that the domestic audience may believe the government is intentionally targeting it.

Another issue that was raised concerned differing implications for Influence Operations at the strategic, operational, and tactical levels. Some questioned the need for the criterion of direction and coordination at the strategic and operational levels because it was unrealistic. The criterion was intended to capture the idea of coordinating the instruments

of national power, but this interpretation excludes any influence activities below the operational level. The critique of this interpretation was based on the observation that, in many cases, operational-level elements have drafted their own strategic guidance and solicited its approval because, in reality, strategic level guidance from the strategic-level is often lacking.

The question of where “influence” is properly situated, whether at the strategic, operational and/or tactical level, or, in organizational terms, whether in the “2” or “5” cell in a joint headquarters. In the CF “influence” is subordinated to information operations, and is considered a “ways and means” or an activity carried out at the tactical level. In the British Army, “influence” is not something that is done at the operational level, the reason being that the term is seen as too tied up with activities at the strategic level; it is seen as more a conceptual rather than an operational term.

Others took issue with the phrase “direction and coordination at the strategic or operational levels” in the KMG paper definition. They said that there were many things that needed to be coordinated, and they raised the questions: coordination with what? what is being coordinated, with whom, and for what purpose?

A number of participants argued that the phrase “psychological and cognitive effects” in the KMG paper’s definition is problematic. These terms were seen as not being very useful because they could mean virtually anything to anybody. Another critique of the definition in the paper was that “effects” are not something we “do” – we do activities and hope that the effects follow.

One syndicate proposed that the more general term “activities” be substituted for “operations” in the term “Influence Operations.” In this context “activities” could include everything from psychological operations to public affairs to the manoeuvring of a tank unit. Another syndicate felt a greater need to specify whether influence operations were intended to target attitudes, intentions, or behaviours.

Approaching the definition from a different angle, influence activities can involve three elements or steps: 1) change, maintain, or enforce an attitude, belief, or will; 2) adopt, follow or desist from a behaviour; 3) follow or desist from a course of action. If only the first two steps are involved, it was hypothesized that this is propaganda activity, more properly a task for the political/diplomatic elements rather than the military.

Further syndicate discussion produced the following refinement of the definition: “Activities primarily intended to have a psychological and/or cognitive effect *upon the will, understanding and/or perception* of an adversary, third party, or ally.”

In this conceptualization, the aim of influence activities is “to get inside the head” of the target, whether that target is an adversary, third party or ally. Accordingly, the phrase “upon the will, understanding and/or perception” was added to the definition to reflect this aim.

The question was then raised whether there is also a need to specify in the definition the broader purpose or context of the activities, i.e., to indicate why the military is bothering to undertake these activities. For example, should one include at the end of the definition the phrase: "...in support of campaign [or, alternatively, strategic] objectives."

It was argued that, in the Canadian context, this is not necessary, as the definition would be integrated into other doctrinal statements, thereby providing the broader context. In the UK experience, such a statement would normally be included to reflect the government's Comprehensive Approach.

This refined definition was then discussed in the context of the Oka crisis, specifically addressing whether (1) the local deployment of artillery, and (2) Gen de Chastelaine's statement that "we cannot not fail," leading to a rapid de-escalation of the crisis, could be considered influence activities consistent with the elements of this definition. It was generally thought that the "fit" of the activities with the definition in this instance was good.

Another syndicate suggested that, perhaps more problematic than finding a precise definition for Influence Operations, is the perception that "influence" is a negative, emotion-laden term, conjuring up images of government propaganda and underhanded manipulation. The question was posed as to whether these perceptions were the result of a disconnect between civil and military society in the West. If so, the question was asked if there was a greater role that Public Affairs should be playing in addressing this disconnect. Furthermore, the issue was raised of how much effort should be placed, when crafting the influencing message, in knowing that it may garner domestic awareness and commentary. In finding a solution to this negative perception issue, it was suggested that research into other options/terms, including a look at other languages' equivalences, should be conducted.

Other Critiques of Influence Operations. It was observed that military doctrine on influence operations was a prisoner of its constituency, i.e., it is doctrine because particular parts of the military community espouse it, and it may lack empirical evidence to support it.

Other Definitions of Influence Operations. It was pointed out that the UK's definition of Influence Operations is based on targeting the adversary's will and understanding. This approach is also supported by an increasing emphasis on media and marketing techniques, and is similar to that proposed in a recent RAND study.⁴⁰³

Problems with Defining the Term "Influence Operations." A key issue that arose in the syndicate discussions was the potential confusion in using the term "influence" because it has been used to refer to ways, means, and/or ends.

⁴⁰³ Kim Cragin and Scott Gerwehr, *Dissuading Terror: Strategic Influence and the Struggle against Terrorism*, (Santa Monica: RAND, 2005).

The definition of “influence operations” may, in one sense, miss the key problem the military currently faces in the theatre of operations: *cultural* intelligence preparation of the battlefield. What the military needs to know is how the people in-theatre perceive the effects of the military’s operations, and, yet this aspect of influence operations has not been fully developed.

Finally, the question was posed whether Influence Operations is actually more of a mindset, than an operation, *per se*?

An Alternative Approach to Defining Influence Operations. Many traditional approaches to defining concepts, in an attempt to clarify terminology, use the idea of a box to draw “hard and fast” boundaries around concepts like Influence Operations. In this traditional approach, the box would incorporate a set of specific influence capabilities. This traditional approach is the one that militaries are inevitably driven towards, because the allocation of budgetary funds among branches of the military and other organizations demands the drawing of boundaries. However, the traditional approach – drawing firm boundaries around a set of activities or capabilities – may not be a helpful way to move forward with our understanding of the concept of influence.

An alternative approach involves not thinking that we have a box at all, but to define the “centre point” of the concept and draw a radius, that changes over time, around it. In this approach, what we want to achieve is what lies at the “centre point” and “activities” then fall within the radius, the more relevant activities lying closer to the centre point. The key to this alternative approach is not to think of a box or even “to think outside the box.”

In the Session 1 plenary session, the following issues were raised:

1. The term “influence” has multiple connotations and the following definitions could help to achieve more precision in understanding the term:
 - a. Ends – an effect or series thereof
 - b. Means – a method to achieve an effect
 - c. Ways – resources to achieve an effect
2. Who determines the political acceptability of influence operations?
3. In influence operations it is important to understand the target of the operations in terms of:
 - a. Attitudes
 - b. Behaviour
 - c. Intention
4. Understanding the target’s culture is an important part of influence operations
5. Are influence activities acceptable in domestic operations?
6. In the definition of “influence operations” in the paper, the definition is confusing because the term “cognitive” has a specific meaning in psychology and is too limiting for the purposes of the definition.
7. Some felt that the criterion of strategic/operational in the definition in the paper too limiting
8. The diagram in the paper needs to highlight the importance of third parties

9. Measures of Effect/Effectiveness are difficult to achieve and their formulation requires careful consideration

Session 2 – CF Information Operations

The aim of the second session was to discuss CF information operations in light of the briefing the workshop received from LCol Hobbes on the state of CF doctrine pertaining to information operations and the related issues. Some of the issues raised included the practicality of measures of effectiveness/measures of performance, policy gaps and the integration of kinetic and non-kinetic activities into operations.

Doctrinal Differences. It was noted that there were a number of different approaches to Influence Operations in Western doctrine. One syndicate recommended that the concept contained in the NATO Coordination Draft version 1.8 be considered as a baseline. The concept, depicted in Figure 2 below, holds that influence activities encompass the actions, be they kinetic or non-kinetic, taken to target the adversary's will or understanding of a situation. In this model, information operations is used as a term to describe the coordination of a series of activities to obtain a specific effect.

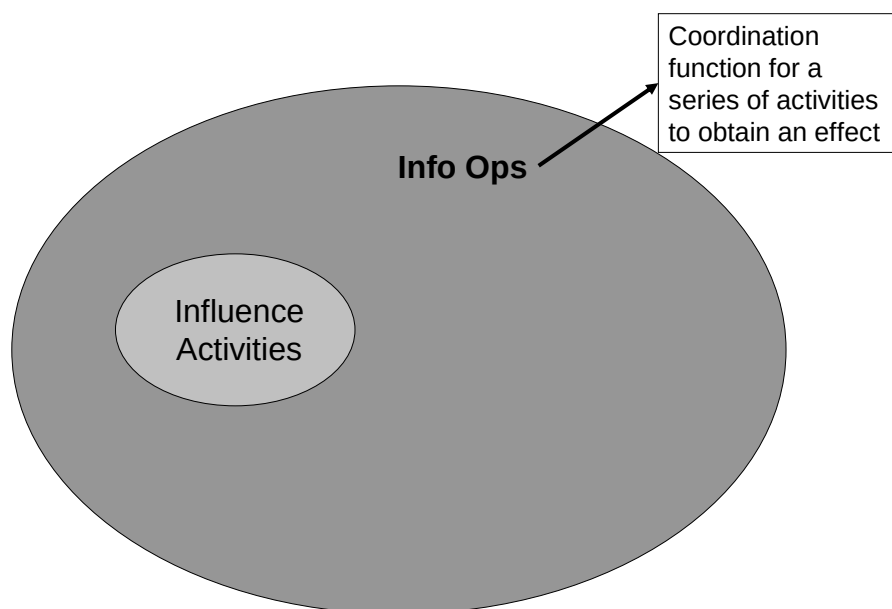


Figure 2: NATO Concept

Despite its provenance as NATO doctrine, this concept, does not reflect the opinions of all western militaries on the matter. For example, the US has a different concept in mind than the other militaries where it differentiates between kinetic effects (described as "Fires") and non-kinetic effects (described as "Influence"). A different approach has

been taken by ABCA which holds that the terms “information operations” and “influence activities” are synonymous. There are dangers with the last two concepts that ought to be considered. First, if one treats all activities as leading to “effects,” then an effects assessment board will cover all activities. This could lead to the concept of information operations withering. Second, the existence of multiple concepts within a number of overlapping multinational military organizations suggests that the issue of terminology is crucial. Any doctrinal concept must be clearly defined, without resorting to tautologies, and fit both the “users” and the target audience of the doctrine.

The issue of integrating both kinetic and non-kinetic activities within the rubric of a single operation was also raised. The discussion of this issue included the consideration of whether or not information operations ought to be an annex to an operations order or part of the main body and how commanders could be advised on information operations. Consensus quickly developed that relegation of information operations to an annex would perpetuate the confusion between information operations as a combination of effects and information operations as a collection of non-kinetic enablers. More discussion followed on how tactical commanders from sub-unit and higher have advisors at hand to assist them with other activities, i.e., artillery advisor, engineer advisor, political advisor, legal advisor, development advisor, etc., but seldom did they have an advisor on information operations. This issue requires more careful consideration, but the commander’s role in integrating both types of activity to achieve specific effects is crucial.

CF Information Operations. It was noted that influence activities have taken on greater importance in the post-Cold War world. During the Cold War competition with the Soviet Union, the concern of the West was to contain tactical and operational activities in order to keep the confrontation from escalating to the strategic level. In the post-Cold War world, however, with the eyes of the media (and the cameras and cell phones of soldiers themselves, e.g., Abu Ghraib) focused on operations in the field, tactical actions increasingly have a strategic impact – the “strategic corporal” problem. This new circumstance has to be taken into account in the planning process.

Given these new circumstances, the question was raised as to how does one train personnel in influence activities. Do we have the means to train in these activities, or is this something that can only be done during course of operations? In its training, the CF tries to replicate the operational environment. For example, at the operational level war-gaming has evolved from the Cold War years in that more non-military people, e.g., psychologists, other government officials, politicians, etc., are brought in to represent the adversary (or Red Team). This is consistent with the “whole of government,” or integrated approach to operations advocated by the CF.

It was also observed that the Provincial Reconstruction Teams (PRTs) – civil-military transition teams – deployed in Afghanistan are influence capabilities unto themselves. Because of the integrated make up of these teams, their various members are pipelines directly to their own organizations in the “whole of government.” This uncoordinated and fragmented reporting networks raises some questions as to where various members of the

PRTs fit into the chain of command. Nevertheless, PRTs are a good indicator of what the future may look like with respect to integrated influence activities.

The importance of language for influence activities was highlighted by one syndicate. The question was posed whether the traditional academic approach to language training was appropriate for current influence activities. The skills such training imparts may be completely wrong for what the corporal needs on the ground. Moreover, there is the problem of anticipating what language skills will be needed over the long term, given that resources for language training are not unlimited. Multicultural countries such as Canada have an advantage, however, in that there is a wide diversity of cultural communities with the requisite language and cultural skills upon which the government may draw.

Given a recurring theme of cultural awareness being key to Influence Ops, a positive aspect of the CF's Reserve focus in this area is the reality that most of the units and personnel involved are from large cities with disparate ethnic communities, where cultural awareness and diversity may not be unusual. While the military members were painfully aware of raising Reserve Restructure issues, in order to exploit this situation it was suggested that greater emphasis be placed on recruiting Info Ops capabilities within urban areas, and that Combat Arms and non-Intelligence Combat Support recruiting be more focused on rural communities.

It was noted that most of the CF's current Influence Ops capability, i.e., the PsyOps and CIMIC capabilities, is embedded within the Reserves. Some wondered if this was the optimal structure given Reservists' limited training time (seen as two-week blocks) and the absence of "modular options" for much of the Info Ops training.

Currently, in the CF, Influence Operations are the purview of the J5 staff. The suggestion was made that Influence Operations should fall under the J3, closely informed by the J2. This suggestion was based on the view that since the J5 was not intimately involved with current operations the J5 was taken less seriously by commanders than other members of their staff because commanders tend to focus on current operations in order to respond to government and media pressures. Given the recognition of importance of Influence Ops some believed that it should migrate to the J3 organization in order to garner appropriate consideration. It was also noted that there is a need for a cultural shift within the senior military ranks with regard to the importance of influence activities for operations. They should not be an "Annex O add-on," but must be an integral part of J3/J5 planning included from the start of the process.

It was suggested that there was a need to coordinate the message being given by the public affairs and the information operations functions. This coordination has been achieved, in part, by the use of the "at a glance" sheet. The sheet is not a comprehensive plan, rather it is a summary of the plan used to task public affairs and info ops personnel, so that each may then go off to "do their own thing" within the framework of an over-arching plan.

More generally, it was felt that there should be a higher level authority coordinating the public affairs national level campaign theme and the info ops military theatre campaign theme to ensure that they are not at odds with each other. The reality, however, is that there are often tensions between the two themes.

Measures of Effect/Effectiveness. The issue of Measures of Effect/Effectiveness (MOE) was first raised in Session 1 and discussion on this topic continued throughout the workshop. The question was raised of whether we were talking about Measures of Effect or Measures of Effectiveness. This question was not resolved by the group.

It was noted that MOEs are necessary for planning influence activities as well as for measuring campaign effectiveness. They are also necessary as a means of demonstrating value for money to senior leaders. In this context, the question was raised if we really know how to do MOE in the context of influence activities? Given the current lack of MOEs for influence activities, is the problem simply one of insufficient resources to gather MOEs? Or is there a gap in our understanding of the concept of MOE in the context of influence activities? This discussion raised the question of what tools we need to do MOE. Do they already exist, making it a matter of selecting the appropriate tools, or do we need to develop other valid tools? Some participants noted that these issues are linked to the Effects Based Approach to Operations.

Related to the discussion of understanding MOEs, was the question of how and when one measures the effects of the activities intended to target the adversary's will and understanding of a situation. While the issue underlying the debate is too complex to address in a short discussion, it did lead to the conclusion that the cultural context of any influence operation is crucial. In practical terms, this meant that not all MOE data could be gathered remotely, and that a certain amount needed to be gathered "on the ground." From a resource perspective, it was noted that every Measure of Effectiveness meant that tactical forces had to gather at least one element of information in the course of their normal, often extremely hectic, duties. This was a warning to collect only the information that was vital as opposed to merely useful.

An issue related to the gathering and interpretation of MOEs was idea that reality is often inferred and seldom shared. Different individuals and organizations will construe events differently, and, within one's own forces, the assessment of any given situation will vary. Third parties and adversaries will see events in a different way again and this leads to the requirement for "red lens" or "red team" activities to understand how an adversary depicts reality. In addition, this problem may require research on how to build an understanding of a complex adaptive system as an environment as well as war being a contest between two complex adaptive systems.

Another issue that was raised focused on when it was best to collect information and the management of expectations of those receiving the information, i.e., some senior leaders expected more precision than was currently possible from MOEs related to influence operations.

In the Session 2 plenary session, the following issues were raised:

1. There are competing doctrinal constructs of information operations and influence operations
2. Any terminology used in doctrine should take both users and the audience into account
3. Measures of Effect/Effectiveness require:
 - a. Realistic time intervals between data collection and analysis
 - b. A credible process (results must be relevant to users)
 - c. Links to EBAO
 - d. Clearly defined tasks for tactical forces
4. The integration of information operations into traditional operations may be difficult to achieve, and may require an information operations advisor to assist Commanders in understanding because Commanders tend to come from operational backgrounds and have little familiarity with information operations
5. Is more training, of not only military personnel but also politicians and civil servants required, to effectively conduct information operations? How do you train all ranks to be better “sensors” for information operations?
6. A gap analysis is required for on key leader engagement activities but it appears that soldiers to have some language and cultural skills to do this activities effectively
7. Should influence operations be assigned to the J2 or J3 staff function?
8. Can information flow faster to Canada to improve on force generation activities?
9. Culture needs to be understood on three levels:
 - a. Own culture
 - b. Day-to-day culture of the operating environment
 - c. Cultural change

Session 3 – Canadian PSYOPS in Afghanistan

The intent of this syndicate session was for each syndicate to identify at least five research questions for the DRDC – Toronto Adversarial Intent Section in light of LCol Vanasse’s presentation on his recent experiences in Kabul and Kandahar and the other presentations and discussions in the Workshop.

The presentation indicated that there was clear dissatisfaction with influence operations in Afghanistan to date, attributed primarily to a lack of awareness by leadership of both the capabilities and the requirements to facilitate those capabilities. While it was noted that “operations were being planned by people who had never met an Afghan or left the camp,” much of the blame was placed upon the CF Lessons Learned system. There were divergent views, however, on what precisely was the problem. Discussion centred on some possible ways to address the current shortcomings in influence operations.

The question was asked if there are different knowledge requirements for commanders, operators, and analysts? If so, what are the differences? When should influence operations be introduced into CF training and education activities.

It was observed that the CF does not have an effective lessons learned capability and that the most active lessons learned capability is the Canadian Army's Lessons Learned system. However, the Army's system appears to be more effective at the tactical than at the strategic level, because this is where the Army's focus of collecting information currently lies (i.e., lessons to improve soldiers' combat effectiveness and survivability). The question was then raised that, with the demise of the Deputy Chief of the Defence Staff Group as the CF's central body for joint lessons learned and joint doctrine with the latest CF transformation initiatives, who should collect information on strategic/operational lessons, and who is adjusting operations accordingly?

A weak link in current operations is in deployed intelligence support for those operations – in both its focus on briefing “peripherally-involved NDHQ staff” as opposed to staffs conducting current operations and in the degree of cultural and operational awareness held by many intelligence personnel. Suggestions to improve deployed intelligence support for current operations ranged from assigning personnel to specialize in focussing on a limited regions through significant periods in their careers, as opposed to the current emphasis on training generalist intelligence personnel, to accepting an extended pre-deployment period (12-18 months), in which language, history, and cultural awareness is acquired through civilian institutions.

Another suggestion to address current shortcomings in influence operations was that the CF may wish to restrict its activities to mainly planning Influence Operations, leaving the majority of the execution of operations to the local citizens, as they would be more credible messengers. In this context by T.E. Lawrence noted that “it is better that they do it badly, than we do it perfectly.”

In the Session 3 plenary session, the following issues were raised:

1. A clear conceptual framework for information operations, complete with accepted terminology, is needed
2. What kinds of tools or organizations are required for such as influence operations and deception?
3. Suitable measures of effects/effectiveness tools to support information operations
4. A Target Audience Analysis framework is required
5. Information operations assets are frequently misused because they are misunderstood (see point 4 from plenary Session 2)
6. Cultural awareness and training are required for influence operations conducted as part of counterinsurgency operations
7. There is a need to better understand the media's role as they affect domestic perceptions of influence operations

8. There is a requirement to create campaign design tools that incorporate influence operations explicitly and more completely than is currently the case with existing tools
9. New campaign design tools should be able to model the adversary “system”

Future Research on Information Operations

In the final session, the group considered possible questions/tasks for future research based on the state of the scientific literature on influence operations.

State of the Scientific Literature on Information Operations. It was noted that context is lacking in much of the research on military influence operations. Most authors focus on demonstrable scientific (what some termed “sterile”) research, with no concept of applicability to real-world operations. Extant Western cultural studies do not address the issue of universality of principles, and are therefore of limited or questionable value in considering what may influence a non-Western audience. It was argued that there is a requirement to research what techniques are working for various adversaries’ influence operations in order to produce a counter-campaign, or at least to minimize the effectiveness of their campaign.

The following issues related to the scientific literature and future research on influence operations were raised:

1. In researching the relationship between perceptions and attitudes a number of variables are at work that complicate the situation
2. Some participants emphasized the need to provide operationally relevant scientific support through an understanding of the operational context, including focused research on decision-making in contexts and influence through others as well as the influence of others.
3. The possible relevance of social marketing/recruiting practices to influence operations, as described in the scientific literature, was raised
4. The existence of inconsistent concepts and the application of them in the field of influence operations was detrimental to research efforts
5. From a research perspective, Zimbardo’s model suggests a holistic/experimental view of the world as opposed to a rational/deconstructionist view
6. When framing research questions, one must be clear as to the purpose of the research: is it to understand better a gap in capabilities, or is it to develop ways to close the gap?
7. Influence should be seen as a dynamic process, for example, not only does the CF conduct influence operations outside of Canada but the CF is influenced by its experiences in such places as Afghanistan.

Research Questions. The following research questions were suggested by the participants in plenary session:

Syndicate 1

1. Can a clearer influence operations conceptual framework be developed to inform subsequent policy and doctrine development? The framework must include clear and comprehensible terminology that is not tautological.
2. What kinds of tools or organizations are required for influence operations? Do we adapt existing tools and organizations or do we start from first principles?
3. What kinds of tools or organizations are required for deception? Do we adapt existing tools and organizations or do we start from first principles?
4. Are there suitable and standardized measures of effectiveness that are universal? If so, could a template be developed to save time and effort in future operations? Are there better tools to support the measurement of effects?
5. Could the Target Audience Analysis framework be revisited to make the process simpler?

Syndicate 2

1. Can the misuse of information operations assets be addressed? What solutions are there to this issue, i.e. structural, doctrinal, procedural, training?
2. How can a force develop a COIN [counterinsurgency] mindset? Does this require experience or can a suitable training environment provide the necessary experiences? How does one develop a sense of cultural awareness without experiencing the culture first hand?
3. Can a better understanding of the media's role on affecting domestic issues be developed and addressed through doctrine?
4. What cultural competency training is required to make every soldier an appropriate sensor? What is required to make analysts more effective?
5. Could a Target Audience Analysis framework be the foundation for a deeper understanding of an adversary or ourselves?

Syndicate 3

1. Could the terminology surrounding influence operations and information operations be clarified with a view to conceptual coherency?
2. Could a gap analysis on the conduct of key leader engagements be undertaken?
3. Are there high-level influence activities distinct from lower-level activities? Could this question be considered along the same lines as the levels of war?
4. Could campaign design tools be created to support the implementation of influence concepts in operations?
5. Can one model an adversary "system" in order to improve the understanding of adversary behaviour?
6. Can one template measures of effectiveness so as to have a "start state" for every operation?

These other research questions were also raised during the workshop.

Cultural Intelligence Preparation of the Battlefield (CIPB). The research task would be to develop a methodology, which applies irrespective of geographic area, to understand cultural nuances in order to create the capabilities to succeed in an area and predict effects. Understanding the gap in our knowledge, we must then develop tools for conducting CIPB.

Key Leader Engagement (KLE). What do we want to do in KLE, and what is our ability to conduct KLE? How do others do it; and what can we learn from non-military KLE?

Campaign Design Tools. Do we understand the lines of operations in influence activities? How are influence activities articulated in campaign design tools? In these tools, all elements of national power must come together in a comprehensive, whole-of-government approach.

How should influence activities be planned and coordinated with non-influence activities?

Is there a way of establishing how to address the “quick hits”? How does one get to know the situation (political, military, economic, societal, informational and institutional) so that one can make informed decisions on actions? This is a means of rephrasing how to shorten the intelligence to operations cycle.

What is the importance of and relationships to the Canadian military culture and the target audiences?

What is the relationship between international military effort and civil societies and how does it differ among nations?

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(U) This report was written to support research by Defence Research and Development Canada (DRDC) Toronto designed to enhance the ability of the Canadian Forces (CF) to plan, implement, and evaluate "influence" campaigns in future expeditionary operations. It contributes to a one-year scoping study that is being conducted to better define the CF's requirements for further research in this area. The report is based on a review of relevant academic disciplines and provides a broad, representative coverage of the area of investigation by clarifying the range of influence activities and providing a classification scheme for those activities. Canadian approaches to influence operations in the last half of the 20th century and the early years of the 21st are a particular focus of this work. Concluding material includes findings on multi-agency planning in the contemporary environment and suggestions for future research in the area of influence operations.

(U) Le présent rapport a été rédigé pour appuyer les recherches que fait Recherche et développement pour la défense Canada (RDDC) Toronto pour améliorer la capacité de planification, de mise en œuvre et d'évaluation des campagnes d'« influence » des Forces canadiennes (FC) au cours des futures opérations expéditionnaires. Il contribue à une étude de délimitation d'un an qui permettra de mieux définir la nécessité pour les FC de poursuivre les recherches dans ce domaine. Le rapport est fondé sur un examen des disciplines pertinentes et offre une couverture large et représentative du champ de l'enquête en précisant l'étendue des activités d'influence et en fournissant un plan de classification de ces activités. La façon d'aborder les opérations d'influence qu'a utilisée le Canada au cours de la dernière moitié du XXe siècle et au début du XXIe siècle met tout particulièrement l'accent sur ces travaux. La conclusion comprend des résultats de la planification multi-organismes dans l'environnement contemporain et des propositions concernant les recherches futures dans le domaine des opérations d'influence.

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(U) influence, perception, effect, choice, control

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