

Leveraging Logical Lines of Operation in COIN

**A Monograph
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Abstract

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Historically, the U.S. Army faces numerous challenges planning for counterinsurgency (COIN) operations. Insurgencies by their very nature occur within the context of a complex operating environment that typically last years if not decades. The insurgency that erupted at the conclusion of major combat operations in Operation Iraqi Freedom represents an example of the complex operating environment that planners will continue to face in the future.

The best available planning method for operational planners to frame operations over the duration of a protracted campaign is called logical lines of operation. Logical lines of operation provide a method for commanders to visualize and adjust operations over time, space and purpose to contribute to operational objectives and strategic end-state(s). This monograph analyzes the theoretical and historical underpinnings of lines of operation (physical and logical) as well as counterinsurgency operations. Subsequently, an analysis and assessment of both U.S. and British planning and counterinsurgency doctrine provides a look at the effectiveness of current doctrine in addressing the use of logical lines of operation in the complex operating environment. Case studies are analyzed to examine the practical application of logical lines of operation in COIN operations and subsequently determine whether the concept informs current doctrine.

The monograph argues that a void exists in both U.S. Army and Joint doctrine with respect to the use of logical lines of operation—particularly with respect to planning COIN operations within protracted campaigns. Consequently, the monograph makes the following recommendations to improve the description and depiction of logical lines of operation in U.S. Joint and Army planning and counterinsurgency doctrine. First, “operationalize” counterinsurgency doctrine by including logical lines of operation as a planning framework. Second, clarify language and terminology across current joint and army doctrine, which features the effects based approach to operational design. Third, clearly differentiate between national insurgency (insurgency during Foreign Internal Defense (FID)) and liberation insurgency (insurgency during state building similar to the operating environment in Iraq). Doctrine minimizes the importance of COIN by nesting the operation as a subset of stability operations and FID. Finally, doctrine should provide conceptual examples of logical lines at each level of war to emphasize unity of effort at the theater strategic and operational level. The analysis, assessment, and recommendations in this monograph inform existing doctrine and bring to light the importance of conceptualizing long-term solutions to the problem of regional and global insurgency.

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CHAPTER 1: INTRODUCTION

Stability operations will require a combination of detailed situational understanding; a coercive posture against obstructionists; unified direction from legitimate civil authority; integrated, multi-agency unity of purpose and coherency of action; sophisticated media operations; organizational endurance; and sufficient popular support over time in order to facilitate the transition to legitimate local governance and reduce the likelihood of the reemergence of destabilizing elements.

-Joint Operations Concept for Stability Operations¹

The Challenge of “Winning the Peace”

During the 2004-05 academic school year at the Command and General Staff College, numerous tactical and operational level commanders visited to discuss the planning challenges presented by the contemporary operating environment (COE) of Iraq. A common theme across each of the presentations was a discussion of one of the elements of operational design called lines of operation.² The depictions of the lines of operation were specific to that individual commander which appeared to originate from differing interpretation(s) of available doctrine—or an inadequate amount of useful doctrine. The commander(s) and subordinate staff planners clearly depended on the concept to facilitate battle command and visualize the operational environment. However, this is where the commonality between discussions typically ended. The application of lines of operation varied significantly depending on the unit and specific situation. Consequently, it was difficult to discern the horizontal linkage across rotational units and the corresponding vertical linkage to a strategic end-state.

¹ Department of Defense, *Joint Operations Concept for Stability Operations*, (Washington: GPO, 9 September 2004), Section 3, 31-47.

² Field Manual 3-0, *Operations*, (Headquarters, Department of the Army, Washington: GPO, June 2001), 5-6 to 5-12. Lines of operation represents one the elements. The remaining elements include end state and military conditions, center of gravity, decisive points and objectives, culminating point, operational reach, approach, and pauses, simultaneous and sequential operations, linear and nonlinear operations, and tempo.

The U.S. Army's 1st Cavalry Division represents one of the organizations that faced the challenges of "winning the peace" while fighting a robust counterinsurgency operation during Operation Iraqi Freedom 2 (OIF-2). Major General Peter Chiarelli, the Commanding General of 1CD, echoed his concerns with the challenge of planning a coherent campaign that would enable the National Command Authorities strategic end-state for Iraq. One of the main prohibitions to this objective was overcoming the conventional mindset of the division in order to set the conditions for the population in Baghdad to enjoy a relatively secure and stable lifestyle. To accomplish this in a planning construct, MG Chiarelli's planners developed a series of lines of operation to address not only military operations, but more importantly, the civil operations (political, economic, and social) required to set the conditions outlined in his intent.³ The planning framework reinforced the utility of the concept and provides a great example of how logical lines of operations can facilitate operational planning and visualization in the counterinsurgency environment.

Planners use elements of operational design as an intellectual framework to develop sound courses of action. The current operational design construct featured in the U.S. Army's capstone manual, FM 3-0, *Operations*, and other doctrinal sources arose from a mixture of theory, history, and practice grounded in the theory of operational art. The primary elements in this design included center of gravity, decisive points, and lines of operation.⁴ There are several alternative approaches to operational design resonating throughout military literature and doctrine including examples such as effects-based approach, systems theory, and critical vulnerabilities. Within this context, the element of operational design that facilitates planning across the full spectrum of operations to include counterinsurgency is the concept of logical lines of operation. Although the scope of this monograph does not address operational design in detail, the perceived

³ Peter Chiarelli and Patrick R. Michaelis, "Winning the Peace: The Requirement for Full-Spectrum Operations," (*Military Review*, July-August 2005), 1-7.

⁴ James Greer, "Operational Art for the Objective Force," (*Military Review*, September-October 2002), 1-5.

requirement for alternatives influences the use of the concept of logical lines and will require elaboration in Chapters 2 and 3.

Recent military doctrine introduced a derivation of this concept called “logical” lines of operation. FM 3-0 defines the term in the following passage:

When positional reference to an enemy or adversary has little relevance, commanders may visualize the operation along logical lines. ***This situation is common in stability operations and support operations.*** Commanders link multiple objectives and actions with the logic of purpose—cause and effect. In a linkage between objectives and forces, only the logical linkage of lines and operations may be evident. Multiple and complementary lines of operations work through a series of objectives. Commanders synchronize activities along multiple lines of operation to achieve the desired end state. Logical lines of operations also help commanders visualize how military means can support nonmilitary instruments of national power.⁵[*emphasis added*]

The definition proves helpful, however, the manual does not expound on the definition and the lack of detail prevails across both Joint and Army doctrine. Logical lines of operation assist the planner and the commander in conceptualizing the complexity of the full spectrum contemporary operating environment. Despite the clear utility of logical lines of operation for the operational planner, there is a void in both Joint and Army doctrine with respect to the planning and application of logical lines of operation at all levels of war—specifically the operational level. This void coupled with conflicting descriptions and definitions in doctrine combined with the various approaches to operational design can be problematic for planners at all levels—particularly the operational planner. Subsequent analysis of doctrine reveals deficiencies and omissions in the development and management of logical lines of operation. For example, the 2001 publication of FM 3-07, *Stability and Support Operations*, does not address logical lines of operation despite the doctrinal requirement generated by full spectrum operations.⁶

⁵ Field Manual 3-0, *Operations*, (Headquarters, Department of the Army, Washington: GPO, June 2001), 5-9.

⁶ FM (Interim) 3-07.22, *Counterinsurgency Operations*, (Headquarters, Department of the Army, Washington: GPO, October 2004). The manual provides a brief discussion of logical lines of operation that essentially repeats the definition found in FM 3-0, *Operations*.

This monograph serves a two-fold purpose. First, it provides an analysis and assessment of theory and history behind logical lines of operation to determine the doctrinal requirement for planning and managing operations within the context of the counterinsurgency environment. Second, it provides the operational planner with an analysis and assessment of the practical application of logical lines of operation to determine the whether a void exists in current doctrine. Critical Joint and U.S. Army planning, operational, and counterinsurgency doctrine does not adequately address logical lines of operation.

Definition of Key Terms

Emerging doctrine combined with numerous interpretations of different terminology used throughout the discussion requires contextual explanation. Several definitions of the operating environment associated with stability and counterinsurgency operations exist. For the purposes of this monograph, the contemporary operating environment refers to the complexity of the current operating environment characterized by asymmetric threats that involve a combination of lethal (conventional and guerrilla) and non-lethal (political, psychological, informational, etc.) means to achieve political strategic objectives.⁷

Complexity and insurgent activity characterizes the contemporary operating environment. According to FM 3-07, an insurgency “is an organized movement aimed at the overthrow of a constituted government through the use of subversion and armed conflict.”⁸ This definition, however, requires some additional qualifiers. First, not all insurrections attempt to overthrow a constituted government. For example, the Iraqi constitution awaits final approval at the time of

⁷ The US Army Training and Doctrine Command (TRADOC) defines the COE as “the overall operational environment that exists today and in the near future...The range of threats during this period extends from smaller, lower-technology opponents using more adaptive, asymmetric methods to larger, modernized forces able to engage deployed U.S. forces in more conventional, symmetrical ways. In some possible conflicts, (or in multiple, concurrent conflicts), a combination of these types of threats could be especially problematic.”

⁸ FM 3-07, *Stability and Support Operations*, (Headquarters, Department of the Army, Washington: GPO, February 2002), 3-3.

this writing, yet a full-blown insurgency has occurred for the last 24 months. Second, an organized movement conveys that there is unity of effort and common purpose across an insurgency. This is not necessarily true, since not all insurgencies (al Qaeda and Sunni extremists in Iraq, for example) have the same political agenda. Therefore, the use of the term insurgent will not differentiate between terrorist and guerrilla tactics unless otherwise specified. With the definition of insurgency established, we can simply define counterinsurgency as those military, paramilitary, political, economic, psychological, and civic actions taken by a government *or occupying force* to defeat insurgency [*emphasis added*].⁹

Military doctrine, theory, and planning will be referred to throughout the monograph and therefore require definition. Military doctrine is defined as “authoritative guidance of how to employ existing or soon to be fielded capabilities or organizations.”¹⁰ Concept, on the other hand, refers to an idea or notion of how something might be done¹¹. Therefore, references to logical lines of operations as a concept describes its utility as a framework for conceptualization and visualization of the environment. Military theory, on the other hand, is a reliable system of beliefs about the nature of conflict or war that is professionally justified (either by soldiers or civilians), but not necessarily doctrinal.¹² Theory and doctrine represent two critical sources that the planner draws from when planning operations and campaigns. Consequently, planning is a “formalized procedure to produce an articulated result, in the form of an integrated system of decisions.”¹³ Planning in a military context is the sequencing of actions in time, space, and purpose to accomplish assigned goals or objectives. With respect to the complex operating

⁹ Ibid., 3-3.

¹⁰ William J. Gregor, *The Relationship Between Joint Doctrine Development and Service DTLOSM*, information paper dated 30 June 2003, 5.

¹¹ Ibid.

¹² James J. Schneider, *How War Works: The Origins and Purpose of Military Theory*, (Fort Leavenworth, KS: US Army Command and General Staff College School of Advanced Military Studies, 16 June 2001), 9.

¹³ Henry Mintzberg, *The Rise and Fall of Strategic Planning*, (New York: The Free Press, 1994), 12.

environment, planning is “a means of reducing external complexity to manageable forms.”¹⁴

Operational level planners develop plans for major operations and campaigns that link tactical actions to the strategic level objectives.¹⁵

Methodology and Organization

The primary method used to analyze the research question and determine the validity of the hypothesis will be case study analysis and comparison. Assessments and conclusions are made within the structure of each major section. The second chapter addresses the historical and theoretical foundations of lines of operation and counterinsurgency. The evolution of counterinsurgency theory establishes the importance of operational planning and analyzes the linkage between logical lines of operation and counterinsurgency doctrine. The chapter also briefly examines complexity theory to facilitate the discussion of logical lines of operation in the context of planning within the COE.

Chapter 3 examines contemporary planning, operational and counterinsurgency doctrine to determine if it satisfies the requirement for logical lines of operations. Additionally, analysis of British doctrine provides a useful comparison to inform U.S. doctrine with respect to logical lines of operation and counterinsurgency operations. The British Army was selected due to their extensive experience in stability operations fighting insurgencies. After the examination of pertinent doctrine, two case studies will be analyzed to determine if available doctrine adequately informs the practical application of logical lines of operation in the contemporary operating environment. The case studies include British operations in the Malayan Emergency and 1st Cavalry Division operations in OIF-2. Additional sources for this assessment will include journals, after action reports from the Center for Army Lessons Learned (CALL), and interviews with U.S. and British Officers. Criteria were identified to help test the application of logical lines

¹⁴ Ibid., 348.

¹⁵ FM 5-0, *Army Planning and Orders Production*, (Headquarters, Department of the Army, Washington: GPO, January, 2005), 1-7.

of operation (or similar design concept) in each case study. The criteria were derived from a variety of sources including commander's comments, doctrine, and practical applications in current operations. The criteria include the following: influencing the population, decision-making, measuring effectiveness, and managing operational risk. Finally, Chapter 4 summarizes the conclusions and makes recommendations for future doctrine.

Scope

The monograph focuses on the use of logical lines of operation within U.S. Army and Joint doctrine as it relates to planning and decision-making in counterinsurgency operations. Current doctrine refers to "physical" and "logical" lines of operation. References to lines of operation will be logical, unless specified in the discourse. Select joint doctrinal manuals will be referenced, however, emphasis was placed on doctrine that would allow an Army operational planner to succeed in the complexity of the contemporary operating environment.

This paper primarily addresses counterinsurgency within the context of stability operations due to the U.S. Army's well-documented challenges with insurgency. Furthermore, this monograph suggests that logical lines of operation provide the best and most versatile methodology for framing, visualizing, and measuring the effectiveness of counterinsurgency operations. Consequently, the case studies selected feature counterinsurgency operations from historical (British in Malaya) and contemporary (OIF) examples. Information on U.S. Army operations in OIF was substantive and readily available. Study of British operations in OIF, on the other hand, proved problematic due to classification and limited source availability. Therefore, Malaya was selected for two reasons. First, the successful counterinsurgency strategy implemented in Malaya reveals a planning framework similar to contemporary doctrine's depiction of logical lines of operation. Second, Malayan operations provided a foundation for the past, present, and future of counterinsurgency doctrine. Information was drawn from several

sources on Malaya merged with contemporary doctrine and perspectives from British officers with OIF experience.

Conclusion

Logical lines of operation provide an invaluable construct for the planning and execution of counterinsurgency within context of stability operations. The analysis and assessment found within the monograph examines whether or not doctrine adequately addresses logical lines of operation. This examination intends to inform emerging doctrine as the United States Army transforms to face the complexity of the future operating environment.

CHAPTER 2: THE EVOLUTION OF LOGICAL LINES

One cannot understand the theory and practice of counterinsurgency warfare without understanding the socio-political-economic intricacies of the “cause” which insurgents use to mobilize support.

-Robert Tomes¹⁶

Introduction

Lines of operation manifested as a concept primarily during Napoleonic Campaigns in the late 18th and early 19th Century. Today, the concept continues to receive the attention of planners as a way to depict the geographic linkage between a base of operations and the operational objectives in a theater of war. Logical lines of operation, however, do not benefit from over two hundred years of theorizing and practice that its theoretical predecessor has enjoyed. The concept was not formally introduced into doctrine until the 2001 version of FM 3-0, *Operations*.¹⁷ The question arises, how did logical lines of operation evolve from geographic lines of operation? Furthermore, how do logical lines of operation fit into counterinsurgency strategy? Most importantly, why do we even need the concept in the first place?

The answer to these questions requires an examination of the historical and theoretical origin of lines of operation and counterinsurgency strategy. Since planning and execution of these two concepts occurs in a complex operating environment, a brief examination of complexity theory will be made in order to reinforce the need for logical lines of operation within military doctrine. Additionally, an introduction to the criteria selected for the case study methodology in Chapter 3 of this monograph provides the groundwork for doctrinal analysis and comparison. Finally, conclusions are drawn to set the baseline for the analysis of current doctrine with respect to the utility of logical lines of operation in counterinsurgency.

¹⁶ Robert Tomes, “Relearning Counterinsurgency Warfare,” (*Parameters*, Spring, 2004), 21.

¹⁷ FM 3-0, 5-9.

Complexity in the COE

Complexity represents an often used but somewhat misunderstood term to describe conditions in the COE. It is all too easy to introduce complexity in a discussion of stability operations, for example, without understanding the theoretical context of the term. Often, military tacticians and planners use terms like complicated and complex. However, the two ideas are very different in meaning and context. Numerous situations in military operations are complicated such as the deliberate breach of an obstacle belt, for example. The primary difference between the two terms, however, is that complicated problems are easily broken down into sub-components for better understanding. Complexity, on the other hand, cannot be easily reduced to sub components due to the numerous interactions and relationships found within that environment. Fortunately, theory provides a foundation that assists in the description of complexity and the nature of the stability environment. Successfully understanding why the environment is complex and the variables that contribute to instability are critical for the planner. Therefore, a brief examination of complexity theory promotes understanding of the operating environment where instability exists and insurgencies thrive.

In simple terms, complexity describes the existence of numerous variables within the COE. Complexity theory in the context of the operational environment attempts to explain the dynamics and interaction of systems within that environment.¹⁸ In his book entitled *Harnessing Complexity: Organizational Implications of the Scientific Frontier*, Robert Axelrod provides insight into complexity and understanding the COE. Axelrod defines a system as complex when

¹⁸ William T. Sorrells, et. al., *Systemic Operational Design: An Introduction*, (Fort Leavenworth, KS: School of Advanced Military Studies, 2005), 55-74. This monograph provides a detailed discussion on a planning framework called Systemic Operational Design (SOD). SOD uses complexity theory that is based on the merging of systems and chaos theory. Systems theory describes how systems interact with their surroundings and create second and third order effects on the systems. The importance of this theory is that if we consider that a threat or threats in the COE is a system, then defeating an that system is difficult to achieve due to the ability of the threat to adapt. Chaos Theory attempts to predict outcomes within a non-linear system. In a military context, chaos theory attempts to provide the planner with a way to predict what the threat and the conditions that will be present in the future. The following section provides SOD as a potential alternative to lines of operation.

there are strong interactions between its elements, so that current events heavily influence the probabilities of many kinds of later events. When a system contains agents and populations that seek to adapt, Axelrod calls it a complex adaptive system (CAS).¹⁹ Dietrich Dorner offers a similar perspective on the dynamics of complexity in his aptly named book entitled *The Logic of Failure*. Dorner describes complexity as the “existence of many interdependent variables in a given system...complexity places high demands on a planner’s capacities to gather information, integrate findings, and design effective actions.”²⁰ Consequently, the planner must contend with the numerous complex adaptive systems found in this environment.

Complexity theory focuses on the interaction of agents within a population and more importantly, how those agents adapt over time. An insurgent organization is a concrete example of a complex adaptive system within a given population. The insurgency in Iraq, for example, continues to develop, organize, and ultimately learn over time.²¹ Military planners use available concepts like logical lines of operation to assist them in framing the interaction of various systems and provide a method for analyzing progress. In an article by Michael Weeks, he discusses ways to model complex adaptive systems. Logical lines of operation provide a way to help the planner ‘model’ and adapt to the complex dynamics of the counterinsurgency environment.²²

¹⁹ Robert Axelrod and Michael D. Cohen, *Harnessing Complexity: Organizational Implications of a Scientific Frontier*, (New York: Basic Books, 2000), 7. This book provides further discussions on the interaction of systems within a complex environment, how those systems adapt, and the potential points to intervene within that system to facilitate control of the system.

²⁰ Dietrich Dorner, *The Logic of Failure*, (Germany: Rowohlt Verlag GMBH, 1989 under the title *Die Logik des Misslingens*; (New York: Metropolitan Books, 1996), 38.

²¹ Bruce Hoffman, *Insurgency and Counterinsurgency in Iraq*, (Santa Monica, CA: Rand Corporation, June, 2004), 6.

²² Michael Weeks, “Chaos, Complexity, and Conflict”, *Air and Space Power Chronicles-Chronicles Online Journal*, 16 July 2001; available online at <http://www.airpower.maxwell.af.mil/airchronicles/cc/Weeks.html>, accessed 11 October 2005, 6.

Fastest way to the insurgent—Influencing Hearts and Minds

Before discussing logical lines of operation within the context of counterinsurgency, an examination of counterinsurgency theory itself is required. The demise of the Cold War combined with the rise of asymmetric threats similar to the insurgency in Iraq placed a renewed emphasis on an old threat. Insurgency (to include all types of asymmetric tactics such as terrorism and guerrilla warfare) as a form of warfare has existed for thousands of years. Consequently, insurgency represents one of the “most prevalent types of armed conflict since the creation of organized political communities.”²³ These political communities evolved into states governed by various forms of political ideologies. The attempts by these governments to defeat the various insurgencies over time resulted in extensive lessons learned along with numerous tactical innovations. The practice of fighting insurgencies forms the basis for counterinsurgency theory.

The formalization of counterinsurgency theory in a practical construct, however, is a relatively recent phenomena that manifested in the middle part of the 20th Century. Despite the U.S. Army and Marine Corps attempts to fight ‘small wars’ throughout the 19th and early 20th Century, doctrine received limited attention with the notable exception of the *Small Wars Manual* published in 1940.²⁴ The manual represents a staunch effort to capture lessons learned from the Marine Corps counterinsurgency experiences, however, culture combined with conventional mindsets degraded thinking on the threat of insurgency to vital U.S. interests. Another factor promulgating the problem is the recurring failure to properly educate our military professionals in unconventional operations. According to John Waghelstein in his book *Preparing for the Wrong War, The United States Army and Low Intensity Conflict, 1755-1890*, “the lack of intellectual and

²³ Bard O’Neill, *Insurgency and Terrorism: Inside Modern Revolutionary Warfare*, (Dulles, VA: Brassey’s Inc., 1990), 1.

²⁴ Steven Metz, “Small Wars: From Low Intensity Conflict to Irregular Challenges” in *Rethinking the Principles of War*, Anthony D. McIvor, Editor, (Annapolis, MD: Naval Institute Press, 2005), 281. Small Wars refers to guerrilla and irregular warfare. The Small Wars Manual still provides a solid reference of proven tactics for contemporary counterinsurgency operations

doctrinal preparedness of the regular forces at the start of a conflict is one of the many fascinating aspects of our history.”²⁵ Waghelstein continues,

Despite the American Army’s extensive experience in guerrilla warfare, it ignores the subject. This doctrinal and educational omission meant that each time the United States Army was called upon to deal with (irregular warfare), the previous lessons had to be relearned often with painful results.²⁶

Fighting insurgency was considered less important than the conventional Army focus on the potential for war with the former Soviet Union. Waghelstein reinforces this point by stating, “the American Army has focused on conventional warfare from its beginning, and particularly since the Civil War, that focus has been on a nearly unique brand of total war.”²⁷ His comments also highlight the problem with the lack of unconventional doctrine to assist planners with solutions for long-term, protracted campaigns.

The Vietnam experience of the 1960’s also exposed the U.S. Army’s lack of preparedness for asymmetric warfare and counterinsurgency operations. The failure to develop viable theoretical constructs to form the basis of successful counterinsurgency doctrine originated from several factors including the failure to adapt to the changing environment.²⁸ This intellectual failure was questioned to the extent that an operations officer returning from a recent deployment to Iraq thought that the United States essentially stopped thinking about counterinsurgency from 1975 to the end of major combat operations in OIF during 2003. The source of the comment, LTC John Nagl, thought the problem significant enough to write a book on the subject called *Counterinsurgency Lessons from Malaya to Vietnam: Learning to Eat Soup with a Knife*. Nagl reinforces this point by stating that, the U.S. Army “preferred to fight the

²⁵ John Waghelstein, *Preparing for the Wrong War: The United States Army and Low Intensity Conflict, 1755-1890*. (Ann Arbor, Michigan: University Microfilms International, 1990), 17.

²⁶ *Ibid.*, 6.

²⁷ *Ibid.*, 7.

²⁸ John Nagl, *Counterinsurgency Lessons from Malaya and Vietnam: Learning to Eat Soup with a Knife*, (Westport, CT: Praeger Publisher, 2002), xiv.

(Vietnam) war as a conventional conflict in the tradition of the Korean War and World War II.”²⁹ Nagl provides a contemporary theoretical analysis of U.S. counterinsurgency in Vietnam along with an historical case study of the successful British Campaign in Malaysia. He provides a conventional warfighting theory to describe approaches to counterinsurgency, which he defines as the indirect (gaining popular support) and direct (attrition) approach.³⁰ ICD experience in OIF-2 reveals the challenge of balancing traditional combat operations with “non-traditional” operations like promoting governance and improving the economy. Another contemporary theorist, Andrew Krepinevich, echoes the notion of popular support emphasized by a majority of COIN theorists when he states that “(counterinsurgents) should concentrate on providing security and opportunity to the Iraqi people, thereby denying insurgents the popular support they need.”³¹

Despite the conventional focus of the U.S. military, militaries of other nations such as France and Britain displayed surges of intellectual energy toward counterinsurgency theory. French Army experience fighting insurgency in Indochina and other areas provided invaluable contributions to modern counterinsurgency theory and doctrine. David Galula, author of the book *Counterinsurgency Warfare: Theory and Practice*, provided a strategy to fight an insurgency based on his vast experiences in China, Greece, Southeast Asia, and Algeria.³² Galula recognized that military solutions represented only a small aspect of counterinsurgency. Other more critical domains required significant attention including the political, social and economic conditions within the country. Within this context, the ultimate success of the counterinsurgency effort depends on the support of the civilian population. According to Galula, the strategic problem of the counterinsurgent depends on “[finding] the favorable minority, to organize it in order to mobilize the population against the insurgent minority...every operation, whether in the military

²⁹ Ibid., xiv

³⁰ Ibid., 27.

³¹ Andrew F. Krepinevich, “How to Win in Iraq,” (*Foreign Affairs*, September-October 2005), 2.

³² David Galula, *Counterinsurgency Warfare: Theory and Practice*, (New York: Frederick A. Praeger, 1964). Chapter 7 lays out the eight-step counterinsurgency strategy.

field or in the social, political, economic, and psychological fields, must be geared to that end.”³³

Consequently, the key to long-term success not only lies in the isolation and defeat of the insurgent, but the creation and sustainment of stability within those areas that the insurgent operates.³⁴

The importance of focusing on the civilian population through political, social, and economic means combined with military operations resonates across counterinsurgency theory. Roger Trinquier, a French contemporary of Galula, reinforces this point by stating “the allegiance of the civilian population becomes one of the most vital objectives of the whole struggle.”³⁵ Bard O’Neill also provides similar perspective on counterinsurgency theory that places primacy on the object of the population. Similar to Galula, O’Neill provides a theoretical framework based on principles to assist in the analysis of insurgencies, which subsequently helps shape counterinsurgency strategy.³⁶

Lines of Operations: From Napoleon to Baghdad

The operating environment that spawned the original concept of lines of operation was far removed from the complexity of today’s COE. The concept was used in a purely geographic context characterized by the conventional battlefields of the 18th and 19th Century where massive armies maneuvered to meet in decisive battle. Several theorists mention the concept of lines of operation during this period. However, the writings of a Swiss born officer named Antoine-Henri Jomini made the idea a principle for the ages.³⁷

³³ Ibid., 77.

³⁴ Ibid., 8, 70-72, and 77.

³⁵ Roger Trinquier, *Modern Warfare: A French View of Counterinsurgency*, (Fort Leavenworth, KS: Combat Studies Institute, 1985), 8.

³⁶ Bard O’Neill, *Insurgency and Terrorism: Inside Modern Revolutionary Warfare*, (Virginia: Brassey’s Inc., 1990), 12.

³⁷ Mario A. Diaz, *Prosperity or Perdition: Do Lines of Operation Apply in Stability Operations*, (Fort Leavenworth, KS: School for Advanced Military Studies, 2003), 8. For additional information on theoretical insights into logical lines of operation, Diaz credits two other military theorists (Henry Lloyd

Jomini was born in 1779 just a decade before the start of the French Revolution. Dissatisfied with his fledgling career as a banker, Jomini decided to join Napoleon's Army in 1798. After a three-year break in service where he started to write about the campaigns of Frederick the Great, Jomini fought in several campaigns under Napoleon. In 1813, he decided to join the Russian Army, subsequently dedicating the rest of his life to the study of war and the scientific "principles" for warfare practitioners. Despite the popularity of another well-known contemporary of Jomini named Carl von Clausewitz, Jomini is still recognized by some military historians as the "founder of modern strategy."³⁸

Lines of operation represent one of the concepts that Jomini conveyed to reduce warfare within a theater of operation to a series of principles. Jomini captures the essence of lines of operation when he states that "each theater must have its own base, its own objective point, its zones and lines of operation connecting the objective point with the base, either in the offensive or the defensive."³⁹ In other words, Jomini used lines of operation to describe the geographic relationship between an army's base of operations and the ultimate object of that force which typically involved a decisive battle with an opposing army. Jomini discusses several other types of lines of operation in his discourse.⁴⁰ However, it is this basic theory based on interior and exterior lines (see Fig. 1) that led to the recent codification of the concept in current doctrine.

(1720-1783) and Heinrich Dietrich von Bulow (1757-1807) with the concept of lines of operation. However, Jomini provides the most detailed description of lines of operation.

³⁸ John Shy, "Jomini," in *Makers of Modern Strategy: From Machiavelli to the Nuclear Age*, ed. Peter Paret with Gordon A. Craig and Felix Gilbert (Princeton, NJ: Princeton University Press, 1986), 144. Shy provides a thought provoking analysis of Jomini including a brief background on his rise to prominence.

³⁹ Antoine Henri-Jomini, *The Art of War*, translated by G.H. Medell and W.P. Craighill, with an introduction by Charles Messenger, (London: Grennenhill Books, 1992), 76.

⁴⁰ Jomini introduces a total of 12 sub-categories of lines of operation; *The Art of War*, 100-104. For the purposes of this monograph, the focus is on the overall concept of lines of operation that connect a base to an objective using interior and exterior lines of operation.

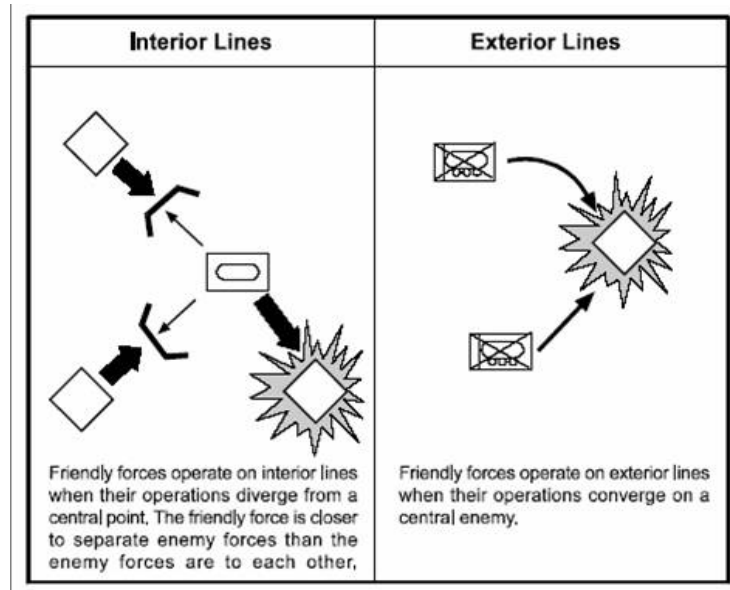


Figure 1: Example of Interior and Exterior Lines of Operation⁴¹

The application of this concept represented an important aspect of success on the Napoleonic battlefield.⁴² It was this linear concept linking a series of intermediate objectives (or decisive points) to an ultimate objective that captured the true meaning of the concept. The concept clearly assists the commander and his staff in understanding the use of ways and means to achieve an end-state within a campaign. Generally speaking, logical lines are the cognitive derivation of the Jominian geographic or “physical” lines of operation.⁴³ Logical lines provide a relationship between political, economic, social, and military lines or conditions with operational and strategic end-states. This concept, according to recent doctrine, allows the commander and staff to visualize this relationship and track operations across a campaign (see Fig. 2).⁴⁴

⁴¹ FM 3-0, 5-8.

⁴² Brian Bond, *The Pursuit of Victory; From Napoleon to Saddam Hussein*, (New York: Oxford University Press, Inc., 1996), 45. Bond provides an interesting comparison of Jomini with his contemporary and theoretical rival named Carl von Clausewitz.

⁴³ A useful way to delineate between the two types of lines is to use ‘physical’ lines of operation reflected in Jominian theory with ‘logical’ lines described in current U.S. military doctrine. Part of the problem associated with lines of operation is the confusion over terminologies and definitions found in doctrine. Further discussion of the differences between the two concepts will be described in Chapter 3 of this monograph.

⁴⁴ FM 3-0, 5-9.

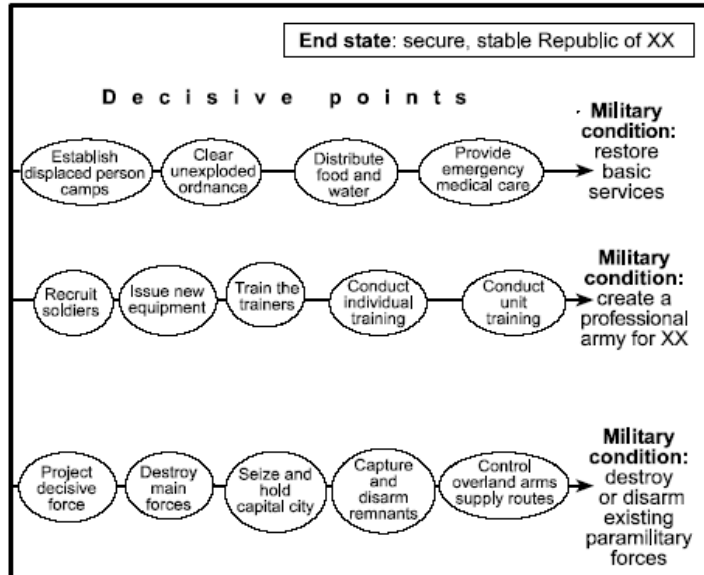


Figure 2: Example of “Logical” Lines of Operation⁴⁵

Logical lines of operation differ from physical or geographic lines of operation based on two primary differences. First, there is the relationship between friendly forces and the enemy. Physical lines of operation capture the relationship between friendly forces and enemy forces along a geographic line that connects the base of operations with an objective. Logical lines, on the other hand, provide a cognitive method for designing operations in a complex operating environment “when positional reference to an enemy or adversary has little relevance.”⁴⁶ Second, according to available doctrine, logical lines provide a framework for commanders and staff to visualize the operating environment using both military and nonmilitary means to achieve an end-state.⁴⁷

The practical application of the two concepts represents another way to highlight the differences between the two. Physical lines apply more readily to conventional operations while logical lines apply to a complex environment characterized by various destabilizing factors including an insurgency. In his monograph entitled *Campaign Planning: Tools of the Trade*, Jack

⁴⁵ Ibid.

⁴⁶ Ibid.

⁴⁷ Ibid.

Kem provides a useful comparison that summarizes the theoretical difference between physical and logical lines of operation:

A (physical) **line of operation** is the directional orientation of a force in relation to the enemy; the link between a force's objective and its bases of operation is a cognitive operational framework/planning construct used to define the concept of multiple, and often disparate, actions arranged in a framework unified by purpose. The actions and objectives in a **logical line of operation** depict causal relationships that are both linear and nonlinear. Operational objectives are depicted along a logical line of operation; the same operational objective may be depicted along more than one logical line of operation. All logical lines of operation should lead to the COG.⁴⁸ [emphasis added]

The linkage between logical lines of operation and counterinsurgency theory is not readily apparent without understanding their evolution. Undoubtedly, Jomini does not attempt to link the two due to his aversion to guerrilla warfare. He thought that “wars involving (guerrilla tactics) were dangerous and deplorable”⁴⁹ Counterinsurgency theory mentions various military and non-military ways to eliminate an insurgency, however, the use of these ideas under the framework of a singular construct like logical lines of operation was not addressed until more contemporary times. Regardless, counterinsurgency theory does rely heavily on the positive relationship between the counterinsurgent, the existing government, and the population. Within this context, counterinsurgency theory reveals constructs that are hypothetically similar to logical lines of operation. For example, a 1984 study on insurgency in Vietnam incorporates a framework, which includes fourteen “lines of approach.”⁵⁰ These lines of approach use both military and non-military (or civil) lines to assist in analyzing the effectiveness of counterinsurgency operations. Although intended primarily for historical analysis, the framework provides a potential conceptual link to logical lines of operation found in contemporary doctrine.

⁴⁸ Jack Kem, *Campaign Planning: Tools of the Trade*, (Fort Leavenworth, KS: US Army Command and General Staff College, 2004), 34-35.

⁴⁹ Max Boot, *The Savage Wars of Peace*, (New York: Basic Books, 2002), 283.

⁵⁰ Douglas Blaufarb and George Tanham, *Fourteen Points: Framework for the Analysis of Counterinsurgency*, (BDM Corporation, 31 July 1984), 2-3. This study provides a detailed methodology for analyzing the effectiveness of counterinsurgency operations. The method complements Bard O'Neill's framework for analyzing an insurgency.

Are their alternatives to Logical Lines of Operation?

Feedback from officers with recent operational experience reveals little in the way of practical alternatives to the logical lines of operations framework. The “Troops to Task” method made popular during peacekeeping operations in the 1990’s was the only alternative planning method offered by U.S. and British Officers to logical lines of operation.⁵¹ This method is more of an execution matrix at the tactical level than a tool to conceptualize and develop courses of action. Despite the practical emphasis of the concept based on feedback, arguments can be made to refute logical lines of operation. The primary issue is linearity and the influence of Jominian thought on the application of logical lines of operation across time and space. The literature reveals more than one notion that a complex operating environment is not conducive to linear and sequential thinking across the operational continuum. Theorists on failures in planning like Dorner, for example, argue that in thinking sequentially about the complex environment “we spare ourselves of much of the thought that goes into the complex...analyses needed to understand the temporal process.”⁵² Consequently, two primary alternatives warrant discussion—one that challenges the concept of lines of operation directly, and the second a more macro level challenge of the operational design found in current doctrine.

In his monograph on the applicability of lines of operation in stability operations, Diaz takes the problem of applying linear principles to complex, non-linear problems a step further. Diaz challenges the concept and believes that lines of operation (both physical and logical) are ineffective for planning in stability operations that include combat.⁵³ Based on systems theory and the use of a “complex matrix of operations,” he attempts to show that it is impossible to use linear thinking for the non-linear complex operating environment (see Fig. 3). Diaz concludes

⁵¹ Interviews with U.S. and British Army Officers, interview by author, email questionnaire, October-December, 2005, (documents in author’s collection). A British Officer was the only respondent from a pool of eight officers interviewed with OIF experience that thought of a potential alternative to assist planning in a predominantly non-kinetic operating environment.

⁵² Dorner, 187.

⁵³ Diaz, 52.

that “lines of operations cannot effectively identify and manipulate the intangible (nonlinear) variables that will allow a plan to extend to success in the future.”⁵⁴

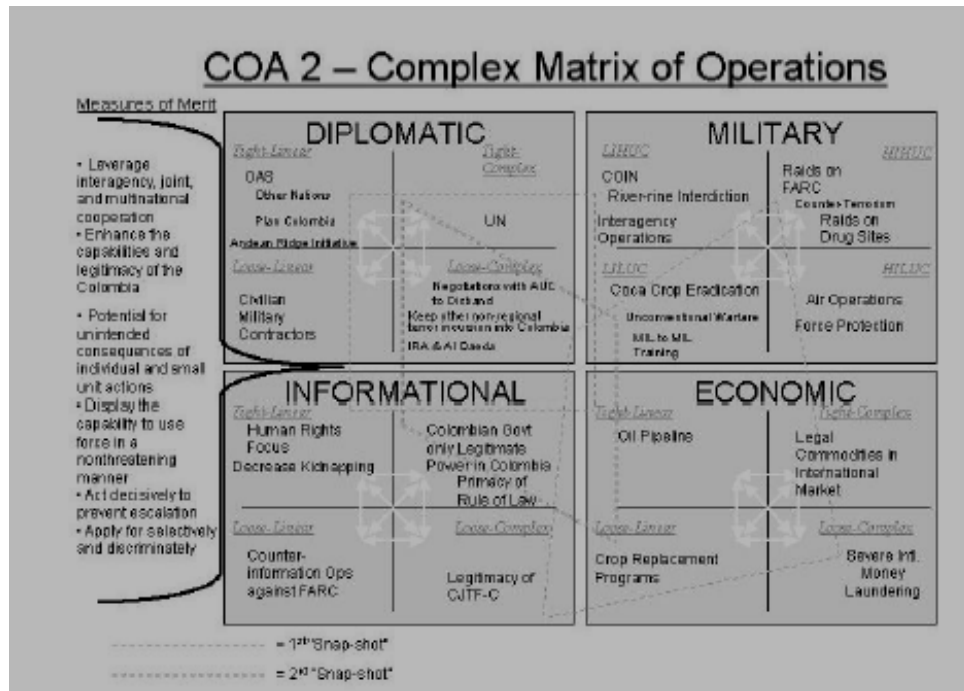


Figure 3: Complex Matrix of Operations⁵⁵

The theory identifies potential limitations to the use of logical lines of operation. However, the author implies that the use of emerging effects based doctrine including operational net assessment (ONA) is unique to the complex matrix of operations. There is no evidence presented that ONA processes cannot also identify effects along logical lines of operation in the COE. Diaz acknowledges that logical lines of operation represent a “suitable construct for the planning of stability operations that do not involve combat operations.”⁵⁶ Furthermore, the matrix of operations does not discount the application of logical lines across the full spectrum of operations to include combat operations.

The complex matrix of operations does provide a useful “snapshot” of the different systems within an operation in relation to the elements of national power (diplomacy,

⁵⁴ Ibid., 48.

⁵⁵ Ibid., 46.

⁵⁶ Diaz, 52.

information, military, economy or DIME). Nevertheless, the utility is minimized based on the exclusion of two important factors—time and space. The matrix essentially provides a list of effects or options under the DIME categories versus a conceptualization of a synchronized and coordinated campaign across time and space. Moreover, the example of lines of operation that Diaz uses portrays lines of operation in the more physical than conceptual context. Finally, Diaz does not disprove the applicability of logical lines of operation in design alternatives like operational net assessment and effects based operations.

The second counter to the use of logical lines of operation deals directly with the macro level-planning problem of designing linear operations in a non-linear, complex environment. One of the more interesting theories proposed at the operational level of planning is called Systemic Operational Design (SOD). The SOD approach provides a relevant point of departure due to the potential implications for current operational design premised on temporal logic. SOD “applies systems theory to operational art in an attempt to rationalize complexity through systemic logic.”⁵⁷ SOD emphasizes a holistic approach to the non-linear problem of complex adaptive systems. Conversely, logical lines of operation by their very nature attempt to reduce the complex environment into smaller parts to assist in developing viable courses of action. Again, the alternatives to contemporary operational design do not exclude the use of linear logic to frame and communicate non-linear solutions. MG Chiarelli and his planners also realized that thinking sequentially during stability operations was a recipe for failure.⁵⁸ The solution, however, was a linear one—balance the selected lines of operation while attempting to understand the complex spatial relationship between decisions and actions along each line.⁵⁹ As described by Kem, “the

⁵⁷ Sorrells, et. al., i.

⁵⁸ Chiarelli and Michaelis, 15.

⁵⁹ Ibid., 15.

actions and objectives in a logical line of operation depict causal relationships that are both *linear* and *nonlinear* [emphasis added].”⁶⁰

Theory to Practice: Evaluating the Utility of Logical Lines

The requirement for logical lines of operation as a planning framework for counterinsurgency operations is evident based on the inherent criticality of the relationship between the counterinsurgent and the majority of the indigenous population. Doctrine specifically mentions the use of lines of operation within the context of stability operations:

Logical lines of operations define the operational design when positional reference to an adversary has little relevance. Operations designed using logical lines of operation typically consist of an extended, event-driven time line. This time line combines the complementary, long-range effects of civil-military operations as well as the cyclic, short-range events characteristic of combat operations.⁶¹

Based on this premise, four criteria were selected to analyze the doctrinal implementation of logical lines of operation in historical and contemporary case studies on counterinsurgency operations.⁶² The four criteria test the utility of logical lines to determine whether or not contemporary planning and operational doctrine adequately addresses the concept. Comparison between U.S. and British application of the concept will help inform conclusions and recommendations for future doctrine.

The capacity to *influence the population* to achieve operational objectives and strategic end-states is perhaps the most important aspect of planning and executing counterinsurgency operations. Theory and doctrine address numerous strategies for countering an insurgency including direct action against the insurgent (attrition), indirect action that involves winning the hearts and minds of the with general populace, or a combination of the two methods. Theoretical

⁶⁰ Kem, 34-35.

⁶¹ FM 5-0.1 (Final Draft), *The Operations Process*, (Headquarters, Department of the Army, Washington: GPO, 5 October 2005), B-7.

⁶² Interviews with U.S. and British Army Officers, interview by author, email questionnaire, October-December, 2005. Feedback from field also assisted in the selection of the four criteria. A majority of respondents reported on the interview questionnaire that logical lines of operation helped assess and analyze the four criteria.

analysis in this chapter identifies variations of this concept, however, influencing the population to support counterinsurgent objectives remains the common denominator conveyed throughout theory and doctrine. As a result, the population is typically selected as the center of gravity or key node, depending on the method of analysis. Attempts to forego the use of multiple logical lines of operation in favor of an attrition strategy can result in disasters like U.S. campaign in Vietnam and the French Army in Algiers.

Decision-making affects the success at all levels of war, especially in the complex environment where insurgency exists. Unlike combat operations on the modern battlefield where intuitive decision-making determines a decisive outcome, decisions in a protracted counterinsurgency campaign can influence outcomes years down the road. FM 6-0, the U.S. Army's primary doctrinal source on mission command and control, defines decision-making as "the process of selecting a course of action as the one most favorable to accomplish the mission."⁶³ In current doctrine, logical lines of operation generally depict decisive points (or objectives) to link cause and effect to an end-state—allowing the commander to visualize the operation. Associated with each objective are decision points that allow the commander to make critical decisions based on qualitative and quantitative analysis and assessments. Logical lines lay out the major decision points over the duration of the operation and ultimately, the campaign. Once the commander arrives at a decision, the line adjusts to the new conditions or continues until the realization of the visualized objective. The criteria address the capacity to make informed decisions in order to allocate resources, promote unity of effort, and facilitate the overall strategic end-state. The quality of decisions made is irrelevant—the capacity to make informed decisions at critical points in time is the important factor.

The method to measure progress is a difficult and time-consuming venture. The apparent difficulties dealing with the insurgency in Iraq, for example, created a maelstrom of critiques on

⁶³ FM 6-0, *Mission Command: Command and Control of Army Forces*, (Headquarters, Department of the Army, Washington: GPO, August 2003), 2-3.

the strategy to “win the peace” in Iraq. As a result, *measures of effectiveness* (MOE) surfaced as the key method for attempting to show progress in a campaign. FM 5-0.1, *The Operations Process*, provides an interim definition of MOE: “a criterion that measures the attainment of an operation’s end state, achievement of objectives, or creation of an effect that is used to assess friendly actions.”⁶⁴ Ralph Perl provides a helpful set of categories for measuring effectiveness including incidents, attitudes, and trends.⁶⁵ MOE provides data to help inform the recommendation to the commanders on the potential decision required. Doctrine provides minimal guidance, however, on how to develop and implement MOE’s. 1CD, for example, used an interesting variation on MOE’s using a “balanced-scorecard” approach that allowed a “transitional rather than a phased approach to the campaign plan.”⁶⁶ A senior instructor from the School for Advanced Military Studies highlights the use of metrics like MOE’s as a way to “refine an understanding of the decision points associated with the transition from the military dominant operations to civil primacy in operations.”⁶⁷ Caution should be taken, however, with the use of any metric in a military operations since number counting can lead to biased analysis and micromanagement. Regardless, the capacity to identify what to measure is just as critical as how to measure the effect or result that drives key decisions that effect all levels of war.

A result of making decisions is the exposure of operations to certain *operational risks*. The management and mitigation of these operational risks is required to wage an effective counterinsurgency campaign with limited resources and exponential requirements. FM 3-0 defines the management of risk as a “process of identifying, assessing, and controlling risk arising from operational factors...making informed decisions that balance risk cost with mission

⁶⁴ FM 5-0.1, Glossary-5.

⁶⁵ Ralph Perl, *Combating Terrorism: The Challenge of Measuring Effectiveness*, (Washington: CRS Report for Congress, 23 November 2005), 9.

⁶⁶ Chiarelli and Michaelis, 14.

⁶⁷ Information obtained from interview questionnaire(s).

benefits.”⁶⁸ In a protracted campaign involving insurgency, operational risk requires continual assessment along all logical lines of operation. Failure to do so can result in short, mid, and long term setbacks across the duration of the campaign. For example, securing certain voting venues during major elections requires a balance of risk in the allocation of resources between security and other critical activities. Effective counterinsurgent organizations manage operational risk and adjust plans to mitigate risk while accomplishing identified objectives. Case study analysis will assist in the determination of whether or not operational risks were identified and managed.

Conclusion

Insurgencies thrive as a system within the complexity of the contemporary operating environment. Complexity theory provides a theoretical understanding of how insurgencies adapt and interact within this complex environment. Counterinsurgency theory stems from efforts to defeat insurgents and enjoy the benefit of numerous lessons learned over the history of warfare. Theorists on counterinsurgency such as Nagl, Galula, and O’Neill provide a foundation to better understand both the nature of insurgency and the development of counterinsurgency strategy.

One of the major characteristics of a successful counterinsurgency campaign is the ability to influence of the civilian population and isolate the insurgent. Lying in the balance is the capacity to gain intelligence and ultimately foster a relatively secure environment. The strength of an insurgency depends significantly on their capacity to gain and exploit the support of the indigenous population. The insurgents only require a small percentage of the population to actively support their cause—passive or neutral support still allows them to operate effectively. Effective engagement of the population requires political, social, and economic reforms along with carefully selected military actions. Logical lines of operation provide a construct that allows

⁶⁸ FM 3-0, 6-6.

military planners to link the political, social, economic, and military lines to operational conditions or end-states nested within the strategic end-state.⁶⁹

Logical lines of operation evolved from theoretical concepts described by military theorists including Jomini and Clausewitz. Analysis of the two concepts reveals that logical lines are more useful in the complexity of the COE while physical lines of operation retain more utility in conventional conflict. Logical lines of operation present a practical construct for planning counterinsurgency strategy. However, problems exist across doctrine in the description, definition and usefulness of logical lines of operation. The next chapter explores this problem by reviewing the status of logical lines of operation in contemporary U.S. and British doctrine. Case studies follow each doctrinal review to assess the practical application of doctrine in historical and contemporary examples.

⁶⁹ Although the scope of this monograph resides primarily at the operational level and below, an important point must be posited to assist with understanding COIN. National strategic objectives and policy provide the ultimate end-state for every military operation or campaign. Unique to protracted campaigns characterized by COIN operations is the fact operational and tactical success/victory can sometimes be derailed by strategic policy. Democracies like the United States, for example, often times struggle with sustained effort despite operational and/or tactical success. A classic example of this phenomena is Vietnam where the United States won a majority of the tactical and operational level battles, yet still lost the overall war due to political weariness on the domestic front. The monograph posits that logical lines of operation facilitate success and ultimately victory at the operational level, despite the potential for failure due to political uncertainty.

CHAPTER 3: FROM THEORY TO APPLICATION

If you wish for peace, understand war, particularly the guerrilla and subversive forms of war.

-B.H.Liddell Hart⁷⁰

Introduction

Chapter 2 provided the theoretical and historical underpinnings of logical lines of operation and counterinsurgency theory. The evolution of counterinsurgency was addressed along with an assessment of the theoretical linkage to logical lines of operation to provide a useful context for planning a protracted campaign. The discussion examined the utility of logical lines in the context of winning the ‘hearts and minds’ by isolating the insurgent(s) from the population. Since insurgency by its very nature involves protracted warfare, operations require design elements like logical lines to frame activities and visualize progress over an extended period of time. Despite the utility of the concept, there appears to be a fracture in the link between theory and the manner that doctrine depicts and explains the concept.

This chapter analyzes and assesses doctrine to determine whether or not there is a void with respect to logical lines of operation in counterinsurgency planning and operations. Analysis of three areas accomplishes this purpose. First, a survey of British Army and Joint doctrine determines whether or not their depiction of logical lines of operation or similar construct informs U.S. doctrine.⁷¹ The British experience with insurgency provides both a theoretical and practical

⁷⁰ B.H. Liddell Hart in British Army Field Manual, Volume 1, *Combined Arms Operations*, (London: Ministry of Defence, 2001), i.

⁷¹ Analysis of British doctrine reveals the same method looking at operational (JWP 3-00, Joint Operations Execution; JWP 3-50, *The Military Contribution to Peace Support Operations*; Army Doctrinal Publication, Volume 1, *Operations*, and Army Field Manual, Volume 1, *Combined Arms Operations*) and planning (JWP 5-00, *Joint Operations Planning*) publications. Similarly, British counterinsurgency doctrine will be explored including counterinsurgency operations found in Chapter 10 of the *Army Field Manual* that provides a detailed chapter on counterinsurgency strategy and operations. The conclusions of

backdrop for dealing with counterinsurgency operations. Second, a survey of U.S. Army and Joint doctrine determines if it satisfies the requirement for logical lines of operation as a planning construct for counterinsurgency operations.⁷² Finally, a case study analysis is provided at the conclusion of each doctrinal assessment to analyze, compare, and assess the practical application of logical lines of operation in two counterinsurgency campaigns—the British Expeditionary Force in Malaya (1948-1960) and the U.S. 1st Cavalry Division in Operation Iraqi Freedom (April 2004-March 2005). The four criteria tested the case studies to determine if doctrine is followed and whether the application of logical lines of operation in a counterinsurgency operation can inform recommendations to fill existing voids in doctrine.

British Doctrine: Policing an Empire

British doctrine provides a useful comparison to U.S. doctrine primarily due to their extensive experience dealing with insurgency. The British approach to counterinsurgency is particularly useful according to one theorist since “Britain developed an elaborate and distinct approach to combating insurgencies and achieved greater level success than any other state (since WWII).”⁷³ A serving officer in the British Army, Brigadier Nigel Aylwin-Foster, captures the contemporary essence of not only British Doctrine, but western counterinsurgency doctrine which focuses on developing and maintaining the support of the indigenous population to isolate the

this chapter combined with the analysis of the practical application of logical lines of operation will assist in the overall assessment of current doctrine.

⁷² The focus will be primarily on Army and Joint operational doctrine (FM 3-0, *Operations* and JP 3-0, *Doctrine for Joint Operations*) and planning doctrine (emerging doctrine found in FM 5-0.1, *The Operations Process* (Final Draft); FM 5-0, *Army Planning and Order Production*, and JP 5-0, *Doctrine for Joint Planning*). With respect to counterinsurgency operations, an examination will be made on stability operations at the Army level FM 3-07, *Stability and Support Operations* and FM(Interim) 3-07.22, *Counterinsurgency Operations* and the Joint level, JP 3-07, *Joint Doctrine for Military Operations Other Than War*. JP 3-07.1, *Joint Tactics, Techniques, and Procedures for Foreign Internal Defense* provides an additional reference for joint operations along with Army FM 6-0, *Mission Command: Command and Control of Army Forces*.

⁷³ Brent Ellis, *Back to the Future? The Lessons of Counterinsurgency for Contemporary Peace Operations*, (4 April 2000), 3.

insurgent—echoed in the last chapter as the winning the ‘hearts and minds.’⁷⁴ Aylwin-Foster further identifies two critical unconventional skill sets that include understanding both the problems and issues within the domestic population and the value of force application.⁷⁵ Subsequently, he reinforces the notion of the direct and indirect approach to fighting insurgents—balancing the two plays a critical factor in the success or failure in counterinsurgency operations. In Malaya, for example, the British quickly learned that the direct application of combat power provided only short-term success, while the indirect approach assisted the accomplishment of strategic objectives.

The British experience fighting insurgencies and conducting policing actions during centuries of imperialism provides a foundation based on a blend of theory and practical application. Some more noteworthy efforts to defeat insurgencies include the ongoing effort against the Irish Republican Army in Northern Ireland in addition to the Malayan Campaign. Despite an extensive history with respect to counterinsurgency, the British possessed no standard doctrine until the publication of their first manual in 1896 called *Small Wars: Their Principles and Practice*. Accordingly, the author of the manual, Charles Callwell, contributed significantly to British theory and doctrine and indirectly contributed to U.S. doctrine of the 20th Century.⁷⁶

Similar to contemporary U.S. doctrine, the concept of logical lines of operation does not receive significant coverage in British Doctrine. Also similar to U.S. doctrine, the concept is being implemented in Iraq despite a lack of doctrinal clarity.⁷⁷ As mentioned in the last chapter, British counterinsurgency doctrine conveys a framework similar to logical lines of operation, but does not provide a definitive planning method like logical lines in their doctrine. British doctrine

⁷⁴ Nigel Aylwin-Foster, “Changing the Army for Counterinsurgency Operations,” (*Military Review*, 2005), 6.

⁷⁵ Aylwin-Foster, 6.

⁷⁶ Ian F.W. Beckett, *Modern Insurgencies and Counterinsurgencies: Guerrillas and Their Opponents Since 1750*, (New York: Routledge Press, 2001), 32.

⁷⁷ This information was obtained via feedback from interviews with British Officers. The officers were generally familiar with the concept, however, they did not have a common understanding of how to practically apply the concept.

refers to more than one type of operational “line” including lines of activity and lines of approach, in addition to lines of operation. The capstone manual for the British Army, Army Doctrinal Publication Volume 1 (ADP-1), *Operations*, provides lengthy discussions on the use of lines of operation within the context of operational design.⁷⁸ However, the emphasis throughout the doctrine remains on the concept of physical lines of operation grounded in Jominian theory. The key difference, though, is the way that each country’s service interprets the concept.

A doctrinal survey comparing U.S. Army and British operational doctrine revealed that 75% of U.S. respondents believed that lines of operation were *physical* in nature compared to 100% of British respondents who believed that them to be *conceptual* in nature.⁷⁹ This point highlights the U.S. Army’s lack of understanding with respect to the conceptual difference between logical and physical lines of operations. It also reinforces, yet again, the conventional mindset ingrained in the U.S. Army interpretation of doctrine. ADP-1 does allude to another type of line of operation “where decisive points are equally substantive but intangible, the linkages between them will be harder to define.”⁸⁰ This theme is further developed later in the manual when it mentions “to build the required robustness in the strategic aim, the development of several contingency options along multiple lines of operation will help provide the necessary flexibility.”⁸¹ Unfortunately, the doctrine does not expound any further on this notion of logical versus physical decisive points. It does, however, reveal the potential for further development of a planning concept like logical lines of operation at the operational level.

⁷⁸ British Army Doctrinal Publication, Volume 1, *Operations*, (London: Ministry of Defence, 1994), 64-66.

⁷⁹ David A.D. Firth, *United in Fact? A Critical Analysis of Intent and Perception in the Application of American and British Army Doctrine*, (Fort Leavenworth, KS: School of Advanced Military Studies, 2003), 38-40. Firth surveyed 100 U.S. Officers and 100 British Officers using 15 questions on the differences and similarities between major subjects in British Army Doctrinal Publication, Volume 1 (ADP 1) and U.S. Army Field Manual 3-0, *Operations*.

⁸⁰ British Army Doctrinal Publication, Volume 1, *Operations*, (London: Ministry of Defence, 1994), 46.

⁸¹ *Ibid.*, 146.

The British Army Field Manual (AFM-1), *Combined Arms Operations*, provides more tactical than operational level perspectives on lines of operation with respect to counterinsurgency operations. Similar to the theoretical underpinnings discussed in Chapter 2, the doctrine reflects the “fact that insurgency and counterinsurgency are essentially about the battle to win and hold popular support, both at home and in the theatre of operations.”⁸² Nested within the manual is a section that introduces lines of operation that assist in achieving an overall end-state. Similar to the US doctrinal definition of lines of operation, the British refer to “multiple lines of operation (economic, legal, military, etc.), working through a series of decisive points...” The discussion further defines the most critical line as the “campaign main effort—the primary line of operation—, which must be political.”⁸³ The doctrine considers all lines of operation the same, however, and does not differentiate between cognitive “logical” lines and physical lines like current U.S. doctrine. Moreover, British Army doctrine does not depict detailed examples of how to implement lines of operation in an operational planning context or as a component of battle command.

British Joint Warfighting Publications (JWP) also addresses lines of operation. JWP 5-00, *Joint Operations Planning*, includes a short description of lines of operation which categorizes lines of operation as “environmental or functional... or a mixture of both.”⁸⁴ This concept reveals greater similarity to the Jominian or physical lines of operation than the logical concept in U.S. Doctrine. Perhaps the best examples of lines of operation that parallel the U.S. military’s description, however, are found in JWP 3-50, *The Military Contribution to Peace Support Operations*. The British elaborate on the concept by stating that “lines of activity establish a relationship between interim criteria, in order to construct a development path to the

⁸² British Army Field Manual, Volume 1, *Operations*, (London: Ministry of Defence, 2001), B-3-1.

⁸³ Ibid., B-3-1.

⁸⁴ British Joint Warfighting Publication 5-00, *Joint Operations Planning*, (London: Ministry of Defence, 2004), Appendix 2B3-1.

steady-state criteria, and to ensure that criteria are satisfied in a logical progression.”⁸⁵ Clearly, the British approach using lines of activity provides a conceptual framework designed to achieve political objectives across the full spectrum of operations to include counterinsurgency. These descriptions provide greater flexibility for the planner, however, like U.S. doctrine, there clearly exists differences across British doctrine.

Assessment of British Doctrine

British doctrine provides some useful information to help inform the limitations in U.S. Joint and Army doctrine. British doctrine uses different terminologies and descriptions for the concept of lines of operation. For example, their use of lines of operation grounded in Jominian theory makes them one dimensional and primarily useful in combat operations. As mentioned previously, JWP 3-50, *Peace Support Operations*, conveys a useful derivation of lines of operation called “lines of activity.” The construct is the closest example to U.S. doctrinal descriptions of logical lines operation. The different activities along social, political, economic, and informational lines provide planners a potential framework for developing sound courses of action. Although the terminology is slightly different, the cognitive intention behind the concept remains the same.

Doctrine continues to describe the concept as a planning tool-- “realistic planning must accommodate the shifting needs of the campaign; constantly looking ahead to ensure the engagement of the necessary military and civil actors, at the correct time, in the correct strengths, and with the necessary capabilities to ensure success.”⁸⁶ The concept mirrors the cognitive approach of logical lines of operation to some extent; however, British counterinsurgency doctrine (Part 10 of the *British Army Field Manual*, for example) does not introduce lines of

⁸⁵ British Joint Warfighting Publication 3-50, *The Military Contribution to Peace Support Operations*, (London: Ministry of Defence, March 2004), 4-9. The manual also introduces a mnemonic for PSO planning called RECHIMED which stands for rule of law, education, commerce, humanitarian and health, information, military, economic, and diplomacy (including administration and governance).

⁸⁶ *Ibid.*, 4-19.

activity as a planning tool. Fortunately, as both the U.S. and British military continue to adapt and adjust their doctrinal approach to planning in the complexity of a counterinsurgency campaign, coherence across doctrine should become more evident. Further discussion of both U.S. and British application of lines of operation and counterinsurgency doctrine occurs during case study analysis and assessment.

British Army Case Study: Hard Lessons in the Malayan Emergency

The MCP recognized that the people...were the key to the success of their insurgency.⁸⁷

The Malayan Campaign provides an excellent analog for several reasons. First, the British were successful defeating the communist insurgency sponsored by the Malayan Communist Party (MCP). Second, the British Army displayed the capacity to adapt and learn from their mistakes in order to achieve long-term success. The first three years of the insurgency (1948-51) met with numerous failures and limited success. Third, the British course of action that eventually provided the impetus for strategic success revealed a conceptual framework similar to logical lines of operation—even though the concept was not codified at the time in British doctrine (or U.S. doctrine, for that matter). The British understood, however, the importance of visualizing political, economic, social, and informational activities along with the judicial application of combat operations to achieve a strategic end-state. Contemporary perspectives from British doctrine will supplement the analysis of the Malaya Campaign and attempt to show the utility of lines of operation over time. Finally, the analysis and assessment of the case study attempts to answer the following question: Does the British campaign plan developed during counterinsurgency operations in Malaya inform U.S. doctrine?

⁸⁷ Nagl, 63.

The origin of British influence in Malaysia dates back to the 18th Century when colonial interests were on rubber and mining.⁸⁸ The British and the MCP did not always encounter an adversarial relationship. In a model of diplomacy, which has haunted many superpowers including the U.S., the British trained the MCP to fight the Japanese in World War II only to end up fighting the insurgents starting in 1948. Undertaking a classic approach to insurgency developed by Mao Tse-Tung in the early 20th Century, the MCP planned on “defeat(ing) the will of the British to maintain control of their colony through a strategy of protracted insurgent warfare.”⁸⁹ The MCP and their affiliated parties numbering near 10,000 members moved quickly from political mobilization in the Mao model to guerrilla warfare against the British.

The British counterinsurgency effort through 1951 can be generally characterized as unsuccessful. Similar perhaps to all protracted struggles against insurgency, the British were slow to develop a unified plan to deal with the insurgency while achieving a politically acceptable end-state. The primary problem the British faced was two-fold. First, a lack of unity of effort and purpose. According to Nagl, “the police commissioner was nominally in command of all army forces, and there was no overall integration of the civil and military efforts.”⁹⁰ Second, the conventional maneuver tactics used during WWII failed to achieve tactical or operational success against the guerrilla effort.⁹¹ Much like the early stages of OIF, the British Army was forced to adapt to a fluid and resourceful enemy while understanding the impact of combat operations on the Malayan society. In many ways, operations in Malaya forced British doctrinal development with respect to counterinsurgency planning and strategy. According to Rand Study of British doctrine in the 1950’s, “there was no existing doctrine to guide action (in Malaya).”⁹² The

⁸⁸ Gerald E. Galloway, *Counterinsurgency: Relearning How to Think*, (Carlisle, PA: U.S. Army War College, 18 March 2005), 9.

⁸⁹ Nagl, 63.

⁹⁰ Ibid., 78.

⁹¹ Galloway, 11.

⁹² Bruce Hoffman and Jennifer M. Taw, *Defense Policy and Low-Intensity Conflict: The Development of Britain’s “Small Wars” Doctrine During the 1950’s*, (Santa Monica, CA: Rand, 1991), v.

problem lies predominantly in the failure to develop a coherent strategy at the operational level. Sir Harold Briggs developed a plan in 1950 (known simply as the Briggs Plan) that attempted to correct this problem. The plan featured three main objectives including security of the Malayan population, clearing out of insurgent resources and infrastructure, and civil-military cooperation.⁹³ Primacy was placed on the first objective, namely securing the population to ‘attack’ the insurgency indirectly. What made the Briggs plan innovative at the time was the application of a conceptual approach using primarily military forces to achieve a non-military solution.

Sir Harold Templer replaced Briggs in 1951 as Director of Operations and High Commissioner, which placed him in control of both civil and military operations.⁹⁴ Templer’s ‘dual-hatted’ position provided the unity of effort required to achieve strategic end-state of a secure, independent Malaya. To accomplish this objective, Templer tackled two problems. First, he laid out a reformation of the overall effort including the reorganization of the Intelligence Service, Police Force and Special Branch, Information Services, Military, and the Home Guard.⁹⁵ Second, Templer laid out a strategy for withdrawal which captured the importance of winning ‘hearts and minds’ of the population along with other objectives outlined in the Briggs Plan. The plan included the establishment of local law, creation of a functional judicial system, freedom of movement for all people, and the creation of a national army.⁹⁶

Sir Robert Thompson, Permanent Secretary of Defense for Malaya during the Emergency, subsequently developed principles for counterinsurgency operations derived from the Briggs Plan: establish a political aim, military subordinate to civil plan, parties must understand and adhere to the law, incorporate information and intelligence, security, and attack the insurgent

⁹³ Galloway, 11.

⁹⁴ Ibid.

⁹⁵ Nagl, 91.

⁹⁶ Galloway, 11-12.

indirectly.⁹⁷ These principles along with the operational objectives in the Briggs Plan reveal a conceptual framework similar to logical lines of operation. Coincidentally, we can extrapolate similar logical lines including *governance* (establish a political aim), *security* (creation of national army, police, Home Guard, etc), *essential services* (resettlement), and *economy* (creating jobs).⁹⁸ Additionally, *information operations* were incorporated across all civil-military operations (information and intelligence). The British developed and implemented logical lines of operation nearly 50 years later during the transition to stability operations in Basrah, Iraq. These logical lines of operation compare with the conceptual approach that the British used in the Malaya Campaign—although the formalized approach did not exist at the time.⁹⁹

Assessment of the British Campaign in Malaya

The British capacity to *influence of the population* was tenuous at best during the initial stages of the campaign in Malaysia. A poorly developed strategy during the first three years (1948-51) focusing on attrition and kinetic dominance of the situation revealed mixed results. It wasn't until the arrival of Templer in 1951 and his further conceptualization of the Briggs Plan revolving around the “hearts and minds” strategy that allowed the counterinsurgents to start

⁹⁷ Ibid., 13.

⁹⁸ Christopher Bell, interview by author, interview questionnaire, 15 December 2005, SAMS, Fort Leavenworth, KS., and Neal Croft, interview by author, interview questionnaire, 12 October 2005, CARL, Fort Leavenworth, KS. Logical lines based on current application of logical lines in Basrah, Iraq by the British Army. MAJ Bell served with the British 7th AR BDE during OIF while MAJ Croft served as the 1 Mech BDE S-3 during OIF-2. The British developed an interesting concept to depict lines of operation called “Bertie Basrah” during major combat operations. This was a systematic approach using a simple human body analogy to help conceptualize the kinetic and non-kinetic requirements in Basrah. During OIF-1, the British used concepts similar to U.S. doctrine following logical lines of governance, security, essential services, and economy. Information operations were added due to the inherent criticality of winning the battle for ‘hearts and minds.’

⁹⁹ It is important to reiterate that lines of operation were not formally introduced until the doctrinal explanation of operational art and design manifested in the 1982 version of FM 101-5, *Operations*. The conceptual logical lines of operation were not introduced in U.S. doctrine until the renamed version of FM 101-5 called FM 3-0, *Operations* in 2001. The closest concept in British doctrine is lines of activity found in JWP 3-50.

“winning the peace.”¹⁰⁰ Templer assumed responsibility as the Director of Operations and the High Commissioner of Malaya, which enabled unity of effort and purpose. Furthermore, Templer re-organized the different agencies to focus on non-kinetic solutions and effectively influence the population towards ultimate victory.¹⁰¹ Templer’s management of different operational lines equating to governance, security, essential services and the economy set the conditions for the eventual defeat of the insurgency.

The emphasis on kinetic operations impaired *decision-making* effectiveness during the first 3 years of the Malayan Emergency. This deficiency combined with the degraded unity of effort contributed to decreased popular support and a series of successes by the MCP insurgency. The low point for the counterinsurgency was the assassination of the High Commissioner Sir Henry Gurney, in 1951.¹⁰² Furthermore, the disorganization of the counterinsurgent forces on both civil and military sides made visualization of the linkage of operations over time difficult to discern. Once again, the transition in 1951 from Briggs to Templer reveals the framework that set conditions and identified transition points toward the strategic end-state. For example, the decision in September of 1953 along the security logical line of operation to lift curfews in the state of Malacca.¹⁰³ The decision allowed the re-allocation of resources and a confirmation that popular support in that largely populated area was now in favor of the counterinsurgent. Two other examples help illustrate this point. First, along the governance line of operation, a decision was made to hold elections in 1955 for partial self-government, and full independence in 1957. Second, a decision within the essential services logical line of operation was made to establish a Rural Industrial Development Authority to “carry out small-scale development projects in the

¹⁰⁰ Joel E. Hamby, “Civil-Military Operations: Joint Doctrine and the Malayan Emergency,” (*Joint Forces Quarterly*, Autumn 2002), 59.

¹⁰¹ *Ibid.*, 60.

¹⁰² Blaufarb and Tanham, *Fourteen Points: Framework for the Analysis of Counterinsurgency*, (BDM Corporation, 31 July 1984), D-8.

¹⁰³ Nagl, 102.

countryside...”¹⁰⁴ These examples represent just a few of the numerous key decisions made by Templer and his staff during the campaign.

In order to assist in decision-making, the British attempted to measure progress through various metrics, although the concept of measuring effectiveness does not manifest in doctrine until the advent of effects based operations. Of course, complexity of the operating environment and the difficulty analyzing metrics for the desired effects can be problematic for the counterinsurgent effort. Simply stated, “...measures of effectiveness that adequately distill and accurately reflect reality help decision-makers make informed, timely decisions (while) ...poorly chosen measures have a multitude of negative effects.”¹⁰⁵ During the first 3 years of the campaign, the British made the common mistake of equating the execution of large-scale operations and the number of dead guerrillas to success. The conceptual shift in strategy emphasizing non-kinetic solutions revealed useful metrics or measures of performance. For example, metrics included numbers of established Chinese squatter villages, number of registered identification card holders, jobs created, and information, (i.e., intelligence, psyops, and propaganda). From these measures, the British determined the effectiveness of their operations and adjusted accordingly. For example, the effectiveness of the British Information Services operations was realized when surrendered enemy personnel (SEP’s) told British officials that voice aircraft “[destroyed the insurgents] morale and induced surrenders.”¹⁰⁶

The level of acceptable *operational risk* shifted significantly as the counterinsurgent effort matured and adjusted to adaptations of the insurgency. Perhaps that greatest reflection of this change in risk was the flexibility gained in the modification of the Briggs Plan during Templer’s command. Increased flow of actionable intelligence fused with the indirect approach

¹⁰⁴ Blaufarb and Tanham, D-20.

¹⁰⁵ William S. Murray, “A Will to Measure—Measures of Effectiveness in Military Decision-making”, 20 July 2005.

¹⁰⁶ Nagl, 95.

against the insurgency allowed the adjustment of operational lines to focus more on ‘hearts and minds’ and less on kinetic operations.

The British campaign plan developed during counterinsurgency operations in Malaya provides useful information for U.S. doctrine. Perhaps the most important aspect of the campaign plan developed by Briggs and implemented by Templer is the conceptualization of the different civil and military operations required to achieve strategic objectives. The plan placed primacy on winning the ‘hearts and minds’ of the Malayan people which led to greater stability and ultimately self-governance. Furthermore, the plan facilitated decision-making, measured progress, and allowed operational risk to be balanced across each conceptual or logical line of operation. Similar to the initial problems with kinetic dominance that the British encountered in Malaya, the U.S. Army’s ICD also experienced the difficulty with overcoming the kinetic limitations of the conventional mindset during their first few months into their campaign. One thing is certain for both the British and U.S. attempts to plan and execute counterinsurgency operations—the lessons go unlearned while doctrine continues to emphasize conventional operations.

U.S. Doctrine: Lessons Unlearned

The codification of lines of operation into doctrine is a relatively recent phenomena. The genesis of the operational level of war, for example, was not formally introduced until the 1982 version of the U.S. Army’s capstone manual, FM 100-5, *Operations*. Moreover, the elements of operational design within the context of operational art were not introduced until the 1986 version of FM 100-5. The first doctrinal mentions of lines of operation are found in FM 100-7, *Decisive Force: The Army in Theater Operations*. Lines of operation were physical ‘Jominian’ lines of operation and conventionally oriented.¹⁰⁷ The term and concept of logical lines were not

¹⁰⁷ Diaz, 13-15.

introduced until the 2001 edition of FM 3-0 (formerly FM 100-5). This development recognized the need for an improved planning framework to deal with the full spectrum of operations that included not only offensive and defensive operations, but stability operations as well.

FM 3-0 defines physical lines of operation as the directional orientation of the force in time and space in relation to the enemy that connect the force with its base of operations.¹⁰⁸ FM 3-0 also introduces a cognitive version of lines of operation that are used “when positional reference to an enemy or adversary has little relevance, commanders may visualize the operation along logical lines...commanders synchronize activities along multiple [logical] lines of operation to achieve the desired end state.”¹⁰⁹ This brief description places a heavy emphasis on the concept as a method to “help commanders visualize how military means can support nonmilitary instruments of national power.”¹¹⁰ The manual's brevity highlights a missed opportunity to expound upon the concepts potential as a planning construct and visualization tool.

Analysis of FM 3-0 also reveals problems with this construct and definition. First, the use of multiple references like exterior, interior, and logical confuses the term. Jomini's description of several different lines of operation also contributes to the confusion. For example, the use of lines of operation within the elements of operational design does not differentiate between “logical” and geographic or physical lines of operation. Second, the examples provided are limited in scope—they do not differentiate between the three levels of war. FM 3-0 provides only one generic example of logical lines of operation. Third, the definition found within FM 3-0 mentions that the requirement for logical lines is “common in stability and support operations,” however, the chapter on stability operation in FM 3-0 does not mention the concept. FM 3-07, *Stability and Support Operations*, also fails to include the concept. Furthermore, the interim manual that represents an extension of FM 3-07, FMI 3-07.22, *Counterinsurgency Operations*,

¹⁰⁸ FM 3-0, 5-7.

¹⁰⁹ Ibid., 5-9.

¹¹⁰ Ibid., 5-9.

mentions the term only in the context of civil affairs activities.¹¹¹ Finally, the definitions in FM 3-0 and 5-0 do not expand upon the concept as a function of battle command or a method for operational planners. This is unfortunate since the primary thrust of the concept is allowing the commander to visualize and communicate the military and non-military aspects of the operation. This is particularly evident in FM 5-0 and FM 6-0 where the concept of logical lines was not mentioned.

The development of counterinsurgency doctrine reveals the organizational difficulties adapting to changes within the operating environment. As discussed in Chapter 2, part of this problem was exacerbated by the conventional paradigm that the U.S. Army finds itself in to this very day. According to Pierre Lessard in his article “Campaign Design for Winning the War and the Peace” the challenge of defining objectives and end-state(s) contributes to the problem. Lessard argues that “while clarity might be achievable in conventional operations, it often remains elusive or ambiguous in... counterinsurgency operations.”¹¹² Intellectual energy devoted to counterinsurgency theory and doctrine was diffused as each generation prepared for the decisive battle on the conventional battlefield.

There was relatively little effort to formally capture counterinsurgency doctrine despite the United States steady involvement against insurgencies dating back to the Revolutionary War. Arguably, the most significant doctrinal contribution codified in formal doctrine was the Marine Corps *Small Wars Manual* published in 1935, which provided tactical solutions to the problem of insurgency.¹¹³ It was not until the 1960’s and the execution of the Vietnam War that counterinsurgency doctrine received most of its theoretical and practical energy. During this period, the Kennedy Administration responded to the former Soviet Union’s threat to spread

¹¹¹ FMI 3-07.22, *Counterinsurgency Operations*, mentions does not differentiate between geographic and logical lines of operations. A brief description of logical lines of operation falls under the civil-military operations section of the manual on page 2-15.

¹¹² Pierre Lessard, “Campaign Design for Winning the War, and the Peace,” (*Parameters*, Summer 2005), 41.

¹¹³ Boot, 283.

communism through global insurgency.¹¹⁴ The administration's policies focused mainly on unconventional units assisting governments in their own internal defense against communist insurgencies—the foundation for Foreign Internal Defense (FID). This bipolar world was, however, radically different compared to the global insurgency we face in the 21st Century.

Other doctrinal manuals were developed in the 1960's related to insurgency and guerrilla warfare, yet the focus remained on tactical execution versus operational planning to win the support of the indigenous population. Moreover, little discussion of counterinsurgency resonated in U.S. military professional journals.¹¹⁵ Even the terminology used to describe insurgency and other forms of lower intensity warfare changed from low intensity conflict (LIC) to military operations other than war (MOOTW).¹¹⁶ The U.S. Joint and Army family of 3-07 manuals represents the latest in this series of manuals attempting to come to grips those “non-conventional” operations that dominate the COE.

Three key attributes of this migration are evident with respect to counterinsurgency doctrine. First, the struggle to break the paradigm that our conventional military only does conventional operations continues to exist.¹¹⁷ The second attribute is the fact that counterinsurgency doctrine does not have an independent category within the context of stability

¹¹⁴ Beckett, 185. In Chapter 2, Beckett discusses the development of counterinsurgency theory in greater detail. According to Beckett, two theorists that attempted to address the topic in any detail include John Pushtay, *Counterinsurgency* (1965) and John J. McCuen, *The Art of Counter-revolutionary Warfare* (1966).

¹¹⁵ *Ibid.*, 81.

¹¹⁶ Perhaps the best example of this problem is the evolution of FM 100-20, *Low Intensity Operations* first introduced in 1981. The 1990 edition of FM 100-20 revealed a subtle change when it was called *Military Operations in Low Intensity Conflict*. In 1994, FM 100-20 was renamed to *Military Operations Other Than War* which reflected the same title as the 1990 Joint Publication 3-07. However, military operations other than war were replaced by stability operations within the context of full spectrum operations.

¹¹⁷ Thomas Kuhn, *The Structure of Scientific Revolutions*, (Chicago: University of Chicago Press, 1996), 10-22. Kuhn describes how paradigms are created in how they contribute to scientific inquiry. Paradigms are essentially a mutually agreed upon set of achievements that a group bases their future research on. Kuhn argues that paradigms are useful in the context of scientific revolutions. However, they also provide a useful analogy for the U.S. Army's current paradigm which favors conventional doctrine over counterinsurgency. The problem with paradigms is that once a group forms a common set of beliefs, the paradigm becomes self-perpetuating and difficult to break or abandon. The U.S. Army's affinity for conventional over unconventional operations represents the difficulty with accepting the need for change and creating a new paradigm.

operations. Third, independent Army doctrine strictly dedicated to counterinsurgency beyond the tactical level still does not appear in Army doctrine (or Joint doctrine, for that matter). Interim FM 3-07.22, *Counterinsurgency Operations*, attempts to bring a more conventional doctrinal perspective on counterinsurgency into the fold, yet falls well short with respect to planning and the use of logical lines. As with previous counterinsurgency doctrine, the manual focuses primarily at the tactical level. The manual also provides little in the way of options for visualizing the operation and developing courses of action. Five different planning “conditions” are mentioned including securing the populace, establishing political institutions, contributing to local government, neutralizing insurgent capabilities, and information flow.¹¹⁸ These are helpful, however, no mention of a method is made for synchronizing these conditions together in a planning framework—logical lines of operation provides a way to accomplish this purpose.

Joint Doctrine contributes little to describing the utility of logical lines along with minimal attempts to address the joint operational effort required to defeat an insurgency. Operationally, JP 3-0 (2nd revision) mirrors FM 3-0 by including lines of operation as an element of operational design. The manual does provide a more helpful description by breaking lines of operation into physical and logical lines. JP 3-0 states that, “Physical lines of operation connect a series of decisive points over time that lead to control of the geographic objective or defeat of an enemy force [while] logical lines of operation link multiple decisive points with the logic of purpose to defeat and enemy or achieve and objective.”¹¹⁹

JP 5-0 (3rd revision), *Doctrine for Joint Planning*, does not expand on the concept as a planning tool and simply refers to the description on logical lines of operation in JP 3-0 (see Fig. 4 above). Figure 4 delineates the two types of operational lines linking decisive points to

¹¹⁸ FMI 3-07.22, 2-2 to 2-3.

¹¹⁹ JP 3-0, *Doctrine for Joint Operations*, (Washington DC: US Government Printing Office, 10 September 2001), IV-12.

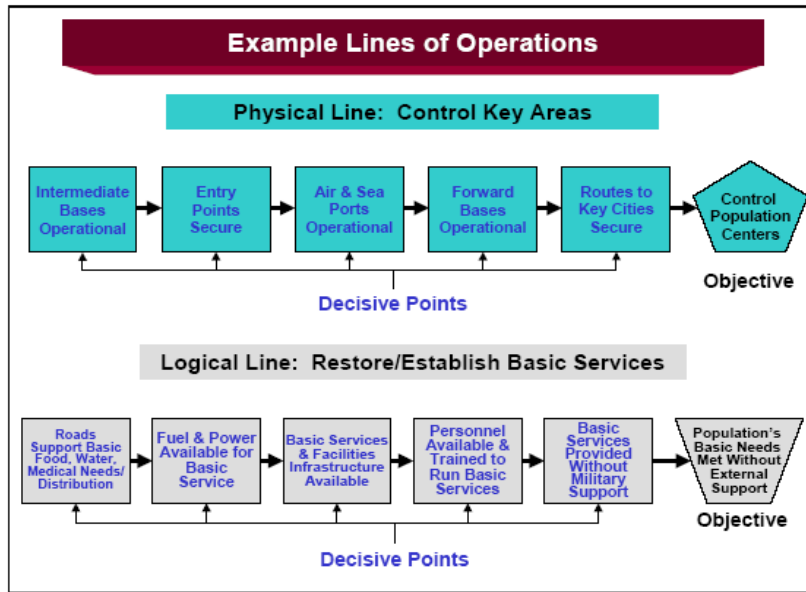


Figure 4: Example Lines of Operations¹²⁰

objectives that conflicts with other doctrine like FM 3-0 which links decisive points to conditions. Clearly, the void in joint doctrine is significant with respect to both counterinsurgency doctrine, and the utilization of logical lines of operation to assist the joint force commander and planners in visualizing the joint operational environment.

JP 3-07 does little to develop the operational level of planning for counterinsurgency operations since, like U.S. Army doctrine, the focus remains more on host nation support and assistance than direct conventional involvement in counterinsurgency operations. Moreover, counterinsurgency does not receive dedicated coverage in the joint doctrinal publications related to JP 3-07. This is evident in JP 3-07.1, *Joint Tactics, Techniques, and Procedures for Foreign Internal Defense* which, as the title suggests, places emphasis on tactics for FID where operational counterinsurgency doctrine is needed.

¹²⁰ JP 5-0, *Doctrine for Joint Planning*, (Washington DC: US Government Printing Office, 25 January 2002), IV-13.

Assessment of U.S. Doctrine

The nature of the changing operational environment creates the need for revision and updating of current doctrine. One of the positive trends with the Army is the capacity to identify and implement necessary changes. According to FM 5-0.1, *The Operations Process*, the Army is currently revising FM's 3-0 and 5-0 in parallel with JP 3-0 and 5-0. Unfortunately, the process is laborious and even with today's technology, time consuming. However, there are some positive efforts to bridge the gap between official doctrinal publications by providing interim and 'working' draft documents to the field. The U.S. Army, in particular, has proven relatively adept at this process in recent years.

FM 5-0.1 provides an example that incorporates emerging doctrine on logical lines of operation and planning for civil-military operations. The manual provides a glimpse of updated doctrine with respect to logical lines of operation. The manual also attempts to modify the term along the lines of JP 3-0 and 5-0 by describing both 'physical' and 'logical' lines of operation. Furthermore, the manual provides examples of logical lines at the tactical and operational level.¹²¹ However, despite the provisions and modifications, the manual does not provide detailed examples that incorporate emerging doctrine such as operational net assessment and the effects based approach. The doctrine continues to resonate with the overly Jominian theory of decisive points leading to an end-state.

Joint doctrine appears to have the greater limitations with respect to logical lines of operation and counterinsurgency operations. Analysis of the current revisions for JP 3-0 and 5-0 reveal minimal changes compared to the emergent doctrine in FM 5-0.1. Both the joint operational and planning manuals provide only background references to logical lines of operations, although the publications do distinguish between physical and logical lines of

¹²¹ FM 5-0.1, B-7 to B-11.

operation. However, the lack of detailed examples based on practical contemporary application limit the planner's capacity to effectively plan an operation using the concept.

FID also proves problematic for doctrine at all levels.¹²² Counterinsurgency in this context diminishes the enormous challenges of fighting an insurgency in major state building operations like Iraq while over-emphasizing support and security assistance to a host nation. Military author Ian Beckett echoes this sentiment when he states that the “distaste for what was now called foreign internal defense (in lieu of) counterinsurgency remained marked in the U.S. military in the 1990's.”¹²³ FID also implies that an insurgency is primarily a foreign policy issue and the problem of the indigenous government. Incidentally, state building operations place the onus of counterinsurgency effort squarely on the shoulders of the U.S. Army and the Marine Corps to a lesser extent. This tends to diffuse the required capability for conventional forces to develop and maintain pertinent counterinsurgency doctrine. Finally, counterinsurgency doctrine within the FID context emphasizes special operations versus a conventional force capability.

U.S. Army Case Study: 1CD in Baghdad—Conventional to COIN

... while combat operations are a part of everyday life for the Soldier in Iraq, the primary mission is to set the conditions, by means of stability and reconstruction operations (S&RO), for an Iraqi government and populace that are not hostile to the U.S. Not only are these operations different, but they are also executed in a much different and complex environment.¹²⁴

The experiences of 1CD during OIF-2 provide an excellent example of an operational organization attempting to plan and execute counterinsurgency operations as part of an extended campaign. MG Chiarelli summarizes the experience succinctly in the article “Winning the Peace: The Requirement for Full-Spectrum Operations” by stating, “although trained in the controlled

¹²² FM 3-07. *Stability and Support Operations*, (Headquarters, Department of the Army, Washington: GPO, 2002), 3-1. One of the 10 categories of stability operations, FID is further broken down into three areas including indirect support, direct support (not involving combat operations), and direct support (involving combat operations).

¹²³ Beckett, 205.

¹²⁴ Call Handbook, *Information Operations (OIF)*, (May 2005), 1-2.

application of combat power, we quickly became fluent in the controlled application of national power.”¹²⁵ The statement speaks volumes to the importance of conceptualizing operations by emphasizing non-kinetic solutions. The division’s operations were remarkable for several reasons. First, the division was involved in stability and reconstruction operations—arguably a counterinsurgency operation in an incredibly complex operating environment. The division’s rotation was far enough removed from the cessation of major combat operations a year earlier that planners could focus on counterinsurgency. Second, the division operated more at the operational level than the tactical level due to the nature of the operational environment and the greatly expanded task organization that included over 60 battalions. Finally, the division planners developed a plan for the campaign that used lines of operation including security, essential services, governance, economy, combat operations, and information operations. Consequently, the case study analysis and assessment attempts to answer the question: Did the 1CD campaign plan effectively leverage available doctrine on logical lines operation during counterinsurgency operations in support of OIF-2?

1st Cavalry Division Operations during OIF-2 look surprisingly similar to the counterinsurgency effort of the British in Malaya over a half-century ago. Both units faced an insurgency while facing the daunting task of winning the support of the indigenous population. Both units also faced the challenge of adapting rapidly to the changing conditions and the adaptive asymmetric threat. However, there are as many dissimilarities as there are similarities. The rotational schedule in OIF makes continuity problematic and sustaining gains in popular support difficult. Second, the COE of Iraq is exponentially more difficult due to the existence of different insurgent groups with different strategies and short-term goals (although evidence shows that the group’s long term goals are similar in some respects). Third, the campaign in Iraq started

¹²⁵ Chiarelli and Michaelis, 4. This though provoking article formed the basis for the case study. It is important to note that the UNCLASSIFIED nature of the monograph prevented detailed analysis of the 1CD’s campaign plan including specific decision points and certain measures of effectiveness.

with regime change and transitioned into counterinsurgency and state building, while Malaya was the result of an attempt to change the political environment to communist rule. There are two significant similarities, however, including the focus on winning ‘hearts and minds’ along with the fact that the insurgencies wanted the “occupying” forces out of the country.

ICD assumed responsibility for the Baghdad AOR in April of 2004 through approximately March of 2005. During this period, the division engaged in the full spectrum of operations from combat operations in Fallujah and Sadr City to facilitating and organizing the national elections.¹²⁶ MG Chiarelli and his staff analyzed the situation and developed a series of lines of operation as a course of action (see Fig. 5). These lines of operation were clearly logical lines, although not described as such. On the horizon for the division were the national level elections in January of 2005.¹²⁷

The initial stages of the campaign in Iraq, much like the first years for the British in Malaya, were difficult due to self-imposed limitations on how to prosecute the operation. This period lasted from the transition of authority (TOA) with 1st Armored Division through the middle of August when Muqtada Al Sadr forces broke the cease-fire with Coalition forces.¹²⁸ As detailed in the previous chapter, historical evidence reveals the Army’s challenge in overcoming the conventional mindset to implement an effective counterinsurgency operation. According to MG Chiarelli, “our own mentality of a phased approach to operations boxed our potential into neat piles the insurgent and terrorist initially exploited.”¹²⁹ Chiarelli continues, “we found that if we concentrated solely on establishing a large security force and targeted counterinsurgent combat operations—and only after that was accomplished, worked toward establishing a sustainable infrastructure supported by a strong government developing a free-market system—

¹²⁶ Ibid., 5.

¹²⁷ Ibid., 4.

¹²⁸ Ibid., 5.

¹²⁹ Ibid., 4.

we waited too long.”¹³⁰ In addition, like the British in Malaya, 1CD did show signs of adapting to the situation. Based on the campaign plan, the key-planning concept that allowed 1CD’s commander and planners to visualize the synchronization, coordination, and execution of the overall campaign was lines of operation.¹³¹

In order to understand the conditions in Baghdad, 1CD planners divided the “demographic battlespace” into three operational categories that included anti-Iraqi forces (the insurgents), supporters of the coalition, and the fence-sitters (neutral population).¹³² The insurgents were dealt with kinetically. Coalition supporters were obviously important to overall strategic success, and information operations required to maintain their support. Finally, the neutral population required the full focus of the division across every line of operation in an effort to move people towards positive support of both the coalition objectives and the Iraqi Government. Consequently, 1CD focused their counterinsurgency effort on the population of Iraq—namely the so called fence-sitters—that was determined to be the center of gravity.¹³³ Another 1CD officer serving in Baghdad, Christopher Ford, provides an interesting analysis of popular support in his article entitled “Speak No Evil: Targeting a Populations Neutrality to Defeat an Insurgency.” Ford states, “the civilian population plays a determinative role in the success or failure of the insurgency; and the civilian population can be more effectively influenced through a more selective and efficient application of civil-military operations.”¹³⁴

This point is perhaps the most important with understanding how the division planners organized the lines of operation into a conceptual framework for execution. The six different lines of operation included information operations, training and employing security forces,

¹³⁰ Ibid.

¹³¹ Note that although that doctrine which existed at this time (FM 3-0, for example) refers to this concept as “logical” lines of operation versus simply “lines of operation”. This point illustrates the potential for confusion within doctrine.

¹³² Chiarelli and Michaelis, 5-6.

¹³³ Ibid., 6.

¹³⁴ Christopher M. Ford, “Speak No Evil: Targeting a Populations Neutrality to defeat an Insurgency,” (*Parameters*, Summer 2005), 52.

essential services, promoting governance, economic pluralism, and combat operations (see Fig. 5).¹³⁵ The end-state for this effort was “a secure and stable government for Iraqis, maintained by indigenous police and security forces under the direction of a legitimate national government that is freely elected and accepts economic pluralism.”¹³⁶ The end-state represents a logical and well thought out goal for the campaign. Furthermore, the end-state essentially translates the lines

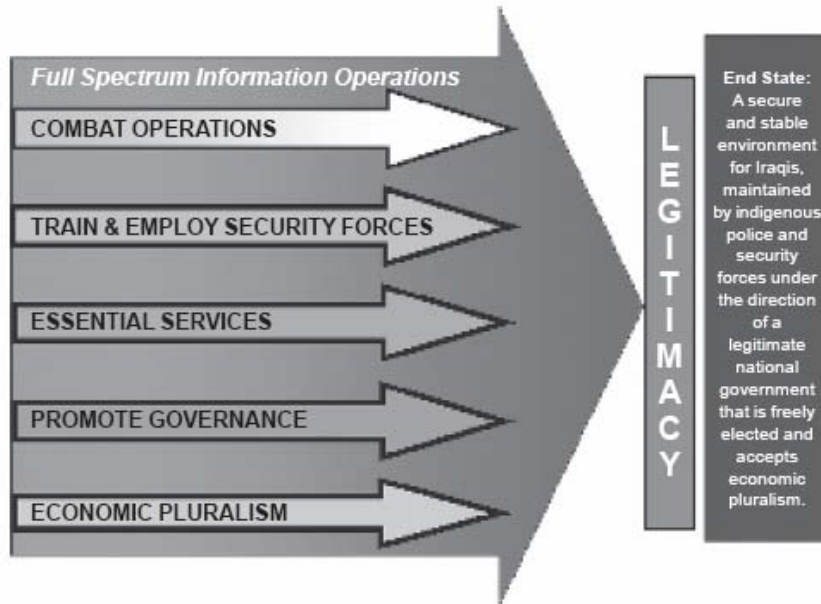


Figure 5: 1CD Lines of Operation¹³⁷

of operation into a vision for the campaign. Whether the end-state selected was right or wrong is not the issue within the context of this monograph. The question is whether the lines of operation and corresponding end-state are linked across all levels of war and tied to the success of the overall counterinsurgency operation?

Before analyzing and assessing the lines of operation, a brief discussion on the selected lines of operation is required. The combat operations and Iraqi security forces lines of operation are fairly self evident and resulted in relative success with respect to killing and capturing of insurgents. Iraqi security forces training showed improvement as evident in the transfer of

¹³⁵ Chiarelli and Michaelis, 7.

¹³⁶ Ibid.

¹³⁷ Ibid.

sections of Baghdad to an Iraqi Army brigade in February of 2005.¹³⁸ Essential services provided an indirect way to influence the population through the provision of services, which improved quality of life along with the tangible benefit of job creation. A series of subordinate activities or lines of operation were developed by the division to address the sewerage, water, electricity, trash, and information (or SWETI).¹³⁹ Because Baghdad was the responsibility of the division and also the capital of Iraq, the governance line of operation focused on the promotion of a legitimate Iraqi government. The defining objective of this effort was the general election in January of 2005. Economic pluralism focused on developing business capacity along with the influx on goods to help promote a path towards free-market economy. Across all these lines of operation was a continual effort to ‘target’ the three different demographic categories of the population through civil-military operations.

Assessment of 1CD Operations in OIF

Similar to the first few years of the Malayan Emergency, the U.S. Army 1CD encountered numerous challenges prior to Al Sadr militia forces violating the cease-fire in August of 2004. The insurgent pressure on the coalition during the months leading up to the uprising caused the leadership to prioritize combat and security operations over the four civil lines of operation. The results, however, were potentially catastrophic. The direct approach military force at the expense of the different non-lethal lines of operation made *influencing the population* problematic. MG Chiarelli emphasizes “understanding the role of our actions through the eyes of the populace was a critical planning, preparation, and execution factor.”¹⁴⁰ The actions of Al

¹³⁸ Ibid., 8.

¹³⁹ Ibid., 11. This framework for essential services is revised in FM 5-0.1, *The Operations Process*, B-10. The manual introduces the acronym SWEATMS (sewage, water, electricity, academics, trash, medical, security) as an example for logical lines of operation at the tactical level.

¹⁴⁰ Ibid., 7.

Sadr subsequently caused the division to re-evaluate and adopt the other three “nontraditional lines of operation to achieve sustainable gains across Baghdad and greater Iraq.”¹⁴¹

Decision-making effectiveness was problematic in the first few months of the campaign. The application of kinetic force to quell the insurgency decreased popular support and magnified initial success by the insurgency. The adjusted focus to the “nontraditional” lines of operation including governance, essential services, and pluralism allowed the reallocation of resources signaling a clear shift from the direct to indirect approach. For example, the division was able to allocate financial resources to address grievances and foster a healthier relationship with the population. As a result, there was an increase in intelligence that led to greater success against the insurgency. The division maintained this momentum through the January elections.

Operations in Iraq also amplified the requirement for *measuring the effectiveness* of operations and the overall progress towards operational and strategic objectives. MG Chiarelli echoes this point, “what also became clear was that the traditional phased approach, grounded in U.S. doctrine, might not be the answer, rather, an event-driven “transitional” approach might be more appropriate based on a robust set of metrics and analysis.”¹⁴² Of course, complexity of the operating environment and the difficulty analyzing metrics for the desired effects can be problematic for the counterinsurgent effort. The Division used what MG Chiarelli called a “balanced scorecard” approach which “allowed the division to gauge, through each line of operation, whether we were meeting campaign objectives, or, based on environmental reality, needed to shift or change to reflect current reality.”¹⁴³ Consequently, ICD used several metrics to measure performance and the overall effectiveness including metrics along the SWETI lines of operation, which were subordinate to the essential service line of operation in the overall campaign plan. However, like the British in the Malayan Emergency, the ICD faced significant

¹⁴¹ Ibid., 10.

¹⁴² Ibid., 7.

¹⁴³ Ibid., 14.

challenges interpreting the various metrics. For example, as pointed out by MG Chiarelli, the metrics leading up to the August 2004 violation of the cease-fire showed positive results with respect to essential services along the SWETI lines, yet violence still erupted on a large scale.¹⁴⁴

Similar to the Malayan Campaign, the level of acceptable *operational risk* shifted significantly as the counterinsurgent effort matured and adjusted to the adaptive insurgency. Increased casualties and a higher rate of insurgent attacks—despite the aggressive use of kinetic operations against insurgent targets--characterized the first months of the insurgency. The implementation of the non-traditional or civil lines actually increased flow of actionable intelligence and minimized operational risk with respect to kinetic operations.

Based on the assessment, the 1CD campaign plan effectively leveraged available doctrine on logical lines operation during counterinsurgency operations. The commander and staff developed and implemented logical lines to provide a framework for operations within the campaign. Decision-making was a function of measuring effectiveness of operations while operational risk was balanced across logical lines to accomplish operational objectives. However, the management and flexibility of the logical lines were not realized until later in the campaign, presumably after the Division placed greater emphasis on kinetic operations to subdue insurgents in Sadr City. This could be attributed to gaps in doctrine that do not explain the importance of primacy on civil operations geared towards the neutral population.

1CD developed logical lines of operation early in the planning process and applied them for the duration of their OIF Campaign. There are differences, however, with the doctrinal application of lines of operation in the case of 1CD. Analysis of the criteria reveals issues with available doctrine and the lack of continuity across both operational planning and

¹⁴⁴ Ibid., 5. This description alludes to the difficulty in identifying causal linkages between actions and effects. The number of significant activities (p. 12, Figure 5) in Sadr City dropped significantly to a negligible number of 10 or less in November of 2004, yet the cause of this decrease cannot be attributed to any one action with 100% certainty. Another example of the problems associated with metrics in the complex operating environment.

counterinsurgency doctrine. First, the article does not mention “logical” within the context of lines of operation. This exclusion underscores the problem in doctrine over the use of “physical” and “logical” lines of operation. Second, the depiction of lines of operation in Figure 5 does not reflect decisive points, effects, conditions, objectives, or centers of gravity.¹⁴⁵ This reflects the differences in interpretation and coherence between joint and army doctrine. FM 3-0 (see Fig. 2) depicts decisive points leading to military conditions while JP 3-0 and 5-0 (see Fig. 4) depicts lines of operation (both physical and logical) linking decisive points to objectives. Interim manual 5-0.1 reveals yet another variation of the concept, linking objectives and decisive points to conditions and an end-state. Third, the campaign plan was premised on the elections in January (the ‘point of penetration’), yet the COG was identified as the neutral population. There is nothing wrong with this distinction, however, the use of physical or kinetic terminology like point of penetration and centers of gravity create the allusion that a decisive point or battle will allow operational and strategic objectives to be achieved. This point reflects macro level planning issues with operational design. Effects based operations, for example, mentions the linkage of effects and conditions, to an end-state while the 1CD article mentions tasks in lieu of effects.

Conclusion

The practical application of logical lines of operation reveals both the utility of the planning framework in counterinsurgency and the challenge of effectively incorporating the concept into contemporary operations. Overall, the two case studies show that the conceptual approach using logical lines of operations is the best method available for operational planners. The case studies also reinforce the theoretical and doctrinal importance of civil primacy over

¹⁴⁵ Note that this graphic of the Lines of Operation does not reflect detailed information due to the classification of this monograph and the unclassified nature of the article.

military or kinetic operations. Lessard emphasizes this point when he states that “conflict resolution is a long process...it is primarily a civil problem that may require military support.”¹⁴⁶

The Briggs Plan sponsored by Sir Harold Briggs and effectively implemented by Sir Gerald Templer emphasized the importance of conceptualizing, synchronizing, and coordinating operations along civil and military lines in order to achieve strategic objectives. British doctrine during the post WWII period was limited at the operational level, yet the adjustments by the leadership convey the conceptual understanding that catalyzed current British doctrine. This was particularly evident for the British during the first years of counterinsurgency operations that featured large formation conventional operations to find, kill, or capture MCP insurgents. Consequently, current British doctrine reveals some useful derivations to help conceptualize operations including lines of activity. Much of the capstone manuals on counterinsurgency and operations like ADP-1 and AFM-1 refer to the Malayan Emergency as a key contributor to the development of counterinsurgency planning and doctrine. Despite similar problems in British doctrine such as the use of different terminology, limited examples, and greater emphasis on physical concepts like center of gravity and decisive points, the doctrine does provide useful concepts that inform U.S. doctrine.

Similarly, 1CD efforts during OIF-2 capture the unique value of logical lines of operation in the COE. Although not the first organization to use logical lines of operation, the division planners and commanders appear to have prioritized the success of the campaign on the management of operations along military and more importantly civil lines of operation. 1CD did an impressive job conceptualizing the framework for the civil and military operations using available doctrine. The conceptualization across time, space, and purpose allowed operational and strategic objectives to be realized, signified by the elections in January 2005. Like any complex operation, the division faced problems along the way. Similar to other

¹⁴⁶ Lessard, 40.

counterinsurgency campaigns like Malaya, the division was initially challenged with the urge to apply primarily kinetic solutions to achieve non-military objectives. Arguably, a component of this issue outside of the well documented cultural problem with the Army's conventional mindset is the void in U.S. doctrine. Confusion over concepts, examples, and terminology contribute to the challenge of interpreting and applying doctrinal concepts. Furthermore, the tendency to apply physical terms to conceptual situations tends to diffuse the importance of the overall objective that is politically motivated and based on the capacity to secure the general population.

Finally, the linkage of purpose across the operational level of war is problematic at best. The real issue with the doctrinal void is the problem with unity of purpose. Although beyond the scope of this monograph, establishing and maintaining unity of purpose is difficult not only within a year long campaign, but also more importantly within a protracted campaign that attempts to link operations to a strategic end-state. Consequently, a 'forcing function' at the joint level is required to ensure unity of purpose, which is critical to achieve theater and national strategic objectives. Despite the use of variations of logical lines at each level, doctrine does not specify a process or mechanism at the operational and strategic level to link unity of purpose. Comparison of the lines of operation found in *The National Strategy for Victory in Iraq* with operational level lines of operation reveal the disconnect between the different sources of doctrine and national policy. The strategy depicts strategic objectives with subordinate "lines of action"—yet another term to confuse the planner.¹⁴⁷ The simple fact that the strategy was not released over two years from the start of major combat operations (November 2005) reinforces the problem with operational planners attempting to nest a campaign plan with strategic objectives.

¹⁴⁷ National Security Council, *The National Strategy for Victory in Iraq*, (Washington: GPO, November, 2005), 27-35.

CHAPTER 4: CONCLUSION AND RECOMMENDATIONS

Apparently, the United States Army can only focus on one kind of war at a time.

-John Waghelstein¹⁴⁸

Accustomed to focusing primarily on combat operations, U.S. forces under the (new Pentagon directive) must now give post-conflict stability operations similar priority, which means they must be ready in foreign countries to carry out such tasks as developing political institutions, establishing judicial systems, and reviving economic activities.

-Washington Post¹⁴⁹

Introduction

The contemporary operating environment demands planning methods to deal with the conceptual nature of complex problems. Logical lines of operation provide a concept that frames the various civil and military operations required to defeat an insurgency and achieve strategic objectives. This monograph examined the historiography, theory, and practical application of logical lines to determine where the void exists and how to improve contemporary doctrine. Regardless of the findings, there are two constants that the operational planner must contend with during future operations like those currently ongoing in Iraq. First, the operating environment will continue to be increasingly complex. Insurgency and guerrilla warfare will continue to be the low-cost, low-tech tactic of choice to attack U.S. forces. Second, future U.S. interventions will continue to be characterized more by stability operations involving counterinsurgency than major combat operations. The purpose of this chapter is to summarize the key points made throughout the monograph and provide recommendations for doctrine based on assessment and conclusions. The recommendations will focus on Joint, Army, and operational level planning and counterinsurgency doctrine.

¹⁴⁸ Waghelstein, 293.

¹⁴⁹ *Washington Post* article in *The Kansas City Star*, (Kansas City, KS), 2 December 2005, A-8.

Final Analysis and Assessment

One of the principles of battle command is the ability to visualize, describe, and direct in the decision-making process. Visualizing and describing the contemporary (and future) operating environment becomes exponentially more difficult as the complexity of the operating environment increases. Consequently, Chapter 2 examined complexity theory in order to improve understanding of the COE and interaction of complex adaptive systems. Networked or “liberated” urban insurgency similar to the one that exists in Iraq today makes planning counterinsurgency even more difficult.¹⁵⁰ Within this context, logical lines of operation provide a way to address complexity and visualize the relationship between each major line of operation within a counterinsurgency campaign. This permits the integration of all available inter-agency assets in conjunction with military capability to ultimately set military conditions and accomplish political objectives.

Theory on the evolution of logical lines of operation is limited in military literature and doctrine. The preponderance of contemporary information focuses on concepts introduced in the 19th Century by theorists like Jomini. The concept for logical lines developed out of the physical idea that lines of operation links decisive points to objectives and end-states. However, there is little evidence of conceptual or logical lines of operation. The manifestation of theoretical thinking on logical lines appears primarily in recent U.S. Army doctrine, specifically FM 3-0, *Operations*. Despite this limitation, the emphasis on stability operation, including counterinsurgency, caused emerging doctrine to attempt to refine the concept and provide better explanations for implementing the concept in current operations.

Army interim doctrinal manual FM 5-0.1, *The Operations Process*, appears to provide a revision along with relatively useful examples of logical lines in application. However,

¹⁵⁰ Steven Metz and Raymond Millen, *Insurgency and Counterinsurgency in the 21st Century: Reconceptualizing Threat and Response*, (Carlisle, PA: Strategic Studies Institute, November 2004), vi.

examination of available counterinsurgency doctrine reveals significant deficiencies including the lack of independent counterinsurgency manuals that address the operational level of war. Consequently, the integration of logical lines as a planning tool is deficient in the planning of counterinsurgency doctrine and across stability operations. This void extends to the Joint level. Joint doctrine is relatively austere with respect to both the use of logical lines of operation and counterinsurgency operations. For example, the final draft of JP 5-0, *Doctrine for Joint Planning*, provides only one generic example of logical lines of operation. Furthermore, counterinsurgency operations continue to receive secondary status within the context of Joint doctrine. JP 3-07, *Joint Doctrine for Military Operations Other Than War*, has not been updated since 1995. Subsequently, insurgency remains a subset of FID, with the Maoist model of the early 20th Century providing the context for counterinsurgency doctrine.

British doctrine provides some useful material to inform U.S. doctrine. The vast British experience fighting against insurgency reveals a longstanding blend of theory and doctrine grounded in the successes and failures of the last 200 years. However, like U.S. doctrine, British doctrine has been marginalized by the Maoist model and to a lesser extent kinetic thinking within the Army itself. Similarly, theorists like Clausewitz and Jomini continue to influence the evolution of logical lines of operation in doctrine. The uses of different terminologies to describe lines of operation are spread throughout Army and JWP operational and planning doctrine. Additionally, like U.S. doctrinal limitations, British counterinsurgency doctrine does not include planning methods like logical lines of operation to assist in operational planning. Perhaps the best example of a concept similar to logical lines is the line of activity in JWP 3-50, *Peace Support Operations*. This doctrine provides a useful description of how to incorporate selected lines of activity into an operational plan.¹⁵¹

¹⁵¹ It is interesting to note the similarities between peace support operations and counterinsurgency. After all, “Winning the Peace” corresponds more to enforcing peace in a politically charged environment of stability and reconstruction operations than major combat operations.

The merging of counterinsurgency and planning theory into doctrine conveys important points with regard to the practical application of logical lines. Theory and doctrine evolves slowly compared to the insurgent's ability to rapidly adapt within the complex environment. This problem includes the influence of Mao Tse-Tung's revolutionary strategy and the importance of popular support. The Maoist strategy for an insurgency (mobilization of the masses, guerrilla warfare, and conventional warfare) continues to provide some utility within the context of insurgency in a failed or failing state. Current doctrine focuses on this type insurgency or "national" insurgency versus the "liberation" insurgency that exists in places like Iraq.¹⁵² As discussed in Chapter 2, insurgencies need the population to remain neutral or actively support their goals in order to achieve their political strategy. Therefore, the current situation in Iraq reinforces the requirement for an adaptive planning tool that allows for adjustments and transitions to stay ahead of the networked or "liberation" insurgency. The fact that the U.S. and her coalition partners are seen as occupiers vice liberators magnifies the challenges of counterinsurgency planning. The overall requirement for the support of the population in favor of the counterinsurgent also remains constant, regardless of the category or classification of the insurgency.

Finally, counterinsurgency theories of the 20th century predated the development of logical lines of operation and the attempt to codify the method as a doctrinal concept. Comparisons of the practical application of logical lines of operation reveal both the utility of the planning tool in counterinsurgency and the challenge of effectively incorporating the framework in contemporary operations. The British did not use the concept in the same manner as the one prescribed in current doctrine, however, lines can be discerned from the carefully developed plans sponsored by Briggs and Templar. The comparison of the two case studies reveals that logical lines of operation represent the best available tool for influencing the population, decision-

¹⁵² Metz and Millen, vi.

making, measuring effectiveness, and managing operational risk. Additionally, the lessons learned from past counterinsurgency planning and operations have positively impacted recent operations in Iraq. For example, 1CD developed logical lines early in the planning process and successfully applied them through the duration of their OIF rotation.

Recommendations

The first chapter mentioned operational design, which provides the intellectual framework for the development of viable courses of action. In his article entitled “Operational Art for the Objective Force,” COL James Greer discussed the challenges for operational planners in dealing with the future operating environment and the full spectrum of operations. The following passage described the issues with contemporary operational design:

Unfortunately, the current operational-design construct is often incapable of providing planners and commanders the means of designing campaigns and major operations (that) full spectrum operations require. Despite the concept of logical, in place of physical, lines of operation in 2001 version of FM 3-0, planners of the ongoing counter-terrorism campaign face the same challenges as planners of peace-support operations in the Balkans. Today’s doctrinal concepts for operational design hamstring planners’ and commanders’ abilities to design and conduct effective, coherent campaigns for operations across the spectrum of conflict in today’s security environment.¹⁵³

Consequently, Greer mentions several alternative approaches to current doctrine including Systems (including Systemic Operational Design), Effects-based, Destroy-Dislocate Disintegrate, and Center of Gravity to Critical Vulnerabilities.¹⁵⁴ Regardless of the design approach, there remains one significant consideration with respect to doctrine. As Greer stated in the passage above, it is important that doctrine does not “hamstring” the planner in developing an effective long-term campaign plan. Doctrine must provide options for the commander to visualize the campaign and communicate his intent to subordinates. Despite both positive and negative aspects

¹⁵³ James K. Greer, “Operational Art for the Objective Force”, *Military Review*, (September-October, 2005), 5.

¹⁵⁴ *Ibid.*, 5-6.

of each approach, Greer concludes that doctrine is probably adequate “if refined based on current practice.”¹⁵⁵ Refinement of existing doctrine is feasible, as long as the terminology used is effective and consistent across doctrine at all levels of war.

The design approach receiving increased emphasis recently at the joint and operational level is the effects based approach. According to JP 5-0, “[an] effects based approach is fundamental to the planning effort, and is reflected in the steps of the Military Decision-making Process (MDMP).”¹⁵⁶ Consequently, effects based language and terminology should be used consistently across doctrine. As discussed throughout the monograph, current doctrine using logical lines provides a conceptual framework applicable to all design approaches, including effects based operations. Lessard provides a useful example of logical lines of operation that merges elements of different current operational design approaches. Lessard discusses enabling effects, which link what he called civil lines of operation and military lines of operation to campaign conditions and operational objectives.¹⁵⁷ Therefore, a recommended adjustment to doctrine to delineate between lines of operation is to call them *civil* and *military* lines of operation.¹⁵⁸ This subtle differentiation places emphasis on how to conceptualize both kinetic and more importantly non-kinetic solutions.

The void in doctrine with respect to logical lines of operation is most evident at the operational and joint level, particularly with respect to planning counterinsurgency operations. Therefore, Joint and Army planning doctrine requires updating. FM 3-0 and 5-0 in parallel with JP 3-0, and 5-0 require better descriptions and examples of logical lines at each level of war from tactical through national strategic. Counterinsurgency operations against liberated insurgencies

¹⁵⁵ Ibid., 5.

¹⁵⁶ JP 5-0, III-2.

¹⁵⁷ Pierre Lessard, *Campaign Design for Winning the War and the Peace*, (Canada: Canadian Forces College, 16 December 2004), 42-45. This monograph provides the foundation for the article with the same title used in Chapter 3. Lessard provides useful recommendations for conceptualizing COIN and modeling lines of operation in effects based language and terms.

¹⁵⁸ Ibid., 47.

are problematic enough without doctrine that brings together all aspects civil and military operations to defeat an insurgency and subsequently set the conditions for success. Furthermore, as suggested by Kem in his monograph entitled *Campaign Planning*, logical lines of operation assist the planner in war-gaming and rehearsing selected courses of action.¹⁵⁹ The staff can war-game and rehearse each logical line of operation across the duration of an operation or campaign. Effects can be analyzed and corresponding decision points determined along each line of operation. Consequently, planning doctrine should reflect the war-gaming and rehearsal process using logical lines of operation.

Joint and operational doctrine also requires an emphasis on unity of purpose with respect to planning counterinsurgency operations. Logical lines should be included early in the planning process and incorporated throughout the phasing construct from deterrence through major combat operations and transition. This allows the planner to integrate, coordinate, and synchronize all elements of national power along with the different agencies and non-governmental organizations required to achieve the strategic end-state. The intent is to “overlap each operational plan with all the others...these concepts translate directly to COIN.”¹⁶⁰ The *National Strategy for Victory in Iraq* provides an example of strategic objectives and subordinate “lines of action” that facilitates the desired end-state.¹⁶¹

Furthermore, a ‘forcing function’ or mechanism must be included in joint level doctrine, which emphasizes the importance of continuity across a protracted campaign, particularly in the theater strategic and operational command structures residing in a theater of operation. A brigade level officer who served during OIF-2 lamented that the incoming unit essentially “disregarded” the logical lines of operation developed and implemented over the previous year-long

¹⁵⁹ Kem, 41.

¹⁶⁰ Gavin Bulloch, “Military Doctrine and Counterinsurgency: A British Perspective.” (*Parameters* Summer, 1996), 4.

¹⁶¹ National Security Council, *The National Strategy for Victory in Iraq*, (Washington: GPO, November, 2005), 27-35.

deployment.¹⁶² A concept paper on stability operations by the Department of Defense provides a good recommendation for solving this problem called a “Joint Planning Structure.” This mechanism “is established by the military and leading civilian agency, (representing) the joint forces nexus for civil-military preparation, organization, and action.”¹⁶³

Counterinsurgency must also be ‘operationalized’ at the joint and operational level.¹⁶⁴ Currently, counterinsurgency doctrine remains tactically focused and embedded as a subset of stability operations. This requires an independent, dedicated doctrine that places primacy on counterinsurgency and clearly delineates between FID and state building in the context of SRO. JP 3-07 series should include a counterinsurgency specific manual like the Army’s version FM 3-07.22, *Counterinsurgency Operations*.¹⁶⁵ The fact that counterinsurgency remains a subset of FID also relates to the longstanding influence of communist revolutionary warfare on strategy and doctrine. Doctrine must clearly delineate between the this “nationalist” type of insurgency and the “liberation” insurgency like the one in Iraq to address political environments where a non-existent or immature government exists for certain periods of time.¹⁶⁶ The complexity of current and emerging 21st-century asymmetric threats demands dedicated doctrine on counterinsurgency. Fortunately, the planning of operations using logical lines is viable for operations and campaigns regardless of the context of the type of insurgency or the complexity of the environment.

¹⁶² Comments made in a non-attribution environment during a briefing at the School of Advanced Military Studies, October 2005.

¹⁶³ Department of Defense, *Security, Transition, and Reconstruction Operations, Version 1.06*, (Washington D.C.: GPO, 8 June 2004), 37.

¹⁶⁴ Joseph D. Celeski, *Operationalizing COIN*, (Hurlburt Field, FL: Joint Special Operations University Press, September 2005), 3. Celeski provides an interesting monograph entitled “Operationalizing COIN” which attempts to address the problem of conceptualizing counterinsurgency from a Special Operations perspective. Celeski includes a brief section on logical lines of operation as a planning method for a counterinsurgency campaign. Unfortunately, conventional doctrine does not emphasize the “operationalization” of COIN in the same manner.

¹⁶⁵ FMI 3-07.22 also requires updating that addresses more operational level planning and less tactical level TTP’s.

¹⁶⁶ Metz and Millen, vi-vii. Metz and Millen present the idea that existing U.S. strategy and doctrine that focuses on national insurgencies rather than liberation insurgencies.

Conclusion

Leveraging logical lines of operation in counterinsurgency provides the framework to visualize the operation, synchronize effects, and sustain momentum to achieve national strategic objectives during stability and reconstruction operations. What makes counterinsurgency during stability operations unique is the application of ways and means by a military force to solve what is essentially a non-military problem. This requires a change in the conventional paradigm from a kinetic mindset to a balanced approach to designing operations. Applying combat power to attack insurgents remains an important component of successful counterinsurgency, however, this represents only a small percentage of the overall operational strategy.¹⁶⁷

No checklist or planning panacea exists that provides the solution to achieve political objectives and decisively defeat an insurgency like the one currently raging in Iraq. Consequently, courses of action must be flexible enough to allow for adaptation within the context of a protracted campaign. Logical lines of operation provides the flexibility that the planner requires to effectively assess and link ongoing operations. John Waghelstein's indicting comment that we are "limited by a lack of intellectual and doctrinal preparedness" cannot continue to be the case. Therefore, we must not permit the lessons from ongoing counterinsurgency operations to go 'unlearned'—our national security depends on it.

¹⁶⁷ Hoffman, 5. Hoffman believes that as much as 90% of the counterinsurgency effort must be focuses on civil activities, while the other 10% of the effort should be on military activity.

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