Theory, its Impact on Military Doctrinal and Organizational Change During a time of War

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Abstract

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This monograph's purpose is to explore theory and its impact on military organizational and doctrinal changes during a time of war. Answering the research question will prove useful in contributing to the professional dialogue for the US to continue to maintain the best led, trained and equipped military in the world. One underlying assumption was that, rationally, theory should drive doctrine, which produces organizational change and that technological or capabilities improvements (prior to, during and after change) would influence, but not dictate, the wholesale refinement of either theory or doctrine.

The research methodology used historic analysis of warfare theorists, case study comparison of past success and failure and scrutiny of lessons only just learned from Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF). The starting point for the study was the importance of theory, the role of theory development in producing refinement in the application of combat power with a brief review of past and contemporary theorists' impact on doctrine, as well as organizational structures. This study relied on a historical perspective with, a dialectic approach to show the impact of change during a time of major wars, specifically, during World War II within a conventional warfare framework of both friend and foe, and the unconventional American experience in Vietnam. This was proceeded by a focused discussion on contemporary lessons learned during OIF and OEF, to include observations in 2004-2005 from the Joint Readiness Training Center (JRTC) Combat Training Center (CTC) on Brigade Combat Team (BCT) transformation. Observations are on modular transformation by the active force and mobilization of the reserves legacy BCT, closing with thoughts on changes generated within the Army Aviation community during the Global War On Terrorism (GWOT).

The conclusion on the role of theory was that historically each service has gravitated to what it identified as the most applicable methodology. With the arrival of the challenges found in both OIF and OEF, with unquestionably smaller manpower forces, the US is unmistakably now a joint force. Theory clearly, along with a host of other interrelated factors from technology, ideology to resources of the state, exerts discernible change on the US military during times of war. The evolution of theory is a natural process that both promoted and accommodated change in capabilities, organizations and doctrine. From the arrival of the Napoleonic way of war to contemporary expeditionary warfare, change remains an evolutionary constant in warfare. Institutional resistance, not the shortcoming of past and evolving warfare theory to generate suitable doctrinal and organizational change has had an impact. Internal governmental refusal to accept a synchronized interagency approach and overt US Army opposition to insurgent warfare has delayed an appropriate response, eroding public support from the US during OIF.

The key findings of the role of theory and its impact ranged from good, indifferent, to bad. The good is a joint force moving toward the development of both joint theory and doctrine. The Presidents' National Strategy for Victory in Iraq bodes well for future success with its distinct counterinsurgency theory flavor using all the elements of national power. Also, the DOD directive making Stability a core mission will serve as a coercing force to overcome military opposition to counterinsurgency operations. Aviation's and the reserves transformation are ideal for future support of our nation, theoretically, doctrinally and organizationally. Within the indifferent realm, is the transformation of the BCTs currently underway, not innovative but fully in line with the American way of war. The bad was finding that the Bush Preemption Doctrine shows a clear disparity between the declared objectives of the nation and the military resources available to engage in those aspirations. The US must, without illusions, understand the challenges of the new global order to ensure long term strategic success, especially if tasked to provide more troops for the GWOT.

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Introduction

The one constant in the history of civilization and specifically warfare, is change. This research monograph will explore warfare theory and its impact on military organizational and doctrinal changes during a time of war. One underlying assumption is that, rationally, theory should drive doctrine, which produces organizational change and that technological or capabilities improvements (prior to, during and after change) will influence, but not dictate, the wholesale refinement of either theory or doctrine. Though some consensus should exist that no two wars are truly the same, we can still draw from the evolutionary well of theoretical application on lessons learned from pre-industrial, so-called modern to contemporary war, as we look to future doctrine and organizational development.

The research methodology uses historic analysis of warfare theorists, case study comparisons of past wars' success and failure and scrutiny of lessons only just learned from Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF). For the most part a dialectic approach will be used. The starting point for the discussion is the importance of theory, the role of theory development in producing refinement in the application of combat power and a brief review of past and contemporary theorists and their impact on doctrine, as well as organizational structure. Next, discussed from a historical perspective, is the role of change during a time of major wars, specifically, as demonstrated during World War II (WWII) within a conventional warfare framework of both friend and foe and the unconventional American experience in Vietnam. This will be followed by a focused discussion on contemporary lessons learned during OIF and OEF. First hand observations from the Joint Readiness Training Center (JRTC) Combat Training Center (CTC) on Brigade Combat Team (BCT) transformation in 2004-2005 to modularity by the active force and mobilization of the reserve legacy BCT will follow. Changes within the US Army Aviation community generated by the most recent conflicts will be explored next. Detailed areas of discussion and assessment are those that have experienced significant structural change during the Global War

on Terrorism (GWOT). Findings from the research thesis are encapsulated in the form of both recommendations and in the summary section of the monograph.

The departure point for the discussion of this topic is fittingly the role of theory, more appropriately scientific paradigm change as addressed in Thomas Kuhn's seminal work The Structure of Scientific Revolution and of significant theorists of warfare in the past two centuries. Kuhn ably articulates the emergence of a theory over competing explanations of "normal science" which can never fully, truly explain, all the facts but which it does present in a manner better than its peers on a scientific topic, in this case, warfare. To be accepted as a paradigm, Kuhn wrote: "theory must seem better than its competitors, but it need not, and in fact, never does, explain all the facts with which it can be confronted."[1]

The transformation of the military profession has been shaped by the acceptance of paradigms of warfare. Historically the paradigms have been sea, land and air components with recent additions of space and information operations. Macgregor wrote of these transformations of dominant maneuver as true Revolutions in Military Affairs (RMAs). These RMAs were produced by the development of better doctrine, formations, leaders and the assimilation of technology.[2] Doctrine differs from theory:, Theory explains the phenomenon while doctrine sets out fundamental authoritative military principles to be applied in support of national objectives.[3] Military doctrine is essentially the practical application of a combination of warfare theories. Change is primarily produced by innovative thinkers, discovery lessons learned, or is a consequence of new technology. The addition of new capabilities or so-called RMAs, also referred to as transformation, can lead to the development of new or competing theories. Natural selection should produce the theory that is the most viable to explain a phenomenon at any given time. The scientific cycle of theory development, competition, acceptance, change, attack, modified acceptance, new explanations and

[1] Thomas S Kuhn, The Structure of Scientific Revolutions (The University of Chicago Press: Chicago, 1996), p. 18.

[2] Douglas A Macgregor, Breaking the Phalanx: A New Design for Landpower in the 21st Century (Praeger Publishers: Westport, 1997), pp. 32, 37.

[3] Operational Terms and Graphics, FM 101-5-130 September 1997, p. 1-55.

internalization of what was previously accepted scientific fact is the normal cycle of paradigm assimilation within a professional community.[4]

Some examples of this scientific process are the life cycle of some recent emergent theories of warfare. One is the influence of aero-mechanized warfare theory, developed in the 1980s, based on demonstrated combined arms success by the US during Desert Storm and Panama, now referred to as expeditionary warfare. A splinter group from the Air Force referred to this same phenomenon. Colonel John Boyd was the genesis for the development of transformation doctrine based on an Observing, Orienting, Deciding, an Acting (OODA) loop. OODA is an "effect based" theory. This theory capitalizes on the conventional advantages built into US capabilities that allows them to act faster than potential adversaries. The effect based approach was validated in Afghanistan and was attempted to be replicated in Iraq as an "effect based campaign."[5] On the other extreme, is the recent arrival of so-called "Fourth-Generation War (4GW)." This theory, widely attacked for its selective historic warfare and sequential interpretation, professes that first generation war was exemplified by massed manpower and was at its pinnacle during the Napoleonic warfare era, next followed by the arrival of firepower-dominated warfare seen during WWI. This was proceeded by the arrival of maneuver in WWII blitzkrieg theory and is most characteristic of US operations today. Insurgency-based warfare is referred to as 4GW and is treated as a contemporary form of warfare. The insurgent attempts to undermine the strategic goals of the group in power by making it to costly, economically, socially, politically and militarily for them to sustain the conflict.[6] The recent Israeli Systemic Operational Design (SOD) approach advocated by Dr. Shimon Naveh (BG ret.) is a controversial theory of warfare. [7] This form of effect based operations lacks linkage from the strategic level to the tactical level of war. While producing unquestioned tactical success at times it lacks the necessary strategic connection to the overall efforts of the state**.** However, the theories just addressed to include

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[4] Kuhn, pp. 66-91.

[5] Fred Kaplan, "The Flaw in Shock and Awe," *Slate*, 26 March 2003, p. 2.

[6]Thomas X Hammes COL, "4th Generation Warfare," *Armed Forces Journal*, November 2004, pp. 40-41.

[7]Shimon Naveh, "*Asymmetric Conflict: An Operational Reflection on Hegemonic Strategies"* (Operational Theory Research Institute, Jerusalem, 2002).

Rapid Decisive Operations (RDO), which will be reviewed later in the monograph, regardless of perceived academic merit, all contribute to debate and positive change within our profession.

The absence of a true American theory of war is problematic for understanding the new modular formations being fielded today. The US currently use a combination of theorists that have defined warfare in conventional/symmetric threats or unconventional/asymmetric warfare. The American Army, at least since the post Vietnam era, has been deeply influenced by the Clausewitzian school of warfare. What is lacking is an all encompassing theory of war that addresses the ground, air, sea, space and cyberspace components. The absence of a true joint American theory of war may well thwart the strategic synchronization of all the elements of national power.[8] Professor Michael Handel was correct when he spoke of a universal logic to warfare. Handel, a noted expert on warfare theory, held that: "the basic logic of strategy, of political behavior and the study of war have a universal logic that even if not codified is pre-Newtonian/pre-Scientific with each state developing its own independent strategic concepts but arriving at the same conclusion."[9]

Clausewitz's multifaceted approach to complexity is obvious, that his paradigm is dated and needs modification is readily apparent. The addition of Information Operations and Technology changing the Trinity to a Pentagon of variable interaction is an example. Kuhn would acknowledge that updating a paradigm after crisis is part of its natural evolution. In the following paragraphs is, a review of counterinsurgency warfare and conventional theorists. They have both influenced warfare with an applied combination of science, objectively measurable, and art, subjective interpretation, to produce doctrinal and organizational change during times of war.

Unconventional Warfare Theory

Counterinsurgency theory is applicable the global war on terrorism and the regional conflicts the US is currently fighting in Iraq (OIF) and Afghanistan (OEF). The US Army continues its infatuation with theorists rediscovered after the failure of the Vietnam War, which incidentally led to

[8] Gordon M Wells COL, "The Center of Gravity Fad: Consequence of the Absence of an Overarching Theory of War," *AUSA* Institute of Land Warfare, Landpower Essay, Arlington, March 2001, p. 2.

[9] Michael I Handel, Masters of War: Sun Tzu, Clausewitz and Jomini (Frank & Co. LTD: Portland, 1992), pp. xiii.

a doctrinal renaissance influencing organizational success by the post Vietnam Army in several conflicts.10 A brief review of past noted counterinsurgency theorists, primarily O'Neill, Galula and Trinquier will demonstrate a remarkable consistency in recommended approaches. This type of war is one requiring the application of an integrated strategy and all the elements of national power, not just the military, to defeat.

Bard O'Neill wrote, in Insurgency & Terrorism, Inside Modern Revolutionary Warfare, that an insurgency is both a political and military phenomenon that uses violence to achieve its desired end state. He advocated that only an overall strategy that embraces all the elements of national power, military, political, economic and social will defeat an insurgency. An insurgency is: "a struggle between a non-ruling group and the ruling authorities in which the non-ruling group consciously uses political resources and violence to destroy, reformulate or sustain the basis of legitimacy of one or more aspects of politics (the process of making and executing binding decisions for a society)."[11] O'Neill provides a fairly comprehensive contemporary framework for understanding causation and possible solutions to insurgent warfare.

To O'Neill the four types of political systems normally attacked by the insurgents are the traditional autocracy, modernizing autocracies, totalitarian states and pluralistic. The toppled former Iraqi government and rogue Taliban regimes were totalitarian states. Interestingly, it is the liberal democratic traditions embodied in pluralistic societies that make them vulnerable to the terrorism practiced by the insurgents. Insurgencies are vulnerable because of their frequently conflicting internal, as well as external demands and goals. The seven types of methodologies used by the insurgents for achieving success over the government are all encompassing, ranging from the extremes of anarchist to preservationist. All types are found in varying degrees in Iraq and Afghanistan. The forms of warfare typically associated with these type conflicts are terrorism, guerrilla and conventional warfare. Both terrorism and guerrilla warfare are found in OIF and OEF.

[10], "B.J.C McKercher ed., "Filling the Void: The Operational Art and the Army," Operational Art: Developments in the Theory of War, Richard M Swain (Praeger Publishers, Inc.: New York, 1996), p. 148.

[11] Bard E O'Neill, Insurgency & Terrorism: Inside Modern Revolutionary Warfare (Brassey's Inc.: Dulles, 1990), p. 13.

Insurgents also historically take four general strategies: conspiratorial, protracted popular war, military focus and urban warfare.[12] Protracted popular war is Maoist inspired and also includes the use of terrorism. The US is confronted with elements of the last three and doctrinally holds that each insurgency is unique in FM 3-05.201 Special Forces Unconventional Warfare Operations, dated 30 April 2003. As a healthy and adaptive learning organization, the Army further acknowledges that counterinsurgency efforts must embrace all the elements of national power for long-term success.

A brief illustration of the narrow focus taken by some is the contention by one author that the US mainly acknowledges only the Maoist version of insurgent warfare. Christopher M. Ford, an OIF 1st Cavalry veteran and lawyer, contended, that in FM 3-07, Stability Operations and Support Operations the Army sharply characterize the insurgency phases to be exploited as pre-insurgency, organizational, guerrilla warfare, conventional warfare and post insurgency. Similarly in FM 3-07.22, a somewhat surgically selected source, Counterinsurgency Operations he references the common phases of development and argues the Army uses Mao's seven phases as the main template to overcome insurgency. Mao's seven phases start with arousing or organizing the people and end with destroying the enemy's national strength while regaining lost territories.[13] One could contend the critical shortcoming has not been the lack of appropriate theory or doctrine to respond effectively to the challenges of counterinsurgent warfare but the lack of a unified nationally-directed approach that has delayed overall progress, especially in Iraq. Within the broad parameters of change the following historic generalization could possibly be made: Operational forces generate transformation, theoretically, doctrinally and organizationally during a time of war (necessity based change), while the institutional Army is most likely to spawn change during peacetime.

Insurgents consistently attempt to undermine the popular support of the government by demonstrating that the sovereign authorities are unable to provide security. They must also strive to maintain their external support for funding, manpower and information dominance. External support

[12] Ibid., pp. 15-47.

[13] Christopher M Ford," Speak No Evil: Targeting a Populations Neutrality to Defeat an Insurgency," *Parameters*, Summer 2005, p. 6.

is identifiable from Iran, Syria and Pakistan with global Muslim sympathy in today's conflicts**.** The insurgent environment is composed of two interrelated components; the first is physical, which helps to determine the overall effectiveness of their violence. The second component is the human dimension. The latter, composed of demographics, social groups, the economy, political culture and systems allows one to better understand the causes of the insurgency. The insurgents, by acquiring active popular support or majority indifference among the population within this environment, offset the government's overall strength advantage. Fortunately one can, over time, influence the type, as well as motivations for external support provided to the insurgents. By influencing the moral, political, material and sanctuary externally provided one can leverage the disharmony inherent in the different insurgent groups. The solution for O'Neill is the implementation of progressive and socially equitable political, economic, military and administrative policies to maintain popular support. This proposed solution should be coupled with motivated intelligence, police and security forces, as well as developing a judicial system that follows due process of law to better defeat the goals of the insurgency.[14]

Galula wrote, in Counterinsurgency Warfare, Theory and Practice that political power is also the key to winning a counterinsurgency and offers some general guidelines for success. He argues that the support of the population is necessary and that it can be initiated by gaining the backing of what he calls an active minority. Internal endorsement of the government's counterinsurgency policies will then be earned conditionally, with demonstrated success in this endeavor. The intensity of effort is prioritized and incorporates an economy of force type effort. This could include living among and securing the population while using the military operational tenants of simplicity and unity of command to guide your actions. In these protracted conflicts, the objective is population control to isolate the insurgents from his support network. Goals are sequential and progressively develop one's overall counterinsurgency capability starting with security of the population and progressing to defeating the insurgents. The military helps defeat the insurgents with a combination

[14] O'Neill, pp. 67-103.

of establishing security with static units and using mobile units to attack. Mobile units attack using actionable human intelligence provided from secure areas. The security effort is focused on key terrain, facilities and the civilian population. Because of the limits of conventional warfare in this environment, the enemy is small and mobile, timely and reliable intelligence is paramount and is only provided by a population that feels secure. Galula believes goals should be the destruction or expulsion of the insurgents and the deployment of static units to maintain contact with and control of the local population. The destruction of the enemies' political organizations and holding local elections are used to test the loyalty of local leaders. This is followed by organizing political parties and winning over or suppressing the remaining guerillas.[15] Trinquier, the next theorist, held views similar to both Galula and O'Neill.

Trinquier wrote, in A French View of Counterinsurgency of 'modern war' but is talking of revolutionary war based on his experience as a Battalion and Regimental commander in Indo-China and Algeria. As a product of his experiences the context of his approach is somewhat dated and tactically focused. He believes military tactics and hardware are useless once one has lost the confidence of the population. Like the previous two theorists, he thinks the first objective is control of the population, provide them with the means to defend themselves and collaboration will follow. Trinquier viewed insurgent warfare as a complex, interwoven system of political, economic, military, and psychological action designed to overthrow the existing regime. The insurgents exploit the internal tensions, ideological, social, religious and economic of the country attacked, while framing it as a global conflict. The insurgent uses terrorism to control the population and to demonstrate the government cannot protect them. They defeat a conventional army by avoiding its strengths and using a relatively few insurgents to promote insecurity and control population centers by terror.

To defeat the guerrilla, one must destroy his organization with large scale and prolonged operations to prevent his expansion and systematic control over the population. Principles for

[15] David Galula, Counterinsurgency Warfare Theory and Practice (Hailer Publishing: St. Petersburg, 2005), pp. 98, 107-135.

success are to remove him from the population. By isolating the insurgent and securing sequentially, towns, inhabited rural and refuge areas his operational areas become untenable. Actions are coordinated over a prolonged period of time to attain the desired results. The Bush doctrine of preemption is a possible chorally to this view that the enemy can only move to open warfare when he has refuge for training, supplies and support from external states. The destruction of foreign bases is essential; one must carry the war to the enemy with the same methods as they employ on the government. Trinquier addressed that war aims clearly known to the local population was the surest way to build confidence and defeat the insurgents. [16] By extension, one can imply this line of attack is applicable at home and in liberal democracies to maintain support for a prolonged conflict. Those that attempted to assassinate President DeGaulle would argue that Trinquier's approach was validated in Algeria but was countered with the French policy change. Galula also held that the French policy change led to disengagement and defeat when the insurgency was contained.[17] One of the salient points, beyond using all the elements of national power, among the three is the importance of establishing security for the local populace. In the next paragraph experiences in Vietnam, Afghanistan and Iraq address some of the practical applications of counterinsurgency theory.

The American Army in Vietnam is a noteworthy case study of not using the applicable warfare theory but embracing technology as a substitute to generate doctrinal and wholesale organizational change. The helicopter, particularly as an RMA, allowed the US to fight a no-win war of attrition, in essence, fighting an unconventional war conventionally facilitating tactical success but ultimately operational and strategic failure. Institutional resistance to change, despite ample evidence of doctrinal and organizational failure in the prosecution of the war, contributed to this defeat.[18] The American Army must still be viewed through the prism of the "American way of war" with its doctrinal and organizational foundations in firepower, lethality, mobility, extended range, precision,

[16] Roger Trinquier, Modern Warfare, A French View of Counterinsurgency (Pall Mall Press Ltd.: London, 1964), pp. ix.

[17] Galula, p. 98.

[18] John A Nagl, Counterinsurgency Lessons from Malaya and Vietnam: Learning to Eat Soup with a Knife (Praeger Publishers: Westport, 2002), p. 187.

technology and qualitative localized superiority. Isolating insurgents implies boots-on-the-ground, not relying on technology as a panacea to win these types of conflict. Greater counterinsurgency success has been experienced in Afghanistan with global support, the expansion of North Atlantic Treaty Organization (NATO) activities and Provisional Reconstruction Teams (PRTs) efforts.[19] Many think the US continues to struggle in Iraq. An incorrect assumption that the insurgency in Iraq has transitioned from a sequential Maoist-type template of ideological unification and skipped insurgency phases from that model to direct guerilla warfare may be part of the reason. The other bad supposition appears to be that the subgroups, categorized as Foreign Regime Loyalist (FRL), Foreign Fighters (FF), Militia's and Rejectionist, are so ideologically diverse they will not embrace a unifying agreement to ouster the occupiers or coalition, depending on viewpoint, from Iraq.[20] The illusive goal in Iraq remains a supportive population that will actively resist the insurgency for us to promote stability. To achieve popular support, the population must be convinced with a combination of lethal, persuasive and incentive force that the elected government is the sole source of legitimate authority.[21] Ford implied the solution was to maximize the diverse counterinsurgency theorist approaches. To Ford the US remains rooted in conventional doctrine. By better using the theorist discussed improvements could possibly be made in existing doctrine, and changing formations during the GWOT.

Concluding on counterinsurgency theorists, one must go beyond the Napoleonic maxim of war that 'victory goes to the largest Battalion.' Sun Tzu thoughts serve as a connection to the next section on conventional ground warfare theorists. His stratagem approach to warfare is focused often at the operational level of war and is especially significant to counterinsurgency theory. His emphasis on intelligence, the importance of deception and knowing one's enemy are crucial to defeating the opponent psychologically without force.[22] His methodology comes close to the ideal

[19] David Lamm COL, "Success in Afghanistan means fighting several wars at once," *Armed Forces Journal*, November 2005, p. 26.
[20] Ford, p. 11.
[21] Ford, p. 7.
[22] *Sun Tzu*, ed. James Clavell, The Art of War (Delacorte Press: New York, 1983), pp. 15, 26, 82.

desired for victory in combating unconventional war. Sun also realized the importance of popular support as a prerequisite for success during an extended war. That the strategic Center Of Gravity (COG) in irregular warfare is public support has been aptly demonstrated by France and the US in the past century. Both were not beaten in Algeria or Indochina militarily, but by the loss of public support and confidence.[23] Conventional warfare down plays the need to secure urban population centers, key infrastructure and maintaining public order and services.[24] Sun Tzu approach is in direct contrast to the Western conventional theorists over reliance on offensive combat to defeat the enemy, which is poorly suited to counterinsurgency war. An examination of Western theorist follows.

Conventional Warfare Theory

A historical review of a few significant wars from the past illuminates the impact on the evolution of theory and change to doctrinal and organizational formations during a time of war. Napoleonic warfare from the early 1800s is the starting point. Napoleon, was integral to the development of the comprehensive body of land warfare theory offered by Clausewitz and Jomini. Next offered are some thoughts on more recent conflicts in Europe and Southeast Asia. The American experience in WWII, conventional, and Vietnam, unconventional, are great case studies with divergent results in the application of warfare theory. These two wars will demonstrate how one can apply differing theories of war during a time of war while experiencing success and/or failure with doctrinal and organizational change at the tactical, operational and strategic level of war.

The Napoleonic way of war is the starting point because of the influence it exerts on theorist and on warfare today. This era saw the introduction of the concept of the nation at war, or the levee in masse. The end of the ancien regime (1789) and the arrival of the Grande Armee in 1804 is a time of pre-industrial warfare that was critical to the development of today's ground warfare theory. Napoleons wars of annihilation, in which the political and military leader were one in the same

[23] Handel, p. 46.

[24] Steven Metz and Raymond Millen, "Intervention, Stabilization, and Transformation Operations: The Role of Landpower in the New Strategic Environment," *Parameters*, Spring 2005, p. 46.

simplified unity of command. This heralded the birth of combined arms warfare with the synchronization of Infantry, Cavalry, Artillery and the arrival of the self contained Divisions/Corps. Napoleon used the simultaneous mobile application of firepower and maneuver to achieve localized quantitative superiority.[25] Napoleon habitually used mass to defeat portions of an opponent's army prior to consolidation or before a nation, or nations was able to fully mobilize. Despite relatively poor communications and slow movement during maneuver, a host of innovations and proven maxims influence future warfare, at both the execution and the theoretical level. Among his campaign fundamentals, are that an army should have only a single line of operation when possible and that the main enemy army is always the objective. When possible, one should use deception to facilitate attacking the enemy's flank and rear while always attempting to turn an exposed flank. As a summation, Napoleon defeated armies in detail before they could mass while keeping his own lines of communication open.[26] Napoleon's role in shaping the thoughts of both Clausewitz and Jomini is uncontestable. Early editions of FM 100-5 showed a decidedly Jominian influence with a tactical and scientific focus found within. They, both, developed theories that would influence untold generations of military professionals.

The Art of War and On War (OW) are viewed by many as enduring warfare classics that help address the underlying logic of human nature and political activity throughout history. A superficial review of two dated, one generally discounted (Baron Antoine Henri de Jomini), one still embraced (Carl Von Clausewitz) but important theorists heavily influenced by the Napoleonic way of war are applicable to this research topic. Of note, even Jomini, with his more mechanical approach was in fundamental agreement on the overall logic and rational direction of war.[27] Using metaphors we find, Clausewitz frequently misunderstood dialectic approach to war as a card game, while Jomini viewed it more as a game of chess. The former considers war more an art, the latter, a science. Clausewitz further refined his theory by acknowledging its complexity, while Jomini

[25] David G Chandler, The Campaigns of Napoleon (Macmillan Publishing Co. Inc.: New York, 1996), p. 150.
[26] Ibid., p. 162.
[27] Handel, p. 3.

maintained its essence is simplicity with well-founded, easily-mastered rules. One emphasizes unpredictability controlled by the primacy of politics, greatly influenced by the dynamic interaction of the people, the army and the government, the so-called "trinity." Of note, the Clausewitzian trinity of analysis is still believed relevant with some even arguing it fully accommodates the integration of technology, information and the globalization impact found in modern warfare.[28] The other extreme is the science of warfare proponent Jomini. He viewed it in a narrow context, attempting to reduce it to a purely professional consideration though Jomini was willing to entertain the belief that war was "far from an exact science it is and impassioned drama."[29]

Jomini and Clausewitz are in harmony on the importance of mass, the destruction of the enemy force and the role of economy of force for overall success. Even Thucydides, considered by some a pre-modern warfare theorist, acknowledged the role of chance in prolonged conflicts: "consider the vast influences of accident in war, before you are engaged in it. As it continues, it generally becomes an affair of chances"[30] Both are in agreement that capturing the enemy's capital, the physical seat of power and government, is second only to destroying his army in the field.[31] Both also concur on the fundamentals of Napoleonic war addressed in the previous paragraph. As with counterinsurgency theorist, by and large, concurrence exists between these theorists on conventional war. Handel lectured at the Naval War College (NWC) on how these theorists exerted a great influence in the development of military doctrine and organizations, in the 19th and 20th Century. Handle thought Clausewitz primarily for the Germans and Jomini for the French and US until Desert Storm. However, the outcomes have not always been successful for the proponents of these theories.

Lupfer wrote, in The Dynamics of Doctrine: The Change in German Tactical Doctrine During the First World War on how the German General Staff was a healthy, learning organization,

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[28] Antulio J Echevarria II, *Clausewitz and the War on Terror*, US Army War College Clausewitz in the 21st Century Conference, England: University of Oxford, March 2005, p. 5.

[29] Baron Antoine Henri de Jomini, The Art of War (Greenhill Books, Leventhal Limited: London, 1992), p. 344.

[30] Thucydides, The Peloponnesian War (Franklin Library Center: Pennsylvania, 1978), Book I, Section 78, p. 42.

[31] Handel, p. 43.

reaching down to the tactical level on the Western Front.[32] This Amy embraced lower level input, produced new doctrine, implemented organizational change and trained to meet changing battlefield conditions, inserting maneuver back into the battlefield late in the war. The German Army's failure in WWI, despite sound theory and innovative doctrinal and organizational change, was a case of the so-called "tacticization of strategy." That is, the primacy of the military institution becoming the operational tail-wagging that should have been the dominant "political-strategic dog."[33] The Germans demonstrated how one can apply theory, practical application of *schwerpunkt*, experience tactical success with doctrinal and organizational change, as the Germans did, while still failing operationally and at the strategic level of war.

WWII is an extraordinary case study of the impact of doctrinal and organizational change with divergent results. The French defeat at the opening of the war heralded the arrival of a new maneuver paradigm called blitzkrieg. The French demonstrated how inappropriate theory application at the doctrinal and organizational level can produce spectacular failure within a very compressed timeline. Doughty wrote, in Seeds of Disaster how the French Army learned the wrong lessons from WWI and institutionalized them, leading to their defeat in 1940. France even chose to overlook the lessons learned on combined arms maneuver from 1919-1939 during successful colonial wars. France opted for centralized control and firepower over decentralized maneuver, even going so far as to establish different tempo and approaches contrary to the lessons of WWI.[34] Remarkably, the French were also defeated in Southeast Asia with a repeat of the 'Maginot line' mentality, with the-'de Lattre line,' and the biggest fort of all, Dien Bien Phu.[35] Handel lectured at the NWC that one could reasonably contend that the French over-reliance on the geometric application of combat power advocated by Jomini contributed to their defeat.

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[32] Timothy T Lupfer, The Dynamics of Doctrine: The Change in German Tactical Doctrine During the First World War (Fort Leavenworth: Combat Studies Institute, July 1981).

[33] Handel, p. 56.

[34] Robert Allan Doughty, The Seeds Of Disaster: The Development of French Army Doctrine, 1919-1939 (Archon Books: Hamden, 1985), p. 110.

[35] Bernard B. Fall, Street Without Joy (New York: Schocken Books, 1972), p. 181.

Doubler chronicled in Closing with the Enemy: How GIs Fought the War in Europe, 1944-1945, how, like the Germans in WWI, doctrinal art and tactical innovation overall led to adaptive and flexible good judgment and creativity by the US.[36] The US Army obviously demonstrated an ability to learn during warfare. Combined arms and organic weapons were crucial to success in the long run. From his standpoint it was the wealth of knowledge generated by experience, sound training and good judgment that overcame the gaps in theory and practice. North Africa demonstrated that US doctrine was fundamentally sound but the training and cooperation foundation were too weak to sustain complex combined arms operations. Some of the several shortcomings noted and corrected during the war were the employment of armor, Close Air Support (CAS) communications, and use of anti-tank assets. The Germans in this conflict, once again, experience tactical success but operational and strategic failure. The Germans failed despite dominant maneuver, superior doctrine and organizational structure, even with significant technological superiority dominance in armor and air capabilities. German dominance was pronounced early and once again, late in the war with the arrival of jet aviation. Blitzkrieg must be viewed, though an innovative warfare paradigm shift and true RMA, from the prism of flawed state leadership.[37] The Germans pillars of combined arms operations were built on the unstable foundation of tactical, even brief operational success but strategic failure, especially when opposed by the strategy of more able adversaries later in the war.[38]

In Vietnam, Nagl chronicled in Counterinsurgency Lessons from Malaya and Vietnam: Learning to Eat Soup with a Knife, that individual attempts to implement appropriate counterinsurgency change were thwarted by an organizational culture of conventional attrition ingrained in the WWII raised leadership. The leadership of the Military Assistance Advisory Group from its inception with O'Daniel, to Williams, to Harkin, up to Westmoreland consistently

[36] Michael D Doubler, Closing with the Enemy: How GIs Fought the War in Europe, 1944-1945 (University of Kansas Press: Lawrence,1994).

[37] Macgregor, pp. 40-44.

[38] Shimon Naveh, In Pursuit of Military Excellence: The Evolution of Operational Theory (Frank Cass Publishers: Portland, 1997), p. 120.

maintained a Jominian view of destruction of the enemy as the true military objective. During General Westmoreland's tenure as senior commander from 1964-68 the Army wholeheartedly embarked on a war of attrition under the mistaken belief that the best way to protect South Vietnam was to defeat North Vietnam on the battlefield with superior firepower and mobility.[39] The administrations flawed policy of graduated response clearly contributed to defeat in Vietnam.[40] The US Army War College became convinced that war and politics could not be separated. The War College began teaching its students in the 1970s based on the Vietnam experience, that for the military to be successful it must be in harmony with the government and its population.[41] This should be viewed as a conceptual crystallization for the military profession of how one can win militarily and still lose politically. Successful strategy depends, therefore, not solely on the military but also on the support, coordination and interaction with the government and with the people during sustained conflict. The Army despite embracing a better understanding of warfare theory and promoting innovation doctrinal and organizational change also became an institution that was resistant to fighting another unconventional struggle. The arrival of the Powell-Weinberger doctrine, which helped shape US foreign policy in the 1980s, can be viewed as a reaction to the bitter Vietnam experience. The Vietnam administration policy of gradual escalation led to the desire by the US Army to avoid entanglement in future unconventional conflicts. The Vietnam experience institutionalized the present-day belief expounded upon by some that the Army exists only for deterrence and to fight and win the nation's wars.[42]

In summary, conventional warfare theory's role in these clashes producing doctrinal and organizational change appears to be significant in the case studies reviewed. A pattern of warfare theoretical paradigm emerges with the arrival of the Napoleonic way of war and was well documented in Breaking the Phalanx. Blitzkrieg showcases the assimilation of new technology,

[39] Andrew J Bacevich, "Requiem for the Bush Doctrine," *Current History*, December 2005, pp. 416.
[40] H. R. McMaster, Dereliction of Duty (HarperCollins Publishers, Inc.: New York, 1997).
[41] Handel, p. 9.
[42] Martin L Cook, The Moral Warrior: Ethics and Service in the US Military (State University of New York Press: Albany, 2004), p. 53.

weapon systems, doctrinal, organizational and leadership change within a theoretical framework to produce dominant maneuver. The resources of the state, public support and political will also influence the ultimate outcome of the war. The human dimension in the application of strategy ultimately determines the outcome of wars.[43] Superior technology alone does not dictate the outcome of modern wars, not the French in Algeria nor US in Vietnam. What seems important is that: "the original motive for the war- will thus determine both the military objective to be reached and the amount of effort it requires."[44]

On War's acknowledgement of political primacy in the development of strategy and policy would seem to help decide what type of theory to apply for successful conflict resolution, based on the views expressed by the government. Of note, in Clausewitz's era the operational level of war was incorrectly viewed as strategy. To be precise the overall strategy depends on the following:, is one embarking on a short-term conflict with limited goals, defeat of opponents military and imposition of terms, or is the military part of a prolonged conflict, nation building that will require sustained involvement over a period of years?

Modularity

Contemporary US Army organizational change is referred to as modularity. Ongoing transformation should help explain the evolution of planned formations of the future for the Army, as theoretical or even technology based constructs. The role of emerging theory from an institutional perspective influencing doctrine and force structure during a time of war should become apparent by exploring the historical evolution of modularity. The primary lessons learned during OIF, initially conventional during Phase I-III and unconventional starting with Phase IV will contribute to this argument. The discussion on OEF will be mainly unconventional. Some views on alternative formations to modularity, standardized interchangeable Brigade centric military formations, with three different, recent ground warfare approaches to transformation will be offered. These

[43] Handel, p. 16.

[44] Carl Von Clausewitz, ed. trans. Michael Howard and Peter Paret, On War (Princeton University Press: Princeton:, 1976), p. 81.

approaches are called Constabulary, the European and Expeditionary Brigades. These will be used to help analyze the future utility of modular units.

The historical evolution of modularity during the industrial age, one could contend first appears in a well-developed fashion on the Western Front during World War I. The evolution of specialized German formations, culminated in 'Hutier tactics' were designed to overcome the limitations of attrition-based trench warfare. Modularity during the latter portions of WWI (1916-18) allowed the Germans to embrace conventional ground warfare theory, in manifestations of mass and firepower using standardized shock formations to attain localized superiority. This choreographed methodology of combined arms warfare restored maneuver to the battlefield. That they experienced tactical success at the expense of operational and ultimately strategic failure was previously discussed. The Germans welcomed the lessons learned from WWI developing a spearheading blitzkrieg theory of warfare based upon combined arms forces synergy and maneuver.[45] These fast-moving penetrations were followed by the majority and predominately unmechanized ground forces, ideally suited for occupation upon the suspension of ground combat operations. The US Army first acknowledged and accepted the German model of modular forces early in WWII. Major Albert Wedemeyer of the US Army staff, helped verbalize, not only the need for maintaining industrial output but also the need for extensive air power. Wedemeyer helped draft the "Victory Plan" and generate the requirement for small, mobile, mass-produced interchangeable, lethal ground units. Wedemeyer encouraged acceptance of the German 'einheit,' or standard unit principle for US formations, which would become institutionalized as 'triangular Divisions.' These interchangeable standardized Regimental based Divisions would reduce reliance on specialty troops. Specialty troops based on previous lessons learned from German Operations, mainly airborne and glider operational losses, had performed poorly. In essence, modularity was adopted in WWII as a means for firepower, mobility and air power to overcome US manpower limitations.[46]

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[45] Macgregor, p. 41.

[46] Charles E Kirkpatrick, An Unknown Future And A Doubtful Present, Writing The Victory Plan of 1941 (Center of Military History United States Army: Washington D.C., 1990), pp. 90-92.

The primary lessons learned from OIF and OEF will prove insightful by helping to shed light on the questions associated with the contemporary US Army movement to modular organizational change during a time of war. Discussed will be several thoughts expressed by Andrew Krepinevich from the 2003 Center for Strategic and Budgetary Assessments (CSBA) study Operation Iraqi Freedom: A First-Blush Assessment. A main lesson drawn out is that the American Army must develop a stability operation capability that is embraced by a national strategy that tackles the post conflict period.[47] Stability operations have proven more troublesome than conventional warfare to combat-proven, joint-integrated and Precision-Guided Munitions (PGMs) capable US forces. Though the US can act unilaterally, what has become apparent is that allied support is critical to long-term success during stability and nation building operations. Future opponents have been exposed to the value of avoiding conventional conflict with what has become an overwhelming force based on mainly legacy equipment that excels at using brilliant munitions, networking and technology fusion to produce overmatch capability. Alternative asymmetric strategies to US forces demonstrated success in both OIF and OEF will most likely embrace the warfare extremes, to include using weapons of mass destruction. This will probably be, coupled with an anti-access capability and the likely development of an inexpensive air defenses system, to counter the surveillance capability now offered by substantial numbers of Unmanned Aerial Vehicles (UAVs). The US will need to maintain a large, conventional expeditionary power projection base capable forces that can truly operate independently in the absence of established accessible forward bases in future clashes. What must be overcome, as was discussed by Cook, is the Army's resistance to prolonged wars and a desire to defeat the opponent militarily and withdraw. A preference for a conventional warfare solution is apparent from this conflict.

An over reliance on conventional warfare is not conducive for success when conducting protracted stability operations. Iraq's defeat conventionally must also be taken in the context of a regional Arab military history that over the past half century has been consistently defeated due to

[47] Andrew F Krepinevich, Operation Iraqi Freedom: A First-Blush Assessment (Center for Strategic and Budgetary Assessments (CSBA): Washington D.C.), 2003, p. i.

deficient training, organization structure and its cultural approaches to modern war.[48] OIF has highlighted that a conventional based force rooted in the history of WWII mechanized formations unencumbered by a regional culture that embraces centralized control is no match for a modernized military force. An opponent culturally adverse to initiative or flexibility, which withholds information, and is poorly led at all levels, is one that the US can unfailingly defeat.[49] Perhaps not the best force to validate the desirability for our new modular force design? Though the campaign was based on the employment of ground combat formations of a cold war era design form, it used much smaller numbers of ground forces than was traditional. Ground based combat power was supplemented by transformed Air Force and Naval expeditionary combat air support (CAS) and Special Operating Forces (SOF) and was meant to become a template for our future wars. This clash was not only an attempt to replicate the success of the Afghanistan War to win decisively and quickly with few troops on the ground, but also to endorse the planned transformation of future combat forces. OEF was a validation of the concept of using PGMs with unconventional forces for targeting in conjunction with a stream lined acquisition, approval to execution command and control process. Because of the success of OEFs SOF and joint PGMs assault, CENTCOM (Central Command) was able to field only a third of the ground forces needed for the first Desert Storm. In essence, CENTCOM had only one heavy, one air assault, one light USMC Division and two light Airborne Brigades at the opening of OIF.[50]

The arrival of Rapid Decisive Operations (RDO) is also rooted in effects based outcomes reliant on using high technology over mass. RDO advocates "fight light, fight fast," by using SOF, joint air power and information dominance to help end the archaic Napoleonic belief that victory goes to the largest battalion.[51] However, RDO regrettably also reduces as many opportunities as it creates with the elimination of ground force capability at the expense of technology. OIF was a demonstration that Clausewitz had it right when he spoke of the roles of friction and chance in all

[48] Ibid., pp. 6-12.
[49] Norvell B De Atkine, "Why Arabs Lose Wars," *American Diplomacy*, December 1999, p. 3.
[50] Krepinevich, pp. 16-20.
[51] Christopher Ankersen and Losel Tethong, p. 52.

conflicts. Additionally, it is now apparent that the ground forces were to light for OIF not only after Phase IV but also during opening ground combat when the only theatre level operational reserve was committed early in the conflict. What is necessary likely remains a mix of high and low technology-legacy based forces as the difficulties associated with older modes of warfare have not ended. Trying to master the complexities of the simultaneous nature of combat and stability operations will not be solved solely by technology or the attempt to accomplish too much with too few forces on the ground.[52] The US have recently discovered during Phase IV of OIF the shortcomings of Intelligence Surveillance Reconnaissance (ISR) assets and of PGMs within urban settings as they attempted to synchronize the shooter, the ISR assets, the PGM and the decision maker with-in the constraints of a time sensitive, ill-defined target.[53] Additionally, the shortcomings of distributed operations during OIF and OEF are now being documented in United States Marine Corps doctrine. The Marines believe that distributed operations are not really new at all but the logical evolution of combined arms warfare. To them it is distributed networked squad to battalion-sized dispersed units, operating over extended distances, using decentralization and constant pressure on an opponent's holistic system that thwart his ability to react effectively,.[54] In OIF, it is the lack of actionable intelligence; over reliance on overhead ISR assets that has led to a return to attrition based warfare despite the advantages claimed for in distributed operations.[55] One could surmise the same shortcomings, are becoming evident in the operation of comparable and newer modular based US Army formations.

Some agreement should exist that the formations of the future, as a theoretical construct based on technology over manpower, were validated recently only to a degree during OEF and early in the opening phases of the current war in Iraq. Many believed, after Operation Desert Storm, a new era or model of warfare had arrived. The over enthusiastic claims of the proponents of air power and

[52] Ibid., pp. 54-55.

[53] Hunter C Keeter, "Urban Operations Shows Limits of U.S., Allied ISR Capability," *Sea Power*, May 2004, pp. 14-15.

[54] Frank G Huffman and Robert E. Schmidle, "Commanding the Contested Zone," *Proceedings*, September 2004, pp. 49-51.

[55] Christopher Ankersen and Losel Tethong, "Rapid Decisive Ops Are Risky Business," *Proceedings*, Oct 2003.

high technology over the need for dominant ground combat power, have been found lacking.[56] The claim that the "fog" and "friction" of the Clausewitzian battlefield has ended with the arrival of this new form of warfare is hollow at best.[57] Some false lessons learned from Desert Storm and OEF were that large formations of land combat power were unnecessary. The nation's command authority anticipated smaller, agile and more lethal combined arms formations with enhanced joint PGMs, networked forces and an overwhelming ISR capability as ideal for OIF. The ongoing debate from the lessons learned from OEF and OIF also includes the relevance of heavy armor forces that first appeared as the unstoppable blitzkrieg seen in the opening campaigns of WWII.

The Army is unquestionably moving toward transformation, with supposedly lighter, deployable more sustainably capable networked, information dominant forces. These forces, it is hoped, will overcome the long deployment and sustainability issues associated with the legacy force. However, as an interim capability the US is retaining two heavy divisions and one BCT to meet near term threats.[58] Having presented some consensus on the perceived shortcomings, benefits and need for transformation, as well as the desirability for maintaining a balanced capability of ground warfare forces, an analysis of developing theories follows. In the next section the practical impact of modularity and some emergent thoughts on what type formations may really be needed are explored.

MG Robert Scales' (Ret.) recent article in the *Armed Forces Journal* The Shape of Brigades to Come, maintains that the US is at a transformation tipping point of three possible, different styles that could be used alone or in combination to meet full spectrum needs. The three different types of future formations offered are: constabulary, European and expeditionary. Each type has unique capabilities to meet conventional high-intensity, mid-intensity or counterinsurgency requirements. The first advocated, the constabulary force appears ideal for counterinsurgency, Stability and Support operations. This model for force structure is founded in the success of the Balkan case studies, in the Implementation, Stability Force of Bosnia and the Kosovo Force, or IFOR, SFOR and

[56] Macgregor, p. 44-48.
[57] Bacevich, pp. 412.
[58] Krepinevich, pp. 30-35.

KFOR. This type of specialized formation would accompany combat forces into the country which, upon defeating the threat would support the constabulary force as it restored infrastructure, while simultaneously maintaining security and control.[59] However, the shortcomings of the constabulary force is that it is a manpower-intensive one when based on successful post conflict occupation force ratio models from the previous century. The constabulary force may not be a viable future force option either economically or sustainable by an all volunteer force involved in prolonged unilateral action. In fact, the current modularity conversion despite an overall projected increase of 5% in combat forces, cannot come close to the historic ratio requirements of 4 soldiers per 10,000 of population for successful policing. Even a best case scenario CBO estimate of fielding 43 to 48 BCTs between now and 2008 will not meet the manpower needs for stability and support operations for moderate unrest. Quinlivian aptly observed, from lessons learned from past stabilizing experiences, that the numerical composition of a force is best determined by taking the size of the population in consideration with the level of security that must be provided for the state to function effectively.[60] Even former Civilian Provisional Administration (CPA) Chief, Paul Bremer III, now candidly admits that he had requested from the Secretary of Defense up to 500,000 troops in Iraq as being possibly necessary for postwar success.[61]

The next possible formation is referred to as the European Brigade which follows the current Army transformation plan for heavy forces. This full spectrum approach is entrenched within the McGregor school of thought. The McGregor view holds that using legacy equipment to fight irregular warfare is not only desirable but also necessary based on the combat that has occurred in OIF. This heavy option advances the position that better modular formations than currently being built are necessary to overcome the limitations found within our formations early in OIF. Major shortcomings during OIF were uncovered in US reconnaissance, security and surveillance

[59] Robert Scales MG (Ret.),"The Shape of Brigades to Come," *Armed Forces Journal*, October 2005, p. 29,

[60] James T Quinlivian, "Force Requirement in Stability Operations," *Parameters*, Winter 1995-96, pp. 59-69.

[61] "Bremer: Request For More Troops Was Ignored," *Los Angeles Times*, 9 January 2006, Sec. 1, p. 1, col. 1.

capabilities. The absence of a true cavalry potential is a salient limitation of the new modular formations and the heavy option advanced might help overcome this shortcoming.

The final view on transformation is the expeditionary view, a mid to heavy conflict solution. Favored by many within the Army and United States Marine Corps (USMC), it is embedded in Brigadier General Hubba Was de Czega's theory of "aero-mechanized maneuver," which he proposes is the replacement for blitzkrieg. De Czega uses case studies from Panama and Desert Storm of extended maneuver by air coupled with fast moving mechanized forces where appropriate, SOF otherwise, of how to create a synergy of mass, mobility and firepower to defeat the enemy. De Czega believes technology is imminent that will produce lightweight vehicles more capable than their current, contemporary, heavier counterparts. Scales contends aero-mechanized maneuver has been validated conceptually in both OIF and OEF with the defeat of the Taliban and the success of the Stryker formations in Iraq.[62] Though based on the OIF experience, it appears that a reduction in the need for heavy armor forces is desirable; it is not necessarily true that the new modular formations are the solution or capability desired for the forces necessary for successful, sustained, stability operations. The claim that modular units are more deployable may not be entirely true. The gross weight and dimension limitations, not to mention the vulnerability of cargo aircraft, for modular formation has not changed or translate to them being more desirable for stability operations.[63] The modular approach must go beyond a perception of being standardized entities capable of full spectrum warfare to really a base formation to task organize from other internal units, outside forces and governmental capabilities as necessary to accomplish assigned missions.

In summary, modularity is not a profoundly new military organizational concept, nor is maintaining the BCT as the basic building block of combat power for the American Army. The current rendition of the three types of modular forces may be seen as the logical evolution of combined arms warfare or even as the fruition of conventional warfare theory. Modularity remains a conventional war solution that requires notable augmentation in both OIF and OEF, with civil affairs

[62] Scales, p. 30.
[63] Krepinevich, p. 28.

and tactical human intelligence teams to name a few, to conduct counterinsurgency warfare. The only formation out of the three emerging modular BCTs, light, heavy and "Stryker," that could be viewed as a bridge or interim force to the Future Combat System (FCS) formation is Stryker. Even Stryker is a legacy system, first fielded by the Marine Corps in the early 1980s as the Light Armored Vehicle (LAV), with new weapon systems and networking technology. Stryker is still motorized Infantry, first used in large numbers by the US in WWII, no matter what we choose to call it. Though one could contend this formation is ideal for employment in the supposedly new theory of expeditionary warfare, under the aero-mechanized maneuver concept it remains a configuration rooted in conventional warfare theory, doctrine and organization.

Brigade Combat Team (BCT) Transformation

First-hand tactical and technical observations, from the CTC at the JRTC on the BCTs active army modular reorganization and mobilization of the National Guard BCTs for GWOT, will be explored next. Initially referred to as the Unit of Action (UA) the BCT with its so-called identical three basic design structures of heavy, light and Stryker is a graphic demonstration of the role of emerging theory. These formations embrace information dominance and networking technology from an institutional perspective. The new BCT, by being employed during a time of war, will help influence future doctrine and force structure. Proponents of modular units claim that these formations are tailorable for mission accomplishment during full spectrum Offense, Defense, Stability or Support, ranging from combat to peace operations. They would also contend that modularity is fully in line with emerging expeditionary warfare theory. Modularity detractors would articulate that these largely Infantry centric formations, with only the Stryker Brigade having a truly full spectrum three Infantry Battalion heavy capability, come at some expense to the professional development of the rest of the officer corps. These same critics would view the current pace of modernization and simultaneous structural reorganization as spawning an Army that is not as well trained at the BCT level for combat as in the past. By limiting a majority of the new BCTs to infantry only commands, reducing the number of armor command coded BCTs and eliminating operations

career field engineer and artillery brigade commands opportunities, a great disservice may have possibly been done within the US Army. Instead of promoting maneuver and the talent embedded in the current force an artificial restriction to the true fulfillment of what transformation so boldly proclaims may have been imposed. Following is an interpretation on the combat power synchronized in modular active duty units and legacy National Guard formations deploying to Iraq. These thoughts will be based on some direct interpretations and theoretical observations interwoven from the earlier research presented. These thoughts should help clarify the applicable warfare theory and the significant impact doctrinal and organizational change has had on the effective mobilization, training, deployment and combat employment of the contemporary Army.

The observations on the CTC formed at JRTC are uniquely this officer's and are not endorsed by the leadership of that training center. The best trained, equipped, organized and led armed forces in the world are exercised routinely at the CTCs. As the senior Aviation Observer Controller from September 2004 to May 2005 Army transformation was observed first hand for the following formations: three National Guard brigades, 6 active duty brigades (light, heavy and Stryker) and three new multi-functional aviation brigades (light and heavy). The CTC had been largely relegated, necessarily so, to facilitating New Equipment Training (NET) and providing an environment for the collective capability development of teams, not validation of capability, from platoon to the brigade level. The ad hoc nature of transformation for the vast majority of the Army had produced this situation. The only formation observed that was an exception to this lack of effective integration of new equipment and the attainment of a visible well trained collective capability thru the Brigade level was the Stryker formation. Stryker is the unique recipient of a programmed three-year life cycle that truly incorporated NET with a sequential and well thought out collective training plan. Additionally, the doctrinal mismatches observed were primarily due to lack of knowledge on the employment by the BCTs of our combat reconnaissance assets and the lack of an organic sufficient ISR capability. In the Combat, Combat Service (CS) and Combat Service Support (CSS) areas, formations were consistently deficient in the proper utilization of, synchronized timely fires, artillery and aerial, engineers, military police, intelligence support, to include the

utilization Unmanned Aerial Vehicles (UAVs) and equipment maintenance. The integration of the previous slice elements into the BCT structure came at a loss, it would appear, of understanding of their doctrinal employment. This absence of doctrinal expertise is visible in junior CS and CSS officer who have become the subject matter expert by default. The same deficiencies are visible in commanders and staff of the BCT, who at times lack the expertise to maximize the capability found within there unique units. These along with the shortcomings demonstrated within the logistics field, are all sources of future concern.

Shortcomings noted within the ISR capability were encapsulated in the Rosenberger 2004 Landpower essay, Breaking the Saber: The Subtle Demise of Cavalry in the Future Force. The mechanized Infantry, Armor, Aviation and Stryker formations observed, while frequently referred to as cavalry units did not possess the manpower, capability or training foundation to complete the reconnaissance and security (R&S) tasks necessary for the success of the BCT. The belief, that integrated joint service sensors can replace manned cavalry to secure the higher HQs and provide timely information to a BCT, Division or Corps is perhaps ill-founded. Rosenberg argues that the modular and future force will be able to develop the situation out of contact does not stand up to historic scrutiny or contemporary CTC experiences. [64] The claim that advanced electronic sensors and air power alone will provide comprehensive situational awareness and dominance without the need to physically find and fix the force to be engaged is flawed and was validated by the shortcomings demonstrated during the Kosovo air campaign.[65] The Army fails significantly, to provide this capability in two major areas: the first being not properly resourcing manned R&S from BCT to Corps. The second deficiency is that the capability that is provided is inadequately manned or equipped and normally unavailable to complete these base requirement missions.

From previous conflicts in Vietnam, Somalia, Serbia and in OEF, as well as OIF, US adversaries have learned to defeat the overmatch capability of the American way of war. One way to

[64] John D Rosenberger COL (Ret.), "Breaking the Sabre: The Demise of Cavalry in the Future Force," *AUSA*, Landpower Essay, Institute of Land Warfare, Arlington, June 2004, p. 1.

[65] Edward N Luttwak, Give War a Chance, *Foreign Affairs*, July-August 1999, pp. 40-41.

defeat the US, is to fight them among the host population in urban and complex terrain to overcome their sensor and firepower advantage.[66] These sensors, ground or air, as was the case at the CTC, remain limited by not just current technology but also the realities of simple deception. Simple deception operations, from camouflage, concealment, to the replication of false copies, compound the sensor shortcomings found in inclimate weather and terrain. One cannot rapidly fix, close with and destroy an enemy that has not been located. In the majority of After Action Reports (AARs) from OIF concerning enemy contact in the spring of 2003 from the maneuver commanders, Battalion to Brigade, the shortcoming voiced was of the lack of intelligence provided from higher levels prior to enemy contact. The organic assets assigned to these maneuver formations were too light, mainly High-Mobility Multipurpose Wheeled Vehicles (HMMWV) or reconnaissance troops too few to develop the intelligence they needed prior to contact.[67] The CTCs and the opening phases of OIF are a recurring demonstration that even in modern warfare situations are frequently developed during a movement to contact over foreign terrain when the enemy is engaged at a place and time of his choosing initially, not the maneuver force. Unmanned sensors cannot replace the human dimension. The ability to problem solve, adapt and react is not to be found in any sensor.

Going beyond the complexity of reconnaissance operations, the challenges of conducting security operations are even more pronounced in unconventional warfare. Assigned R&S forces are an absolute necessity to preserve the combat power of the main body by finding, fixing, delaying or repealing the enemy as necessary.[68] The light Infantry and heavy modular forces observed were equipped by design with only two maneuver Battalions and normally utilized their under strength Reconnaissance and Surveillance Squadron, approximately a third the size of an Infantry Battalion, as a third maneuver Battalion. The results of using this unit for maneuver is it ceased becoming even a limited R&S asset to the BCT and was to undermanned and equipped to fight as a maneuver Battalion. Fehrenbach fittingly wrote of the shortcomings of an Army that doctrinally trains as a

[66] Rosenberger, p. 4.
[67] Rosenberger, p. 8.
[68] Rosenberger, p. 9.

three Battalion Regimental force but is manned and attempts to fight with only two in This kind of War.[69] With the exception of Stryker, heavy formations have been reduced from a maneuver capability of nine to twelve companies to only eight.[70] Hopefully the designers of this force construct did so not with just resource limitation in mind but also with good intentions and foresight. A subliminal acknowledgement, perhaps, that the ground combat forces on-hand are too small to accomplish the mission they have been given, or acceptance of the reality that: "peacekeeping, peacemaking, counterinsurgency and other forms of irregular war are more manpower intensive than they are firepower intensive."[71] However, perhaps modularity force planners have fully anticipated the assimilation of a real third maneuver Battalion for future expansion to better meet the high manpower demands for on the horizon asymmetric conflicts.

The modular entity is, without a doubt, one that begs to be task organized with additional assets to accomplish complex combat missions that involve developing the situation for a larger force or any type of extended, duration or distance, maneuver. The necessity for assigned combined arms R&S with sufficient manpower and equipment to be combat effective is lacking in the current modular structure. One could contend, as the Armor Center Command Sergeant Major did that under modularity the army has a net increase of Military Operational Sill (MOS) 19 series trained scouts, which means an enhanced, not degraded, capability.[72] Some also point out that the BCT is more capable now with the expansion of the reconnaissance Troop-to-Squadron strength.[73] However, the aggregate BCT increase in scouts comes at the expenses of eliminating the previous robust Corps Armored Cavalry Regiment (ACR) capability. The BCT reconnaissance assets under modularity are, at times, inadequate to the BCT tasks assigned. The BCT is compelled periodically to place an over-reliance on electronic sensors, ground and air, and secure automation resources to overcome their

[69] T.R. Fehrenbach, This Kind of War (Brassey's: Washington D.C., 1994), p. 88.
[70] Douglas Holtz-Eakin (Director), Options for Restructuring the Army (Congressional Budget Office (CBO), CPO: Washington D.C., May 2005), p. 53.
[71] Tom Donnelly ed., "Kill the QDR," *Armed Forces Journal*, February 2006, p. 10
[72] George DeSario, Jr. CSM, "Task Force Modularity/Force Stabilization," *Armor*. Vol. CXIII, No. 5, September-October 2004, p. 6.
[73] CBO, p. 53.

internal reconnaissance limitations. Over-reliance on technical capability is a poor substitute for developing a well rounded strategy that encompasses all the elements of combat power from the individual soldier on up. Keegan wrote, in INTELLIGENCE IN WAR, of the validity of this argument. Keegan argued that superior intelligence is not historically validated as the key to success in war, especially not as claimed for the war on terrorism. Keegan contends the human element decides the fight not modern intelligence technology.[74] Cavalry remains essential to developing the situation, not just electronic sensors, prior to the decisive fight.

Going beyond the CTC requirement for cavalry capable forces, they remain a pronounced necessity during combat. The need for trained, organized and equipped troopers to conduct R&S mission, ideally suited for robust or economy of force augmentation has been demonstrated several times during the OIF conflict. From the use of 3d Armored Cavalry Regiment on two deployments now to contain the insurgency, in conjunction with light and USMC forces on the Syrian Border in western Iraq, to the use of the 2d Light Cavalry Regiment (LCR). 2d LCR was extended in combat from 12 to 15 months, to help crush the spring 2004 Shiite uprising in Southern Iraq. These unique cavalry constructs operated over a period of hundreds of kilometers, used organic aviation assets conducted movements to contact, found, fixed and destroyed hostile forces. LTG Dempsey the current commander of the Iraqi training mission has stated, 2d LCR in its economy of force role was instrumental in suppressing the southern spring uprising. Of note, the Stryker units in OIF, with cavalry heavy skill sets, attached Aviation and logistic TFs, have become the most closely organized to a cavalry regiment under the current modular initiative. The loss of robust Cavalry formations under the current modernization path means reduced R&S capability to fight conventionally or unconventionally in current and future wars.

The absence of Subject Matter Experts (SMEs), within the BCT, have at times thwarted proper employment in Combat, CS and CSS areas at the CTC. Shortcomings have been manifested possibly by emphasis on tactical, over technical, skills for entry level soldiers and the deferral of

[74] John Keegan, INTELLIGENCE IN WAR (Random House Inc.: New York, 2002), pp. 25, 334.

Noncommissioned Officer (NCO) academies. The deficiencies visible at the CTC take the form of poorly understood and maintained unit equipment by junior soldiers. Additionally, inadequacies were noted in the doctrinal employment of fires, air and ground, engineers, military police, intelligence and in the utilization of UAVs. Those key combat multiplier functions that were previously resident in the so-called "separates" at the Brigade or Battalion level, artillery, engineer, intelligence, signal and military police have migrated to the BCT. The assignment, of relatively inexperienced Captains, to lead what are now organic Company size organizations produce real limitations in the knowledge base and understanding of how these assets should be utilized. The exception to this observation is the artillery battalion commander resident within the BCT. Beyond doctrinal employment units are also unfamiliar with the maintenance requirement of previously non-assigned equipment and frequently choose not to perform any operator level maintenance at the CTC. Compounding the BCT challenge are artillery, intelligence, logistic and engineering vehicles, including combat systems forward deployed that are unavailable for collective level or maintenance training. In the area of logistics, from resupply to transportation, unit expertise at the proponent and staff level observed were inadequate. Logistics failed to meet the demands placed on equipment and personnel during even the simulated short duration combat of the CTC. Neither the Brigade Support Battalion (BSB) nor the Special Troops Battalion (STB) in the modular heavy or light formations I observed were able to remedy these deficiencies. A CBO study on modularity noted the Stryker formation is unique in that it only has a BSB and assimilates the support function into its HHC found in a STB.[75] Faults were manifestly evident at the CTC that had not existed, or were not as pronounced, in the previous organizational structure of our army.

The integration of the previous so called slice elements into the new BCT modular structure was probably in part a reaction prompted by the poor performance of one support unit's convoy and the negative publicity generated by that event. That decisive event in OIF was the 507th convoy ambushed on the 23d of March 2003 in Al Nasiriyah. A safe assumption is that, as in the past and

[75] CBO, pp. 55-58.

throughout recent history, support convoys will continue to be attacked with substantial unplanned combat losses. However, a better approach may have been as a training one not as a theoretical, doctrinal or organizational shortcoming. The real deficiency in supporting forces that should been addressed, from the perspective of a former Squadron commander in Iraq were broader. The shortcomings displayed in logistical sustainment were visibly manifested from theatre level down to the maneuver formations to optimally provide for maneuver forces. Modularity's elimination of Support Brigades does not address the logistic problems confronted early in OIF.

The reserves, to include National Guard BCTs, have not yet been converted to the modular formations. When they are, it is anticipated they will adopt the same basic three combat constructs of the active component, with at least one Stryker formation, for a total of 34 planned BCTs.[76] Some believe these unique forces have shifted from a strategic to an operational reserve because of the policy resource mismatch in the execution of the GWOT. The soldiers observed at the CTC, and the skill sets they possess, will become the resident experts during transformation as they return veterans from there OIF and OEF deployments. The reserves are ideally suited for unconventional warfare by temperament and the distinctive embedded civilian based skill sets resident in these formations. Better representative of US society and the open communities they come from, they bring exceptional skill sets necessary for success in unconventional warfare. Coming from all walks of life, regardless of military specialty (the banker, the policeman, the construction engineer), all contribute in a unique manner during nation building ventures. Of note, it is the reserves with their unique demographics and cohesion at the state level for responding to emergencies that are now being mobilized and deployed in the opposite fashion and sent to combat as formations initially challenged to conduct Battalion collective level action and higher. Well intentioned, basic skill sets developed and motivated at the platoon and company level, they are the ideal building block for creating combat power. At the Battalion level and higher these skill sets are not as well developed for a variety or reasons. Resistance to embracing the profession of arms is not one of the reasons for the

[76] CBO, p. XXIII

shortcomings found in the reserves. However, higher level headquarters (HQs) deficiencies had an impact on the overall combat cohesion of these BCTs prior to deployment. Additionally, due to significant numbers of undeployables for combat service as unit entities, these Brigades are now being deployed as disparate entities composed of soldiers from a minimum, at times, in excess of 20 states. The same deficiencies were repetitively observed in the three NG BCTs deployed to OIF from the CTC at JRTC in 2004 to 2005.

One of the great ironies of the GWOT is the ability to modernize and functionally restructure the reserve component from its cold war legacy structure, after years of attempts, to better meet the nation's needs at home and abroad. The "National Guard Division Redesign Study" of the past decade identified the imbalance between NG combat forces and the support forces available to deploy with them. The findings of that initiative and changes recommended, to a certain degree, compliment the total army's modularity plan. Under the current transformation plan, the NG will need 20,000 fewer positions as it reconfigures into two strategic reserve Divisions and six homeland security or peacekeeping configurations. The total number of combat brigades will be reduced while consolidating the reserve's unique ones, previously separate, into the NG. Though increasing the total number of separate brigades, it is projected they will be maintained at a higher equipment, personnel and training level.[77] By CBO independent estimates the 5% increase in combat power under the active components modularity plan will require 25,000 to 45,000 more soldiers. This combat power increase will lead to a dependency on up to 60,000 more support personnel from the reserves. The additional manpower requirement will not come from the 30,000 man temporary increase above the active armies 482,000 currently authorized. The reorganization of the reserves will, in turn, generate the need for 60,000 to 90,000 more unforecasted support personnel in the citizen soldier force. The conversion combination will make the Army more, not less, dependant on the reserves, which is already at an all time 50 year high.[78] However, it would be fair to anticipate,

[77] CBO, p. 10.
[78] CBO, Appendix B, pp. 2-5.

after transformation that the NG will emerge as the dominant DOD supporting partner for Homeland Security and Defense, possibly even earning the moniker “watchers of the homeland.”

In closing, the current active duty modular forces and reserve component BCTs observed at the CTC displayed unique capabilities and limitations. These units are based on past and to a degree on developing conventional war theory, the organizational and doctrinal employment are not significantly different from the cold war construct or first Desert Storm success of the past century’s army. Prior to arrival at the CTC the active modular units were engrossed in NET, not Battalion level or higher collective training. The reserve BCTs focused on assimilation of new personnel and basic combat skills. Both these organizations required significant training prior to deployment and augmentation upon arrival in country to conduct counterinsurgency warfare. Additionally, the elimination of a previously very robust cavalry R&S capability and over-reliance on electronic sensors should be a source of concern to the US Army. Additional areas of apprehension should be the lack or resident expertise available within the BCT with the permanent assignment of previously slice elements organic to separate Brigades. Finally, as a result of the GWOT modernizing, training, equipping and developing the leadership of the reserve forces is ongoing in the most advantageous manner possible. That this restructuring and right-sizing to the type of reserve component needed in the future, to better meet both state and federal potential emergencies, is ongoing must be viewed as a positive trend.

Army Aviation Transformation

In the following discussion U.S. Army Aviation Reorganization under the modular concept will be analyzed based on lessons learned both from the initial campaign and most recent portions of OIF, as well as from OEF. Aviation restructuring will help demonstrate what role theory, if any, has played in the development of new doctrine and the organizational changes generated that created these unique Multi-functional Aviation Brigade (MFAB). The Aviation structures that have been recently formalized are comparable to the much smaller and logistically challenged Aviation TFs that were prevalent in support of the BCTs at the CTC’s. Aviation TFs were also used extensively in

conflicts other than war in the past decade, notably in the Balkans. The MFABs have helped also spawn some dramatic changes externally, such as the arrival of the Brigade Aviation Element (BAE) built into the new BCTs. The MFABs have also had some unintended consequences as a result of reorganization and the expansion of the Aviation Brigades capabilities.

An examination of recent U.S. Army Aviation Reorganization based on lessons learned from the initial campaign of Operation Iraqi Freedom (OIF) should prove insightful. Army Aviation has been largely unchanged since the 1980s when it fielded a more capable utility helicopter, the UH60, and attack helicopter, the AH64. However, the arrival of the new capability produced no real change to air mobility or air assault doctrine. These AH64 Battalions, with their incredible antitank capability were fielded at Battalion strength, 24 aircraft each, within the heavy and Air Assault Divisions. Entire Attack Regiments were formed at the Corps level. During this timeframe "deep attack" doctrine, emerged conceptually along with the arrival of Airland Battle doctrine for countering the Warsaw Pacts numerical advantage.[79] The fact should be addressed that even in the Vietnam War against a relatively unsophisticated Air Defense threat, mainly small arms, over 5,000 helicopters were lost during the course of the conflict, a not unsubstantial number of aircrew and equipment losses. The exception to this low threat reality was Operation Lam Son 719. Operation Lam Son 719 was the US air mobile supported excursion into Southern Laos by South Vietnamese forces in 1971, considered a medium air defense threat environment.[80] The modern day Attack Battalions experienced incredible success in the first gulf war and were relatively unscathed, as were all our forces.[81] They were not employed in large numbers in combat again until the opening phases of OIF in 2003. Deep attack is theoretically and doctrinally valid from a conventional war perspective with its emphasis on mass, surprise and striking at the decisive place and time.

[79] James M. Brodt and Lowell H Schwartz, The Future of Deep Attack Helicopter Operations (Rand Arroyo Center: Santa Monica, 2004), p. 13.

[80] John J Tolson LTG (Ret.), AIRMOBILITY 1961-1971: Vietnam Studies (Department of the Army: Washington D.C., 1973), pp. 240-244.

[81] Rand, p. 3.

The failure of two large helicopter deep attacks, Brigade strength, during OIF by a largely conventional, though unsophisticated foe, appears to have become an impetuous for dramatic structural change. The Iraqis countered the massed attack helicopter capability by understanding US doctrine and by applying lessons learned from previous experience in Desert Storm. The Iraqi's concentrated substantial volumes of small arms fire along flight routes to repeal the aerial attack formations. The elimination of three Corps Aviation Brigades, four Regimental Attack units from Germany, Korea and the US since the beginning of OIF is noteworthy. Reducing the total number of Aviation Brigades from 21 to 14 is probably not just an extension of admiration for conventional and emergent expeditionary warfare theory. Change also reflects a refined appreciation for the shortcomings displayed in the execution of US deep attack doctrine. That these formations are more responsive at the tactical level, currently the transitioning Division level, recently called the Uex, with the increase in size of both capability and manpower found in the new MFABs, is not contested. The divisional MFABs are ideal for creating Aviation Task Force expeditionary units, previously called multi-function battalions, and providing substantial assault and attack helicopter capabilities to ground maneuver commanders.

Possibly, what has been largely ignored is that reorganization was not based so much on future needs, as framed by theory, but in reaction to the well documented shortcomings in the execution of US aviation doctrine. In The Future of Deep Attack Helicopter Operations, a 2004 draft Rand Arroyo Center Study, undergoing revision prior to final release, the shortcomings inherent in past attack helicopter operations are analyzed. The study should not be viewed as a definitive work but as only one part of a holistic body of literature on the unique capabilities and limitations of rotary wing aviation in warfare. The Rand Study was initially generated by an internal project examining combined and joint warfare in Iraq. The study was subsequently co-sponsored by the Army G3 and G8. The research embraces three competing fields of view of massed attack helicopter operations, the so called "advocates, skeptics and declining relevance" school of thought.[82] The focus of this

[82] Rand, p. vii.

study was two fold: to better understand the underlying failure of the 11th Attack Helicopter Regiment (AHR) deep attack by two Attack Battalion Squadrons on the Medina Division on 23 March and why deep attack helicopter missions overall failed in the opening of the OIF campaign. In the Medina Division attack no aircraft reached the target, 30 of 31 were damaged and one destroyed. The debate within this study also offers three views of aircraft employment. The first employment issue was the level of situational awareness and intelligence provided prior to and during these attacks. The second issue was the overall vulnerability of attack helicopters, to include the overall effectiveness of support provided prior to and during the attack. The final employment concern considered was the ability of alternative platforms to better accomplish the deep strike mission.[83]

The tentative conclusion of the study was the failure on 23 March 2003 was not an isolated incident. The failure was a systemic one that could be documented historically and applied to the issues addressed above within the overall context of deep attack doctrine. The same general findings are also accessible, though with slightly different interpretations possibly based on one's viewpoint, from contemporary novels. Novels such as, Mark Bowden's Black Hawk Down, and Sean Naylor's Not A Good Day To Die, address the shortcomings and strengths of contemporary helicopter operations in combat.[84] Additionally, countless service unique, classified and unclassified, AARs provide identical factual information for comprehensive analysis and review from OEF and OIF.

Concerning overall intelligence and situational awareness to the response of unsophisticated opponents helicopter crews have been consistently unprepared for the veracity and lethality of the opponent's response. Despite heavy losses, from Operation Anaconda in Afghanistan, to Mohamed Farrah Aidid's fighters in Somalia and in OIF, global opponents think they have learned how to defeat the US. To them, to defeat the US tactically and psychologically, one need only to destroy US helicopters with unsophisticated weapons to eliminate the will to fight and force withdrawal. Helicopters have remained vulnerable to small arms, Rocket Propelled Grenades (RPGs) and

[83] Rand, p. viii.

[84] Mark Bowden, BLACK HAWK DOWN (Grove/Atlantic Inc.: New York, 1999) and Sean Naylor, NOT A GOOD DAY TO DIE (Berkley Books: New York, 2005), *im passim*.

shoulder fired anti-aircraft systems from Vietnam, to the same three countries just noted. History has repetitively demonstrated that attack helicopters are susceptible to these primitive threats. During Operation Anaconda in OEF, five of six attack aircraft employed were disabled by a combination of small arms and RPG's. The failure of the deep attack on the Medina Division was by the suppression provided by hundreds of small arms and RPG launches along the attack axis of the aircraft on the ingress and egress routes and was without any use of radar guided missiles or emitting signatures. The attack proved a recipe for disaster from its inception with poor intelligence, to no suppressive or supporting fires.[85]

In Kosovo the decision was made not to use attack Battalions from TF Hawk. The decision was attributable to the realization that suppressive fires could not be employed effectively in support of rotary wing aircraft. The inability to locate unsophisticated air defense threats and the substantial collateral damage, to include massive civilian deaths, that would have resulted from unobserved fires underlined the judgment not to use them. Therefore, the choice was made not to employ rotary wing assets and rely on lower risk fixed wing platforms in Kosovo.[86] In OIF, after the 23 March debacle, the senior ground commanders opted to limit deep attack helicopter operations based on the speed of the advance. The commanders thought the capability of alternative fixed wing assets would reduce vulnerability and accomplish the exact same mission. The mismatch between attack helicopter capability and doctrinal employment led to the draft recommendation by the Rand study to eliminate the high risk deep attack mission profile. The recommended mission change was a paradigm shift for Army Aviation.[87] Attack helicopters still remain ideally suited for conducting armed R&S, close-air fires and support operations, such as convoy escort. However, the ability of attack helicopters alone to shape the battlefield with deep attack massed formations has proven an illusion. The Army should and has embraced utilizing these attack assets to provide lethal close fires to ground maneuver

[85] Rand, pp. 30-48.
[86] Rand, p. 35.
[87] Rand, p. 7.

units.[88] Doctrinal refinement designed to better support, quite correctly, ground combat-arms formations, not the refinement of existing or emerging theory appears to have produced organizational change. The diminishment in stature of the hallowed Corps deep-attack doctrine of the past 30 years will in all likelihood better win both current and future US armed disputes. A doctrinal deep attack remnant is today's version of the same concept, on a much smaller scale, now referred to as a "Mobile Strike." Mobile strike embraces fire power, agility, and precision actionable intelligence for high value targets, over mass addressing the shortcomings found within the recent Rand study. Mobile strike clearly complements some of the employment tenets previously addressed in the review of emergent expeditionary warfare theory.

The BAE was created as a result of the historic lack of air ground synchronization of aviation in support of the BCT ground maneuver commanders at the CTCs and as a result of lessons learned from OIF and OEF.[89] The BAE is designed, manned, equipped and trained to meet the Air Ground Integration (AGI) and Army Airspace Command and Control (A2C2) needs of the modular BCTs. The BAE uses the BCT structural artillery fire support element success as a templated building block to create a similar Aviation unique capability resident on the BCT staff for sustained 24-hour operations. The BAE consists of the Brigade Aviation Officer (BAO), a Major, an assistant BAO Captain, a Chief Warrant Officer (CWO) Tactical Operations Officer (TACOPs), a Sergeant First Class (SFC), a Staff Sergeant (SSG) and one Specialist (SPC). The last three enlisted positions are in the aviation operations career field (15P).

Core missions for the BAE have been identified as planning operations ranging from 72 to 96 hours out for the BCT. The missions range from Close Combat Attacks (CCAs), Mobile Strikes, Joint Air Attack Team (JAAT), Air Assault, R&S and Air Medical Evacuation (MEDEVAC). Additional missions for the BAE are Airborne Command and Control (C2), Aviation Special Operations, Army Airspace Command and Control (A2C2) and the employment of Unmanned

[88] Rand, p. xii.

[89] Robert D. Carter and Paul V. Marmon, LTC, "Manning, Equipping, Training and Deploying the Brigade Aviation Element," *Army Aviation,* 31July 2005, p.14.

Aerial Vehicles (UAVs).[90] In conjunction with the arrival of the BAE all tactical level UAVs have been assimilated into the Aviation Branch and are now doctrinally referred to as the family of Unmanned Aircraft Systems (UASs).[91] The Aviation TF in support of the BCT will execute the BAE plan and must maintain a collaborative relationship with the BAE. The Aviation TF commander still provides an LNO to the supported BCT. What is innovative is the resident BAE becomes the conduit for the LNO to interface with the BCT. BAEs have been fielded in all the transformed BCTs of the 101st, the 3rd, 4th, and 10th Infantry Division's and most recently in the 48th BCT of the Georgia Army National Guard (GANG). The BAE uses equipment previously found only in Air Traffic Service (ATS) or in the Divisional Headquarters, specifically the Theatre Integrated Airspace System (TAIS) for joint airspace situational awareness. Additionally, they share equipment and resources with the BCTs Air Defense Air Management (ADAM) cell to create a comprehensive understanding of all ongoing or planned Aviation Operations within the BCTs battle space.[92]

The arrival of the MFAB, the fielding of the BAE and the elimination of deep attack doctrine has brought the Army more in tune with the USMC doctrinal use of rotary wing combat power. Though the Marines have their own organic, fixed-wing aircraft for intermediate to deep CAS, the Army remains dependent on the Air Force. The marines promote a conservative use of rotary wing attack assets directly in support of and with supporting fires from ground maneuver forces. This reduces the losses and damage to helicopters from small arms while also providing responsive fires.[93] During the An Nasiriyah 23 March 2003 fight by TF Tarawa, which was shortly after the 507th convoy ambush and coincidently the same night of the defeat of the 11th AHR deep attack, the Marines used substantial combat rotary wing support to win the close fight. The rotary wing support also helped to mitigate the risk of friendly fire fratricide from organic fixed wing assets. Tragically,

[90] Carter, p. 16.
[91] James Bullinger, "AAAA Hosts First Unmanned Aerial Vehicle Systems Symposium," Army Aviation, December 2005, pp. 42-43.
[92] Carter, p. 18.
[93] Rand, p. 17.

it was an Air Force A-10 that produced the worst fratricide of the opening of OIF during this close fight.[94] As a counter-comparison it is noteworthy that rotary wing area fire weapons are used effectively and safely for CCAs, even danger close when required, to support the close fight. CCAs are ideal for overcoming the type of 'hugging tactics,' first seen by the US in unconventional warfare in Vietnam, that insurgents commonly use within the substantial urban sprawl districts found within Iraq. Hugging tactics are a clear attempt by the rebels to negate the substantial firepower advantage of coalition forces. Emerging doctrine is addressing the placement of ground combat forces under the Operational Control (OPCON) of the MFAB commander during Stability and Support operations. These promising new developments show great potential for better optimization of US ground and aviation combat power and forces.

Aviation reorganization supports, some tenets of emerging warfare theory, such as network centric harmonization of aviation operations. However, organizational and doctrinal change during a time of war has had some unintended consequences. One unintended consequence of reorganization is less efficiently trained forces. Another undesirable outcome was BCT airspace and fires internal conflicts from built-in inefficiencies that thwart synchronization despite networking. Another shortcoming is the absence of a true joint rotary wing support competence, perhaps because of the lack of a discernible truly joint US warfare theory. Turmoil created from contradictions inherent in Aviation TF operations are the final product of change.

Reorganization of the MFAB, though extremely beneficial, has also come at a cost when executed during a time war in the form of reduced efficiency. The aircraft that are currently being flown during OIF and OEF are hard-pressed to maintain the current operational tempo mechanically. As these aircraft return home, they must undergo substantial and necessary time-consuming overhauls, which reduce the amount of aircraft available for training. By keeping the same amount of aircraft forward, while simultaneously training aircrews and reorganized teams in the rear, you create a training imbalance that ripples adversely all the way from the individual to Battalion level. At the

[94] Rand, pp. 58-59.

CTC, a noticeable decline was observed in collective capability within the MFABs understanding and in the application of doctrinal fundamentals. Reconnaissance, security, air assault and attack operations, were not executed doctrinally at the CTC. This deficiency was partly attributable to the lack of required readiness level progression training time for newly assigned aviators prior to arrival at the CTC. The dual demands of limited aircraft and high personnel turmoil, during the reorganization process, had a visible impact on army aviation proficiency at the CTC.

Another undesirable outcome was BCT airspace and fires internal conflicts from built-in inefficiencies that thwart synchronization despite digital networking. In the synchronization of BCT fires a somewhat convoluted planning and execution fires process is used that involves BCT personnel from Artillery, Air Defense Artillery (ADA), the BAE and the US Air Force Tactical Air Control Party (TACP). Additionally, the BAE and ADAM cell currently share not only equipment but also split competing airspace responsibilities. Airspace, by its very nature, is joint use. Despite better digital networking the current cooperative approach of splitting responsibility for high airspace usage of fixed, rotary, UAVs creates needless conflict. By not mandating overall aviation mission responsibilities conflict between the BAO, TACP, Air Defense Officer and the BCT staff compromises mission success.

Continuing beyond this internal synchronization-generated turmoil Army rotary wing assets should routinely support more than only US Army forces. The lack of joint US warfare theory impacts on the ability to develop a meaningful joint aviation doctrine. Army aviation should be a true joint use asset with attack and scout aircraft for the close fight and, theatre wide assets for CS, CSS logistical support, to include personnel recovery assets. The daily Air Tasking Order (ATO), should allocate army aviation assets with a multitude of joint missions, as is the Close Air Support (CAS) and sustainment capabilities provided by the sister armed services. Additionally, reorganization turmoil has caused contradictions in aviation TF operations. Shortcomings are apparent in the execution of the roles and responsibilities of the Air Mission Commander (AMC) and the lack of clarity in unit Standard Operating Procedures (SOPs). A final problem generated by change during a time of war is found in short duration TF operations.

The AMC is tasked with overall mission responsibility for a flight of aircraft, "when two or more aircraft are operating as one flight, the unit commander will designate an air mission commander to be in command of all aircraft in the flight. The designation of air mission commander is an assignment of command responsibility and is not a crew duty assignment."[95] In the past, when flights generally consisted of homogenous types of airframes, the lack of knowledge by the AMC of the capabilities of other aircraft was not a liability. Under Aviation TF operations dissimilar flights of aircraft are not at all atypical. The not too uncommon, less than optimal performance of the AMC when in charge of unrelated aircraft, is worthy of discussion. The delegation of command responsibility, is comparable to an Armor Battalion's motor officer deciding how to accomplish a combined arms TF mission because of his expertise in the majority of one type of vehicle involved in that mission, even though the Company or Battalion Commander participates in that operation. Perhaps the AMC delegation of command responsibility for aviation missions is tied to the Vietnam experience? In the era of short rotations, high officer turn over with substantial loss of low cost aircraft and aircrews, conceivably the regulation establishing the AMC made perfect sense. Even factoring inflation losses were still in the thousands of dollars not millions, as is the rule for today's airframes. However, the tendency today in OIF and OEF must be towards promoting and developing leadership for TF complexity. Mandating appropriate leadership involvement as AMCs commensurate with existing responsibility on the ground should be considered, at least at a minimum when employing dissimilar aircraft and capabilities on a flight. The desirability of having subordinate officers who specialize in a particular platform does not optimize TF mission accomplishment. In today's TF mixed fleet operations to have anyone with a lower level of overall experience, education and less desirable leadership development schools responsible for mission accomplishment is foolish. Appointing someone an AMC based on demonstrated proficiency in operating only one type of aircraft or mission profile is unrealistic. Unlike in Vietnam, the US now routinely operates multi-million dollar aircraft in TF operations. Better solutions to the AMC

[95] Aviation Flight Regulations, AR 95-1, 1 Sep 1997, p. 14.

problem posed by TF mission sets could be generated by simply reviewing mishap rates. A review of mishap rates based on who the AMC was for that flight, not just the Pilot-in-Command of the mishap aircraft, should help establish the fallacy of this approach. Review of multi-ship aircraft mishaps would help ascertain how often the Company or Battalion leadership is taking responsibility for planning and executing TF missions. Perhaps mission accomplishment, cost efficiencies and optimizing overall pilot development would be greater with a career progression process similar to the other services?

Aviation Task Force (TF) operations of short duration also pose some unique maintenance, crew selection and briefing authority synchronization problems. Dilemma s are generated when the parent unit, retains the assets and responsibility for maintaining, fielding and briefing the aircrews that will be task organized to accomplish a particular mission. The nonparticipating unit does not have the breath of knowledge necessary to embrace the complexity balance needed between aircraft and aircrew provided, for whatever duration, to accomplish that TF mission. A solution is to look harder at providing controls commensurate with responsibility for TF undertakings instead of focusing solely on resourcing. An interim solution could possibly be longer duration and more semi-permanent in nature TFs. Finally, the MFABs consistently struggle to provide comprehensive SOPs for weather minimums for flights and for fighter management. Each battalion develops a unique SOP based on its platform that, when merged into a TF, creates conflict with dissimilar understandings of weather minimums, duty cycles and crew selections. The tendency to allow Battalions to facilitate differences in how aircraft and aircrews should be utilized must be better controlled by the MFABs.

In summary, MFABs are more responsive to maneuver forces due to organizational and doctrinal change made during war. Doctrinal modification have deemphasized deep strike and replaced it with mobile strike, better supporting tenets of expeditionary warfare theory. The changes made have had both positive and negative impacts on the MFABs.

The Way Ahead

Ground warfare counterinsurgency and conventional theory and the lessons learned from past conflicts recommendations will now be addressed on modularity and the impact of BCT, as well as Army Aviation reorganization. Recommendations are based on discrepancies or benefits noted during the research and from first hand observations.

What has become clear during work on this research monograph on the role of theory, its impact on military doctrinal and organizational change during a time of war, is no truly unique American theory of war is discernible. The review of noted past ground warfare theorists, primarily Clausewitz, Jomini and briefly Sun Tzu, show a decidedly conventional focus in US doctrine and formations. Contemporary theorists, like Galula, Trinquier, and O'Neill, encapsulate much of what has been learned during unconventional or counterinsurgency conflict by the west in the past century. Unconventional theorists are marginalized at times by an overriding conventional warfare perspective. Emerging theorists, especially the expeditionary proponents reviewed, it appears are beginning to assimilate conventional and unconventional thinkers' perspectives into how to best confront asymmetric conflicts. In the new global order asymmetric threats are increasingly coming in contact with the Western, especially our American, way of war. As ably argued by Kuhn in his The Structure of Scientific Revolution, the natural evolution of theoretical development is one that accommodates and facilitates change, though it may never explain all the facts, by its very nature. Though each service discernibly embraces it own unique theorist a rich enough body of conventional and unconventional theory is emerging to work toward a US joint theory of war. Visionaries, though not always treated kindly by their services, continue to help modify, improve and produce change in the paradigms of warfare.

The United States is now in an era where joint operations are becoming the model for combat. Increasingly joint warfare is becoming normative, much more so than was the case before the arrival of Nichols Goldwater inspired reform. The refinement, development and assimilation of a unique US joint warfare theory will help produce a more developed joint doctrine. The appearance of

joint doctrine consensus has been developing over the past several years along with the new warfare theories. One need only look back at the first Desert Storm, when each service component essentially fought separately, though in harmony with conventional war theory, as taught in the war colleges in the 1980's. Though the tenets of Airland Battle doctrine were applied, it is almost inconsequential in comparison to the most recent understanding of joint warfare demonstrated during OIF and OEF. Emerging theory has discernibly influenced doctrinal and organizational change, as has emerging technology, Department of Defense (DOD) budget priorities and political ideology.

The lessons from previous conflicts do not always prove beneficial theoretical frameworks to prepare for future conflicts. The French early in WWII are a good example of the misapplication of warfare theory. The French used new technology and modified ground warfare doctrine contrary to their colonial warfare experiences in the era between the two World Wars. The French embraced a non-combined arms static defensive theory of war. The French form of warfare was reliant on centralized hierarchical control and used massed artillery firepower in a fixed layered defense to defeat or delay opponents on the border until counterattacking forces could be employed. They could contend and did prior to defeat that negating the importance of maneuver in comparison to firepower was the appropriate warfare theory. Their ability to ignore the importance of maneuver and develop the wrong doctrine and organizational structure stands in comparison to their opponents. The Germans interestingly enough despite adopting the ideal theory for maneuver (blitzkrieg) still failed.[96] .The Germans in both World Wars embraced modularity and used a RMA in the form of blitzkrieg theory in the second one. The Germans developed appropriate doctrine, technology, leadership and organizational innovations, though with a much smaller maneuver forces as a percentage of the overall ground component force. The Germans were still defeated, at the end of the day, at the operational and strategic levels of war.

The American experience in Vietnam, like the French, is another noteworthy case of applying the wrong warfare theory. In the case of this unconventional conflict, despite tactical

[96] James S Corum, The Roots of Blitzkrieg (University of Kansas Press: Lawrence, 1992), p. 21.

success the US failed to defeat the insurgency by losing public and political support over time. The US lost in Vietnam at the operational and strategic level because of a flawed national policy and in the execution of the war in Southeast Asia. What is becoming clear from OIF and OEF is the new found familiarity with counterinsurgency theory that the military is not the sole solution. The Western way of war is not well suited to opponents who do not fight on the same terms.[97] Western approaches to war remain poorly suited to the culture and the asymmetric fight currently confronted. An inter-agency effort is needed with the military being supported or supporting, based on national command authority guidance of the main effort, for regional conflict success. Disappointingly the American way of war is one that is overly reliant on the military, not embracing a strategy involving all the elements of national power. The solution to asymmetric conflicts is not solvable solely be warfare. An integrated and focused political, social, economic and a situationally dependent military supporting or main effort is required for success. Host nation support at a minimum, with preferably global support for legitimacy with Nongovernmental and International Governmental Organization (NGOs/IGOs) participation are also required to confront current conflicts. OEF lessons learned must be integrated into future conflicts. Global support for the conflict, the success of the PRTs, the involvement of the international community and the NATO assumption of increased missions in OEF should be emulated.[98] The recent DOD announcement of stability as a core mission requirement is an ideal forcing function to compel the US Army to overcome its resistance to unconventional warfare and these frequently long term resource intensive nation building efforts.

As noted earlier, modularity is not tremendously innovative but is in line with the conventional over unconventional approach to American wars. A conventional approach both creates and mitigates some risk while helping to facilitate the assimilation of new technology and equipment. Conservative transformation allows us to maintain a heavy legacy capability until the arrival of the FCS projected, in a recent CBO study, for 2015. Budgetary limits established for the

[97] David A Graff and Robin Higham, A Military History of China (Westview Press: Boulder, 2002), p. 12.

[98] Lamm, pp. 25-27.

development and fielding of future technologies does have as an influential role as emerging theory in promoting doctrinal and organizational change in the US Army. Perhaps the legacy system versus FCS cost debate will produce a compromise beneficial to the Army. Of importance, even the much vaunted Stryker, is only an upgraded combat platform first fielded by the Marine Corps. In essence, the leading system for transformation currently is a legacy one using off-the-shelf and emerging technologies to counter future or emerging threats prior to the arrival of the FCS.

While visionaries tend to disrupt the status quo, even internal constructive criticism is at times rejected, the well intentioned solutions and alternatives they offer also help to promote professional debate and produce change. Pertinent to this discussion is the point that the Army leadership has plainly embraced the McGregor argument for continued use of legacy equipment. Army aviation's cancellation of the Comanche program and relying instead on existing technology for a replacement scout aircraft for the Kiowa Warrior (KW) is the logical continuation of this conservative approach. A source of concern should be over becoming victims of precision and reliance on technology over manpower. The false expectations raised, ranging from over confidence on mechanical sensors to an unfounded belief in the prevention of collateral damage based on the mastery of science, should be a source of apprehension. False expectations will slow the development of the right mix of future forces for R&S tasks, stability missions, or even fighting asymmetric opponents in urban sanctuaries found around the globe.

Modularity's most visible shortcoming is the disappearance of a truly meaningful resident ISR capability and the absence of a third real maneuver Battalion within some of the so-called identical BCTs. Transformation of the reserve forces to a more relevant future structure is clearly desirable. However, because of the GWOT, out of necessity forces have been employed, previously planned homogeneously ones, in combat in direct conflict with the doctrinal principal of unity of command. The piecemealed nature of the NG BCTs mobilized, trained and deployed is not a model we should emulate in future conflicts. In conclusion, modularity is not an innovative concept but really the continued logical progression of maneuver warfare. Since the Napoleonic way of war

advanced nations have attempted to leverage combat formations for optimum combined arms effect for dominant maneuver within the context of the realities of state resources, will power and vision.

On Army aviation transformation, the modification of deep strike doctrine is a very positive development. The doctrine change was in part based on the lessons learned in the current conflict, coupled with a new appreciation for previously ignored case studies. The advent of mobile strike doctrine, the elimination of large attack regiments and Corps Aviation Brigades are beneficial. The MFABs truly correspond to the assimilation of lessons learned, new doctrine, emerging theory on expeditionary warfare and budgetary realities. MFABs with their Aviation TFs will, without a doubt, provide better and more lethal close combat power in support of US ground maneuver forces. Additionally, the correct termination decision was unmistakably made with the cancellation of the previous centerpiece of Aviation modernization, Comanche. After billions of dollars in sunk cost with no end in sight, the senior leadership of the Army obviously realized it would bankrupt Aviation's future, possibly the Army's own modernization plan, by procuring advanced technology that was not needed. Existing capability in airframes already exceed a potential adversary's ability to defeat the US now or in the immediate future.

The shortcomings in the new structure have been articulated. One main deficiency is the lack of synchronization despite digital networking due to the inherent structural complexity built into the BCT that prevents the development of optimum AGI conditions. Perhaps looking at converting excess ADA and Artillery positions into Aviation ones as the MI community has, is a possible solution to achieve unity of effort. The MI community has embraced the conversion of unique enlisted UAV skill sets into Aviation positions with the assumption of Aviation branch's new UAS tactical mission. Currently, the new BAEs are fielding without any permanent increase in aviation personnel force structure, though that may be sustainable in the short term. What is disconcerting is the lack of unity of effort built into the current disjointed airspace approach of the modular BCT staff. One branch should have proponency for the synchronization of a truly joint aviation effort; perhaps, it should be the ADA, TACP, Aviation or the Artillery community. Regardless of ownership until overall responsibility of effort is established it will remain an inefficient effort. In

closing, though the absence of a truly joint rotary wing asset for the total DOD force, to the dated perception of the role of the AMC and the MFABs conflicting SOPs, Army aviation is undoubtedly more responsive. The emerging structure is better than the previous cold war era legacy force, the one previously theoretically entrenched, doctrinally and organizationally fielded.

The way ahead for the US Army should and will continue to be one based in part on current and evolving theories of warfare. Emerging theories have a role in helping to shape doctrine and organizational structure during a time of war. Confronting full spectrum conflict comprehensively will require more than relying solely on technological innovations or the RMAs promised in an as yet-to-be-developed force. Technology, along with fiscal realities and national policies, such as preemption doctrine, along with theory should help contribute to the development and fielding of new combat formations. Applying warfare theory tactically and substituting technology for an all encompassing strategy is not an option. The possibility of repeating the German failures of both WWI and WWII with there absence of strategic appreciation for the rational synergy of all the elements of national power must be avoided. Tactical success with superior equipment, training, and leadership within a smaller lethal force but ultimately operational and strategic failure in the GWOT cannot be allowed. Specifically, the body of well developed past, contemporary and emerging theories coupled with a conservative approach to transformation on warfare should be part of the natural evolution of future US Army formations. Though lacking an overarching, contemporary joint American theory of war the US is moving positively in that direction doctrinally and organizationally using existing warfare theory. Using all the elements of national power is plainly just as important as a combined arms approach to combat for success in the GWOT.

SUMMARY

The key findings on the role of theory and its overall impact on military doctrinal and organizational change during a time of war can be categorized as good, bad and indifferent. To start with, we have no overarching American theory of warfare that is joint in nature. Historically in the past each service gravitated to what it believed was the most applicable methodology. On the other

hand, with the arrival of the conflict challenges found in both OIF and OEF and the unquestionably smaller manpower forces available after the drawdown of the early 1990s, an unmistakably joint force is emerging. This force is gravitating toward some consensus on doctrine and conceptual clarity on the importance of using all the elements of national power for conflict resolution. Theory, like doctrine, should remain authoritative not prescriptive in nature, with generally well accepted and understood concepts. Theory, along with a host of other interrelated factors, from technology, ideology to resources of the state, does exert perceptible change on the military during times of war. The evolution of theory, though it is of a separate air/space, ground, sea, information/technology contemporary nature currently, is a natural process. Warfare paradigm change promotes and accommodates modifications in capabilities and doctrine in military organizations. From the arrival of the Napoleonic way of war, to blitzkrieg warfare in WWII to today's so-called expeditionary warfare, change remains a constant in the evolution of warfare. Appropriate doctrinal and organizational change that captures emerging technology is both successful and ongoing. However, a combination of institutional governmental and military resistance, not so much the shortcomings of past and evolving warfare theory, conventional or unconventional, retard change. Internal institutional governmental refusal to embrace an interagency approach has had an impact on the GWOT. Additionally, overt US Army opposition to insurgent warfare and the predictable loss of political will and public support for lengthy, poorly understood struggles is discernable. All of these challenges have helped thwart the development of a joint American theory of war.

The lack of a true inter-agency approach incorporating all the elements of national power to develop and implement a strategy for success has delayed progress in Iraq. Some contend that the lack of any real planning for phase IV of OIF by General Franks and the slow response by LTG Sanchez thereafter, to the developing insurgency, contributed to the perceived dismal performance in Iraq to date.[99] Conventional warfare achievements, which were supported by expeditionary warfare theory tenets, have not translated into counterinsurgency success in OIF. Be that as it may, one of

[99] Bacevich, pp. 415-416.

the best recent developments was the President's National Strategy for Victory in Iraq announced in November 2005. This strategy succinctly confronts the national problems posed in phase IV of OIF and bodes well for future success with its distinct counterinsurgency theory approach. President Bush acknowledges:

"Terrorism and insurgencies historically take many years to defeat, through a combination of political, economic and military tools…Our strategy for victory along the political, security and economic tracks incorporates **every aspect of American power,** with assistance from agencies throughout the federal government, and the involvement of the United Nations, other international organizations, Coalition countries and other supporting countries and regional states."[100]

Another promising development is the resistance by the US Army to long term commitment to unconventional warfare due to previous failures in counterinsurgency and nation building operations (Vietnam, Somalia, and Haiti) has been addressed. The new DOD directive, making stability operations a core mission, will serve as a coercing force to overcome this opposition to counterinsurgency operations. The US Army, as an institution, refused to even acknowledge the importance of counterinsurgency warfare in its capstone FM 100-5 manual first revised and published after defeat in Vietnam. The recognition of the importance of counterinsurgency warfare doctrinally bodes well for future professional discussion. Unconventional conflicts in the past have been undermined by an inability to maintain public support and sustain political stamina. The lack of public support for prolonged costly, in lives and resources, counterinsurgency warfare can, over time, erode political support for the war now being confronted by the US. Furthermore, by defining OIF as a vital US interests and outlining why failure is not acceptable, it may help overcome the historic lack of will by democracies involved in prolonged conflicts. Conflicts not involving national survival have not been well prosecuted by democracies historically. Army aviation's and the reserve components ongoing transformation should also prove ideal for better support of the military and nation, theoretically, doctrinally and organizationally in the coming years.

[100] National Strategy for VICTORY IN IRAQ (National Security Council, GPO: Washington D.C., November 2005), pp. 10-25.

Within the indifferent realm is the transformation of the BCTs currently underway. The assessment of this monograph was validated in the May 2005 findings by the Congressional Budget Office (CBO) study of Options for Restructuring the Army. They found, with the exception of the deficient reorganization into the Pentomic Division structure of the 1950s, the current and past reorganization efforts have not enhanced combat power capabilities.[101] The CBO also was unable to evaluate the Army's claimed benefits of modularity of qualitative over quantitative improvement. The CBO found the Army had a subjective belief at best due to the lack of realistic budgetary and support personnel requirements in there analysis. The CBO did find that these formations are no more rapidly deployable than their predecessors.[102] With no real peer competitor on the horizon at least until the fielding of a new FCS structure projected for 2015, one could voice that reorganization during a time of war comes at the expense of a less well trained force. Modularity, though partly based on expeditionary warfare theorists' expectations, has promoted doctrinal and organizational change, though the benefits for full spectrum success maybe illusionary at best.

Change remains the one observable constant of warfare. The US Army is converting in a conservative manner while retaining a traditional conventional legacy overmatch capability. However the transformation comes at a genuine loss of ISR, understanding of CS and CSS doctrine and sustainment capability within the BCTs during a time of war. Additionally, NET for changing BCTs has reduced the amount of optimum training time available to combat forces prior to deployment to OIF and OEF. That the Army will weather this transformation until the arrival of the FCS or its equivalent as an institution, is uncontestable. Within the broad parameters of theory, doctrine and organizational change during a time of war, arguably the same BCT and, for that matter, ACR formations could have been retained and developed a better capability. That is, by not reshuffling personnel and units, the BCTs would have had increased collective training opportunities while simultaneously modernizing legacy era systems and equipment. Conversion may well have been generated more by resourcing opportunity than theory, though it is within the realm envisioned

[101] CBO, Appendix B, p. 9.
[102] CBO, Summary, pp. ii-xxiv.

by expeditionary warfare theorists. The desire to demonstrate and use technology as a means to reduce the costliest component of US warfighting capability, man that is, may well be altering the military.

In closing, the shortcomings and advantages found in answering the research question on theory, its impact on military doctrinal and organizational change during a time of war, should prove useful. Asking and answering this thesis will contribute to the professional dialogue needed for the US to continue to maintain the best led, trained and equipped military in the world. However, a source of concern must be the prolonged nature and poor results in Iraq of US efforts to date. The preemptive focus of the Bush Doctrine has aptly demonstrated a clear disparity between the declared objectives of the nation and the military resources available to engage in those aspirations. The mismatch between manpower available and objectives desired, especially if tasked to provide even more troops for the GWOT should be a source of anxiety for military planners. Some also believe that OIF has damaged US prestige abroad and shown the limitations of the small, high technology based, conventionally focused, all volunteer force. America has also highlighted for her potential adversaries the lack of public and political support for asymmetric conflict.[103]

The alternative to not overcoming this way, ends means policy mismatch in Iraq for the US is unthinkable and is readily found in the parallels of the story of Athens as told in Thucydides. Like the Athenians experience, the US is now the sole remaining superpower with the collapse of the Soviet Union. This may have made the ideological conflict in the Middle East inescapable. "The growth of the power of Athens, and the alarm which this inspired in Lacedaemon, made war inevitable."[104] As retold in the Moral Warrior, the US, like Athens did not set about to be a superpower but emerged one at the end of WWII. That the global economy has prospered from the political, military and economic power of the US is uncontestable. The severity of the widespread resentment at US prosperity is however somewhat surprising. Just as Athens did, the US has also chased her own vision of well being and strategically isolated herself from the support of neighbors

[103] Bacevich, p. 413.
[104] Thucydides, Book 1, Section 23, p. 16.

at times.[105] America can and must avoid the type defeat suffered by the Athenians in Sicily, which heralded the beginning of the end of their empire. The parallels to possible US defeat in Iraq are striking. Success in the GWOT means winning with all the elements of national power, if the US is to avoid the disaster foretold by Nicias of: "grasping at another empire before we have secured the one we have already."[106] The US must, without illusion, clearly understand the challenges of the new global order to ensure long term strategic success.[107]

[105] Cook, p. 7.
[106] Thucydides, Book 6. Section 10, p. 324.
[107] Cook, p. 14.

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