

THE PARADIGM SHIFT IN U.S. ARMY OPERATIONAL THOUGHT

1982-2017

Le Changement De Paradigme Dans La Pensée Opérationnelle De L'Armée Américaine

1982-2017

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ABSTRACT

This dissertation examines the evolution of U.S. Army operational thought from its introduction in 1982, through Operation IRAQI FREEDOM, until 2017. It found that the concept “operational art”, a term used to describe the application of creative and critical thinking to military operations, facilitated the planning and execution of military operations in support of U.S. strategy during the Global War on Terrorism. However, during Operation IRAQI FREEDOM, the doctrinal application of operational art struggled, after the invasion’s initial success, with stability operations. Still, due to a paradigm shift in U.S. Army operational thought, operational art was adapted to facilitate the execution of counterinsurgency. This research demonstrates that, due to the conflict environment of the period, American operational art evolved into a process for solving problems rather than a particular approach to doing so. In contrast, the central core of operational thought remained constant, coordinating battles or tactical actions over time and space to achieve strategic or political objectives.

RÉSUMÉ

Cette thèse examine l'évolution de la pensée opérationnelle de l'armée américaine depuis son introduction en 1982, en passant par l'opération IRAQI FREEDOM, jusqu'en 2017. Elle a révélé que le concept d'« art opérationnel », terme utilisé pour décrire l'application de la pensée créative et critique aux opérations militaires, a facilité la planification et l'exécution des opérations militaires en soutien à la stratégie américaine pendant la guerre mondiale contre le terrorisme. Cependant, pendant l'opération IRAQI FREEDOM, l'application doctrinale de l'art opérationnel a rencontré des difficultés, après le succès initial de l'invasion, avec les opérations de stabilisation. Cependant, en raison d'un changement de paradigme dans la pensée opérationnelle de l'armée américaine, l'art opérationnel a été adapté pour faciliter la mise en œuvre de la contre-insurrection. Cette recherche démontre qu'en raison du contexte conflictuel de l'époque, l'art opérationnel américain a évolué vers un processus de résolution de problèmes plutôt que vers une approche particulière pour y parvenir. En revanche, le cœur de la pensée opérationnelle est resté constant, coordonnant les batailles ou les actions tactiques dans le temps et l'espace afin d'atteindre des objectifs stratégiques ou politiques.

TABLE OF CONTENTS

Abstract.....	ii
Chapter One – Introduction.....	1
Chapter Two – Literature Review.....	23
Chapter Three – The Historical Context of Operational Thought.....	44
Chapter Four – The Introduction of Operational Thought in the U.S. Army.....	65
Chapter Five – AirLand Battle.....	87
Chapter Six – Full Spectrum Operations.....	113
Chapter Seven – Unified Land Operations.....	146
Chapter Eight – Conclusion.....	171
Bibliography.....	185

LIST OF FIGURES

Figure 2.1 Schools of Operational Thought.....	25
Figure 6.1 The 1993 Concepts of Theater and Operational Design.....	116
Figure 6.2 The 2001 Elements of Operational Design.....	117
Figure 6.3 The 2008 Elements of Operational Design.....	138
Figure 7.1 The 2012 Elements of Operational Art.....	163
Figure 7.2 The 2016 Elements of Operational Art.....	166
Figure 7.3 The 2017 Elements of Operational Art.....	169

LIST OF ABBREVIATIONS AND ACRONYMS

ADP	Army Doctrine Publication
ADRP	Army Doctrine Reference Publication
BCT	Brigade Combat Team
BDP	Battlefield Development Plan
CAC	Combined Arms Center
CENTCOM	U.S. Central Command
CFACC	Combined Force Air Component Commander
CFC	Combined Forces Command
CFLCC	Combined Force Land Component Commander
CINC	Commander in Chief
CINCCENT	Commander in Chief, Central Command
CJCS	Chairman of the Joint Chiefs of Staff
CJTF	Combined Joint Task Force
COIN	Counterinsurgency
DCSDOC	Deputy Chief of Staff for Doctrine
FM	Field Manual
IBCT	Interim Brigade Combat Team

ITO	Iraqi Theater of Operations
JFC	Joint Force Commander
JP	Joint Publication
JTF	Joint Task Force
MDMP	Military Decision-Making Process
MEF	Marine Expeditionary Force
MNC-I	Multi-National Corps – Iraq
MND-C	Multi-National Division – Center
MNF-I	Multi-National Force – Iraq
MOOTW	Military Operations Other Than War
NCA	National Command Authorities
NCOs	Non-Commissioned Officers
ODSS	offense, defense, stability and support
OEF	Operation ENDURING FREEDOM
OIF	Operation IRAQI FREEDOM
OPORD	Operation Orders
OOTW	Operations Other Than War
PLANORD	Planning Orders

RMA	Revolution in Military Affairs
SAC	Strategic Air Command
SAMS	School of Advanced Military Studies
SBCT	Stryker Brigade Combat Team
SIOP	Single Integrated Operations Plan
SOD	Systemic Operational Design
TAC	Tactical Air Command
TRADOC	Training and Doctrine Command
UNAAF	Unified Action Armed Forces
UNSC	United Nations Security Council
USACGSC	U.S. Army Command and General Staff College
USF-I	US Forces-Iraq
WMD	Weapons of Mass Destruction

Chapter One - Introduction¹

Introduction

Since the United States Army introduced the operational level of war, the conceptual region between strategy and tactics, in 1982, and its introduction of operational art in 1986, every other component of the American military has also adopted the concept in some form along with most, if not all, of America's allies.² This adaptability is evident in the U.S. military's ability to increase complexity by adding a level of war between the strategic and tactical in the 1980s. The increased number of nodes and networks, in the form of operational responsibilities and activities, made the planning and execution of military operations by the United States military during that period more complex. Still, the military was able to navigate this complexity with resilience and flexibility.³

Throughout the U.S. military's formal concept of operational thought, the United States has employed military force to effect regime change or restore a state's sovereignty on several occasions, most notably in Grenada (1983), Panama (1989–1990), the Persian Gulf (1991), Afghanistan (2001), and Iraq (2003), the last three being particularly notable.⁴ The 2001 overthrow of the Taliban regime in Afghanistan was achieved by a combination of

¹ As the focus of this dissertation is U.S. Army operational doctrine in particular, and U.S. military doctrine in general, U. S. terminology and spelling is used throughout.

² In the 1982 version of *Operations FM 100-5*, the operational level is defined as, "... the theory of larger unit operations. It also involves planning and conducting campaigns." Department of the Army, *Operations FM 100-5* (Washington, D.C.: Headquarters, Department of the Army, 20 August 1982), 2-3. The contemporary U.S. military definition of the operation level is "The operational level of warfare links the tactical employment of forces to national strategic objectives. **The focus at this level is on the planning and execution of operations using operational art**" Joint Staff Director for Joint Force Development. *JP 3-0 Joint Operations*. (Washington, D.C.: Department of Defense, October 2018), I-13. In the 1986 version of *FM 100-5 Operations*, operational art is defined as, "Operational art is the employment of military forces to attain strategic goals in a theater of war or theater of operations through the design, organization, and conduct of campaigns and major operations." Department of the Army, *FM 100-5, Operations* (Washington, D.C.: Headquarters, Department of the Army, 5 May 1986), 10. The contemporary U.S. military definition of the operation art is "the cognitive approach by commanders and staffs—supported by their skill, knowledge, experience, creativity, and judgment—to develop strategies, campaigns, and operations to organize and employ military forces by integrating ends, ways, means, and evaluating risks." Director for Strategy, Plans, and Policy (J-5), *JP 5-0 Joint Planning* (Washington, D.C.: Department of Defense, December 2020), I-3. Allied usage of the concept of operational art includes: NATO Standardization Office, *AJP-3 Allied Joint Doctrine for the Conduct of Operations* (Brussels: NATO Standardization Office, February 2019), 1-1; Directorate of Army Doctrine, *B-GL-300-001/FP-001 Land Operations* (Kingston, ON: Army Publishing Office, January 2008), 6-3; ACOS Warfare, *ADP Land Operations* (Warminster: Land Warfare Development Centre, 2016), 8-10; and Land Doctrine Centre, *Land Warfare Doctrine 1: The Fundamentals of Land Power* (Canberra: Chief of Army, 2017), 15.

³ James Moffat, *Complexity Theory and Network Centric Warfare* (Washington, D.C.: DoD Command and Control Research Program, 2003), 46-47 and Dennis J.D. Sandole, *Capturing the Complexity of Conflict* (New York: Pinter, 1999), 26-28.

⁴ Matthew C. Weed, *The War Powers Resolution: Concepts and Practice* (Washington, D.C.: Congressional Research Service, 3 April 2015), 15, 18, 19, 21 and 42.

Special Forces, airpower, and indigenous forces led by tribal leadership rather than the conventional military.⁵ The two major traditional wars since the introduction of the operational level were Operation DESERT STORM in the Persian Gulf (1991) and Operation IRAQI FREEDOM (OIF) against Iraq (2003-2010).⁶

The research question this dissertation will answer is: Did the U.S. Army's concept of "operational art" experience a paradigm shift during America's Global War on Terrorism? In turn, the thesis statement for this dissertation is: the use of the concept "operational art" initially facilitated the planning and execution of military operations in support of U.S. strategy during the Global War on Terrorism. However, during Operation IRAQI FREEDOM, the application of operational art at first struggled, after the invasion's initial success, with stability operations. Still, due to a paradigm shift in U.S. Army operational thought, operational art adapted such that it facilitated the execution of counterinsurgency and stability operations.

Any examination of a paradigm shift in operational art as applied by the U.S. military in general, and specifically the U.S. Army, has potential consequences for how the U.S. Army and the U.S. military think about, and in turn conduct, operations in the future. On the chance that a paradigm shift in operational art has made the United States and the U.S. military less effective at conducting military operations. In that case, the U.S. military should reconsider its continued use as a conceptual paradigm in general and the U.S. Army in particular. If, however, the paradigm shift in operational art has made the U.S. Army and the U.S. military more effective at the conduct of military operations, its importance would be validated. The U.S. military and the U.S. Army should reinforce it. An examination into the operational level of war could bring into question the concept of operational art as outlined in U.S. Army doctrine in particular, and in U.S. military doctrine in general, and resultantly, as practiced by the U.S. Army and the U.S. military, leading to a revision of this idea in part, or its entirety, or alternately it could lead to the reinforcement of its importance. Due to the widespread adoption of the operational level of war and operational art by NATO and most, if not all, of America's allies, the consequences of an examination of operational thought in general, and a paradigm shift in operational art in particular, extend to them as well.

Structure of the Dissertation

This dissertation will examine the history, theory and doctrine of U.S. Army operational thought, starting with the historical background of operational thought, followed

⁵ Richard W. Stewart, General Editor, *American Military History Volume II: The United States Army in a Global Era, 1917-2008*, (Washington, D.C.: Center of Military History United States Army, 2010), 468-474.

⁶ "This form of warfare is characterized as a violent struggle for domination between nation-states or coalitions and alliances of nation-states. This form is labeled as traditional because it has been the preeminent form of warfare in the West since the Peace of Westphalia (1648) that reserved for the nation-state alone a monopoly on the legitimate use of force. The strategic purpose of traditional warfare is the imposition of a nation's will on its adversary nation-state(s) and the avoidance of its will being imposed upon us." Directorate for Joint Force Development (J-7), *JP 1 Doctrine for the Armed Forces of the United States* (Washington, D.C.: Department of Defense, July 2017), 1-5.

by the history of the U.S. Army's introduction of the operational level in 1982 and operational art in 1986. This is followed by an examination of U.S. Army operational doctrine, focusing on operational art, from 1982 to 2017, thereby considering the evolution of operational art before OIF, during OIF and any lessons from OIF that led to doctrinal change. A particular focus on Operation IRAQI FREEDOM, from 2003 to 2010, will determine whether or not U.S. Army operational doctrine was put into practice, and if so, determine what kind of impact it had on practice and whether or not it changed.

Attention is on OIF rather than Operation ENDURING FREEDOM (OEF) because although the U.S. launched OEF against Afghanistan in response to the 11 September 2001 terrorist attack against the U.S. before invading Iraq, operations in Iraq were the primary U.S. effort until the end of OIF.⁷ U.S. Special Forces began operations in Afghanistan on 19 October 2001, and soon, there were about three hundred Special Forces soldiers supporting indigenous efforts to defeat the Taliban. The first conventional U.S. Army forces to deploy to Afghanistan were a company from the 10th Mountain Division. By the end of the year, there were about 5,000 soldiers on the ground in Afghanistan.⁸ The primary focus of U.S. forces in Afghanistan from 2002 to 2004 was hunting fugitive Taliban and al-Qaeda leaders. From 2004 onwards, the U.S. also played a more significant role in nation-building along with coalition partners, notably NATO allies, whose overall contribution was larger than that of the U.S. at the time.⁹ Initial U.S. efforts were focused on special operations forces conducting counter-terrorism operations and later on, nation building as part of a coalition effort, neither of which was the center of attention for the application of U.S. military and U.S. Army operational doctrine.

The Historical Context of Operational Thought

With Chapter One providing an introduction to this dissertation and Chapter Two being a literature review of the relevant literature used for this dissertation, Chapter Three will consider the four groups generally identified, to one degree or another, for originating the idea of operational art or more accurately, operational thought. Historical context regarding operational thought begins with 19th century German ideas and 20th century Soviet ideas. The strongest arguments regarding the origins of operational thought are for the Prussians and Germans, starting with Field Marshal Helmuth von Moltke and the Soviets in the period between World War One and World War Two. Both viewed operational thought and practice, lying between strategy and tactics, as enabling offensive military action to defeat an enemy military force tactically.¹⁰ The reasons why they developed a concept of

⁷ U.S. operations in Afghanistan post-9/11 will only receive further reference, as appropriate, as they may relate to changes in U.S. Army operational doctrine, in keeping with the focus of this dissertation on OIF.

⁸ Richard W. Stewart, ed., *American Military History Volume II*, 468-474 and 508-509; and Barbara Salazar Torreon and Sofia Plagakis, *Instances of Use of United States Armed Forces Abroad, 1798-2023* (Washington, D.C.: Congressional Research Service, 2023), 22-23.

⁹ Stewart, *American Military History*, 509-511; and Salazar and Plagakis, *Instances of Use*, 23-25.

¹⁰ Michael Krause, "Moltke and the Origins of the Operational Level of War," in *Historical Perspectives of the Operational Art* edited by Michael D. Krause and R. Cody Phillips (Washington, D.C.: Center of Military History United States Army, 2005), 113 and 125; Dennis Showalter, "Prussian-German Operational Art, 1740-1943," in *The Evolution of Operational Art: From Napoleon*

“operations” as something between strategy and tactics are key to the understanding of the concept of operational thought. Alternative arguments for the origins of operational thought will also be examined. Most notably, operational art, thought, and practice originated with Napoleon and alternatively, that for Americans operational thought truly started during the U.S. Civil War and that in turn operational art was practiced during the U.S. Civil War.¹¹ Napoleon is considered, as he is often identified as being one of the first practitioners of operational art, although not everyone agrees on this. Historical context for the U.S. Army starts with the consideration of the argument that American operational art originated during the U.S. Civil War, and this is followed by an examination of U.S. Army doctrine from the

to the Present edited by John Andreas Olsen and Martin van Creveld (Oxford: Oxford University Press, 2011), 38-44; Robert M. Citino, *Blitzkrieg to Desert Storm: The Evolution of Operational Warfare* (Lawrence, KS: University Press of Kansas, 2004), 3-5 and 301-302; Lieutenant Colonel A.I.G. Kennedy, “The Operational Art of War – National or International Evolution,” in *The British Army and The Operational Level of War* edited by Major General J.J.G. Mackenzie and Brian Holden Reid (London: Tri-Services Press Limited, 1989), 134-135; Milan N. Vego, *Operational Warfare* (Newport, RI: United States Naval War College, 2000), 13; Jacob Kipp, “The Origins of Soviet Operational Art 1917-1936,” in *Historical Perspectives of the Operational Art*, edited by Michael D. Krause and R. Cody Phillips (Washington, D.C.: Center of Military History United States Army, 2005), 214-215 and 234; Bruce Menning, “Operational Art’s Origins” in *Historical Perspectives of the Operational Art*, edited by Michael D. Krause and R. Cody Phillips (Washington, D.C.: Center of Military History United States Army, 2005), 10-11 ; Jacob Kipp, “The Tsarist and Soviet Operational Art, 1853-1991,” in *The Evolution of Operational Art: From Napoleon to the Present* edited by John Andreas Olsen and Martin van Creveld (Oxford: Oxford University Press, 2011), 65-69; Shimon Naveh, *In Pursuit of Military Excellence: The Evolution of Operational Theory* (London: Frank Cass Publishers, 1997), 40; Aleksandr A. Svechin, *Strategy*, edited by Kent D. Lee (Minneapolis, MN: East View Publications, 1992), 69 and 269; Jacob Kipp, “Two Views of Warsaw: The Russian Civil War and Soviet Operational Art, 1920-1932,” in *The Operational Art Developments in the Theories of War* edited by B.J.C. McKercher and Michael A. Hennessy (Westport, CT: Praeger Publishers, 1996), 67 and 78; and Bruce W. Menning, “The Imperial Russian Legacy of Operational Art, 1878-1914,” in *Historical Perspectives of the Operational Art*, edited by Michael D. Krause and R. Cody Phillips (Washington, D.C.: Center of Military History United States Army, 2005), 206-07.

¹¹ Gunther E. Rothenberg, *The Art of Warfare in the Age of Napoleon* (Bloomington, IN: Indiana University Press, 1980), 129; Robert M. Epstein, *Napoleon’s Last Victory and the Emergence of Modern War* (Lawrence, KS: University Press of Kansas, 1994), 24; David G. Chandler, “Napoleon, Operational Art, and the Jena Campaign,” in *Historical Perspectives of the Operational Art* edited by Michael D. Krause and R. Cody Phillips (Washington, D.C.: Center of Military History United States Army, 2005), 27; Michael D. Krause and R. Cody Phillips, *Historical Perspectives of the Operational Art* (Washington, D.C.: Center of Military History United States Army, 2005), 25; James J. Schneider, “Vulcan’s Anvil: The American Civil War and the Foundations of Operational Art” (Theoretical Paper, School of Advanced Military Studies, U.S. Army Command and General Staff College, 1992), 16-17, 20-22 and 39; Michael R. Matheny, *Carrying the War to the Enemy: American Operational Art to 1945* (Norman, OK: University of Oklahoma Press, 2011), 10-11; James J. Schneider, “The Loose Marble – And the Origins of Operational Art,” *Parameters* 19, no. 1 (March 1989), 90; Arthur V. Grant, “Operational Art and the Gettysburg Campaign,” in *Historical Perspectives of the Operational Art* edited by Michael D. Krause and R. Cody Phillips (Washington, D.C.: Center of Military History United States Army, 2005), 350; and Walter E. Kretchik, *U.S. Army Doctrine: From the American Revolution to the War on Terror* (Lawrence, KS: University Press of Kansas, 2011), 67-81.

end of World War One through to the introduction, or rediscovery, of the operational level in 1982.

The Introduction of Operational Thought in the U.S. Army

Starting in Chapter Four, the journey of the introduction of the operational level began with the American withdrawal from Vietnam and the shift in focus by the U.S. Army back to Europe and the Cold War face off with the Soviet Union. While the U.S. military had focused on the war in Vietnam, the Soviet Union had been continuing to develop its military capability in Europe throughout the 1960s. The U.S. Army, therefore, had to reorient from fighting an asymmetric, infantry-centric war in Asia to being able to fight a combined arms battle against a similarly capable peer opponent. The 1973 Middle East War heavily influenced this reorientation; the destructive effects of modern weapons had a particular impact on U.S. Army thinking.¹²

The Americans introduced the doctrinal construct of the operational level of war in 1982 as part of revisions to the 1976 edition of FM 100-5, which was criticized for being too defensively oriented. The 1982 edition adopted an offensive philosophy over the defense in response to criticism of the 1976 edition, both from outside the U.S. Army and from those within. A key driver of change was General Donn Starry, Commander Training and Doctrine Command (TRADOC), based on what he learned visiting the Golan Heights in 1974 and his experience commanding U.S. V Corps in Europe, where he had to face the challenges of implementing the doctrine in the 1976 edition if he were to deal with a Warsaw Pact offensive in Europe. Instead, American forces would need to seize the initiative, which would be best done through offensive action. Starry believed that one key to American military success would be winning the deep battle, achieved by military action at the operational level.

The Evolution of Operational Thought in the U.S. Army

The American military introduced the doctrinal concept of operational art in 1986 as an evolution of the doctrinal construct of the operational level of war. The 1986 edition reinforced an offensive philosophy over the defense in a further response to criticism of the 1976 edition. The fall of the Berlin Wall in 1989 signalled the beginning of the end of the Cold War, at which point operational art in the U.S. Army was three years old and the operational level seven years old. The Army was still wrestling with what both concepts meant and how they should be applied. Those who developed the doctrine had a clear understanding of the operational level and operational art, but others who learned of the concepts from doctrine and as part of a broader professional military education did not share such a strong understanding. In part, this was due to the lack of a detailed doctrinal explanation of operational art.¹³ This misunderstanding was reinforced by the fact that the

¹² John L. Romjue, *From Active Defense to AirLand Battle: The Development of Army Doctrine, 1973-1982* (Fort Monroe, VA: Historical Office, United States Army Training and Doctrine Command, 1984), 2-3.

¹³ John F. Meehan, "The Operational Trilogy," *The US Army War College Quarterly: Parameters* XVI, no. 3 (Autumn 1986), 12 and David Jablonsky, "Strategy and the Operational Level of War: Part 2," *The US Army War College Quarterly: Parameters* XVII, no. 2 (Summer 1987), 65.

Soviets also used the term operational art, but differently from how the term was used in U.S. doctrine.¹⁴ Furthermore, the U.S. Army concept of operational art was still evolving, so depending on when one went through the professional military education system in the U.S. Army, over time, different generations of officers were taught slightly different concepts of operational art.¹⁵ For the U.S. Army, how operational art would be applied in a war against the Warsaw Pact in Europe was relatively straightforward and understandable and was little different from German application in the 19th century and World War Two and little different from Soviet understanding in the 1920s and 1930s. This is examined in more detail in Chapter Five.

The U.S. Army introduced the operational level, then operational art, which lies between strategy and tactics, to enable large scale offensive military action to tactically defeat an enemy military force within a theater of war. It was introduced at a time when the U.S. Army replaced the operational concept of Active Defense with AirLand Battle, primarily focused on Europe for use within NATO against the Soviet Union and the Warsaw Pact. The combination of maneuver and firepower would facilitate enemy destruction, while the idea of deep battle would disrupt the enemy, leading to operational shock.

The Change of Operational Thought in the U.S. Army

By the beginning of the 21st century, operational art changed from focusing on offensive military action to a more tactical approach to defeating an enemy. It became more of a style of planning and executing military operations. This is examined in detail in Chapter Six with a focus on OIF. The focus is on the various facets or dimensions of activities that take place as part of operational thought, such as the designing, organization, integration and conduct of campaigns, major operations and battles. Chapter Six considers OIF in two parts, oriented around the grammar of the war being fought. War's first grammar is the procedures and principles "to overthrow an opponent by armed force," generally a war between states.¹⁶ The first grammar addresses a relatively well-defined problem to solve,

¹⁴ Dwight L. Adams and Clayton R. Newell, "Operational Art in Joint and Combined Arenas." *The US Army War College Quarterly: Parameters* XVIII, no. 2 (June 1988), 34. Soviet operational art was focused on the offense, using deep operations by creating a breach in the enemy defense then committing the bulk of Soviet forces through the breach to attack into the enemy's depth. Georgii Samoilovich Isserson, *The Evolution of Operational Art*. translated by Bruce W. Menning (Fort Leavenworth, KS: Combat Studies Institute Press, 2013), 42 and 66-67; and Vasiliy Yefisovich Savkin, *The Basic Principles of Operational Art and Tactics (A Soviet View)*, translated by the United States Air Force (Washington, D.C.: U.S. Government Printing Office, 1974), 45. When the U.S. Army adopted operational art, the focus was on designing campaigns and major operations, utilizing battles over time and space to achieve strategic objectives. At the time, it was anticipated that the U.S. Army, along with its NATO allies would start from the defensive and the U.S. Army would use deep operations to interdict Soviet follow-on forces. Army Command and General Staff College, *FM 100-5 Operations* (Washington, D.C.: Department of the Army, May 1986), 10 and 19-20.

¹⁵ General (Ret'd) Donn A. Starry, "A Perspective on American Military Thought," *Military Review* LXIX, no. 7 (July 1989), 11.

¹⁶ Carl von Clausewitz, *On War*, edited and translated by Michael Howard and Peter Paret (Princeton: Princeton University Press, 1976), 605; Antulio J. Echevarria II, "American Operational Art, 1917-2008," in *The Evolution of Operational Art: From Napoleon to the Present* edited by John Andreas Olsen and Martin van Creveld (Oxford: Oxford University Press, 2011), 137; Antulio J. Echevarria II,

which typically results in the conduct of more linear operations based on lines of operations. It also uses a direct approach to solve the problem, and it is usually practiced more so at the higher levels of command. War's second grammar involves at least one major actor that is not a state; this type of war is commonly referred to as "insurgency, guerrilla warfare, or irregular warfare."¹⁷ The second grammar faces an ill-defined problem to solve that requires lines of effort, often in a noncontiguous battlespace. As a result, it usually applies an indirect approach to solve the problem it confronts, with operational art being practiced by lower levels of command, as low as the company level.

Chapter Seven considers whether any changes to operational doctrine were sustained as having utility or whether doctrine reverted to earlier concepts because changes failed to maintain their utility. The focus is on operational doctrine released after the end of OIF, up until 2017, thereby considering the operational doctrine released immediately following OIF in 2011-2012 and the next generation released in 2016-2017. Chapter Seven also considers another idea regarding operational thought introduced during the same period as OIF. This concept posits that the operational level was inserted between strategy and tactics, as strategy became subsumed by policy and/or politics. In turn, operational art replaced military strategy, which had evolved into grand strategy that also included policy and/or politics, serving as the link between policy or politics (grand strategy) and tactics.¹⁸

Ideas, Operational Thought and Levels of War

There are, however, three areas that need to be addressed to set the context for examining the history, theory and doctrine of U.S. Army operational thought. The first is the role of ideas or thought. Operations, operational art, operational practice and the operational level are all ideas based on thoughts. Militaries have bodies of knowledge about operations, operational art and the operational level, in which they blend their historical experience and theories (based on scientific facts and creatively generated ideas) to develop doctrine (the institutionally approved body of knowledge), enabling effective practice.

"War's Second Grammar," (Paper, Strategic Studies Institute, U.S. Army War College, 2009), 2; and Emile Simpson, *War from the Ground Up: Twenty-First-Century Combat as Politics* (New York: Columbia University Press, 2012), 127.

¹⁷ Echevarria, "American Operational Art," 137; Echevarria, "Second Grammar," 2; and General Rupert Smith, *The Utility of Force: The Art of War in the Modern World* (New York: Alfred A. Knopf, 2007), 19, 28, 334 and 374.

¹⁸ Alexander Mattelaer, "The Crisis in Operational Art" (paper, European Security and Defence Forum, New Transnational Security Challenges and Responses, 2009), 14-15; Hew Strachan, *The Direction of War: Contemporary Strategy in Historical Perspective* (Cambridge: Cambridge University Press, 2013), 17-19, 20-21, 38, 40-41, 212-213, 215-216 and 248; Hew Strachan, "The Lost Meaning of Strategy," *Survival* 47, no. 3 (Autumn 2005), 44 and 47; Hew Strachan, "Strategy or Alibi? Obama, McChrystal and the Operational Level of War," *Survival* 52, no. 5 (October-November 2010), 159-161, 162 and 164; Justin Kelly and Mike Brennan, *Alien: How Operational Art Devoured Strategy* (Carlisle, PA: Strategic Studies Institute, 2009), 61-63 and 67; Lawrence Freedman, *Strategy: A History* (Oxford: Oxford University Press, 2013), 206-207, 209, 240-244; Emile Simpson, *War from the Ground Up*, 140-141, 228 and 243-244; and Colin S. Gray, *The Strategy Bridge: Theory for Practice* (Oxford: Oxford University Press, 2010), 20-21 and 45-46.

From this observation, two other areas emerge that need to be addressed to set the context of the study. To place the U.S. Army's introduction and evolution of operational thought in context, it is necessary first to consider how all the armed services of the United States address operational thought. The U.S. Army views it as crucial for the conduct of current operations as well as the driving force behind capability development. However, the other services have divergent ideas and interpretations regarding the meaning and purpose of doctrine and operational thought within the U.S. military.

This leads to the third area to be considered, providing context for the overall study, which is the familiar interpretative construct of war that will be used. There has been a general acceptance of politics, policy, strategy, and tactics as the common interpretative constructs of war. Politics, or policy, determines the political or policy objectives of the war, strategy determines how best to use military power to achieve those objectives, and tactics is the application of military power in battle to achieve military objectives.¹⁹

Ideas and Military Doctrine

When considering the concept of operational practice or operational art, there are at least three aspects which must be regarded as part of the cognitive process: ideas, knowledge and thought. How each of these is defined is therefore essential. It should be kept in mind that words have meaning, and if misused or used differently without explanation, they can create confusion. The resulting misunderstanding and confusion can be reinforced by what Australian researcher Aaron Jackson describes as "the volume of buzzwords and imprecise terms that have been coined in recent decades to describe the nature of warfare and ways that it should be prosecuted."²⁰

Ideas, thoughts, or knowledge can rarely remain unchanged over time without some alteration from their original form.²¹ Paradigms shift when an incongruity is discovered or

¹⁹ B.H. Liddell Hart, *Strategy Second Revised Edition* (New York: Meridian, 1991), 319 and 321-322; J.C. Wylie, *Military Strategy: A General Theory of Power Control* (Annapolis, MD: Naval Institute Press, 1989), 43-44; Henry E. Eccles, Rear Admiral, United States Navy (Retired), *Military Concepts and Philosophy* (New Brunswick, NJ: Rutgers University Press, 1965), 40-42 and 257-259; Colonel J.F.C. Fuller, *The Foundations of the Science of War* (London: Hutchinson & Co. (Publishers), Limited, 1926), 105-107 and 153-155; Harry G. Summers, *On Strategy: A Critical Analysis of the Vietnam War* (Novato, CA: Presidio Press, 1995), 83-91; Julian Lider, *Military Theory: Concept, Structure, Problems* (New York: St. Martin's Press, 1983), 203-204; and Colin S. Gray, *The Strategy Bridge*, 15-20.

²⁰ Dr. Aaron P. Jackson, *The Roots of Military Doctrine: Change and Continuity in Understanding the Practice of Warfare* (Fort Leavenworth, KS: Combat Studies Institute Press, 2013), 1.

²¹ For this examination, an idea is defined using the eleventh edition of Merriam-Webster's dictionary as "a formulated thought or opinion." A thought is defined as the "individual act or product of thinking, or the organized views and principles of a group or individual." A concept is "organized around a main idea or theme." Concepts are therefore groupings of complementary and supplementary ideas, something more than a single idea. Frederick C. Mish, ed., *Merriam-Webster's Collegiate Dictionary*, 11th ed. (Springfield, MA: Merriam-Webster, Incorporated, 2012), 257, 615 and 1301.

identified between practice and theory.²² It is therefore necessary to situate in context, a text and by extension its author, reconstituting the text as a historical event or as historically intended, thereby avoiding false attribution to historical authors. When considering current shared ideas, beliefs and concepts, we can lose sight of the fact that they may not have always been considered in the same manner as we consider them today. That said, it is a mistake to think that ideas move only forward with time and that the historian goes back to study their origin; ideas evolve and that evolutionary path is key to contemporary context and understanding.

There are two general ways in which ideas can be considered and examined. The first is considering the body of work as a stand-alone unit, studying the text itself and the context in which it was conceived. The issue with focusing on the text itself is separating the interpretation of the text from the reader's views and biases. This, in turn, leads to the problem of interpretations of earlier works and actions, real or imagined, that predate the articulation of the idea itself. The challenge, however, with considering the context, rather than or in addition to the text itself, is that the context itself may be ambiguous. The second way to examine and evaluate ideas is that they do not necessarily remain constant; they can evolve as the environment in which they exist evolves. Azar Gat, military historian and political scientist, argues military theory is comprised of "changing contextual frameworks" that are influenced by the challenges faced by practitioners, which are in turn a reflection of "human perspectives, attitudes, and emphases."²³ Over time, ideas and theories evolve. That said, one must keep in "mind the historical and intellectual circumstances in which" the theory or idea originated.²⁴

Thomas Kuhn, the American historian and philosopher of science, argues that paradigms change when an incongruity is discovered or identified between practice and theory. As this incongruity gains broader exposure, more of those in the field of study devote attention to it and its resolution. As exposure and attention increase, if there is still no resolution, the paradigm will start to blur. Resolution will generally occur in one of three ways: a solution is found within the existing paradigm, or there is eventual agreement that there is no solution to the problem; it is set aside; or, lastly, a new paradigm emerges. New fundamentals accompany the emergence of this new paradigm, a change to basic generalizations, techniques and procedures.²⁵

Also, like knowledge, thoughts and ideas pass from one person to the next, changing subtly with each transfer, losing a word, changing a word, slightly shifting the context, often quite unintentionally. Theorist Ludwik Fleck observed that the person in receipt of a message never understands it precisely the way the sender meant for it to be understood. Each time this repeats, more of the original meaning can be lost until eventually there is little of the original message left. The new thought or idea that continues to circulate now belongs to the

²² Thomas S. Kuhn, *The Structure of Scientific Revolutions* (Chicago: The University of Chicago Press, 2012), 143-144.

²³ Azar Gat, *A History of Military Thought: From the Enlightenment to the Cold War* (Oxford: Oxford University Press, 2001), 256.

²⁴ Gat, *Military Thought*, 256.

²⁵ Thomas S. Kuhn, *The Structure of Scientific Revolutions*, 81-85.

thought collective, where it is changed, all the while shaping the thoughts and ideas of those who come into contact with this ever-evolving idea.²⁶

The evolution of military doctrine, or a change in doctrine, is a formal adjustment in how strategic aims will be achieved based on a formal assessment by military professionals.²⁷ Doctrinal change is the result of new assumptions and ideas regarding the employment of military forces, reflecting the creation of knowledge and its propagation throughout the military profession.²⁸ Doctrinal change is also the result of problem solving, which is central to what the military profession does, requiring dynamic thinking based on evolving knowledge to respond to problems in a dynamic environment.²⁹

There is a broad range of interpretations as to the actual nature of military doctrine. It varies in terms of scope, ranging from a clear and logical theoretical system to a set of principles, down to a single concept. Military doctrine can have a range of applications, including primary military and political goals, a body of thinking regarding military art, and strategic principles for a particular time. It can be an expression of state military policy or the opinion of some professionals, such as military leaders, representing a national or collective interest. Military doctrine can therefore be formulated at various levels, spanning the national governmental level, the armed forces as a whole, or down to an individual service.³⁰

Furthermore, military doctrine in general, and U.S. Army doctrine in particular, serves several purposes. Most importantly, it provides a common foundation for solving military problems based on a common military culture. This common military culture, grounded in a shared language based on doctrine, is reinforced by the actual doctrine itself, shaping soldiers and leaders in a reinforcing loop to enable a common and united way of solving military problems. Lastly, military doctrine provides a common framework for conducting military operations based on lessons learned and established best practices.³¹

The U.S. military defines operational doctrine as the “fundamental principles that guide the employment of United States military forces in coordinated action toward a common objective and may include terms, tactics, techniques, and procedures.”³² The U.S. Army views doctrine as the standard approach throughout the Army to conducting military operations. Doctrine is a delicate balance between a definitive guide and flexibility for a broad range of diverse environments and applications.³³ The U.S. Army contributed forces to

²⁶ Ludwik Fleck, *Genesis and Development of a Scientific Fact*, edited by Thaddeus J. Trenn and Robert K. Merton and translated by Fred Bradley and Thaddeus J. Trenn (Chicago: The University of Chicago Press, 1979), 42.

²⁷ Benjamin M. Jensen, *Forging the Sword: Doctrinal Change in the U.S. Army* (Stanford, CA: Stanford University Press, 2016), 9-10.

²⁸ Jensen, *Forging the Sword*, 10.

²⁹ Jensen, *Forging the Sword*, 15-17.

³⁰ Julian Lider, *Military Theory*, 309-310.

³¹ Combined Arms Doctrine Directorate, *ADP 1-01 Doctrine Primer* (Washington, D.C.: Department of the Army, September 2014), 1-3 to 1-5.

³² Office of the Chairman of the Joint Chiefs of Staff, *DOD Dictionary of Military and Associated Terms* (Washington DC: The Joint Staff, 2021), 114.

³³ *FM 100-5 Operations* (1986), 6.

OIF with the understanding that its doctrine reflected how the Army would contribute to the outcome of OIF.³⁴ Well into the execution of OIF, that view had fundamentally not changed. U.S. Army doctrine addressed how the Army viewed the nature of operations, provided the fundamentals for conducting operations, and outlined methods of command and control.³⁵ Towards the end of OIF, the U.S. Army combined the U.S. joint definition of ‘doctrine’ with the joint definition of ‘joint doctrine’ to develop an Army definition for ‘Army doctrine.’ U.S. Army doctrine is defined as the “fundamental principles, with supporting tactics, techniques, procedures, and terms and symbols, used for the conduct of operations, which guide the actions of operating forces and elements of the institutional Army that directly support operations in support of national objectives. It is authoritative but requires judgment in application.”³⁶

At the same time, doctrine is not just the “knowledge disseminated through officially approved publications;” experience and practice also contribute to the body of knowledge that constitutes doctrine. Most definitions of doctrine are based on ‘formal doctrine’, which includes manuals used for military training, as well as professional military education, along with written and graphic training aids.³⁷ There is also an informal doctrine based on experience and tradition, passed on from one generation to the next, both orally and in writing.³⁸ As illustrated in Chapter Three, the Germans adopted an informal approach to doctrine, particularly in terms of operational thought. In contrast, the Soviets and the Americans in the post-Vietnam era took a more formal approach to doctrine development and dissemination.

Central to U.S. Army doctrine is an operational concept that includes tactics, techniques, procedures, as well as equipment, training and support. As used here, ‘operational’ is defined as a military action to achieve a military mission or the process of conducting combat; it is not being used as a concept between strategy and tactics.³⁹ This concept needs to be flexible enough to permit tactical freedom of action, while being broad enough to address anticipated situations. It essentially addresses how “the Army fights its battles and campaigns.”⁴⁰ Doctrine is built around ideas and thoughts that lead to concepts about the conduct of military activities.⁴¹ Doctrine can also be viewed as the military’s and the Army’s ‘belief system’, how they will fight, what their organizational culture is, and within the state, how its civil-military relations will be determined.⁴² Doctrine presents the ideas to be used for training and operations by the Army to shape collective thinking in the

³⁴ Army Training and Doctrine Command, *FM 3-0 Operations* (Washington, D.C.: Department of the Army, June 2001), 1-14.

³⁵ Army Training and Doctrine Command, *FM 3-0 Operations* (Washington, D.C.: Department of the Army, February 2008), D-1.

³⁶ *ADP 1-01 Doctrine Primer* (2014), 1-2.

³⁷ Benjamin M. Jensen, *Forging the Sword*, 4.

³⁸ Andrew J. Birtle, *U.S. Army Counterinsurgency and Contingency Operations Doctrine 1860-1941* (Washington, D.C.: Center of Military History, 2009), 5-6.

³⁹ *FM 3-0 Operations* (2001), 1-14.

⁴⁰ *Operations FM 100-5* (1982), 2-1.

⁴¹ Jensen, *Forging the Sword*, 6 and Colonel James R. McDonough, “Building the New FM 100-5 Process and Product,” *Military Review* LXXI, no. 10 (October 1991): 4.

⁴² Dr. Aaron P. Jackson, *The Roots of Military Doctrine*, 1.

performance of the tasks the government has assigned it. There was, and is, an expectation by the U.S. Army that its leaders will stay current with doctrinal changes through self-development and self-study.⁴³ Furthermore, updates to U.S. Army operational doctrine are broadly promulgated in a timely fashion, thereby enabling self-study.⁴⁴

The U.S. Military and Operational Thought

The approach to operational thought among the six armed service of the United States varies considerably. Of those six armed services, the Coast Guard and Space Force pay the least attention to operational thought. The Coast Guard makes no mention of operational art but does refer to its operational arts of “seamanship, airmanship, law enforcement, joint military and interagency operations.”⁴⁵ It also makes no mention of the operational level. The newest service, the Space Force, has only recently issued its capstone doctrine and mentions operational art only twice. In the first case, operational art is nested within the concept of space warfare, and in the second, operational art is viewed as a trait to be practiced “at every level of warfare” along with audacity, ingenuity, leadership and cunning.⁴⁶ It mentions the operational level once, as its focus is primarily on the political and strategic levels.

Before considering the four remaining armed services, it is essential to keep in mind the origins of operational thought and practice, as well as operational art. In the 19th century, the Prussians and then the Germans did not have to consider the application of operational thought for an air force, as such a force did not exist at the time. Later, the Germans and then the Soviets were both land powers, where naval operations played a supporting role to the Army’s efforts. The same held for the role of the air force; once such a force was developed, for both the Soviets and the Germans, their respective air forces played a secondary supporting role to their armies. Before the Cold War, the Soviets did not have a strategic air force, while the Germans attempted to create one but then abandoned the effort after the failure of the Battle of Britain.⁴⁷

⁴³ Center for Army Leadership, *FM 6-22 Army Leadership Competent, Confident, and Agile* (Washington, D.C.: Department of the Army, October 2006), 8-6 to 8-7 and Center for Army Leadership, *ADRP 6-22 Army Leadership* (Washington, D.C.: Department of the Army, August 2012), 7-6.

⁴⁴ Army Chief of Staff, *FM 100-5 Operations* (Washington, D.C.: Department of the Army, April 1977), Front Cover Sheet; Army Training and Doctrine Command, *FM 3-0 Operations*, 2001, Rear Cover Sheet; Combined Arms Doctrine Directorate, *ADP 3-0 Unified Land Operations* (Washington, D.C.: Department of the Army, October 2011), Rear Cover sheet; and Combined Arms Doctrine Directorate, *FM 3-0 Operations* (Washington, D.C.: Department of the Army, October 2017), Rear Cover Sheet.

⁴⁵ United States, Coast Guard, *Coast Guard Publication 3-0 Operations* (Washington, D.C.: Department of Homeland Security, February 2012), ii.

⁴⁶ Chief of Space Operations, *Space Capstone Publication Spacepower Doctrine for Space Forces* (Arlington County, VA: Headquarters United States Space Force, June 2020), 50, 53.

⁴⁷ A strategic air force is defined as a force capable of the “bombing of enemy assets far from the line of battle, usually on the enemy home front (industries, infrastructure, centers of communication, and the general population).” Tami Davis Biddle, *Air Power and Warfare: A Century of Theory and History* (Carlisle, PA: Strategic Studies Institute and U.S. Army War College Press, 2019), 5.

In addition, the historical conditions for land warfare that led to operational thought and practice did not exist for either naval warfare or aerial warfare. Tactical battle for a naval force at sea is ultimately always a meeting engagement; there is no piece of terrain, or in this case ocean, upon which to anchor a defense, where one can wait for the attacker to launch their offensive as there is in land warfare.⁴⁸ As a result, the tactical defense has never become superior to the tactical offense to require a solution, such as operational art, to enable offensive action in the pursuit of strategic objectives, as was the case for Prussia in the 1870s and for Soviet theory in the 1920s and 1930s. U.S. Navy doctrine makes no mention of tactical offense or tactical defense. It has even been argued that it is a mistake to divide naval warfare into defense and offense.⁴⁹ The term “defense” is used generally when referring to the Department of Defense, defense of the United States or about self-defense. The principle of war “Offensive” is addressed, but makes no mention of the defense, unlike both the U.S. Army and joint doctrine.⁵⁰

The U.S. Navy did not have a formal process for doctrine until 1993 with the stand up of Naval Doctrine Command.⁵¹ Traditionally, the Navy has been more focused on technology and views doctrine as something that is not directive but rather more of a common way of thinking.⁵² It formally acknowledged the operational level of war in March 1994 with the publication of the U.S. Navy’s first doctrinal publication.⁵³ The U.S. Navy did not introduce operational art into the Navy until 2010 with its second edition of *NDP-1 Naval Warfare*, which used the Joint Doctrine definition of operational art. Traditionally, the U.S. Navy has taken the view that there were three elements of war: strategy, logistics and tactics.⁵⁴ The U.S. Navy retains a similar, if slightly modified, view of the three levels of war, those being strategy, operational logistics and tactics, simplifying the middle one to operations.⁵⁵ The U.S. Navy still believes that tactical success in a single naval battle can achieve the desired strategic objectives.⁵⁶ For the most part, U.S. Naval understanding of

⁴⁸ Julian Corbett, *Some Principles of Maritime Strategy* (London: Longmans, Green and Company, 1911), 85 and J.C. Wylie, *Military Strategy*, 43.

⁴⁹ Milan Vego, *Operational Warfare at Sea: Theory and Practice*. 2nd ed. (New York: Routledge, 2017), 15.

⁵⁰ Chief of Naval Operations, *Naval Doctrine Publication 1 Naval Warfare* (Washington, D.C.: Department of the Navy, March 1994), 45; Army Training and Doctrine Command, *FM 100-5 Operations* (Washington, D.C.: Department of the Army, June 1993), 2-4 and Department of the Army, *JP 3-0 Doctrine for Joint Operations* (Washington, D.C.: Department of Defense, February 1995), A-1.

⁵¹ James J. Tritton, “Naval Doctrine...From the Sea” (Monograph, Naval Doctrine Command, 1994), 4.

⁵² Commander Thomas W. Hills, “Joint Doctrine: Out of Synch with National Security Strategy and Transformation” (Monograph, National War College, National Defense University, 2002), 6.

⁵³ Captain Wayne P. Hughes, “Naval Operations: A Close Look at the Operational Level of War at Sea,” *Naval War College Review* 65, no. 3 (Summer 2012), 23.

⁵⁴ Hughes, “Naval Operations,” 24.

⁵⁵ Chief of Naval Operations, *Naval Doctrine Publication 1 Naval Warfare* (Washington, D.C.: Department of the Navy, April 2020), 26 and Captain Wayne P. Hughes, “Naval Operations: A Close Look at the Operational Level of War at Sea,” 2012, 24.

⁵⁶ *Naval Doctrine Publication 1 Naval Warfare*, 2020, 27-28.

operational art is based on joint doctrine. It is practiced when conducting joint operations under a combatant commander, like the Pacific Theater of Operations in World War Two.⁵⁷

There has been some thought put into operational art from a naval perspective outside of U.S. Navy doctrine. Milan Vego, professor of joint military operations at the U.S. Naval War College, describes operational art for naval forces as the “theory and practice of planning, preparing, and executing major naval operations aimed at accomplishing operational objectives.”⁵⁸ He notes, however, that many naval practitioners and theoreticians do not recognize operational art and for those that do, there are challenges with accomplishing operational objectives at sea without operating with at least one other service.⁵⁹ Recently, it has been argued that by combining and coordinating the fleet functions of striking, scouting, screening and basing to achieve an operational objective it is possible to practice operational art.⁶⁰ The idea needs more work to be convincing along with an actual description of what operational art is. At best naval operational art is joint operations art.⁶¹

Aerial warfare faces the same situation as naval warfare; tactical battles are ultimately always a meeting engagement, as there is no piece of terrain upon which to anchor a defense, where one can wait for the attacker to launch their offensive, as in the case of land warfare.⁶² As a result, the tactical defense has never become superior to the tactical offense, as to require a solution, such as operational art, to enable offensive action in the pursuit of strategic objectives. U.S. Air Force doctrine makes no mention of tactical offense or tactical defense. When the defense is mentioned in Air Force doctrine, it is often in the context of defending an air base rather than a piece of airspace.⁶³ Aerial defense takes the form of a series of offensive engagements, whether at the strategic and/or operational level, tactical aerial battles are essentially offensive.⁶⁴ Even active air defense is reactive based on offensive engagements that are essentially a series of meeting engagements.⁶⁵

⁵⁷ James J. Tritten, “Naval Perspectives for Military Doctrine Development” (Monograph, Naval Doctrine Command, 1994), 16-17.

⁵⁸ Milan Vego, *Operational Warfare at Sea*, 1.

⁵⁹ Vego, *Operational Warfare*, 1 and 16.

⁶⁰ Jeffrey R. Cares and Anthony Cowden, *Fighting the Fleet: Operational Art and Modern Fleet Combat* (Annapolis, MD: Naval Institute Press, 2021), 49-50.

⁶¹ Cares and Cowden, *Fighting the Fleet*, 10 and 13.

⁶² J.C. Wylie, *Military Strategy*, 43.

⁶³ Air Force Chief of Staff, *Air Force Manual 1-1 Volume I Basic Aerospace Doctrine of the United States Air Force* (Washington, D.C.: Department of the Air Force, March 1992), 15.

⁶⁴ Air Force Chief of Staff, *Air Force Basic Doctrine Air Force Doctrine Document 1* (Washington, D.C.: Department of the Air Force, September 1997), 14 and Air Force Chief of Staff, *Air Force Basic Doctrine Air Force Doctrine Document 1* (Washington, D.C.: Department of the Air Force, November 2003), 22.

⁶⁵ Air Force Chief of Staff, *Air Warfare Air Force Doctrine Document 2-1* (Washington, D.C.: Department of the Air Force, November 1999), 9 and Air Force Chief of Staff, *Air Force Basic Doctrine, Organization, and Command Air Force Doctrine Document 1* (Washington, D.C.: Department of the Air Force, October 2011), 45.

The U.S. Air Force makes little reference to operational art in its doctrine, although it does use the three levels of war: strategic, operational and tactical.⁶⁶ The term operational art was used in the U.S. Air Forces' *Airpower Journal* in the summer of 1987.⁶⁷ This was followed in 1988 by Colonel John A. Warden's book, *The Air Campaign: Planning for Combat* based on a paper he wrote at the National War College in 1986. The book provided a "theoretical framework for conceptualizing, planning, and executing an air campaign," focused on gaining air superiority during war,⁶⁸ and would have considerable influence on U.S. Air Force operational doctrine.⁶⁹ The first use of operational art in doctrine was in *Air Force Manual 1-1 Volume I Basic Aerospace Doctrine of the United States Air Force* released March 1992. It described operational art as "the planning and employment of air and space assets to maximize their contribution to the combatant commander's intent."⁷⁰ This description did not align with the U.S. Army description of operational art from 1986 or the joint doctrine description of operational art that would come out in 1993.

Warden's influence, however, extended beyond his book and its contribution to the 1992 edition of U.S. Air Force operational doctrine. His idea of the enemy as a system made up of "five rings" that represents the enemy's five centers of gravity, or as incorrectly identified by Warden, vulnerabilities.⁷¹ In conjunction with this was his idea of parallel attack, hitting more things at once, as opposed to sequential attack, of trying to deal with one thing in its entirety before moving on to the next.⁷² Warden first presented these ideas in May 1988 in a paper titled "Global Strategy Outline," and implemented them during the planning for the air campaign during Operation DESERT STORM in 1991.⁷³ That operational approach provided the foundation and framework for the eventual air campaign plan.

⁶⁶ *Air Force Manual 1-1 Volume I Basic Aerospace Doctrine of the United States Air Force*, 1992, 2-3 and Air Force Chief of Staff, *Air Force Doctrine Publication 1 The Air Force* (Washington, D.C.: Department of the Air Force, March 2021), 1-2.

⁶⁷ General Charles L. Donnelly, Jr. (Ret), "A Theater-Level View of Air Power," *Airpower Journal* I, no. 1 (Summer 1987), 3.

⁶⁸ Colonel John A. Warden III, *The Air Campaign: Planning for Combat* (New York: Pergamon-Brassey's International Defense Publishers, 1989), xxi and 141.

⁶⁹ *Air Force Manual 1-1 Volume II Basic Aerospace Doctrine of the United States Air Force* (1992), 97, 110, 123, 155 and 216.

⁷⁰ *Air Force Manual 1-1 Volume I* (1992), 10.

⁷¹ Colonel John A. Warden, III, "The Enemy as a System," *Airpower Journal* IX, no. 1 (Spring 1995), 42, 44, 47 and 49 and Colonel John A. Warden, III, "Air Theory for the Twenty-first Century," in *Battlefield of the Future: 21st Century Warfare Issues*, Revised Edition, edited by Barry R. Schneider and Lawrence E. Grinter (Montgomery, AL: Air University Press, 1998), 108-111.

⁷² Colonel John A. Warden, III, "The Enemy as a System," 54 and Colonel John A. Warden, III, "Air Theory for the Twenty-first Century," 116.

⁷³ John Andreas Olsen, "Warden Revisited: The Pursuit of Victory Through Air Power," *Air Power History* 64, no. 4 (Winter 2017), 41 and 44.

Despite Warden's influence operational art would not be addressed in U.S. Air Force doctrine any detail until *Operations and Organization Air Force Doctrine Document 2* in 2007.⁷⁴ For the most part, the U.S. Air Force is more like the U.S. Navy, focusing on technology and therefore focusing more on military strategy and the strategic level than on operational art. The Air Force also goes further than the Navy, focusing not only on the technology but also on the systems that develop it and manage it, leading to the subordination of doctrine as well as operating procedures to "orientation on system characteristics."⁷⁵ In 2008, the term and the concept of effects-based operations were banned from use in the U.S. Joint Forces Command by the commander at the time, General James N. Mattis.⁷⁶ Despite this, by the 21st century, the U.S. Air Force was using the concept of an effects-based approach to operations rather than operational art and has come to see operational art as "the creative means" to practice "the military commander's craft."⁷⁷ The U.S. Air Force is neither a proponent for operational art nor a practitioner; its focus is on the effects-based approach to operations rather than operational art.

The Marine Corps uses the operational level and levels of war extensively, but more or less ignores the concept of operational art.⁷⁸ The first time operational art is mentioned is in 2011 in *MCDP 1-0 Marine Corps Operations*, and then only fleetingly, concerning the conduct of the defense.⁷⁹ Based on the origin of the idea of operational art, which was a concept to enable offensive action in the face of defensive superiority due to the size of armies and lethality of the battlefield, the Marine Corps' ignoring of the concept is not a surprise. The role of the Marine Corps is to conduct amphibious operations, thereby gaining lodgment for the conduct of a land campaign.⁸⁰ The U.S. Army forms the nucleus of the "joint force land component" that plans and conducts the land campaign; any ground-based elements of the Marine Corps would conduct tactical missions as part of that land campaign.⁸¹ In addition, the Marine Corps views doctrine differently than the other services, considering it more a "philosophy of warfighting" rather than a definitive body of work regarding the conduct of war.⁸²

⁷⁴ Air Force Chief of Staff, *Operations and Organization Air Force Doctrine Document 2* (Washington, D.C.: Department of the Air Force, April 2007), 8-10.

⁷⁵ Commander Thomas W. Hills, "Joint Doctrine: Out of Synch with National Security Strategy and Transformation" (Monograph, National War College, National Defense University, 2002), 7.

⁷⁶ James N. Mattis, "USJFCOM Commander's Guidance for Effects-based Operations," *Joint Force Quarterly* 51 (October 2008), 108.

⁷⁷ Air Force Chief of Staff, *Annex 3-0 Operations and Planning* (Washington, D.C.: Department of the Air Force, November 2016), 6 and 13.

⁷⁸ Matthew J. Schultz, "The Operational Warfare Revolution: How Operational Art Can Prepare the Marine Corps for an Era of Great Power Competition," *Expeditions with MCUP* (2020), accessed 31 August 2022, <https://doi.org/10.36304/ExpwMCUP.2020.02>, 12-13.

⁷⁹ Marine Corps Commandant, *MCDP 1-0 Marine Corps Operations* (Washington, D.C.: Department of the Navy, September 2001), 8-16.

⁸⁰ *MCDP 1-0 Marine Corps Operations* (2001), 1-13 to 1-15.

⁸¹ *FM 3-0 Operations* (2001), 1-3.

⁸² Commander Thomas W. Hills, "Joint Doctrine: Out of Synch with National Security Strategy and Transformation," 7.

In the end, currently, all the services that use operational art in their doctrine use the joint doctrine definition of operational art, even the U.S. Army. That being said, of the six-armed services, only the U.S. Army has a comprehensive concept of operational art and its application. As such, the main frame of reference regarding the evolution of military thinking on operational art will therefore be U.S. Army doctrine due to its introduction of operational art to the U.S. military as well as the primacy of land component operations during Operation IRAQI FREEDOM.

The Levels of War

Starting with *On War* by Carl von Clausewitz, Clausewitz argued that war was “a true political instrument, a continuation of political activity by other means.”⁸³ War, then, is about the pursuit of a political objective or end. Strategy, Clausewitz states, is “the use of engagements for the object of the war.”⁸⁴ Strategy, therefore, is how the political objective of the war can be achieved. The means of achievement is through the application of tactics, which Clausewitz defined as “the use of armed forces in the engagement.”⁸⁵ Thus, politics determines the objective of the war, strategy determines how that objective can be achieved, and battle, using military forces applying tactics, is how the purpose can be achieved.

In *The Art of War* by Antoine Henri de Jomini, Jomini also argues that a war’s objective or end is politically achieved through strategic ways using tactical means. He claims, “a statesman concludes whether a war is proper, opportune, or indispensable, and determines the various operations necessary to attain the object of the war.”⁸⁶ The decision to go to war is a political one, seeking a political objective. Strategy is defined as “the conception and arrangement” of the various operations that make up the military campaign.⁸⁷ Jomini divides tactics into two parts. Plain ‘tactics’ consist of “other operations of a mixed nature such as passages of streams, retreats, surprises, disembarkations, convoys, winter quarters,” and the like.⁸⁸ The other part of tactics is grand tactics, which is maneuvering on the battlefield, forming up for the attack, “and the art of fighting upon the ground.”⁸⁹ Thus, tactics refer to the methods used to achieve a political objective through strategic means.

There has been a general acceptance of politics, policy, strategy, and tactics as the common interpretative constructs of war. Politics, or policy, determines the political or policy objectives of the war, strategy determines how best to use military power to achieve those objectives, and tactics is the application of military power in battle to achieve military objectives.⁹⁰ French Admiral and military theorist Raoul Castex accepted much of what

⁸³ Carl von Clausewitz, *On War* (1976), 87 and Carl von. Clausewitz, *On War*, translated by O.J. Matthijs Jolles (New York: Random House, Inc., 1943), 16.

⁸⁴ Carl von Clausewitz, *On War* (1976), 128 and Carl von. Clausewitz, *On War* (1943), 62.

⁸⁵ Carl von Clausewitz, *On War* (1976), 128 and Carl von. Clausewitz, *On War* (1943), 62.

⁸⁶ Baron Antoine Henri de Jomini, *The Art of War*, translated by the United States Military Academy (London: Greenhill Books, 1992), 14.

⁸⁷ de Jomini, *The Art of War*, 69.

⁸⁸ de Jomini, *The Art of War*, 69.

⁸⁹ de Jomini, *The Art of War*, 69.

⁹⁰ B.H. Liddell Hart, *Strategy Second Revised Edition*, 319 and 321-322; J.C. Wylie, *Military Strategy*, 43-44; Henry E. Eccles, Rear Admiral, United States Navy (Retired), *Military Concepts and Philosophy*, 40-42 and 257-259; Colonel J.F.C. Fuller, *The Foundations of the Science of War*, 105-

Clausewitz and Jomini had to say about tactics and strategy, and in the case of Clausewitz, policy as well. Still, he did not see these as distinct and sequential activities. Instead, he argued that there was a continual interplay between policy and strategy, and between strategy and tactics. A good strategy required good tactics, the conception of strategy interacted with the execution of tactics.⁹¹ Although he agreed with Clausewitz regarding war as a continuation of politics, he felt that the relationship between policy and strategy was more nuanced and less sequential. Policy both aids strategy and intervenes to provide direction to strategy.⁹²

The strategic theorist Edward N. Luttwak shared similar ideas to those of Castex; he viewed politics, grand strategy, theater strategy, and tactics not as levels of war but as levels within the realm of strategy, “the conduct and consequences of human relations in the context of actual or possible armed conflict.”⁹³ The lowest level was the technical level, focused on employment and the use of particular weapons in combat. At the tactical level, the tactical combat actions of units and formations were subordinate to the operational level, which employed schemes of war to achieve strategic objectives. The operational level is guided by theater strategy at the theater level, focused on attaining military outcomes in support of national objectives. National objectives are determined at the grand strategic level that combines military action, economic activity, domestic politics, and diplomacy to accomplish those objectives.⁹⁴

It should be noted that Luttwak introduced the operational level, situated between theater strategy and tactics, before the U.S. Army adopted an interpretative construct of war in the 1982 edition of *FM 100-5 Operations*, which also included the operational level. He argued that at the strategic level, theater strategy determined outcomes or objectives based on available resources to accomplish political goals within known political constraints. The tactical level focused on the application of specific techniques. In between these two, the operational level used “schemes of warfare” to achieve theater strategic objectives by the correct “combination of tactics.”⁹⁵ Military theorist Rear Admiral Henry E. Eccles also identified an operational level between strategy and tactics; he viewed operations as a mix of logistics and tactics to achieve strategic objectives.⁹⁶ He also divided strategy into national strategy, focusing on all elements of national power in support of policy, and military

107 and 153-155; Harry G. Summers, *On Strategy: A Critical Analysis of the Vietnam War*, 83-91; Julian Lider, *Military Theory*, 203-204; and Colin S. Gray, *The Strategy Bridge*, 15-20.

⁹¹ Admiral Raoul Castex, *Strategic Theories*, edited and translated by Eugenia C. Kiesling (Annapolis, MD: Naval Institute Press, 1994), 8-10.

⁹² Castex, *Strategic Theories*, 205-207.

⁹³ Edward N. Luttwak, *Strategy: The Logic of War and Peace Revised and Enlarged Edition* (Cambridge, MA: The Belknap Press of Harvard University Press, 2001), 2.

⁹⁴ Edward N. Luttwak, *Strategy: The Logic of War and Peace* (Cambridge, MA: The Belknap Press of Harvard University Press, 1987), 69-71 and Luttwak, *Strategy Revised*, 87-90.

⁹⁵ Edward N. Luttwak, “The Operational Level of War,” *International Security* 5, no. 3 (Winter 1980/81): 61.

⁹⁶ Henry E. Eccles, *Military Concepts and Philosophy*, 258.

strategy, which used military power to achieve “military objectives and to support national policy.”⁹⁷

Like Castex, Luttwak’s construct is like those of Clausewitz and Jomini. In all three cases, the tactics are the same. Clausewitz’s and Jomini’s strategy equates to Luttwak’s theater strategy, which focuses on military matters. Luttwak’s grand strategy aligns with politics, as employed by Clausewitz and Jomini. Luttwak’s technical level was implied by both Jomini and Clausewitz, incorporated into the tactical level. Jomini refers to this as the “art of fighting”, while Clausewitz refers to it simply as “fighting.”⁹⁸ As already identified, neither Clausewitz nor Jomini identified an operational level as did Luttwak. This then raises the question: where did the operational level originate, which leads to the first idea of operational thought introduced earlier in this study.

The evolution of the definition and description of the terms strategic and its derivatives and tactical and its derivatives in U.S. Army doctrine is addressed throughout Chapters Four through Seven. The same holds for the ideas of the operational level and operational art. However, it is worth noting that there are a variety of usages of the term operations. Both the term operation(s) and operational have several usages as well as meanings. The term operation can describe any undertaking by a military unit. Operations can define a staff function in which the operations staff focus on the primary function of a particular military organization. In contrast, the other staff focus on things such as logistics, administration, intelligence and the like. The term operational can be used to differentiate a particular military organization’s status, i.e. one that is ready to function effectively in its primary role.⁹⁹ Furthermore, Milan Vego, professor at the U.S. Naval War College, recognizes the difficulty in addressing the idea of operational thought and practice due to imprecise terminology. In *Operational War*, he highlights a lack of consistency regarding the use of terminology not only across services but even within the same military document, and a lack of agreement on the meaning of several terms related to the concept of operational art.¹⁰⁰

Before turning specifically to the descriptions of the different ideas of operational thought that will be central to this study, one supporting idea, that of ends-ways-means, needs to be defined and described. General Maxwell Taylor, in 1981, at the U.S. Army War College, stated strategy consisted of objectives (ends), ways and means. The strategy then is focused on ends – military objectives achieved by ways – methods of applying military capability using means – military resources. The concept of ends-ways-means, however, applies to all three levels of war.¹⁰¹ It can also be used to describe the link in purpose between the three levels of war: the strategic level provides the ends to be achieved, the operational level outlines the ways in which the ends will be achieved, and the tactical level

⁹⁷ Eccles, *Military Concepts and Philosophy*, 261.

⁹⁸ Baron Antoine Henri de Jomini, *The Art of War*, 69 and Carl von Clausewitz, *On War* (1976), 128.

⁹⁹ Robert Leonhard, *The Art of Maneuver: Maneuver-Warfare Theory and AirLand Battle* (Novato, CA: Presidio Press, 1991), 8.

¹⁰⁰ Milan N. Vego, *Operational Warfare*, xv.

¹⁰¹ Arthur F. Lykke, Jr., “Toward an Understanding of Military Strategy,” in *U.S. Army War College Guide to Strategy*, edited by Joseph R. Cerami and James F. Holcomb, Jr. (Carlisle, PA: U.S. Army War College, 2001), 179-180.

provides the means by which to enable the ways selected to achieve the desired ends.¹⁰² Ends explain what is to be accomplished; they are the conditions to be created to achieve the political or military objectives.¹⁰³ Ways explain how the ends are to be achieved, or the sequence of actions to accomplish the objectives.¹⁰⁴ Means are the resources to be used or the application of military force.¹⁰⁵ The ends are why one is at war: to achieve something. The ways are how the war will be waged to achieve the ends. Means are what will be used to achieve the ends.

Ideas of Operational Thought

There are three different ideas regarding operational thought found between the ideas of strategy and tactics. The first idea, the Traditional school, posits that operational thought and practice lie between strategy and tactics, enabling offensive military action to tactically defeat an enemy military force across a relatively broad geographic area through a range of simultaneous military actions over time, thereby achieving operational and strategic objectives. There are two views, or ways, as to how the enemy military force is to be defeated. The first is about the destruction of the enemy, generally through annihilation, achieved through offensive operational action.¹⁰⁶ The second is about operational shock or operational paralysis, rather than enemy destruction, achieved through offensive operational action.¹⁰⁷ This idea of achieving decisive military victory is examined in considerably more detail in Chapter Three regarding the origins of operational thought and practice.

The second idea, the Creative school, is that operational art is more of a style of planning and executing military operations.¹⁰⁸ U.S. military doctrine describes operational art as “the manifestation of informed vision and creativity”¹⁰⁹ and “the application of creative imagination.”¹¹⁰ Over time, this approach has evolved to become more cognitive, broadening beyond just creativity to include skill, knowledge, experience, and judgment. It has shifted from focusing on a particular approach to solving a problem to emphasizing the

¹⁰² Antulio J. Echevarria II, “American Operational Art, 1917-2008,” 138.

¹⁰³ Nathan K. Finney and Francis J.H. Park, “A Brief Introduction to Strategy,” in *On Strategy: A Primer* edited by Nathan K. Finney (Fort Leavenworth, KS: Combat Studies Institute Press, 2020), 5 and *JP 3-0 Doctrine for Joint Operations* (1995), II-3.

¹⁰⁴ Finney and Park, “A Brief Introduction to Strategy,” 5; *JP 3-0 Doctrine for Joint Operations* (1995), II-3; and Director for Operations, *3-0 Joint Operations* (Washington, D.C.: Department of Defense, February 2008), IV-3.

¹⁰⁵ Finney and Park, “A Brief Introduction to Strategy,” 5 and *FM 100-5 Operations* (1986), 13.

¹⁰⁶ Robert M. Citino, *Blitzkrieg to Desert Storm*, 3-5; Michael D. Krause, “Moltke and the Origins of the Operational Level of War,” 125; and Dennis E. Showalter, “Prussian-German Operational Art, 1740-1943,” 38-44.

¹⁰⁷ Shimon Naveh, *In Pursuit of Military Excellence*, 184-185; Bruce W. Menning, “Operational Art’s Origins,” 9; and Justin Kelly and Mike Brennan, *Alien: How Operational Art Devoured Strategy*, 51-56.

¹⁰⁸ *3-0 Joint Operations* (2008), IV-2 to IV-3; Chief of Naval Operations, *Naval Doctrine Publication 1 Naval Warfare* (2020), 36; Air Force Chief of Staff, *Annex 3-0 Operations and Planning* (2016), 6 and 46 and James J. Schneider, “Vulcan’s Anvil, 20-22.

¹⁰⁹ *3-0 Joint Operations* (2008), IV-3.

¹¹⁰ Combined Arms Doctrine Directorate, *FM 3-0, CI Operations* (Washington, D.C.: Department of the Army, February 2011), 7-1.

process of problem solving.¹¹¹ Both ideas are examined in more detail in Chapters Four and Five regarding the adoption and evolution of operational thought in the U.S. Army.

The third idea, the Grand Strategic School, holds that military strategy became subsumed by policy, and operational art, in turn, replaced military strategy (which evolved into grand or national strategy/policy) as the bridge between policy (grand or national strategy) and tactics. There are two branches to this argument.¹¹² The first argument posits that after WWII, strategy became subsumed by policy, and the operational level in turn replaced strategy as the bridge between policy, which was now considered a form of strategy, and tactics. The second branch argues that the creation of the operational level of war changed the purpose of operational art from a bridge between strategy and tactics to that of formulating strategy by taking over campaign planning from the strategic level. The strength of this argument is considered in more detail in Chapter Seven.

Methodology

This dissertation aims to determine whether or not the U.S. military, and the U.S. Army in particular, practiced the operational doctrine it had and whether or not this doctrine proved effective or changed. Building on Kuhn, it will determine at which point, if any, the U.S. Army operational doctrine experienced a paradigm shift. If the U.S. Army's doctrine changed, this examination will consider the conventionalization of Army doctrine in general, and operational thought in particular, focused broadly around the period of Operation IRAQI FREEDOM.

Chapter Three uses historical method to examine the origins of operational thought through the use of historical narrative to identify the originator of the concept of operational thought, when and why they came up with it.¹¹³ Chapters Four and Five also follow historical method using historical narrative to trace the U.S. Army's adoption of operational thought and practice, culminating in the introduction of the operational level in 1982 and operational art in 1986. In addition, Chapters Five through Seven take Kuhn's concept of a new explanatory idea challenging the existing paradigm and the competition between the old and new paradigms a step further. They consider the competition between the old and new paradigms and the resulting paradigm, exploring how change was communicated and normalized. These chapters will set the stage for determining whether the U.S. military practiced the doctrine it had and whether this doctrine proved effective.

These chapters focus on U.S. Army operational doctrine after the release of the 1986 edition of *FM 100-5 Operations* and ending with the 2017 edition of *FM 3-0 Operations*, *ADP 3-0 Operations*, and *ADRP 3-0 Operations*.¹¹⁴ This covers the period of OIF, which

¹¹¹ *ADRP 3-0 Unified Land Operations* (2012), 4-1.

¹¹² The idea of calling the third idea the Grand Strategic School combines the Neo-Clausewitzian concept of politics, strategy, and tactics evolving into strategy, operational art, and level tactics, with the notion that grand strategy, utilizing all instruments of power, aligns with Liberalism, while military strategy and its use of hard power align with Realism.

¹¹³ Robert Jones Shafer, ed., *A Guide to Historical Method* (Belmont, CA: Wadsworth Publishing Company, 1980), 40-43.

¹¹⁴ In 2011, the U.S. Army restructured its doctrine under the Doctrine 2015 initiative so that Army doctrine publications (ADP) provide the "intellectual underpinnings of how the Army operates",

ended 31 August 2010, through to and including the first complete updated editions of U.S. Army operational doctrine after OIF. U.S. Joint operational doctrine from the 1993 edition of *JP 3-0 Doctrine for Joint Operations* to the 2017 edition of *JP 3-0 Joint Operations* will be considered, as necessary, as a frame of comparison. The examination aims to determine the changes surrounding the ideas of U.S. military and operational thought, focusing on the definition and description of operational art in U.S. Army doctrine. In contrast, other concepts supporting operational thought, such as operational design, elements of operational design and elements of operational art, will also be considered concerning the evolution of U.S. Army operational doctrine. This will result in a clear understanding of the evolution of U.S. Army operational thought.

Chapter Six also uses a form of process tracing or explanation of how events came about in the form of a narrative, and where more detailed information may be lacking, a more general explanation is employed to address events, processes and outcomes. When detailed information does exist, an analytical explanation of the planning and the thinking behind it, based on U.S. Army doctrine that should have guided their development and practice, is used.¹¹⁵ Any analytical explanation of OIF is based on the sources available, some of which are identified in the literature review in Chapter Two, to answer the question, “Did the U.S. Army’s concept of ‘operational art’ experience a paradigm shift during America’s Global War on Terrorism?”. Documentary evidence related to OIF is used to help determine to what extent the two main ideas of operational thought are in practice with the U.S. Army in particular, and if possible, with the U.S. military in general. Specifically, whether the evidence supports the idea that operational thought and practice, lying between strategy and tactics, concerns enabling offensive military action through the use of tactical actions over time and space to defeat an enemy military force to achieve strategic aims tactically. Alternatively, whether the evidence supports the idea that operational art is more a style of planning and executing military operations based on vision, imagination, creativity, skill, knowledge, experience and/or judgement, focused more on defining and solving a problem than the actual approach to solving a problem. Finally, consideration is given to the possibility that operational thought and practice in the U.S. Army were based on a combination of both ideas. In this case, a determination is made as to how the different ideas were rationalized to function without conflicting with one another.

This examination starts in the next chapter by considering what has already been written about the operational level and operational art. It commences with an overview of the three schools of thought and then proceeds to the historical evolution of operational thought and practice. The discussion then shifts to what has been written about the U.S. Army’s adoption of operational thought and its evolution within the U.S. Army since its adoption, as well as within Operation IRAQI FREEDOM itself.

Army doctrine reference publications (ADRP) provide more detailed explanations of ADPs and field manuals (FM) “contain principles, tactics and procedures.” *ADP 1-01 Doctrine Primer* (2014), 1-1 and 2-5.

¹¹⁵ Alexander L. George and Andrew Bennett, *Case Studies and Theory Development in the Social Sciences* (Cambridge, MA: MIT Press, 2005), 210-211.

Chapter Two – Literature Review

The literature on the introduction and practice of operational thought, whether at the operational level of war or operational art, is not unified. Some authors address the historical origins, while others are strong proponents for a particular branch of the Traditional school of operational thought. More recently, some have been more critical of the Traditional school of thought, offering an alternative to complement or replace it. Consequently, the literature review starts with the identification and brief overview of the three schools of thought before reviewing the literature directly applicable to all three. It then addresses the literature related to the historical evolution of operational thought and practice before focusing on the German and Soviet origins. The most significant part of the literature review looks at the U.S. Army's adoption of operational thought and practice.

The U.S. operational doctrine since 1982 is examined in detail in the dissertation itself, complemented by an assortment of references. Any general secondary material related to U.S. operational doctrine since 1982 is addressed in the literature review below. The final part of the literature review examines the literature on Operation IRAQI FREEDOM. As the review below will illustrate, very little detailed material specific to operational thought and practice by the U.S. military during Operation IRAQI FREEDOM has been found.

Schools of Operational Thought

Operational thought (and practice) encompasses operational art, the operational level of war, and/or operations larger than and distinct from battles and/or engagements, constituting or part of a campaign.¹ Based on the body of existing literature, to be considered below, there are three schools of thought regarding operational thought and practice. The first school of operational thought, the Traditional school, is distinct from tactics, aiming to achieve strategic objectives, and emerged when the tactical defense became significantly superior to the tactical offense, fitting between strategic thought and tactical thought. This superiority of the defense severely restricted, if not prohibited, offensive tactical action. This occurred for two main reasons: 1) the development or evolution of mass armies, starting with the French Revolution and the levée en masse, combined with 2) increased firepower enabled by the technological advancements of weapons during the Industrial Revolution.

Initially, the only way to achieve offensive action was to maneuver around defensive positions, to either attack a weaker flank with firepower or to create a threat (to lines of communication or key terrain) that forced the defender to maneuver, thereby coming into the open and being vulnerable to opposing firepower. Later, in World War One, armies became large enough, space became relatively limited, and firepower

¹ *Operations FM 100-5* (1982), 2-3; *FM 100-5 Operations* (1986), 10; Combined Arms Doctrine Directorate, *ADP 3-0 Operations* (Washington, D.C.: Department of the Army, July 2019), 1-1; Joint Chiefs of Staff, *JP 3-0 Doctrine for Joint Operations* (Washington, D.C.: Department of Defense, September 1993), II-3; and *JP 3-0 Joint Operations* (2018), I-13.

increased to a point that maneuver was no longer possible (on the Western Front, it was still possible on the Eastern Front, which contributed to the eventual defeat of the Russians). It then became necessary, to enable offensive action, to use technology (the tank, combining mobility, firepower and protection) to breach the enemy's defensive line or strong point(s). Once defences were breached, offensive operational action was possible enabling an attack or threat of attack on a weaker flank, forcing the enemy to react exposing them to opposing firepower.

The Traditional school of thought has two branches. The first branch is operational practice, which lies between strategy and tactics, focusing on the destruction of the enemy, typically through annihilation, achieved through offensive operational action.² The second branch, although similar to the first, differs from it in that operational art focuses on operational shock or operational paralysis, rather than enemy destruction, achieved through offensive operational actions.³ The Traditional school of thought primarily relates to the concept of operational art.

The second idea, the Creative school, emerges in U.S. military doctrine at the beginning of the 21st century. This concept suggests that operational art is more of a style of planning and executing military operations.⁴ U.S. joint doctrine describes operational art as “the manifestation of informed vision and creativity,”⁵ and “the application of creative imagination.”⁶ Over time, this concept has been tempered to a more cognitive approach, broadened beyond just creativity, to also include skill, knowledge, experience, and judgment.⁷ It has become about the process of solving a problem rather than a particular approach to solving it.

The third school of thought, the Grand Strategic school, is more recent and relates more to the idea of the operational level of war than the idea of operational art. Central to this school of thought is the notion that, after WWII, military strategy became subsumed by policy, operational art, and the operational level, in turn replacing military strategy (which became grand strategy/policy) as the bridge between policy (grand strategy) and tactics.⁸ It is worth noting that Strachan, Freedman, and Howard are all

² Robert M. Citino, *Blitzkrieg to Desert Storm*, 3-5; Michael D. Krause, “Moltke and the Origins of the Operational Level of War,” 125; and Dennis E. Showalter, “Prussian-German Operational Art, 1740-1943,” 38-44.

³ Shimon Naveh, *In Pursuit of Military Excellence*, 184-185; Bruce W. Menning, “Operational Art's Origins,” 9; and Justin Kelly and Mike Brennan, *Alien: How Operational Art Devoured Strategy*, 51-56.

⁴ *JP 3-0 Joint Operations* (2008), IV-2 to IV-3; *Naval Doctrine Publication 1 Naval Warfare* (2020), 36; *Annex 3-0 Operations and Planning* (2016), 6 and 46; and James J. Schneider, “Vulcan's Anvil.”

⁵ *3-0 Joint Operations* (2008), IV-3.

⁶ *FM 3-0, CI Operations* (2011), 7-1.

⁷ Combined Arms Doctrine Directorate, *ADRP 3-0 Unified Land Operations* (Washington, D.C.: Department of the Army, May 2012), 4-1.

⁸ Alexander Mattelaer, “The Crisis in Operational Art,” 14-15; Hew Strachan, *The Direction of War*, 17-19, 20-21, 38, 40-41, 212-213, 215-216 and 248; Hew Strachan, “The Lost Meaning of Strategy,” 44 and 47; Hew Strachan, “Strategy or Alibi? Obama, McChrystal and the Operational

British. Colin Gray, also British, shares similar doubts about the operational level.⁹ One reason for this is that Strachan, Howard, and Gray are all strongly Clausewitzian, viewing war in Clausewitzian terms of politics, strategy, and tactics.¹⁰ Another reason for a strong British representation is the difference in approach and perspective between British and American views on politics, strategy and war.¹¹ This school of thought has become much more in vogue in the wake of the inconclusive wars in Afghanistan and Iraq.¹²

Schools of Operational Thought

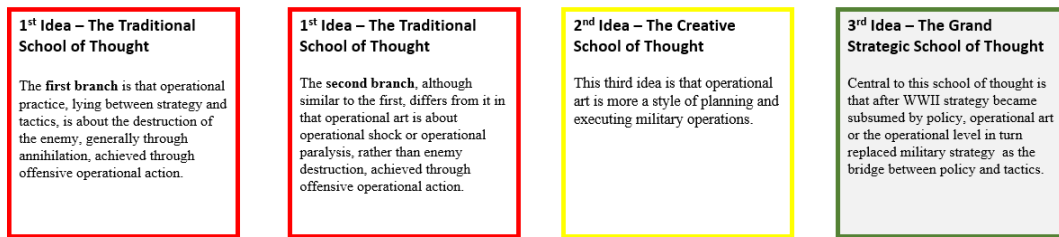


Figure 2.1

A leading proponent of the Traditional school of thought, focusing on annihilation, is Robert M. Citino, who approaches the issue of operational warfare from a historical perspective. In *Blitzkrieg to Desert Storm: The Evolution of Operational Warfare*, Citino makes a reasonable argument for operational art being a focus on operational maneuver, synthesizing movement and firepower, with a view of achieving decisive victory, preferably through an offensive battle, leading to the destruction of the enemy.¹³ Shimon Naveh, who approaches operations and operational art from a systems theory perspective as a theoretician, makes the case for the Traditional school of thought, focusing on shock or paralysis. In basic terms, operational art, as described by Naveh, author of *In Pursuit of Military Excellence: The Evolution of Operational Theory* (1997), seeks to penetrate an enemy's depth to attack follow on forces and enemy logistics to cause operational shock leading to enemy defeat.¹⁴ Milan Vego in *Operational Warfare* (2000) disagrees with Shimon Naveh, arguing the field of operational art is too diverse, too broad and too deep to be explained by general system theory.¹⁵ The Israeli Defense

Level of War," 159-161, 162 and 164; Lawrence Freedman, *Strategy*, 206-207, 209, 240-244; and Colin S. Gray, *The Strategy Bridge*, 20-21 and 45-46.

⁹ Gray, *The Strategy Bridge*, 20-21.

¹⁰ Hew Strachan, *The Direction of War*, 46-63; Michael Howard, "The Influence of Clausewitz," in *On War* edited and translated by Michael Howard and Peter Paret (Princeton: Princeton University Press, 1976), 27-44; and Gray, *The Strategy Bridge*, 1-7.

¹¹ Richard K. Betts, "Should Strategic Studies Survive?" *World Politics* 50, no. 1 (October 1997), 23.

¹² Justin Kelly and Mike Brennan, *Alien: How Operational Art Devoured Strategy*, 61-63 and 67 and Emile Simpson, *War from the Ground Up*, 140-141, 228 and 243-244.

¹³ Robert M. Citino, *Blitzkrieg to Desert Storm*, 7-8 and 301-302.

¹⁴ Shimon Naveh, *In Pursuit of Military Excellence*, 16-17, 184.

¹⁵ Milan N. Vego, *Operational Warfare*, 10.

Forces from 1994 to 2006 used Naveh's thinking to formulate its operational ideas, but based on its experience in the 2006 Second Lebanon War, it abandoned this approach to operations.¹⁶

The second school, which views operational art as more of a style of planning and executing military operations, primarily arose out of the evolution of U.S. Army operational doctrine itself. The 1982 edition of *Operations FM 100-5* introduced and defined the term operational level,¹⁷ and the 1986 edition introduced and defined the term operational art.¹⁸ The definition of operational art remained pretty much consistent from 1986 to 2008, the use of force to achieve strategic goals using major operations and battles.¹⁹ The 2008 edition of *FM 3-0 Operations*, however, changed the definition, thereby introducing the second idea, the Creative school, of what operational art may be. This is the idea that operational art is more of a style of planning and executing military operations.²⁰ U.S. joint doctrine describes operational art as "the manifestation of informed vision and creativity,"²¹ and "the application of creative imagination."²² Over time, this is tempered to a more cognitive approach, broadened beyond just creativity, to also include skill, knowledge, experience and judgement. It became about the process to solve a problem rather than a particular approach to solving a problem.²³

For the third school of thought, or the Grand Strategic school, the introduction of the operational level of war between the strategic and tactical levels was an outcome of the U.S. Army experience in the Vietnam War and "a by-product of trying to understand the American loss in Vietnam."²⁴ Harry Summers, in his book *On Strategy*, highlights a strategic disconnect in part due to the elevation of strategy to the political level and the increased influence of civilian advisors at the expense of military professionals.²⁵ Hew Strachan, in *The Direction of War: Contemporary Strategy in Historical Perspective*, argues that the U.S. military introduced the operational level and operational art to

¹⁶ Amir Rapaport, *The IDF and the Lessons of the Second Lebanon War* (Ramat Gan, Israel: The Begin-Sadat Center for Strategic Studies, 2010), 4-5 and 9-10.

¹⁷ "The operational level of war uses available military resources to attain strategic goals within a theater of war. Most simply, it is the theory of larger unit operations. It also involves planning and conducting campaigns." *Operations FM 100-5* (1982), 2-3.

¹⁸ "Operational art is the employment of military forces to attain strategic goals in a theater of war or theater of operations through the design, organization, and conduct of campaigns and major operations." *FM 100-5 Operations* (1986), 10.

¹⁹ *FM 3-0 Operations* (2001), 2-3.

²⁰ *FM 3-0 Operations* (2008), 6-1; James J. Schneider, "Vulcan's Anvil," 20-22; *JP 3-0 Joint Operations* (2008), IV-2 to IV-3; *Naval Doctrine Publication 1 Naval Warfare* (2020), 36 and *Annex 3-0 Operations and Planning* (2016), 6 and 46.

²¹ *JP 3-0 Joint Operations* (2008), IV-3.

²² *FM 3-0, CI Operations* (2011), 7-1.

²³ *ADRP 3-0 Unified Land Operations* (2012), 4-1.

²⁴ Richard M. Swain, "Filling the Void: The Operational Art and the U.S. Army," in *The Operational Art: Developments in the Theories of War*, edited by B.J.C. McKercher and Michael A. Hennessy (Westport, CT: Praeger, 1996), 162.

²⁵ Harry G. Summers, *On Strategy: A Critical Analysis of the Vietnam War*, 2-3 and 42-44.

replace strategy that the political level had absorbed during the height of the Cold War due to the importance of nuclear strategy combined with how nuclear strategy was being developed at the time. The operational level and operational art have attempted to fill the void left by the elevation of strategy, but they are ill-suited to doing so.²⁶

The issue of the operational level being elevated to the strategic is echoed by Emile Simpson in *War from the Ground: Up Twenty-First Century Combat as Politics*. He also argues that when fighting, as the U.S. military terms it, irregular warfare, politics or the policy level extends down to the tactical level.²⁷ A key issue he identifies is the disconnect between political objectives and military actions. Bruce Menning argues in *Historical Perspectives of the Operational Art* (2005), that Napoleon practiced strategy as defined by Clausewitz not operational art and that contemporary strategy is more akin to policy than Clausewitz's definition of strategy, in his chapter "Operational Art's Origins".²⁸

In *On Operations: Operational Art and Military Disciplines*, B.A. Friedman provides insight into the idea that the American adoption of the operational level or operational art was to replace military strategy due to its elevation to the political level, or its absorption by grand strategy, in line with the third idea, or the Grand Strategic school, of why there is operational thought between strategy and tactics. He also reinforces, to a greater degree, the Prussian influence on the idea of operations between tactics and strategy while arguing against the concept of an operational level of war. Friedman only makes one brief mention about OIF, along with Operation DESERT STORM and Operation ENDURING FREEDOM, and it was about destroying enemy command and control, not directly about operational art. This argument is strongly reinforced by his use of "Thinking and Acting Like an Early Explorer: Operational Art is Not a Level of War," written by Huba Wass de Czege, one of the principal authors of both the 1982 and 1986 editions of FM 100-5. Huba Wass de Czege states that the term operational level was a "mis-translated idea borrowed from Soviet doctrine."²⁹

Perhaps more importantly, Friedman takes a unique approach when it comes to examining operational art in detail based on what he terms six disciplines. Friedman's six disciplines are: 1) administration, 2) information, 3) operations, 4) fire support, 5) logistics, and 6) command and control.³⁰ Concerning number three, operations, he argues it is mainly about "arranging time, space and forces." It should be more accurately be called coordination but the term 'operations' is the "modern naming convention."³¹ These are very similar to the six joint functions found in U.S. joint doctrine. The 2008 edition of

²⁶ Hew Strachan, *The Direction of War*, 212-218.

²⁷ Emile Simpson, *War from the Ground Up*., 237.

²⁸ Bruce Menning, "Operational Art's Origins," 7.

²⁹ Huba Wass de Czege, "Thinking and Acting Like an Early Explorer: Operational Art is Not a Level of War," accessed 15 November 2021, <https://smallwarsjournal.com/blog/journal/docs-temp/710-deczege.pdf>

³⁰ B.A. Friedman, *On Operations: Operational Art and Military Disciplines* (Annapolis, MD: Naval Institute Press, 2021), 59.

³¹ Friedman, *On Operations*, 83.

JP 3-0 Joint Operations introduced the six joint functions as: 1) command and control, 2) intelligence, 3) fires, 4) movement and maneuver, 5) protection, and 6) sustainment.³² Friedman elected to use operations rather than maneuver as he views maneuver as being offensively focused and thus ignores defensive operations.³³ The equivalent concept for the U.S. Army is combat power, which consists of: 1) movement and maneuver, 2) intelligence, 3) fires, 4) sustainment, 5) command and control, and 6) protection that are used to apply 7) information and 8) leadership. All the elements of combat power, but leadership and information, are considered and called warfighting functions in U.S. Army doctrine.³⁴ Friedman's use of his six disciplines, which seem to align with the six joint functions, is a more Jominian or principles-based approach to examining the idea of operational art.

The Historical Evolution of Operational Thought and Practice

The Prussians, under Helmuth von Moltke, practiced operational thought, bridging the gap between strategy and tactics, because technology, firepower and period defensive positions, combined with large conscript armies were making the tactical defense considerably superior to the tactical offense. The German state later continued this practice. Offensive action conceived at the operational level enabled one to take the initiative and achieve tactical, and in turn, operational and possibly strategic decisions. The same logic held with Soviet operational art. In addition, the Soviets accepted that bypassing enemy defenses to get into a position of advantage threatening enemy capability may not always be possible, in which case it would be necessary to penetrate the enemy's main defensive line. The Soviets, unlike the Germans, also formalized their thinking about operational art and its relationship with both strategy and tactics.

Several authors examine the history of both the German and Soviet development of operational thought. Regarding German operational thought, Milan Vego, Michael Krause, and Dennis Showalter argue that von Moltke was the first one to use the terms operational and operations as something between tactics and strategy as a means to leverage time in movement and command to achieve decisive victory against the defensive lethality of modern firepower.³⁵ Regarding German operational practice during World War Two, Lieutenant Colonel A.I.G. Kennedy, as well as Justin Kelly and Mike Brennan, make the case that the Germans sought to penetrate the enemy defenses, encircle their forces and then annihilate them to achieve victory.³⁶ Robert M. Citino approaches the issue of operational warfare from a historical perspective in *Blitzkrieg to Desert Storm: The Evolution of Operational Warfare*, maintains that it was the Germans

³² *JP 3-0 Joint Operations* (2008), iii and III-1.

³³ B.A. Friedman, *On Operations*, 59.

³⁴ *FM 3-0 Operations* (2008), 4-1.

³⁵ Milan N. Vego, *Operational Warfare*, 13; Michael Krause, "Moltke and the Origins of the Operational Level of War," 113; and Dennis Showalter, "Prussian-German Operational Art, 1740-1943," 38.

³⁶ Justin Kelly and Mike Brennan, *Alien: How Operational Art Devoured Strategy*, 29-48 and Lieutenant Colonel A.I.G. Kennedy, "The Operational Art of War – National or International Evolution," 134-135.

who developed and perfected warfare at the operational level rather than the Soviets, arguing that the German operational objective was the destruction of the enemy. The focus is on decisive victory through a synthesis of movement and firepower at the operational level.³⁷ While Shimon Naveh, *In Pursuit of Military Excellence: The Evolution of Operational Theory*, makes a case for a lack of a German operational concept between strategy and tactics, instead claiming German military success early on in World War Two was due to the poor performance of Germany's enemies in the face of German tactical excellence, rather than as masters of operational art.

The strongest case made regarding the Soviet development of operational thought is by Shimon Naveh, who provides considerable detail on how the Soviets developed the concept of operational art, based on a broad range of Soviet military thinkers. These thinkers focused on achieving operational shock to defeat an enemy by penetrating an enemy's depth to attack follow on forces and enemy logistics.³⁸ Several authors identify the Soviets during the interwar period as being the ones who formalized the idea of operational art, including John English, Bruce Menning and Jacob Kipp.³⁹ Justin Kelly and Mike Brennan examine the Soviet execution of operational art in the latter part of World War Two and its further refinement by the Soviets during the Cold War.⁴⁰ Lieutenant Colonel A.I.G. Kennedy concludes that, despite some similarities, the Germans and Soviets developed their ideas for the most part separately and that it was the Soviets who developed operational art as a concept of operations, not the Germans.⁴¹

U.S. Army Adoption of Operational Thought and Practice

The Combat Studies Institute was established at the US Army Command and General Staff College in 1979. That same year, it published *The Evolution of US Army Tactical Doctrine, 1946-76*, which scrutinized the evolution of US Army tactical doctrine primarily through the various iterations of Army publication *FM 100-5 Field Service Regulations* or, later, *Operations*. It concluded that US Army doctrine throughout the period was focused, to one degree or another, on war in a European context similar to that fought in World War Two. As the doctrine evolved, nuclear war came to take great prominence.

During the period of study, the US Army doctrine underwent three general phases. The first focused on the possibility of war in Europe, the second, in the 1960s, shifted its focus to counterinsurgency in light of the growing war in Vietnam. Finally, after Vietnam, a return to the possibility of war in Europe occurred. When the focus was

³⁷ Robert M. Citino, *Blitzkrieg to Desert Storm*, 301-302.

³⁸ Shimon Naveh, *In Pursuit of Military Excellence*, 16-17, 40 and 184.

³⁹ John English, "The Operational Art: Developments in the Theories of War," in *The Operational Art: Developments in the Theories of War* edited by B.J.C. McKercher and Michael A. Hennessy (Westport, CT: Praeger Publishers, 1996), 20; Bruce Menning, "Operational Art's Origins", 10-11 and Jacob Kipp, "The Origins of Soviet Operational Art 1917-1936," 214-215.

⁴⁰ Justin Kelly and Mike Brennan, *Alien: How Operational Art Devoured Strategy*, 29-48.

⁴¹ Lieutenant Colonel A.I.G. Kennedy, "The Operational Art of War – National or International Evolution," 134-135.

on war in Europe, tactical doctrine was oriented towards the defensive, and during the period of interest in counterinsurgency, doctrine was oriented more towards the offensive. Robert Doughty concluded that after World War Two, “the emphasis on firepower, the defense and attrition has slowly increased until they have become the primary characteristics of US Army tactical doctrine.”⁴² This echoes Russell Weigley’s argument that the American way of war seeks the enemy’s destruction through a war of annihilation.⁴³ This was the view of US Army doctrine just before the introduction of the operational level of war, followed by operational art four years later.

Major Paul H. Herbert focuses on the development of doctrine, specifically FM 100-5, after the Vietnam War, examining the what, how and why of its development in *Deciding What Has to Be Done: General William E. DePuy and the 1976 Edition of FM 100-5, Operations*. He identifies the main issues of the doctrine that resulted in considerable debate: the perceived emphasis on the defense, the importance of force ratios and destruction of enemy forces rather than the psychological aspects of war, and European centrality at the expense of a more global view.⁴⁴ This debate played a vital role in the intellectual and doctrinal development of the U.S. Army during the critical post-Vietnam period. *U.S. Army Doctrine: From the American Revolution to the War on Terror* by Walter E. Kretchik views doctrine manuals as developing professional cohesion in the face of the chaos of conflict through the imposition of systems of training, procedures, equipment and organization on the army.⁴⁵ He argues that the U.S. Army has been more innovative and adaptive than historians often give it credit, and as a result, groups the U.S. Army’s doctrine into four distinct eras. The first era (1779-1904) focused on tactical drill manuals, the next (1905-1944) shifted focus to how to win wars, the third era (1944-1962) viewed the army as part of a larger military organization, and the final era (1963-the present) addresses multinational warfare and interagency cooperation.⁴⁶ Although Kretchik addresses the introduction of the operational level and operational art, he provides little detail on either due to the broader view of his scope of study.

The U.S. Army introduced the operational level in 1982 and operational art in 1986, the former as part of revisions to the 1976 edition of FM 100-5 that was criticized for being too defensively oriented. The 1982 and 1986 editions adopted an offensive philosophy over the defense because there was a lack of faith that a defensive posture would be able to deal with a Warsaw Pact offensive in Europe. Instead, American forces would need to seize the initiative, which would be best done through offensive action. American military success became contingent on winning the deep battle achieved by military action at the operational level.

⁴² Robert A. Doughty, *The Evolution of US Army Tactical Doctrine, 1946-76* (Fort Leavenworth, KS: Combat Studies Institute, 1979), 49.

⁴³ Russell F. Weigley, *The American Way of War: A History of United States Military Strategy and Policy* (Bloomington, IN: Indiana University Press, 1973), xxii.

⁴⁴ Paul H. Herbert, *Deciding What Has to Be Done: General William E. DePuy and the 1976 Edition of FM 100-5, Operations* (Fort Leavenworth, KS: Combat Studies Institute, 1988), 96.

⁴⁵ Walter E. Kretchik, *U.S. Army Doctrine*, 2.

⁴⁶ Kretchik, *U.S. Army Doctrine*, 283-84.

Before more recent works on operational thought and practice, in particular the operational level of war and operational art, one author often cited for his influence on the growth of the U.S. Army concept is Edward N. Luttwak.⁴⁷ An often-cited work of Luttwak's, concerning operational thought, is "The Operational Level of War," published in *International Security* in the winter of 1980, in which he clearly outlines that theater strategy seeks to attain political goals and that operational ways use tactics to achieve the strategic objectives.⁴⁸ He also argues that relational maneuver seeks to incapacitate an enemy by disrupting its actions and ability to communicate amongst itself. In contrast, attrition seeks the enemy's destruction through the use of superior forces, most of the time, however, both are in use to varying degrees.⁴⁹ He goes on to argue that the operational level applies to the defensive. Both the Germans and Soviets, however, viewed operations as offensive; the defensive was adopted only until conditions permitted the resumption of the offensive. Therefore, his idea of an operational defense is new and unique. Finally, Luttwak identifies three key elements or principles of operational practice: enemy strength is to be avoided, deception is the key enabler for success, and intangibles matter.⁵⁰

In addition to Luttwak's works, several anthologies on the operational level of war and operational art have been published since the U.S. Army introduced the concept of the operational level of war in 1982 and operational art in 1986. These anthologies include chapters that address the introduction of both by the U.S. military. One of the first books regarding operational thought addresses both the theory and practice of the operational level of war and the operational art. The anthology *On Operational Art* (1994) edited by Clayton R. Newell and Michael D. Krause defines the operational level of war, using the 1982 definition from the U.S. Army doctrinal publication, FM 100-5, *Operations*, as "The theory of larger unit operations" and involving "planning and conducting campaigns."⁵¹

A number of the authors in the anthology link the operational level to campaigns and geographical theaters of operation, and the concept of joint operations is also linked to the operational level. The chapter on the "Theoretical Implications of Operational Art" considers the dominant and distinguishing characteristic of operational art to be the use of "distributed free maneuver of forces in a theater of operations."⁵² This idea of maneuver

⁴⁷ L.D. Holder, "Educating and Training for Theater Warfare," in *On Operational Art*, edited by Clayton R. Newell and Michael D. Krause (Washington, D.C.: Center of Military History United States Army, 1994), 173 and 187 and Lawrence Freedman, *Strategy: A History* (Oxford: Oxford University Press, 2013), 202.

⁴⁸ Edward N. Luttwak, "The Operational Level of War," 61.

⁴⁹ Luttwak, "Level of War," 63-65.

⁵⁰ Luttwak, "Level of War," 70-76.

⁵¹ Clayton R. Newell and Michael D. Krause, General Editors, *On Operational Art* (Washington, D.C.: Center of Military History United States Army, 1994), iii.

⁵² Distributed maneuver is characterized by a series of distributed battles, while concentrated maneuver is characterized by a single decisive battle. James J. Schneider, "Theoretical Implications of Operational Art," in *On Operational Art* edited by Clayton R. Newell and Michael D. Krause (Washington, D.C.: Center of Military History United States Army, 1994), 18.

relates to Luttwak's idea of maneuver mentioned above. Some authors argue that operational art is the execution of strategy, or strategic ends achieved through strategic ways (operational art) using strategic means. Others argue operational art is a bridge between strategic ends and tactical means, or strategic ends achieved through operational ways using tactical means.⁵³ General Crosbie Saint makes a very important observation on command, levels of war and operational art. He argues that command is not confined to a single level of war, for example theater level command is 75 percent strategy and 25 percent operational art.⁵⁴ These various ideas illustrate the range of thinking that shapes the ideas of U.S. operational thought identified in this dissertation.

The introduction of operational art by the U.S. Army is covered in some depth by Richard M. Swain in "Filling the Void: The Operational Art and the U.S. Army", focusing on the period 1974 to 1986. What is particularly interesting is his conclusion, that the process used by the U.S. Army when adopting the idea of operational art "was almost entirely synthetic, abstract, and imitative."⁵⁵ This work contains a wealth of historical information about the concept's adoption by the U.S. Army explaining how operational art was introduced. Swain acknowledges the important role Luttwak, addressed above, played in shaping the introduction of the operational level into U.S. Army doctrine, as well as that played by other defense critics.⁵⁶ Although the chapter alludes to why it was introduced, it falls short of providing a definitive reason.

The U.S. Army Center of Military History also explored the past in the 2005 *Historical Perspectives of the Operational Art*. Harold Nelson introduces the U.S. history of the operational level of war and operational art in the U.S. Army in "The Origins of Operational Art." His consideration starts with the American Civil War and the idea of one great decisive battle within a theater, shifting later in the war to an attempt to find the enemy's flank. He outlines the general history behind the U.S. Army's adoption of the operational level in 1982 providing one perspective on its adoption of operational art. The anthology also provides a perspective on Soviet and Russian, as well as French and

⁵³ In 1981, General Maxwell Taylor at the U.S. Army War College stated that strategy consisted of objectives (ends), ways and means. Strategy then is focused on ends – military objectives achieved by ways – methods of applying military capability using means – military resources. The concept of ends-ways-means applies to all three levels of war. Arthur F. Lykke, Jr., "Toward an Understanding of Military Strategy," 179-180. Another way this is used is that strategic ends are achieved using operational ways employing tactical means. Antulio J. Echevarria II, "American Operational Art, 1917-2008," 138. The concept is used in U.S. Army operational doctrine starting with the 1986 edition of *FM 100-5 Operations* through the 2017 edition of *ADRP 3-0 Operations*. *FM 100-5 Operations* (1986), 10 and Combined Arms Doctrine Directorate, *ADRP 3-0 Operations* (Washington, D.C.: Department of the Army, October 2017), 2-1.

⁵⁴ Crosbie Saint, "The Ground Commander's View – II," in *On Operational Art* edited by Clayton R. Newell and Michael D. Krause (Washington, D.C.: Center of Military History United States Army, 1994), 48.

⁵⁵ Richard M. Swain, "Filling the Void," 165.

⁵⁶ Swain, "Void", 163.

German operational art, providing a useful historical background in which to place U.S. Army operational thought in perspective.

Five chapters in the anthology focused on the American experience. The first, on “The Origins of Operational Art,” argues the U.S. Army did not have a concept of the operational level until its introduction in 1982.⁵⁷ The next chapter, “Operational Art and the Gettysburg Campaign,” states, “As a concept, the operational level of war did not exist during the American Civil War.”⁵⁸ The chapter goes on to argue, however, that although there may not have been an idea of the operational level, generals did practice operational art. In “Normandy to Falaise: A Critique of Allied Operational Planning in 1944,” Russell Weigley argues that the U.S. Army ignored operational art during World War Two, focusing instead on strategy and tactics.⁵⁹ The next chapter on the Korean War focuses on the failure after the recapture of Seoul up to the withdrawal from North Korea, as a case study on how operational art could have prevented or mitigated failure if the U.S. Army had practiced operational art at the time. The final chapter considers the U.S. Army’s application of operational art, after its formal introduction in 1986, in Operations DESERT SHIELD and DESERT STORM. The case study highlights the three elements or principles of operational practice as identified by Luttwak above.

Antulio J. Echevarria examines the theory and practice of American operational art, albeit from the perspective of war’s grammar, the first focused on using armed force against a peer and the second based on insurgency or irregular warfare,⁶⁰ or that which the U.S. military terms traditional warfare and irregular warfare, in Chapter Five of *The Evolution of Operational Art: From Napoleon to the Present* (2011), “American Operational Art, 1917-2008.” The chapter provides a good overview on American operational thought and practice prior to its formal introduction in 1982 and 1986. Notably, he outlines the idea of operational art being the way in which tactical means achieve strategic ends.⁶¹ He also addresses the introduction of the operational level and operational art into the U.S. Army in the 1980s, as well as the tension created for strategy due to the threat of nuclear war with the Soviet Union. He differentiates between “the classical conception of operational art” and the 21st century definition, which places too much emphasis on “creative imagination” rather than where it should be, “design.”⁶² He therefore has something to offer concerning all three ideas being addressed in this dissertation.

⁵⁷ Harold W. Nelson, “The Origins of Operational Art,” in *Historical Perspectives of the Operational Art*, edited by Michael D. Krause and R. Cody Phillips (Washington, D.C.: Center of Military History United States Army, 2005), 333.

⁵⁸ Arthur V. Grant, “Operational Art and the Gettysburg Campaign,” 349.

⁵⁹ Russell Weigley, “Normandy to Falaise: A Critique of Allied Operational Planning in 1944,” in *Historical Perspectives of the Operational Art*, edited by Michael D. Krause and R. Cody Phillips (Washington, D.C.: Center of Military History United States Army, 2005), 393.

⁶⁰ Antulio J. Echevarria II, “American Operational Art, 1917-2008,” 137.

⁶¹ Echevarria, “American,” 138.

⁶² Echevarria, “American,” 137-138.

The U.S. Army Training and Doctrine Command published a history of U.S. Army doctrine development after the Vietnam War titled, *From Active Defense to AirLand Battle: The Development of Army Doctrine, 1973-1982*. Based on the period, it addresses the introduction of the operational level war in the 1982 edition of *Operations FM 100-5*, looking first at the immediate revision of U.S. Army doctrine after the Vietnam War followed by the debate surrounding that doctrine after its introduction in 1976.⁶³ John Romjue provides a balanced assessment of the issues surrounding the 1976 edition of *Operations FM 100-5*, putting some problems in context, validating others and rejecting some. Romjue also explores the evolution of specific concepts and introduces new ones, tracing their development up to the introduction of the 1982 edition of *Operations FM 100-5*.⁶⁴

Concerning the introduction of the operational level of war, Romjue touches on the German influence on the 1982 version and identifies General Glenn K. Otis as the driver behind the introduction of the operational level, despite the German deletion of the concept from the 1973 edition of the German *Army Service Regulation HDv 100-100*.⁶⁵ Romjue does not, however, address why General Otis introduced the idea or concept of the operational level in the 1982 edition; the appendices do, however, help shed light on the reasoning behind its adoption. The third appendix is of particular interest as it consists of seven select documents regarding the evolution of U.S. Army doctrine from 1973 to 1982. The most significant of the select documents concerning the introduction of the operational level of war is the seventh document, a paper by General Otis titled “Doctrinal Perspectives of War.” Otis defines the operational level as “the planning and conduct of campaigns – the use of battles and their results by corps and larger units to attain major military goals.”⁶⁶ He goes on to explain the purpose of the operational level, what it involves and what form it can take. He also introduces the term “operational art.” There is no date for the paper but based on the publication date of *From Active Defense to AirLand Battle: The Development of Army Doctrine, 1973-1982* it is from 1984 or earlier, at least two years or possibly more, before the introduction of the term “operational art” in the 1986 edition of *FM 100-5 Operations*.

A comprehensive overview of U.S. Army doctrinal development in the 1970s and 1980s leading into the 1990s is “The Evolution of U.S. Army Doctrine: From Active Defense to AirLand Battle and Beyond,” a master’s thesis by Major Jeffery Long. In the thesis, Long seeks to explain the evolution of U.S. Army doctrine in the 1970s and 1980s, first outlining the significant changes that occurred and then examining five external and four internal factors that contributed to the change. Long argues that the 1986 edition of *FM 100-5* was less innovative than either of the two preceding editions and, for the most

⁶³ John L. Romjue, *From Active Defense to AirLand Battle*, 3-22.

⁶⁴ Romjue, *AirLand Battle*, 23-66.

⁶⁵ Romjue, *AirLand Battle*, 61.

⁶⁶ General Glenn Otis, “Doctrinal Perspectives of War,” in *From Active Defense to AirLand Battle: The Development of Army Doctrine, 1973-1982* by John L. Romjue (Fort Monroe, VA: Historical Office, United States Army Training and Doctrine Command, 1984), 109.

part, charted a middle ground between the two, acknowledging the strengths of both.⁶⁷ He goes on to note that although the 1982 edition introduced the operational level of war, it was the 1986 edition that “gave it substance,” by providing a more detailed definition and addressing the idea of operational design.⁶⁸ Despite having a section that examines how the 1986 edition addressed the operational level of war, he does not deal with the introduction of operational art in the 1986 edition. Long does explain how the operational level came to be introduced in the 1982 edition, but does not address why. He also fails to explain how and why operational art was introduced in the 1986 edition of FM 100-5.

Benjamin M. Jensen considers doctrinal change in the U.S. Army based on “knowledge networks”⁶⁹ and how they develop and distribute new ideas throughout an organization, as seen in *Forging the Sword*. He focuses on two institutional processes that he identifies as incubators, which develop ideas and advocacy networks, and enable their distribution and acceptance.⁷⁰ He thereby addresses how doctrine is developed in the U.S. Army and how it changes over time. Jensen identifies two schools of thought regarding the cause of doctrinal change. The first, the traditional school of thought, is that competitive bureaucratic pressures and/or exogenous shocks, often military defeat, are the primary causes of doctrinal change.⁷¹ The second school argues that doctrinal change is the result of new operational challenges that military professionals seek to overcome.⁷²

Jensen then examines four case studies, all of which are of particular interest to this dissertation. First is the development of the 1976/77 version of *FM 100-5: Operations*, which was prompted by the end of the Vietnam War. That doctrine introduces the concept of Active Defense. He views Active Defense in a different light than many, taking a more positive approach to it. The second example he uses is the next evolution of doctrine, from Active Defense to AirLand Battle, with the publication of a new *FM 100-5: Operations* in 1982. This is followed by consideration of the 1993 version of *FM 100-5: Operations*, with its changes based on the experience of Operation DESERT STORM and the end of the Cold War. The 1993 edition introduces two new concepts, in particular Full-Dimension Operations, “the whole continuum of possible tasks the Army might be called on to address,”⁷³ and military operations other than war (MOOTW). The fourth and final case study is particularly pertinent to this dissertation, examining the requirements for counterinsurgency and stability doctrine in the post-9/11 operating environment, and their impact on *FM 3-0: Operations* and *ADP 3-0: Unified Land Operations*. He provides some insight into the adoption of operational thought by

⁶⁷ Major Jeffery W. Long, “The Evolution of U.S. Army Doctrine: From Active Defense to AirLand Battle and Beyond” (Master’s thesis, U.S. Army Command and General Staff College, 1991), 78-81.

⁶⁸ Long, “The Evolution of U.S. Army Doctrine”, 91.

⁶⁹ Benjamin M. Jensen, *Forging the Sword: Doctrinal Change in the U.S. Army* (Stanford, CA: Stanford University Press, 2016), 1.

⁷⁰ Jensen, *Forging*, 1-2.

⁷¹ Jensen, *Forging*, 11-13.

⁷² Jensen, *Forging*, 15.

⁷³ Jensen, *Forging*, 113.

the U.S. military, thereby helping to shape the context more effectively, but offers little about its evolution within the U.S. military.

In the 1980s, during the time the U.S. Army introduced the operational level and operational art, two authors of the 1982 edition of FM 100-5 authored chapters in separate books addressing the introduction of the operational level and operational art into U.S. Army doctrine. The first was “Army Doctrinal Reform” by Huba Wass de Czege, one of the authors of the 1982 edition of *Operations FM 100-5* and the founder of the School of Advanced Military Studies (SAMS) at the U.S. Army Command and General Staff College at Fort Leavenworth, in *The Defense Reform Debate: Issues and Analysis*, in which he attempts to address the Army’s search for the most suitable doctrine after the U.S. Army withdrawal from Vietnam and in light of the controversy surrounding the introduction of the 1976 edition of FM 100-5. He identifies eight reasons for change to doctrine in light of the 1976 edition of FM 100-5, among them, the need for balance between maneuver and firepower, arguing neither maneuver alone will defeat the enemy nor will firepower on its own, instead maneuver is necessary to put firepower in the right place of one’s choosing.⁷⁴ More importantly, he addresses the concept of deep attacks and their importance to operations, as well as the significance of the offence for obtaining decisions.⁷⁵

The other notable work is “Operational Art in the US Army: New Vigor” by L.D. Holder published in *Essays on Strategy III*. It is a blend of ideas, some of which confuse operational art with military strategy. In contrast, others emphasize the concept that operational art focuses on enabling tactical actions for strategic advantage.⁷⁶ Besides offering further illumination on the relationship between strategy and politics, it reinforces the historical genesis of the concept of operational art as a means to enable tactics in the face of large armies and massed firepower, as the rationale for the U.S. Army’s introduction of operational art into its doctrine.⁷⁷ Both this chapter and “Army Doctrinal Reform” by Huba Wass de Czege above provide essential insight into the U.S. Army’s decision to introduce operational art into its doctrine, which many purely historical accounts and critiques do not. Both also support the argument that the U.S. adopted operational art and the operational level to enable offensive action, similar to the earlier rationales for its development by the Germans and Soviets.

An essential journal in this research is the *Military Review*, the professional journal of the U.S. Army published by the U.S. Army Command and General Staff College at Fort Leavenworth. The review of journals for articles relevant to the U.S. adoption of operational thought and practice began with the January 1972 edition, approximately a year before the U.S. military would withdraw from Vietnam. Numerous

⁷⁴ Huba Wass de Czege, “Army Doctrinal Reform,” in *The Defense Reform Debate: Issues and Analysis*, edited by Asa A. Clark IV, Peter W. Chiarelli, Jeffery S. McKittrick and James W. Reed (Baltimore: The Johns Hopkins University Press, 1984), 109.

⁷⁵ Wass de Czege, “Army Doctrinal Reform,” 112-115.

⁷⁶ L.D. Holder, “Operational Art in the US Army: New Vigor,” in *Essays on Strategy III*, edited by George C. Maerz (Washington, D.C.: National Defense University Press, 1986), 117.

⁷⁷ Holder, “Operational Art,” 118, 122 and 128.

articles are relevant to research on the American adoption and evolution of operational thought and practice; however, there are a number that provide insight into the adoption of operational thought and practice by the U.S. military.⁷⁸

General Otis, the new commander of TRADOC, issued a message in *Military Review* volume LXII, no. 5, published May 1982, announcing the U.S. Army adoption of “AirLand Battle” doctrine.⁷⁹ It also had an article, “The Operational Art of the AirLand Battle” by Lieutenant Colonel John Doerfel, on operational art four years before the U.S. Army officially adopted it. An article, “The New FM 100-5” by Lieutenant Colonel (P) Huba Wass de Czege and Lieutenant Colonel L.D. Holder, published in the July 1982 edition, also referred to operational art even though the term was never used in the 1982 edition of *Operations FM 100-5*.⁸⁰

The *Air University Review* published the article “The Evolution of the AirLand Battle Concept” by John Romjue in 1984, which touches on the introduction of the operational level into U.S. Army doctrine. They also published “USAF Doctrine: An Enduring Challenge” by Colonel Clifford Krieger, USAF, which addressed the operational level and raised concerns about a lack of common understanding regarding the definitions of the operational and strategic levels.⁸¹ Both are indicative of U.S. Air Force interest in the concept of operational thought.

The March 1986 edition of *Military Review* published several articles on U.S. Army doctrine: “FM 100-5: The AirLand Battle in 1986,” “A Theoretical Perspective of AirLand Battle Doctrine,” “AirLand Battle: The Historical Background,” and “Some

⁷⁸ Lieutenant Colonel Wilson C. Blythe, Jr., “A History of Operational Art,” *Military Review* XCVIII no. 6 (November-December 2018), 37-49; Major Martin E. Dempsey, “Campaign Planning: A Simpler View,” *Military Review* LXIX, no. 7 (July 1989), 76-78; Colonel Wallace P. Franz, “Operational Concepts,” *Military Review* LXIV, no. 7 (July 1984), 2-15; Colonel James K. Greer, “Operational Art for the Objective Force,” *Military Review* LXXXII, no. 5 (September-October 2002), 22-29; Lieutenant General Mike Lundy and Colonel Rich Creed, “The Return of U.S. Army Field Manual 3-0, Operations,” *Military Review* XCVII no. 6 (November-December 2017), 14-21; Bruce W. Menning, “Operational Art’s Origins,” *Military Review* LXXVII, no. 5 (September-October 1997), 32-47; Lieutenant Colonel Clayton R. Newell, “What is Operational Art?” *Military Review* LXX, no. 9 (September 1990), 2-16; Major General Gordon R. Sullivan, “Learning to Decide at the Operational Level of War,” *Military Review* LXVII, no. 10 (October 1987), 16-23; Colonel Richard M. Swain, “The Written History of Operational Art,” *Military Review* LXX, no. 9 (September 1990), 100-106; Lieutenant Colonel (P) Huba Wass de Czege and Lieutenant Colonel L.D. Holder, “The New FM 100-5,” *Military Review* LXII, no. 7 (July 1982), 53-70; and Russell F. Weigley, “From the Normandy Beaches to the Falaise-Ardenne Pocket: A Critique of Allied Operational Planning in 1944,” *Military Review* LXX, no. 9 (September 1990), 45-64.

⁷⁹ General Glenn K. Otis, “THE AIRLAND BATTLE,” *Military Review* LXII, no.5 (May 1982), 2.

⁸⁰ Lieutenant Colonel (P) Huba Wass de Czege, and Lieutenant Colonel L.D. Holder, “The New FM 100-5,” 56.

⁸¹ Colonel Clifford R. Krieger, “USAF Doctrine: An Enduring Challenge,” 23.

Vagrant Thoughts on Doctrine.”⁸² The most significant of these was “FM 100-5: The AirLand Battle in 1986” by General William R. Richardson, commander of TRADOC, which summarized the key changes to the 1986 edition of *FM 100-5 Operations*. This article provides insight into the U.S. Army’s adoption of operational art. The challenges with definitions, terminology and understanding were highlighted in another U.S. Army professional journal, such as “The Operational Trilogy,” that posits “the failure to define the term ‘operational level’ has caused confusion.”⁸³ This is not the only time this sentiment will be expressed, and it is one reason that the operational level and operational art are poorly understood.

Overall, throughout the 1990s, relatively little was written in professional U.S. military journals directly about American operational thought and practice in general. The end of the Cold War and its implications for U.S. national security garnered considerably more attention. None of the material published during the period added anything of notable significance to the existing body of literature on operational thought and practice. In the October 1991 issue of *Military Review*, a one-page piece by General Frederick M. Franks, Commander of TRADOC, was published, addressing the need to update FM 100-5. This was not because there were problems with the then-current edition, but rather because the environment to which the doctrine applied was changing. The details of the anticipated change were provided in the article “Building the New FM 100-5 Process and Product,” although the next edition would not be released for over 18 months. The importance of doctrinal change was highlighted in the article “Doctrine: A Guide to the Future” by General Gordon R. Sullivan, Chief of Staff of the U.S. Army, published at the beginning of 1992.⁸⁴

Turning specifically to U.S. Army doctrine, the operational level was first introduced in the 1982 edition of *FM 100-5 Operations*. The first edition of this manual was the 1905 edition of *Field Service Regulations*. Before World War Two all editions were tactically focused, aimed at addressing how to administer and fight an army. The 1941, 1944 and 1949 editions of *FM 100-5 Field Service Regulations Operations* were also tactically focused and changed little in substance throughout the war or in its aftermath. The 1949 edition did touch on atomic weapons, but not in any great depth. The 1954, 1962, and 1968 editions shifted focus from the purely tactical, linking the tactical

⁸² General William R. Richardson, “FM 100-5: The AirLand Battle in 1986,” *Military Review* LXVI, no.3 (March 1986), 4-11; Major Wayne M. Hall, “A Theoretical Perspective of AirLand Battle Doctrine,” *Military Review* LXVI, no.3 (March 1986), 32-43; John L. Romjue, “AirLand Battle: The Historical Background,” *Military Review* LXVI, no.3 (March 1986), 52-55; and Jay Luvaas, “Some Vagrant Thoughts on Doctrine,” *Military Review* LXVI, no.3 (March 1986), 56-60.

⁸³ John F. Meehan, “The Operational Trilogy,” *The US Army War College Quarterly: Parameters* XVI, no. 3 (Autumn 1986), 9.

⁸⁴ General Frederick M. Franks, Jr., “Full-Dimensional Operations: A Doctrine for an Era of Change,” *Military Review* LXXII, no. 12 (December 1993), 5-10; Colonel James R. McDonough, “Building the New FM 100-5 Process and Product,” *Military Review* LXXI, no. 10 (October 1991), 2-12; and General Gordon R. Sullivan, “Doctrine A Guide to the Future,” *Military Review* LXXII, no. 2 (February 1992), 2-9.

to the political and the strategic. Most notably, the 1962 edition was the first to define strategy, in particular national strategy and military strategy. The American withdrawal from Vietnam set the stage for a rewrite of the 1968 edition of *Operations of Army Forces in the Field FM 100-5*. None of the versions of U.S. Army operational doctrine to this point mentioned or defined an idea of operations that fit between strategy and tactics.⁸⁵

FM 100-5 Operations was officially issued on 1 July 1976 and was updated on 29 April 1977 by the inclusion of an index. Although it neither introduced the operational level nor operational art, the doctrinal debate surrounding the manual was critical to the U.S. Army's doctrinal shift from an army at war in Vietnam to one prepared to fight the Soviets in central Europe and the eventual introduction of the operational level and operational art. The general theme of this edition was shaped by the relatively high lethality of the modern battlefield and the fact that America and her NATO allies had a numerical inferiority relative to their Soviet and Warsaw Pact opponents. In light of this, the 1976 edition of *FM 100-5 Operations* emphasized defense operations as this would be America's posture in the event of war in Europe against the Soviet Union. The 1976 edition of *FM 100-5 Operations* was viewed as promoting the doctrine of Active Defense.⁸⁶

The 1982 edition of *Operations FM 100-5* introduced and defined the term operational level, and the 1986 edition introduced and defined the term operational art. The 1982 edition also introduced the operational concept of AirLand Battle doctrine, replacing Active Defense and refocusing the Army's emphasis back to the offense. The definition of operational art remained pretty much consistent from 1986 to 2008. The 2008 edition of *FM 3-0 Operations*, however, changed the definition to introduce a second idea of what operational art may be. This concept suggests that operational art is

⁸⁵ Army Chief of Staff, *Field Service Regulations United States Army* (Washington, D.C.: War Department, 1 February 1905); Army Chief of Staff, *Field Service Regulations United States Army 1914* (Washington, D.C.: War Department, 31 July 1918); Army Chief of Staff, *Field Service Regulations United States Army 1923* (Washington, D.C.: War Department, 2 November 1923); Army Chief of Staff, *Tentative Field Service Regulations Operations FM 100-5* (Washington, D.C.: War Department, 1 October 1939); Army Chief of Staff, *Field Service Regulations Operations FM 100-5* (Washington, D.C.: War Department, 22 May 1941); Army Chief of Staff, *Field Service Regulations Operations FM 100-5* (Washington, D.C.: War Department, 15 June 1944); Army Chief of Staff, *Field Service Regulations Operations FM 100-5* (Washington, D.C.: Department of the Army, August 1949); Army Chief of Staff, *Field Service Regulations Operations FM 100-5* (Washington, D.C.: Department of the Army, September 1954); Army Chief of Staff, *Field Service Regulations Operations FM 100-5* (Washington, D.C.: Department of the Army, February 1962); Army Chief of Staff, *Operations of Army Forces in the Field FM 100-5* (Washington, D.C.: Department of the Army, September 1968); *FM 100-5 Operations* (1977); and *Operations FM 100-5* (1982).

⁸⁶ John L. Romjue, *From Active Defense to AirLand Battle*, 8-11.

more of a style of planning and executing military operations.⁸⁷ U.S. Army operational doctrine is examined in considerable detail in Chapters Four through Seven.

Operation IRAQI FREEDOM

There are several good overviews of Operation IRAQI FREEDOM (OIF). An in-depth review of the beginning of OIF up to a little more than a year into the conflict is *Operation IRAQI FREEDOM: Decisive War, Elusive Peace*, published by RAND. It answers a number of questions, most notably why planning was so effective for the invasion yet ineffective for postwar operations, how well commanders maintained control over activities, and how effective was the management of post-war Iraq.⁸⁸ Although it does not address the operational level, operational art, or their interaction with the strategic level, it does provide practical context by covering the planning for OIF and the actual invasion. It ends its analysis at the end of June 2004, more than a year after the initial invasion. The Congressional Research Service Report *Operation Iraqi Freedom: Strategies, Approaches, Results, and Issues for Congress* also provides a comprehensive overview from planning through invasion to 2008.

A sound critical examination of the entirety of OIF, from planning to withdrawal, is also provided in the two-volume history, titled *The U.S. Army in the Iraq War*, also published by the Strategic Studies Institute.⁸⁹ This historical study has been sub-divided into five sections providing a good historical overview of American ground operations in Iraq: Road to War (2001 – 2003), Invasion and Victory (2003), Insurgency and Civil War (2003 – 2006), The Surge (2007 – 2008), and Drawdown and Withdrawal (2008 – 2011). In correspondence with the U.S. Central Command (CENTCOM) Historian, Dr. David Dawson, this is the best history of OIF utilizing unclassified CENTCOM documents.⁹⁰

There are several general histories of the Iraq War, but they barely touch on operational thought and practice, whether at the operational level or the level of operational art. Notable among these are John Keegan's *The Iraq War* and *The Iraq War: A Military History* by Williamson Murray and Major General Robert H. Scales. Both histories focus on the invasion and the defeat of Saddam Hussein's government and do not address the follow-on occupation and Iraqi civil war. Two books by Michael R. Gordon and General Bernard E. Trainor, *Cobra II: The Inside Story of the Invasion and Occupation of Iraq* and *The Endgame: The Inside Story of the Struggle for Iraq, from*

⁸⁷ *FM 3-0 Operations* (2008), 6-1; James J. Schneider, "Vulcan's Anvil", 20-22; *JP 3-0 Joint Operations* (2008), IV-2 to IV-3; *Naval Doctrine Publication 1 Naval Warfare* (2020), 36 and *Annex 3-0 Operations and Planning* (2016), 6 and 46.

⁸⁸ Walter L. Perry, Richard E. Darilek, Laurinda L. Rohn and Jerry M. Sollinger, eds., *Operation IRAQI FREEDOM: Decisive War, Elusive Peace* (Santa Monica: RAND Corporation, 2015), xx, xxv and xxviii.

⁸⁹ Colonel Joel D. Rayburn and Colonel Frank K. Sobchak, eds., *The U.S. Army in the Iraq War Volume 1: Invasion Insurgency Civil War 2003-2006* (Carlisle, PA: United States Army War College Press, 2019) and Colonel Joel D. Rayburn and Colonel Frank K. Sobchak, eds. *The U.S. Army in the Iraq War Volume 2: Surge and Withdrawal 2007-2011*. (Carlisle, PA: United States Army War College Press, 2019).

⁹⁰ Dr. David Dawson, E-mail to the author September 22, 2020.

George W. Bush to Barack Obama, provide several insights into the planning, invasion, and occupation of Iraq as well as the follow-on occupation, insurgency and Iraqi civil war. However, although both books examine the political and strategic decisions made and consider some significant tactical actions, neither book focuses on operational art or the operational level, nor do they specifically address either.

The political level of the war is examined in some detail in *Explaining the Iraq War: Counterfactual Theory, Logic and Evidence* by Frank P. Harvey. It examines the war from a political standpoint, considering the causes and conduct from both international and domestic political perspectives. Steven Metz examines the evolution of U.S. security strategy in *Iraq & The Evolution of American Strategy*, using OIF as a case study, providing good strategic context for the war. Unlike several references, he goes beyond the actual invasion and considers the occupation and the strategic challenges faced by the U.S. during the Iraqi civil war. These references help provide the political and strategic context for OIF, but they do not address the operational level or the U.S. application, or lack thereof, of operational art.

Some studies examine the strategic and tactical aspects, for the most part, while bypassing the operational aspects. Thomas Donnelly offers a strategic evaluation of the Iraq War, focusing on the invasion and the beginnings of the insurgency in *Operation Iraqi Freedom: A Strategic Assessment*. When considering the invasion, he also assesses the U.S. tactical fight that led to victory but ignores operational thought and practice. A more detailed study is that by Anthony Cordesman in *The Iraq War: Strategy, Tactics, and Military Lessons*, where he also examines the strategic, particularly grand strategy, and the tactical actions of the war. There is no mention of operational art, and his tactical focus even gets into the details of individual weapon systems. One book that examines the operational level is *Expectation of Valor: Planning for the Iraq War* by Colonel (Retired) Kevin C.M. Benson; however, it focuses on planning for the invasion and does not address operational art.

The Combat Studies Institute Press published two works focused on the U.S. Army in Operation IRAQI FREEDOM (OIF). The first, examining the invasion of Iraq, *On Point: The United States Army in Operation Iraqi Freedom* focuses on the tactical level, making no mention of operational art and barely touching on the operational level, primarily in a theoretical context. The second work, *On Point II: Transition to the New Campaign: The United States Army in Operation IRAQI FREEDOM May 2003 – January 2005*, considers the occupation and the insurgency. Again, there is no mention of operational art. Although the operational level is referred to more frequently than in the previous volume, it is often used in conjunction with the term strategic level, in effect not differentiating between the two. Both works provide valuable tactical context regarding OIF, but no insight into U.S. Army or U.S. military operational thought and practice.

The U.S. Army Combined Arms Center published *Learning From Our Military History: The United States Army, Operation Iraqi Freedom, and the Potential for Operational Art and Thinking* by Aaron J. Kaufman. On the surface, this work appears to be similar to the thesis proposed in this work. However, the focus is entirely different, concentrating on learning and counterinsurgency in the context of OIF. It examines

officer education and development, as well as the U.S. Army's role as a learning organization. Learning is considered in the context of the army's implementation of counterinsurgency in Iraq during OIF. The study is about how the U.S. Army learned and adapted during OIF; it is not an examination or critique of operational art.

The U.S. military generated hundreds of terabytes of digital operational records from 2003 to 2011 regarding OIF. Rayburn and Sobchak noted that, "Currently this vast database is largely in disarray, with no clear prospect for cataloging it and making it accessible to researchers in the near term."⁹¹ The digital collection at CENTCOM is more than 300 terabytes of classified and unclassified records about the Iraq War. It is anticipated that it will be several years before the full holdings are accessible to military researchers, and longer still before they are available to the public.⁹² This was confirmed in the correspondence with the CENTCOM Historian, Dr. David Dawson.⁹³ This means that it will be several years, assuming the data collection is declassified, before there are any definitive studies of OIF based on primary references.

That said, the U.S. Army Heritage & Education Center OIF collection comprises 1,007 unclassified documents spanning the period from 2001 to 2011. It includes emails, notes, memos, and letters between and among the likes of the President, Secretary of Defence, Chairman of the Joint Chiefs of Staff, Commander CENTCOM, Commander Multi-National Forces – Iraq, Commander Multi-National Corps – Iraq, and Commander U.S. Forces – Iraq, among others. The collection also includes several operation orders (OPORD) and planning orders (PLANORD) for various operations, as well as planning briefings, battle update assessments, commander's intent briefings, among some other military planning documents and presentations. The collection also includes weekly assessments at various levels, as well as assorted strategy documents, plans, policy notes, and operational summaries. Finally, some interviews were conducted "in theater" with general officers and staff officers, including Generals Petraeus and Odierno. In summary, no detailed material specific to operational thought and practice by the U.S. military during Operation IRAQI FREEDOM has been found.

Conclusion

Based on the literature review, the three schools of operational thought are not addressed simultaneously in any single piece of literature. As a result, the Traditional school is seen as separate from the Grand Strategic school, so that they almost always ignore one another, while the Creative school is rarely touched upon. This dissertation argues that the U.S. military has simultaneously advocated for and practiced both versions of the Traditional school. The contemporary U.S. view has been to fight a battle of annihilation in the close battle while attempting to shock its adversary in the deep

⁹¹ Rayburn, Colonel Joel D. and Colonel Frank K. Sobchak, eds. *The U.S. Army in the Iraq War Volume 1*, 664.

⁹² Rayburn and Sobchak, *Volume 1*, 663-664.

⁹³ Dr. David Dawson, E-mail to the author September 22, 2020.

battle or operation. The evolution of U.S. Army doctrine from the Traditional school to the Creative school during the Iraq War is examined in detail for the first time.

The literature on the historical evolution of operational thought can at times be somewhat disjointed. This dissertation will bring together this historical context to enhance understanding of the U.S. Army's adoption of the operational level and operational art. This historical context begins with von Moltke, goes on to recognize the lack of operational thought during World War One and addresses the Soviet formalization and articulation of the idea of operational art. It will also touch on the informal German practice of operational thought as compared to the formal Soviet articulation of operational thought. Outlier ideas on the origins of operational thought will also be mentioned, notably Napoleon and the U.S. Civil War.

The primary focus of the dissertation is on the U.S. Army doctrine from the post-Vietnam era onwards. The literature on the U.S. adoption of operational thought, encompassing the operational level and operational art, is quite extensive but somewhat disjointed; this dissertation will aim to correct that. The existing literature does not clearly explain why the U.S. military adopted operational thought in the first place. This has led to a misunderstanding regarding its origins in U.S. military practice, which, in turn, has reinforced a misinterpretation of what operational thought, and operational art in particular, entails. This research will explore why these constructs were adopted based on the disparate bits of evidence.

The evolution of operational thought in the U.S. military has been largely overlooked, yet it has undergone significant changes since its introduction. There are a few reasons for this oversight. Firstly, there is a lack of precise understanding of what operational art is. Secondly, the U.S. military's doctrinal focus was elsewhere. The U.S. Army introduced operational art and the operational level of war in response to the challenges it faced in Europe against the Soviet Union during the Cold War. Shortly after their introduction, the Cold War came to an end. The U.S. military's doctrinal focus shifted to its role in a unipolar world without its Cold War adversary. Then, with 9/11, the focus soon moved again to fighting insurgencies in both Afghanistan and Iraq, not on operational thought and the meaning and practice of operational art. This, in turn, is the main reason why there is extremely little literature on operational thought and practice during Operation IRAQI FREEDOM. This dissertation will utilize the body of declassified evidence from OIF to support its examination and explanation of the evolution of operational thought and practice in the U.S. Army.

To examine operational thought, it is necessary to understand how the concept of operational thought came about. The next chapter will introduce the origins of operational thought in the 19th and early 20th centuries, with a focus on Europe. It will also examine the early evolution of U.S. Army operational thought from the American Civil War through to the end of the Vietnam War.

Chapter Three – The Historical Context of Operational Thought

This chapter will introduce the origins of operational thought in the 19th century. It will also look at the early evolution of U.S. Army thought regarding what would become operational art, as well as the operational level of war or operational warfare. Central to the examination of early U.S. Army thought on operations will be doctrine, particularly the various editions of *Field Service Regulations*, and from 1968 onwards, the evolving editions of the U.S. Army Field Manual (FM) concerning operations. This examination is based on the ideas of operational thought that have been identified in Chapters One and Two.

This chapter primarily examines the evolution of the first idea of operational thought. That operational conceptualization, which lies between strategy and tactics, enables offensive military action to tactically defeat an enemy military force, either through the destruction of the enemy or through operational shock or operational paralysis. These two aspects of operational thought are often, but not always, referred to as operational art. This idea is examined in more detail in Chapters Four and Five, while the second idea is addressed in detail in Chapters Six and Seven, and the third idea is considered in Chapter Seven. It is essential to note that this chapter explores the concept of operational thought, encompassing, but not limited to, operational art and the operational level of war. The primary focus is on the history of thought, not on the history of action.¹ Another way to consider this is that the examination looks at those individuals or thought collectives that devised, or were involved in, the conceptualization of operational art or the operational level within their historical period.

Origins of Operational Thought

By the middle of the 19th Century, a number of factors related to the Industrial Revolution and its impact on war and armed conflict created conditions that favored the development of operations distinct from, yet complementary to, strategy and tactics. The scale of war expanded dramatically as governments mobilized their entire populations, resulting in mass armies that required new methods of planning and directing large forces, as well as increasing the geographical scope of 19th Century warfare. In addition, ever increasing firepower expanded the range and lethality of battles and engagements.² Notably, challenges concerning control of forces and the growing effect of firepower highlighted tactical limitations.³

Mass and firepower seriously challenged the idea of a single-point strategy, the creation of one grand Napoleonic battle that was supposed to decide a war.⁴ The strategy

¹ J.G.A. Pocock, *Political Thought and History: Essays on Theory and Method* (Cambridge: Cambridge University Press, 2009), 13.

² Milan N. Vego, *Operational Warfare*, 2; Bruce W. Menning, "Operational Art's Origins," 4-5 and Thomas Bruscino, "The Theory of Operational Art and Unified Land Operations" (School of Advanced Military Studies Theoretical Paper, U.S. Army Command and General Staff College, 2012), 11.

³ Denis E. Showalter, "Prussian-German Operational Art," 39.

⁴ Bruce W. Menning, "Operational Art's Origins," 5.

of a single point is, and was, the concentration of one's forces in time and space for one distinct battle. Firepower alone was unable to achieve a decisive outcome; therefore, what was required was decisive action through physical shock action. Since the range of human vision exceeded that of small arms and artillery, military forces were able to execute their preliminary deployment on the actual battlefield before entering combat.⁵

To counter this, attackers abandoned tightly massed formations for dispersed skirmish tactics, while defenders made greater use of entrenchments.⁶ This occurred because the range of weaponry now equalled the range of vision. Combat was now initiated from the line of march; preliminary deployment occurred before stepping onto the actual battlefield.⁷ This resulted in two things happening. This led to the lateral distribution of forces, which, in turn, required synchronization to be most effective. At the same time, depth also increased. Both reactions caused a considerable broadening and deepening of the battlefield.⁸

James Schneider, professor of military theory, identifies eight attributes or conditions that enabled operational art after the middle of the 19th Century. First, is distributed operations characterized by dispersed battles conducted across time and space, linked through a common aim. The distribution over time and space was a reaction to weapons lethality. Secondly, the distributed operations are integrated by a single campaign plan that uses successive and simultaneous battles to achieve strategic objectives.⁹ Thirdly, large modern industrial armies relying on the mass of fires to enable maneuver required continuous logistics to remain militarily effective, logistics had to be able to support successive movement. Central to this in the 19th Century was the railroad.¹⁰ The railroad also enabled rapid concentration in theater and permitted assembly of military forces from diverse points on a large scale.¹¹ The telegraph made logistic support of mass armies more efficient and more effective as requirements could be known and acted on more quickly. Fourthly, instant long-range communication like the telegraph also enabled larger more dispersed forces to act simultaneously, reinforcing broadly and deeply dispersed battles.¹²

⁵ Georgii Samoilovich Isserson, *The Evolution of Operational Art*, 15.

⁶ James J. Schneider, "Vulcan's Anvil," 7-9.

⁷ Georgii Samoilovich Isserson, *The Evolution of Operational Art*, 19-20.

⁸ James J. Schneider, "The Loose Marble," 87-88; James J. Schneider, "Vulcan's Anvil," 28-29 and Isserson, *Evolution*, 18-20.

⁹ Schneider, "Vulcan," 35-37 and 59 and James J. Schneider, *The Structure of Strategic Revolution Total War and the Roots of the Soviet Warfare State* (Novato, CA: Presidio Press, 1994), 35-39.

¹⁰ Schneider, "Vulcan," 42 and 59 and Schneider, *The Structure of Strategic Revolution*, 39-43.

¹¹ Georgii Samoilovich Isserson, *The Evolution of Operational Art*, 18; Milan N. Vego, *Operational Warfare*, 2; Bruce W. Menning, "Operational Art's Origins," 4-5 and Thomas Bruscino, "The Theory of Operational Art and Unified Land Operations", 11.

¹² James J. Schneider, "Vulcan's Anvil," 49 and 60; James J. Schneider, *The Structure of Strategic Revolution*, 43-46; Milan N. Vego, *Operational Warfare*, 2; Bruce W. Menning, "Operational Art's Origins," 4-5 and Thomas Bruscino, "The Theory of Operational Art," 11.

Fifthly, the continuous logistics made possible by the railroad and the telegraph supported durable formations capable of conducting dispersed sequential battles. Continuous logistics allowed formations to operate almost indefinitely as long as the resources existed to sustain them. The lack of such a capability meant earlier armies had to aim to fight a single decisive battle as they would be logistically exhausted after the first major battle.¹³ Operational vision is the sixth condition or attribute. Those practicing operational art required “a unified and holistic approach in design, execution and sustainment of their campaigns.”¹⁴

The seventh attribute or condition is that the enemy must be operationally similar to one’s own army or operational art is difficult at best, or impossible at worst.¹⁵ An example of failure to practice operational art is the Vietnam War, while the 1991 Gulf War is an example of successful practice of operational art.¹⁶ That said, based on more recent thinking and practice, the idea of operational art has evolved so that this may no longer holds true. This will be examined further in Chapters Six and Seven. The final condition is more about the environment in which operational art takes place, rather than an attribute or condition of operational art itself, and that is a state having the capacity to wage war. This includes having the necessary natural and human resources, production capacity, transportation infrastructure and leadership to wage war on an operational scale. It needs to have the capacity to strategically sustain the war.¹⁷

For operational art to thrive conditions must be such that conduct of military operations are more effective if they are dispersed in breadth and depth due to the lethality of the battlespace. Logistical capability needs to be able to sustain both simultaneous and sequential operations. Military forces in turn need to be such that they can leverage this logistical capability, and be capable of conducting simultaneous and sequential operations. The broader and deeper instantaneous communications capability is pushed, the better coordinated, and therefore the more effective, simultaneous, and sequential operations are likely to be. Finally, military leadership must be able to visualize simultaneous and sequential operations across the depth and breadth of the battlespace.

Operational art was therefore based on the middle 19th Century requirement to distribute mass armies in the theater of operations as opposed to the late 18th and early 19th centuries, which focused on concentrating forces for a single decisive battle.¹⁸ At the beginning of the 19th Century, Napoleon did not organize his forces for battle prior to their approach march as he was able to stop short of his military objective, and adjust his combat formation before actually entering combat. Grant and von Moltke, on the other hand, had to possess the “perspective and foresight” to organize their forces for battle

¹³ Schneider, “Vulcan,” 50-53 and 59-60 and Schneider, *Structure*, 46-48.

¹⁴ Schneider, “Vulcan,” 53 and 60 and James J. Schneider, *Structure*, 48-50.

¹⁵ Schneider, “Vulcan,” 56-57 and 60.

¹⁶ James J. Schneider, *The Structure of Strategic Revolution*, 50-51.

¹⁷ James J. Schneider, “Vulcan’s Anvil,” 57-58 and 60-61 and Schneider, *Structure*, 51.

¹⁸ Schneider, “Vulcan,” 21.

prior to stepping onto the actual battlefield, while integrating successive and, more importantly, simultaneous operations into an operational whole.¹⁹

Napoleon

One of the earliest practitioners of operational art, it is argued, was Napoleon at the beginning of the 19th Century.²⁰ Much of this contention, however, is based on Napoleon's practice rather than a unique idea or concept of operational art. The arguments are therefore based on a history of action rather than a history of thought. There is no actual evidence that Napoleon had a clear conception of an area of conflict between strategy and tactics.²¹ This argument is supported by those who were involved in the Napoleonic Wars and frequently cited Napoleonic examples in their writings on war and its conduct. Most notably, Antoine Henri de Jomini and Carl von Clausewitz do not mention an area of conflict between strategy and tactics. Jomini used the term "grand tactics," however, for Jomini, this is maneuvering on the battlefield, forming up for the attack, "and the art of fighting upon the ground."²² Clausewitz addresses strategy in considerable detail, but much of his work examines the tactical conduct of war without mention of anything like operational art or even Jomini's idea of "grand tactics."²³

Napoleon's strategy aimed to seek and achieve a decisive battle, which was central to how Napoleon waged war.²⁴ Napoleon employed a strategy of a single point, focusing on a single grand battle that would decide a war through the concentration of force in time and space for a single decisive battle. The empty battlefield, devoid of tightly massed formations but characterized by dispersed skirmish tactics and entrenched defenders, did not exist. Napoleon could arrange his army regardless of the future battle he would face, as he could adjust it before entering combat; his army, therefore, only had to synchronize action within itself. This is because the range of human vision exceeded the range of small arms and artillery, which permitted preliminary deployment on the actual battlefield before forces entered combat. Napoleon's warfare focused on concentrating forces for a single decisive battle.²⁵

¹⁹ James J. Schneider, "The Loose Marble," 87-88 and Georgii Samoilovich Isserson, *The Evolution of Operational Art*, 21-22.

²⁰ John Andreas Olsen and Martin van Creveld, eds., *The Evolution of Operational Art: From Napoleon to the Present* (Oxford: Oxford University Press, 2011), 1; Robert M. Epstein, *Napoleon's Last Victory and the Emergence of Modern War*, 5; and 14-15 and Martin van Creveld, "Napoleon and the Dawn of Operational Warfare," in *The Evolution of Operational Art: From Napoleon to the Present* edited by John Andreas Olsen and Martin van Creveld (Oxford: Oxford University Press, 2011), 15-32.

²¹ David G. Chandler, "Napoleon, Operational Art, and the Jena Campaign," 27.

²² Baron Antoine Henri de Jomini, *The Art of War*, , 69.

²³ Carl von Clausewitz, *On War* (1976), 225 and Carl von Clausewitz, *On War* (1943), 171.

²⁴ Gunther E. Rothenberg, *The Art of Warfare in the Age of Napoleon*, 147-49 and David G. Chandler, *The Art of Warfare on Land* (London: Penguin Books, 2000), 161.

²⁵ Georgii Samoilovich Isserson, *The Evolution of Operational Art*, 15-16; Bruce W. Menning, "Operational Art's Origins," 4-5; and James J. Schneider, "The Loose Marble," 86-87.

Napoleon also integrated political and military functions, having little use for separate levels of war. As the Emperor, he was the head of state responsible for making the political decisions regarding conflict and determining its political objectives. He was also the Commander-in-Chief of the armed forces, determining the military's strategic aims and objectives, the method of war, and the means to be employed. As the Commander of the Grande Armée, he determined the tactics that would be used to win in battle.²⁶ Napoleon did not allow divisions and corps to act independently; instead, he converged them on a single point of his choosing in a classical manner.²⁷ Napoleon's subordinate commanders were rarely permitted to use their initiative. When subordinate commanders did freely interpret their orders, the results were "rampant indecision, rivalry, indiscipline and failure."²⁸ Napoleon had his own personal style of command, and it was highly centralized.²⁹ This is perhaps nowhere better illustrated than in the Battle of Waterloo, where Napoleon, seeking to become Emperor of France again, was the superior tactical commander facing off against the Duke of Wellington. Napoleon had made his political decision to return to France in an attempt to seize power, and he would achieve this through the strategy of a single point, or single-point strategy: the single grand battle at Waterloo, which would decide the war by concentrating force in time and space for the single decisive battle.

American Civil War

Turning specifically to the United States, an argument can be made that operational art was practiced during the American Civil War, particularly during the war's later stages.³⁰ There is no evidence, however, that there was a unique idea or concept of operational art upon which that practice could have been based. Again, the arguments are based on a history of action rather than a demonstrable history of articulated operational thought. There is no firm evidence that either side during the American Civil War had a concept of what operational warfare, something different than and between strategy and tactics, was or could be.³¹ In some cases, it is acknowledged that the argument is based on a history of action rather than a history of thought, using a modern definition of operational art as the framework for making a case for the practice of operational art during the American Civil War.³²

Military doctrine, the formalization of military thought, was primarily focused on what is today referred to as the tactical level. Formal military doctrine at the time was

²⁶ Gunther E. Rothenberg, *The Art of Warfare*, 129; Robert M. Epstein, *Napoleon's Last Victory*, 24; and David G. Chandler, "Napoleon, Operational Art, and the Jena Campaign," 28.

²⁷ James J. Schneider, "The Loose Marble," 89-90 and James J. Schneider, "Vulcan's Anvil," 22-23.

²⁸ David G. Chandler, "Napoleon, Operational Art, and the Jena Campaign," 28.

²⁹ Gunther E. Rothenberg, *The Art of Warfare*, 89.

³⁰ Michael R. Matheny, *Carrying the War to the Enemy*, 10-11 and James J. Schneider, "Vulcan's Anvil," 16-17, 20-22 and 39.

³¹ Arthur V. Grant, "Operational Art and the Gettysburg Campaign," 350 and James J. Schneider, "The Loose Marble," 90.

³² Michael R. Matheny, *Carrying the War to the Enemy*, xviii and 272.

quite limited. The primary doctrinal publication for the U.S. Army at the time was *Rifle and Light Infantry Tactics for the Exercise and Maneuvers of troops when acting as light infantry or riflemen*, approved 29 March 1855. This manual was replaced in the Union Army on 11 August 1862 by *Infantry Tactics*, which the Confederates also used.³³ But there was no doctrine addressing the strategic level, let alone the operational level or operational art. *Elements of Military Art and Science*, written by Henry Wager Halleck, who became General-in-Chief of the United States Army during the Civil War, was published in 1846 and was used as a textbook at the U.S. Military Academy. The work was heavily influenced by Jomini's *Art of War*, which in turn became a textbook at the U.S. Military Academy in 1862.³⁴

The practice of operational art during the American Civil War is most apparent toward the end of the war, starting in the spring of 1864 with Lieutenant General Grant's campaign against General Lee. Grant's campaign plan was based on two forces and illustrates the breadth and depth of operational maneuver by the Union during the Civil War. In the east, Major General Meade would attack the Army of Northern Virginia, Major General Butler would advance on the Confederate capital of Richmond, and Major General Sigel would secure the Shenandoah Valley and its vital resources, all to bring General Lee to battle. In the West, Major General Sherman would attack Brigadier Joseph E. Johnston's army and then target the Confederate war-making economy. In support of Sherman was Major General Banks, who would seize Mobile, Alabama, then advance towards Georgia. Five separate forces with five separate missions that supported an intermediate objective of defeating the Confederate Army to achieve the final objective of the military defeat of the Confederate States.³⁵

Due to the depth and breadth of the battlespace during the American Civil War, commanders had to be able to visualize simultaneous and sequential operations across both time and space. James Schneider describes this as the "ability to render incomplete and ambiguous information into a meaningful impression of the true state of affairs in their theater of operations."³⁶ Major General J.F.C. Fuller, British military theorist and historian, argues in his book *Grant and Lee: A Study in Personality and Generalship*, that Grant had the characteristics of mind necessary for operational vision:

It was not through knowledge gained from books but through the gift of historic imagination in part that he was enabled to see the true character of the greater conflict in which he was engaged, its relation to the past and its bearing on the future; that enables him to take in at a glance the whole field of the war, to form a correct opinion of every suggested and possible strategic campaign, their logical

³³ Walter E. Kretchik, *U.S. Army Doctrine*, 67-81.

³⁴ Michael R. Matheny, *Carrying the War to the Enemy*., 10.

³⁵ Allan R. Millett, Peter Maslowski and William B. Feis, *For the Common Defense: A Military History of the United States from 1607 to 2012* (New York: Free Press, 2012), 208; Timothy H. Donovan, Jr., Roy K. Flint, Arthur V. Grant, Jr. and Gerald P. Stadler, *The West Point Military History Series: The American Civil War* (Wayne, NJ: Avery Publishing Group, Inc., 1987), 196-197 and Richard W. Stewart, ed., *American Military History Volume I*, 285-286.

³⁶ James J. Schneider, "Vulcan's Anvil," 53.

order and sequence, their relative value and the interdependence of one upon another;....³⁷

Archer Jones, military historian, supports this view of Grant. He argues Grant could “see interrelationships, make valid inductions and identify critical variables.”³⁸

Operational art, the pursuit of a strategic objective using military force arranged over time and space in battle, was practiced by Lieutenant General Ulysses S. Grant during the American Civil War, particularly during their 1864 and 1865 campaigns. There is, however, no evidence that there was a unique idea or concept of operational art upon which that practice could have been based. With the end of the Civil War, lessons identified regarding the maneuvering and command of large armies were lost for a number of reasons. First, the Army shrank rapidly after the war, and the large formations that had been used to practice operational art disappeared. Second, there was no formal synthesis of what had happened during the war, immediately after it had ended. Related to that, there was no military body responsible for ensuring that it happened.³⁹

Prussia

Although operational art was first practiced during the American Civil War, the first concrete evidence of an operational paradigm between tactics and strategy occurred in Prussia in the 1860s. The Franco-Prussian War, like the American Civil War, demonstrated a concept of operations distinct from, yet between, strategy and tactics, which focused on coordinating tactical efforts in support of strategy. Rather than an extensive written doctrine, however, unity of thought was created through the German military education system, primarily at the *Kriegsakademie* and the General Staff. Under Field Marshal Helmuth Graf von Moltke, Chief of the General Staff for Prussia, then Germany, the training and education of the General Staff was done primarily through General Staff rides of previous military campaigns, to develop a tactical and operational understanding of the time and space of the battlefield and the theater of operations. Their training and education were based on an understanding of military history rather than a body of formal written doctrine. The study of military history was also used to educate officers at the *Kriegsakademie* in the application of strategy, operations and tactics. Based on this study, military history students were expected to be able to find solutions to military problems.⁴⁰

Moltke, in his “Essay on Strategy” (1871), addressed how operations could achieve strategic objectives;⁴¹ he viewed operations as a means by which strategy could

³⁷ Major General J.F.C. Fuller, *Grant and Lee: A Study in Personality and Generalship* (Bloomington, IN: Indiana University Press, 1982), 245-246.

³⁸ Archer Jones, *Civil War Command & Strategy: The Process of Victory and Defeat* (New York: Simon & Schuster Inc., 1992), 229.

³⁹ Michael R. Matheny, *Carrying the War to the Enemy*, 11-12 and James J. Schneider, *The Structure of Strategic Revolution*, 168-169.

⁴⁰ Gerhard P. Gross, *The Myth and Reality of German Warfare: Operational Thinking From Moltke the Elder to Heusinger* (Lexington: University Press of Kentucky, 2016), 43-45.

⁴¹ Michael D. Krause, “Moltke and the Origins of the Operational Level of War,” 134.

be achieved through the use of military means.⁴² He believed that the “operational objective” would be achieved tactically, thereby serving “the ends of strategy.” The operational objective was the enemy’s army because its defeat would accomplish the purpose of the war.⁴³ In volume four of his work, Moltke further elaborated on the role operations played between the tactics of battle and the strategy of war. Chapter Four of the work, consisting of 46 pages, is about the “Operation Plan – War Objective and Operation Objective.”⁴⁴ He was therefore among the first to recognize the need for something between strategy and tactics, introducing terms such as “operational direction” to distinguish activities at this intermediate level.⁴⁵ He was the first to use the term *operativ* or “operational” on a routine basis. He used the term “operations” frequently, most often when describing troop movements to combine forces and set the conditions for a decisive battle.⁴⁶ Moltke employed the concept of operations, distinct from strategy and tactics, when addressing the achievement of the campaign objective.⁴⁷

To make this happen, Moltke would first define a clear objective for the campaign, separate but linked to the strategic objective, supported by tactical aims. Next, operational decisions were made based on the campaign objective, rather than those of the strategic or tactical goals. Finally, the course of the war between strategy and tactics was shaped through the movement of large bodies of troops and their deployment into battle.⁴⁸ Unlike Napoleon, who sought to combine his forces before the tactical battle for one decisive tactical fight, Moltke sought to combine his forces at the point of battle, simultaneously attacking the enemy’s front and flanks.⁴⁹ Thus, Moltke coordinated his efforts operationally rather than using strategy to set the conditions for tactical effort. During the Franco-Prussian War, Helmuth von Moltke implemented this idea by making decisions based on operational goals in support of the campaign objective, primarily determining the location for assembling the army and devising the best approach to contact the French Army.⁵⁰

⁴² Daniel J. Hughes, ed., *Moltke On the Art of War Selected Writings* (Novato, CA: Presidio Press, 1993), 45; Helmuth von Moltke, *Moltkes Militärische Werke*, vol. 2, part 2, *Die Thätigkeit als Chefs des Generalstabes der Armee in Frieden* (Berlin: The Great General Staff, Department for War History I, 1900), 34-39; and Krause, “Moltke,” 131.

⁴³ Dennis E. Showalter, “Prussian-German Operational Art, 1740-1943,” 41 and Gerhard P. Gross, *The Myth and Reality of German Warfare*, 40.

⁴⁴ Helmuth von Moltke, *Moltkes Militärische Werke*, vol. 4, *Die Thätigkeit als Chefs des Generalstabes der Armee in Frieden*, 70.

⁴⁵ Michael D. Krause, “Moltke and the Origins of the Operational Level of War,” 114.

⁴⁶ John English, “The Operational Art: Developments in the Theories of War,” 8 and Gerhard P. Gross, *The Myth and Reality of German Warfare*, 28.

⁴⁷ Bradley J. Meyer, “The Operational Art: The Elder Moltke’s Campaign Plan for the Franco-Prussian War,” in *The Operational Art: Developments in the Theories of War* edited by B.J.C. McKercher and Michael A. Hennessy (Westport, CT: Praeger Publishers, 1996), 45.

⁴⁸ Meyer, “Operational Art,” 29.

⁴⁹ Rudolf von Caemmerer, *The Development of Strategical Science During the 19th Century*, translated by Karl von Donat (London: Hugh Rees, Ltd., 1905), 198 and 240.

⁵⁰ Bradley J. Meyer, “The Operational Art,” 44.

Moltke recognized that the execution of operations would enable tactical advantage to unhinge the strength of the tactical defensive, creating an opportunity for offensive exploitation. The Prussians had determined that strategy and tactics were stronger in the defensive; it was the zone in between that would be able to force the offensive. Without operations or if operations turned from the offence to the defence, war would devolve into a tactical defensive. With large mass industrial armies, this would lead to deadlock, as the World War One was to demonstrate.⁵¹

Moltke understood that improving weapons technology of the period was making it much easier to defend at the tactical level than to attack. Improvements in the effective range of weapons meant that operational envelopment had to swing wider and wider to threaten the enemy's operational lines of communications to get him to abandon his defensive positions. When attacking, it was best to spread out as much as possible by targeting both the enemy's front and flank simultaneously, resulting in two separate but coordinated approaches. Moltke, therefore, was well aware of the need to disperse his forces across the depth and breadth of the area of battle. He viewed keeping one's forces concentrated for any length of time as risky. Instead, it was preferable to use several smaller forces advancing separately and then concentrating them at the right time and place.⁵²

Moltke comprehended as early as the 1850s that railroads would enable the continuous sustainment of widely dispersed military forces and would ease the burden on more traditional forms of transport, allowing them to be repurposed, often augmenting logistical support further forward. His logistical capacity was such that he was able to deploy three armies on different axes of advance.⁵³ Moltke utilized the telegraph to enhance his strategic flexibility by providing operational direction to his subordinates, thereby reducing the scope of time and space simultaneously.⁵⁴ Moltke viewed military strategy as the "conduct of operations under the pressure of circumstance."⁵⁵ The effective implementation of military strategy was based on the adaptability of operational execution. The conduct of operations was the way of achieving strategic goals or ends through the use of military means.⁵⁶

The Soviet Union

It was the Soviets who first clearly articulated the concept of an operational link between strategy and tactics. Although formally introduced in 1926, it built upon Russian Army ideas from before World War One. Lieutenant Colonel Aleksandr Aleksandrovich Neznamov first used the term operation (*operatsiya*) in a lecture in 1909, following the

⁵¹ Michael D. Krause, "Moltke and the Origins of the Operational Level of War," 139-40.

⁵² Rudolf von Caemmerer, *The Development of Strategical Science*, 304-305; and Bradley J. Meyer, "The Operational Art," 35-42.

⁵³ von Caemmerer, *Strategical Science*, 197 and Meyer, "Operational Art, 35-36.

⁵⁴ Michael D. Krause, "Moltke and the Origins of the Operational Level of War," 145.

⁵⁵ Daniel J. Hughes, ed., *Moltke On the Art of War Selected Writings*, 47 and Krause, "Moltke," 134.

⁵⁶ Krause, "Moltke," 138-139.

Russo-Japanese War. He used it “to describe the linking together of maneuver and combat into a series of “individual bounds of the attacker forward and the defender backward.”⁵⁷ The term “operational art” was first used by General-Major Alexander Andreevich Svechin of the General Staff Academy and Frunze Academy of the Workers’ and Peasants’ Red Army (RKKA) in his book *Strategy* (1926). He described “operational art” (*operativnoe iskusstvo*) as a level of military art between tactics and strategy that linked tactical successes through the commander’s plan and intent into operational “bounds” leading to strategic success.⁵⁸ He viewed operational art as a new and distinct theory that perceived tactics as providing “the “steps” for operational “leaps” along a path determined by strategy.”⁵⁹

Svechin considered attrition to be the preferred strategy for the mass peasant-based army of the Soviet Union, and annihilation a risky strategy, as it relied on a single decisive battle that might not defeat the enemy completely.⁶⁰ His primary critic was Marshal Mikhail N. Tukhachevsky, Soviet military mechanization theorist, who argued that overwhelming mass in a battle or battles of annihilation would ensure victory.⁶¹ In 1923, Tukhachevsky wrote that the destruction of the enemy army, rather than its disruption, was the primary aim of war. Consequently, the operational goal was to destroy enemy communications and forces.⁶² Furthermore, Nikolai E. Varfolomeev, Deputy Head of the Department of Strategy at the RKKA, identified two main factors that needed to be addressed to achieve operational annihilation. First, a breakthrough was required, followed by a pursuit, to destroy the enemy throughout its depth. This would require “successive deep operations” that were linked and focused on the strategic objective. Second, successive operations would risk exhausting the forces involved. Therefore, effective logistics and logistic planning would be vital to achieve the full potential offered by deep operations.⁶³ Throughout the early 1930s, studies were published that analyzed the significant campaigns of World War One and the Russian Civil War, leading to the identification of a logic at the operational level and further detailing its nature. Varfolomeev argued that battle is the means of operations and therefore “tactics are the material of operational art.” In turn, “the operation is the means of strategy, and operational art is the material of strategy.”⁶⁴

⁵⁷ Bruce W. Menning, “The Imperial Russian Legacy,” 206-07 and Jacob Kipp, “Two Views of Warsaw,” 65.

⁵⁸ Aleksandr A. Svechin, *Strategy*, 269.

⁵⁹ Svechin, *Strategy*, 69.

⁶⁰ Svechin, *Strategy*, 68-69, 96-99 and 246-250; Jacob Kipp, “Two Views of Warsaw,” 67 and Jacob W. Kipp, “The Origins of Soviet Operational Art 1917-1936,” 234.

⁶¹ Jacob Kipp, “Two Views of Warsaw,” 53 and 78 and Kipp, “The Origins of Soviet Operational Art 1917-1936,” 234.

⁶² Kipp, “Warsaw,” 53.

⁶³ Jacob W. Kipp, “The Origins of Soviet Operational Art 1917-1936,” 231.

⁶⁴ Shimon Naveh, *In Pursuit of Military Excellence*, 182.

Part of Soviet operational art was the concept of deep operations.⁶⁵ These operations were designed to attack the enemy's depth simultaneously as Soviet forces penetrated the enemy's frontline defensive positions, enabling the encirclement of enemy forces and ultimately leading to their destruction. Deep operations relied on the coordination and synchronization of effects from a range of combat capabilities, including, but not limited to, tanks, artillery (particularly long-range artillery), infantry, including airborne forces, and air power.⁶⁶ The idea of deep operations has strong linkages to the attritionist school of thinking rather than the annihilationist school of thought. Tukhachevsky argued in favor of annihilation, while Svechin contended that the Soviet military was not capable of executing an offensive strategy of annihilation; instead, it should employ a strategy of defensive exhaustion, wearing down the enemy through a war of attrition.⁶⁷ Deep operations are intended to grind the enemy down through several simultaneous and sequential blows along the enemy's depth, leading to operational shock (*udar*) rather than focusing on the enemy's destruction. This operational shock is achieved by coordinating attrition through fire and maneuver, resulting in shock to the enemy's front caused by the close battle of forces directly engaged, as well as simultaneously to forces in depth.⁶⁸

Operational art and deep operations were formalized in 1936 with the publication and issuance of *Temporary Field Regulation-36 (PU-36)* by the Red Army. It pushed Tukachevsky's annihilationist approach to strategy and operations, focusing on the enemy's defeat through their destruction. The most essential element for enabling this was firepower.⁶⁹ It paid particular attention to surprise as the key to setting the necessary conditions for operational success, as it would cause enemy paralysis through secrecy based on camouflage and speed. The enemy defences were to be breached by a series of combined arms attacks, followed immediately by attacks in depth, which would lead to the enemy's encirclement and destruction.⁷⁰ Enemy reserves would be destroyed in meeting engagements, or clashes of opportunity, as they attempted to support the forward defences, ultimately and ideally leading to Soviet encirclement of enemy forces.⁷¹ The

⁶⁵ V.K. Triandafillov, *The Nature of the Operations of Modern Armies*, 150-151; Georgii Samoilovich Isserson, *The Evolution of Operational Art*, 47-48; Naveh, *In Pursuit of Military Excellence*, 187-191; and Colonel David M. Glantz, "Soviet Operational Art and Tactics in the 1930s" (Paper, Soviet Army Studies Office, Combined Arms Center, Fort Leavenworth, 1990), 12.

⁶⁶ David M. Glantz, *Soviet Military Operational Art in Pursuit of Deep Battle* (Abingdon: Routledge, 2021), 24-25.

⁶⁷ James J. Schneider, *The Structure of Strategic Revolution*, 177.

⁶⁸ Shimon Naveh, *In Pursuit of Military Excellence*, 184-85.

⁶⁹ Joint Publications Research Service, *USSR Report Military Affairs Provisional Field Regulations of the RKKA 1936*, edited and translated by the Joint Publications Research Service (Springfield, VA: National Technical Information Service, 1986), 2 and 7.

⁷⁰ Joint Publications Research Service, *USSR*, 2, 32 and 52-53.

⁷¹ Jacob W. Kipp, "The Tsarist and Soviet Operational Art, 1853-1991," in *The Evolution of Operational Art From Napoleon to the Present*, edited by John Andreas Olsen and Martin van Creveld (Oxford: Oxford University Press, 2011), 73; Dr. Jacob W. Kipp, "Mass, Mobility, and the Red Army's Road to Operational Art, 1918-1936" (Paper, Soviet Army Studies Office,

implementation of *Temporary Field Regulation-36 (PU-36)* by the Red Army, however, suffered a severe setback due to Stalin's purges of the Red Army between 1937 and 1938.⁷² These purges removed most of the Red Army's senior leadership as well as many of its most influential and innovative thinkers.⁷³

Germany

Unlike the Soviets, the Germans after World War One did not develop a conceptualization of operational art. They retained the concept of operations as a middle ground between strategy and tactics. The Germans certainly faced challenges during the interwar period in terms of developing a formal doctrine. The Treaty of Versailles left Germany with a small army of 100,000 men (of which no more than 4,000 could be officers), posing at best a limited threat to the states facing them. As such, it would be difficult for Germany to develop military concepts regarding the employment of the military that would have any reasonable probability of success. Perhaps more importantly, both the German General Staff and the War Academy had been abolished. Thus, the former, which would have developed and drafted doctrine, no longer existed, and the latter, which would train and educate officers in the use and development of doctrine, also no longer existed.⁷⁴ Despite these limitations, seven doctrinal publications were published and distributed across the German army between 1921 and 1923. Most notable was the new field service regulations *Combined Arms Leadership and Battle (Führung und Gefecht der verbundenen Waffen)*, which outlined and provided guidance for combined arms tactics in the German army. This was complemented by the six other publications addressing the tactical doctrinal needs of the artillery, engineers, signalers and infantry, the latter further complemented by doctrinal manuals on rifle section and

Combined Arms Center, Fort Leavenworth, 1987), 24; and Joint Publications Research Service, *USSR Report Military Affairs*, 52-53.

⁷² The purge effectively started 22 May 1937 with the arrest of Tukhachevsky and a number of other senior officers. One explanation for the purge is that Stalin wanted to increase his control over both the party and the state. Another explanation is that there was a genuine concern that foreign-backed enemies of the state had infiltrated the Soviet Army. Regardless, only nine days after the trial of the main 'ring leaders', over 980 senior officers had been arrested. By September 1938 all eleven Deputy Commissars for Defense and every commander of a military district had been executed. In addition, 220 of 406 brigade commanders, 110 of 195 divisional commanders, 57 of 85 corps commanders and 13 of 15 army commander had been executed. Peter Whitewood, "The Purge of the Red Army and the Soviet Mass Operations, 1937-38," *Slavonic and East European Review* 93, no. 2 (April 2015): 292-293 and 305-307 and Alan Clark, *Barbarossa: The Russian-German Conflict 1941-45* (New York: William Morrow and Company, Inc., 1985), 34.

⁷³ Robert M. Citino, *Blitzkrieg to Desert Storm*, 78-79.

⁷⁴ Citino, *Blitzkrieg to Desert Storm*, 33. A disguised German General Staff continued to function despite the terms of the Treaty of Versailles. Robert M. Citino, *The Path to Blitzkrieg: Doctrine and Training in the German Army, 1920-39* (Mechanicsburg, PA: Stackpole Books, 2008), 43.

machine gun group training.⁷⁵ All of this doctrine, however, was focused on the tactical level.

Shimon Naveh argues in his book *In Pursuit of Military Excellence: The Evolution of Operational Theory*, that the German military before World War Two did not have a coherent theory regarding the conduct of operations situated between the strategic and tactical levels. Instead, their discussions and publications focused on the impact of technology on the conduct of war, specifically at the tactical level. He also argues that *Regulation 300, Truppenführung*, emphasized tactical maneuver and tactical command to the greater detriment of operational concepts. This tactical focus was reinforced at the War Academy, which concentrated officer training and education at the tactical level rather than at the strategic and operational levels.⁷⁶

That said, German Army *Regulation 300, Truppenführung* (1933), focused on the tactical matters but also touched on the operational aspects.⁷⁷ It indeed identified operations as something separate from tactics, in keeping with the ideas put forward by Moltke in the 1860s and 1870s. In the chapter on “Command”, much of the advice presented in *Truppenführung* is neither specifically tactical nor operational, but it does, in places, speak to “operational and tactical engagements.”⁷⁸ It is the chapter on “Reconnaissance” where there is the most significant distinction between tactics and operations, with guidance on “operational reconnaissance (*operative Aufklärung*)” clearly articulated separately from “tactical reconnaissance (*taktische Aufklärung*).”⁷⁹ The chapter on the “Attack” specifically addresses “operational sectors” and how these “must extend far into the enemy’s depth.”⁸⁰ In *Truppenführung*, operations were distinct from tactics and were something other than strategy.

This is supported by Heinz Guderian in *Achtung-Panzer!*, when he differentiates between tactical reconnaissance and operational reconnaissance.⁸¹ He also addresses the linkage between tactical and operational. He argues that tanks need to be concentrated in large groups and then used independently, supported by other arms, and deployed in depth and breadth. He views the use of tanks in mass as more effective than dispersing them to support other arms, most notably the infantry. He goes so far as to say that large formations of tanks make it possible “to exploit tactical success into the operational dimension.”⁸²

⁷⁵ Citino, *The Path to Blitzkrieg*, 11-12.

⁷⁶ Shimon Naveh, *In Pursuit of Military Excellence*, 128. The Kriegsakademie was reestablished after October 1935. Citino, *The Path to Blitzkrieg*, 232.

⁷⁷ Bruce Condell and David T. Zabecki, eds. *On the German Art of War: Truppenführung* (Boulder, CO: Lynne Rienner Publishers, Inc., 2001), x.

⁷⁸ Condell and Zabecki, *Truppenführung*, 22.

⁷⁹ Condell and Zabecki, *Truppenführung*, 39 and 44-45.

⁸⁰ Condell and Zabecki, *Truppenführung*, 92.

⁸¹ Heinz Guderian, *Achtung-Panzer: The Development of Tank Warfare*, translated by Christopher Duffy (London: Cassell Military Paperbacks, 1992), 144-147 and 163.

⁸² Guderian, *Achtung-Panzer*, 170.

German Colonel Walter Spammenkrebs, who wrote *Angriff mit Kampfwagen* (1939),⁸³ argued that tanks should be concentrated to take advantage of their speed, protection and firepower. This would allow them to conduct deep operations rather than being used to support the infantry with a much narrower scope for being decisive. He argued that the objective of massed tanks should be to quickly strike deep where the enemy was moving administratively, rather than being tactically focused on engaging enemy forces at the point of contact. The idea was to attack the enemy where they were vulnerable after breaking through their main defenses.⁸⁴ The tank, with its mobility, firepower, and protection, was able to penetrate defensive positions, especially when supported by engineers, artillery, and dive bombers, allowing it to conduct operational maneuvers if circumstances prohibited outflanking the enemy.

The operational concept that evolved in the German Army between World War One and World War Two built upon Moltke's ideas from the late 19th century. Moltke saw broad sweeping operational maneuvers as a means for overcoming the increasing strength of the tactical defense due to evolving weapons technology. By World War One, the tactical defense had become so strong, due to the machine gun and improvements in artillery, that sweeping operational maneuvers were no longer quick enough to outflank the enemy, leading to the deadlock of trench warfare. Central to the interwar German concept was the use of tanks that would bring mobility back to the battlefield, enabling geographically distant and separate forces to conduct a series of concentric assaults in an attempt to encircle the enemy and complete their destruction.⁸⁵ Key elements were mobility, initiative to seize tactical opportunities, envelopment of enemy forces and deep penetration. This supported the political and strategic necessities of rapid, decisive battles, resulting in quick wars while mitigating the technological advantages of the tactical defence.⁸⁶

The U.S. Army and Operational Thought – 1865 to 1975

1865 to 1945

After the Civil War, the U.S. Army returned to a constabulary role, and with that, all the large formations disappeared. At the end of the Civil War, in May 1865, the Union Army consisted of 1,034,064 volunteers, and by November 1866, only 11,043 remained in service. The main area of Army operations after the Civil War was on the American western frontier, where the Army attempted to enforce treaty compliance with several

⁸³ The Attack with Fighting Vehicles. Robert M. Citino, *Quest for Decisive Victory: From Stalemate to Blitzkrieg in Europe, 1899-1940* (Lawrence, KS: University Press of Kansas, 2002), 199.

⁸⁴ Citino, *Quest*, 199-201.

⁸⁵ Citino, *Quest*, 195.

⁸⁶ Denis E. Showalter, "Prussian-German Operational Art, 1740-1943," 50-51 and Matthew Cooper, *The German Army 1933-1945: Its Political and Military Failure* (Lanham, MD: Scarborough House, 1990), 132 and 136-7.

indigenous nations that had signed treaties with the U.S. government in 1865.⁸⁷ Between 1865 and 1898, the U.S. Army had 943 engagements against various indigenous nations, with only a few, most notably in 1876 and 1877, involving massed forces of up to 4,000 soldiers; most engagements were considerably smaller. The cavalry was preferred over the slower-moving infantry and artillery for countering skirmishes and pursuing the tactics resulting from the indigenous hit-and-run guerrilla activities.⁸⁸ As a result, the doctrinal focus of the U.S. Army from the end of the Civil War up to 1898 and even World War One was on tactics. By 1890, U.S. Army operations against the indigenous nations had pretty much come to an end.

There was little thought or introspection on military activities beyond the Army's tactical role in constabulary and counter-guerrilla operations. Up until the 20th century, the U.S. Army's keystone doctrine—the doctrine at the top of a doctrinal pyramid that influenced and shaped all others—was the *Infantry Drill Regulations*. The *1891 Infantry Drill Regulations* guided the use of the rifle and bayonet by the infantry, as well as collective tactics ranging from the squad to the corps level. At the company level and above, movement out of direct contact with the enemy was conducted in columns; the more columns, the bigger the formation.⁸⁹ In the defense, battalions created strong points using interconnected entrenchments, similar to those seen in World War One.⁹⁰

The most significant evolution in U.S. Army professional education before World War One were the reforms brought about by Secretary of War Elihu Root from 1899 to 1904. The initial purpose behind Root's reforms was to enable the U.S. Army to better manage its new colonial possessions that came under American governance as an outcome of the Spanish-American War of 1898. He soon came to realize that they were necessary to prepare the Army for the challenges that would come with America's increasing importance and influence in world affairs due to her growing economic and industrial potential.⁹¹ The creation of the Army War College, along with the definition of the role of the General Staff and Service College at Fort Leavenworth, was to focus on preparing officers to function as commanders and staff of large units or formations. The General Staff and Service College was renamed the Command and General Staff School in 1923, and in 1946 it became the Command and General Staff College.⁹² The War College and the Command and General Staff College, which focused on higher-level

⁸⁷ Allan R. Millett, Peter Maslowski and William B. Feis, *For the Common Defense*, 218 and 221-223.

⁸⁸ Russell F. Weigley, *History of the United States Army* (New York: Macmillan Publishing Co., Inc., 1967), 267-268.

⁸⁹ United States Army, *Infantry Drill Regulations United States Army 1891* (New York: D. Appleton and Company, 1898), 44 and 63.

⁹⁰ *Infantry Drill Regulations United States Army 1891*, 221-223.

⁹¹ Brian McAllister Linn, *The Echo of Battle: The Army's Way of War* (Cambridge, MA: Harvard University Press, 2007), 93 and Russell F. Weigley, *History of the United States Army*, 313-314.

⁹² Richard W. Stewart, ed., *American Military History Volume I*, 377 and Walter E. Kretchik, *U.S. Army Doctrine*, 109.

senior officer education, would go on to play a key role in the development of operational thought within the U.S. Army.

The *1904 Infantry Drill Regulations* differed little from either the 1891 or the 1895 *Infantry Drill Regulations*. In 1905, the *Field Service Regulations* replaced the *Infantry Drill Regulations*, introducing a more combined arms approach to military conflict.⁹³ Regardless of the change, doctrine continued to be tactically focused, and there remained no mention of a concept of operational art or an operational level of war. The 1905 edition of *Field Service Regulations* was followed by the 1910 edition, which was updated in 1913 and changed little from the 1905 edition. The 1914 edition of the *Field Service Regulations* used by the U.S. Army in World War One, went through eleven amendments by July 1918.⁹⁴ The 1918 edition of the *Field Service Regulations United States Army 1914*, defines neither strategy (strategical) nor tactics (tactical), and the term ‘operations’ is not used in the sense of military practice situated between strategy and tactics. The focus of U.S. Army practice during World War One, from the time it entered the war on 6 April 1917 to the war’s end, was on tactical proficiency at the divisional level.⁹⁵

During the 1920s and 1930s, several key texts were used at Leavenworth. The first, *Principles of Strategy, With Historical Illustrations*, includes a chapter entitled “Operations.”⁹⁶ This section of the book continues to define operations as the conduct of military activity and goes on to identify the campaign plan as determining the strategy objective.⁹⁷ The second text used at Leavenworth was the *Tactical and Strategical Studies Corps and Army* (1922). The introduction of the book makes it quite clear that the focus of the book is “on the tactical and strategical handling of corps and an army.”⁹⁸ The third text is *The Principles of Strategy for an Independent Corps or Army in a Theater of Operations* (1936), written by staff at the Command and General Staff School, where the text was developed based on the staff’s understanding of strategy.⁹⁹ A review of the text reveals that it is focused on strategy, while also touching on tactics and politics. The publication uses the word operations in several different ways, but often preceded by strategic, as in “strategic operations”, using the word operations synonymously with activities.

⁹³ United States Army, *Infantry Drill Regulations United States Army 1904* (Washington, D.C.: Government Printing Office, 1904), 5-7.

⁹⁴ *Field Service Regulations United States Army 1914* (1918), 1.

⁹⁵ Richard W. Stewart, ed., *American Military History Volume II*., 53, Michael R. Matheny, *Carrying the War to the Enemy*, 26-28 and Walter E. Kretchik, *U.S. Army Doctrine*, 130.

⁹⁶ William K. Naylor, *Principles of Strategy, With Historical Illustrations* (Fort Leavenworth, KS: The General Service Schools Press, 1921), 149.

⁹⁷ Naylor, *Principles*, 160.

⁹⁸ General Service Schools, *Tactical and Strategical Studies Corps and Army* (Fort Leavenworth, KS: The General Service Schools Press, 1922), iii.

⁹⁹ Michael R. Matheny, *Carrying the War to the Enemy*., 71 and Command and General Staff School, *The Principles of Strategy for an Independent Corps or Army in a Theater of Operations* (Fort Leavenworth, KS: The Command and General Staff School Press, 1936), 3.

Field Service Regulations United States Army 1923 was followed by the 1939 edition of *Tentative Field Service Regulations Operations FM 100-5*. Like earlier editions, the 1939 edition of *Tentative Field Service Regulations Operations FM 100-5* defines neither strategical (strategy), operations, nor tactical (tactics). In May 1941, just before the United States entered World War Two, this manual was replaced by the 1941 edition of *Field Service Regulations Operations FM 100-5*. There was again little substantive change from the previous edition. The 1941 edition was revised three times between its initial release and its replacement in 1944.¹⁰⁰ These alterations were based on lessons identified during World War Two. None of the editions published and used during World War Two defined strategy, operations or tactics.

World War Two to the Vietnam War

The U.S. Army's experience of World War Two did not seem to inspire the exploration or development of an operational level of war or a concept of operational art within its doctrine.¹⁰¹ The first post-World War Two edition of FM 100-5 was *Field Service Regulations Operations FM 100-5* issued on 15 August 1949. The foreword notably argues for flexibility in thought and the application of military knowledge; "Set rules and methods must be avoided. They limit imagination and initiative, which are so vital in the successful prosecution of war."¹⁰² Both imaginative thinking and initiative were essential elements of the U.S. Army concept of operational art when it was introduced in 1986 and as it continued to evolve.¹⁰³ Like previous editions, strategy, operations, and tactics remain undefined. The foreword, however, alludes to the introduction of atomic weapons, stating, "a weapon, whose deadliness dictates increased dispersion to reduce casualties," an indirect reference to atomic weapons.¹⁰⁴ It was the introduction of atomic and nuclear weapons that led to the idea that military strategy became subsumed by policy.

After World War Two the United States rapidly demobilized and reduced its conventional military strength to minimal levels, instead relying on the deterrence effect of its atomic attacks on Hiroshima and Nagasaki, combined with its post-war monopoly on atomic weapons.¹⁰⁵ In the United States, nuclear strategy dominated thinking regarding the possibility of war in the post-war world. In the mid-1950s, President Eisenhower directed the U.S. military to use all necessary means to defend the United States and protect American interests. This resulted in a strategy of massive retaliation.¹⁰⁶

¹⁰⁰ *Field Service Regulations Operations FM 100-5* (1944), Title Page.

¹⁰¹ Harold W. Nelson, "The Origins of Operational Art," in *Historical Perspectives of the Operational Art* edited by Michael D. Krause and R. Cody Phillips (Washington, D.C.: Center of Military History United States Army, 2005), 342.

¹⁰² *Field Service Regulations Operations FM 100-5* (1949), v.

¹⁰³ *FM 100-5 Operations* (1986), 10 and *ADRP 3-0 Unified Land Operations* (2012), 4-1.

¹⁰⁴ *Field Service Regulations Operations FM 100-5* (1949), v.

¹⁰⁵ Williamson A. Murray, "The Post-War World," in *The Cambridge History of Warfare*, edited by Geoffrey Parker (New York: Cambridge University Press, 2005), 364.

¹⁰⁶ Formally adopted by the Eisenhower Administration in 1954 as a means to reduce military spending and balance the federal budget. It was based on American nuclear superiority over the

By the 1960s, this approach had been replaced by the ‘flexible response’ adopted under Secretary of Defense Robert McNamara. Flexible response saw NATO containing any conventional Soviet attack into western Europe and, if unable to halt the Soviet advance using a “graduated nuclear response”, to convince the Soviets of American and NATO resolve to resort to nuclear war and thus have the Soviets halt their advance.¹⁰⁷ Into the mid-1980s, the United States Air Force was dominated by Strategic Air Command and was focused on nuclear war with the Soviet Union. The view was that if deterrence failed, the war would quickly become nuclear, and Strategic Air Command would be expected to hit the Soviets as hard as possible.¹⁰⁸ There was neither scope for operational art in a nuclear war, nor was there a need for an operational level of war, as all important decisions would be made at the political level and the war would be resolved in a few hours, or certainly no more than a couple of days.

Between the 1949 and 1954 editions of *Field Service Regulations Operations FM 100-5*, the Korean War took place. This conflict, however, had no impact on U.S. Army doctrine regarding the concept of an operational level of war or operational art.¹⁰⁹ It can be argued that older styles of warfare adequately addressed the military requirements of the Korean War. The 1954 edition of *Field Service Regulations, Operations FM 100-5*, remained in use until 1962 and underwent three significant changes. The 1954 edition of *Field Service Regulations Operations FM 100-5* reintroduced the link between politics and the use of military force. It was a first step in highlighting the relationship between politics, strategy, and war. This relationship would increase in significance in the 1962 rewrite and ultimately lead to the development of war levels, including the introduction of the operational level, in 1982. The manual reemphasized the offense, while recognizing the complexity of the defense, refocusing it in line with the offense, and presenting options for its execution. In “Section V. Conduct of the Defense,” the manual foreshadows the introduction of the controversial “active defense” construct, which was reintroduced in 1976 as the U.S. Army’s operational concept. Paragraph 295. c. states, “As the direction of the enemy’s main attack becomes apparent, troops are shifted or emplaced to meet the threat.”¹¹⁰ The reintroduction of active defense in 1976 triggered a doctrinal review that led to the introduction of the operational level in 1982 and operational art in 1986 by the U.S. Army.

The 1962 edition of *Field Service Regulations Operations FM 100-5* represented a significant philosophical shift and indicated a movement toward operational level

Soviets meaning America would need to rely on the threat of nuclear retaliation even for less threatening military threats. Michael J. Meese, Suzanne C. Nielsen and Rachel M Sondheimer, *American National Security*, 7th ed. (Baltimore: Johns Hopkins University Press, 2018), 60-63.

¹⁰⁷ Michael Carver, “Conventional Warfare in the Nuclear Age,” in *Makers of Modern Strategy from Machiavelli to the Nuclear Age*, edited by Peter Paret (Princeton, NJ: Princeton University Press, 1986), 782-786.

¹⁰⁸ Williamson A. Murray, “The Post-War World,” in *The Cambridge History of Warfare*, edited by Geoffrey Parker (New York: Cambridge University Press, 2005), 365.

¹⁰⁹ Antulio J. Echevarria II, “American Operational Art, 1917-2008,” 150-152 and Robert M. Citino, *Blitzkrieg to Desert Storm*, 148-151.

¹¹⁰ *Field Service Regulations Operations FM 100-5* (1954), 127.

thinking. The first chapter is titled “Strategy and Military Force,” including a “General” section that addresses “Terms,” “National Objectives,” “National Strategy,” “U.S. National Objectives and National Strategy,” and “Military Strategy.”¹¹¹ For the first time, the FM 100-5 described strategy. National Strategy is portrayed as “the sum of the national policies, plans, and programs designed to support the national interests”... it “is the long range plan through which a nation applies its strength toward the attainment of its objectives.”¹¹² Military Strategy is described as directing “the development and use of the military means which further national strategy through the direct or indirect application of military power.”¹¹³ In turn, military power is characterized as “that element of national strength which is designed to apply physical force in the implementation of national policy and in the attainment of national objectives.”¹¹⁴ The operative elements of military power are military forces, which “consist of men, weapons and other material formed into units capable of military operations.”¹¹⁵ Although the concept of strategy is well-defined in the 1962 edition of *Field Service Regulations Operations FM 100-5*, there remained no indication of a concept for operational thought or practice between strategy and tactics.

In 1968, the doctrine was updated with the 1968 edition of *Operations of Army Forces in the Field FM 100-5*. In many ways the 1968 manual changed little from the 1962 edition; the 1968 edition retained the definitions of “national objectives,” “national strategy,” and “military strategy.”¹¹⁶ It goes on to describe “the nature of military power” based on the characteristics of military forces and detailing the elements of American military power, also introduced in the 1962 edition.¹¹⁷ The 1968 edition of *Operations of Army Forces in the Field FM 100-5* defined military operations as “actions or the carrying out of strategic, tactical, service, training, or administrative military missions,” thus reinforcing its use as a synonym for military activity.¹¹⁸

The Vietnam War and Its Aftermath

Following the Vietnam War, the U.S. Army faced numerous problems and challenges. There were difficulties maintaining discipline. This was highlighted by much illegal drug use and addiction, as well as racial tensions that manifested in a number of race riots. These problems were exacerbated by poor leadership and reduced unit manpower, all resulting in low military effectiveness throughout the Army. Discipline problems, reduced professionalism and low morale fed off one another, making a bad situation worse. At the same time, the U.S. Army faced the challenges of transitioning to an all-volunteer force and the introduction of the Total Force, whereby the regular army

¹¹¹ *Field Service Regulations Operations FM 100-5* (1962), 3-4.

¹¹² *Field Service Regulations Operations FM 100-5* (1962), 3.

¹¹³ *Field Service Regulations Operations FM 100-5* (1962), 4.

¹¹⁴ *Field Service Regulations Operations FM 100-5* (1962), 6.

¹¹⁵ *Field Service Regulations Operations FM 100-5* (1962), 6.

¹¹⁶ *Operations of Army Forces in the Field FM 100-5* (1968), 1-1 to 1-2.

¹¹⁷ *Operations of Army Forces in the Field FM 100-5* (1968), 1-3 to 1-5.

¹¹⁸ *Operations of Army Forces in the Field FM 100-5* (1968), 1-1.

would rely on the Army Reserve and the National Guard to supplement deployed forces for any future missions.¹¹⁹

The task of rebuilding the army fell to General Creighton W. Abrams, Army Chief of Staff. He made three decisions that would have a direct impact on the revision of the 1968 edition of *Operations of Army Forces in the Field FM 100-5* and the role doctrine would play in the process of rebuilding the U.S. Army. The first decision was the creation of the Strategic Assessment Group, which would consider the global security environment which the U.S. Army would face in the future. The group was created in the spring of 1973, led by Colonel Edward Astarita, whom Abrams had chosen. The group produced a classified briefing that was briefed throughout the Department of Defense before the group fulfilled its mandate and was disbanded in the spring of 1974.¹²⁰ The main finding of the report was that for the United States, Western Europe had been, and more importantly, would continue to be, its primary strategic concern going forward. Furthermore, U.S. conventional forces would play a key role in assuring European allies of their importance to U.S. strategic security while alleviating their fears of nuclear war.¹²¹

Secondly, the implementation of Operation Steadfast in 1973 would reorganize the Army, focusing on the institutional operation or function of the Army itself, and how training would be organized and managed. The latter part, the organization and management of training, resulted in the creation of the Training and Doctrine Command (TRADOC), which would be responsible for all U.S. Army doctrine and, therefore, the revision of the 1968 edition of *Operations of Army Forces in the Field FM 100-5*.¹²² When General William E. DePuy arrived to take command of TRADOC, his initial focus was on combat development and training, not doctrine. This soon changed.¹²³

Thirdly, Abrams had DePuy oversee a study of the recently ended 1973 Middle East War. This study shaped the direction and form that U.S. Army doctrine would take for the 1976 edition of *FM 100-5 Operations*.¹²⁴ DePuy identified three major lessons from the 1973 Middle East War. First, modern weapons systems were considerably more

¹¹⁹ Richard W. Stewart, ed., *American Military History Volume II*, 373-381 and Richard Lock-Pullan, “‘An Inward Looking Time’: The United States Army, 1973-1976,” *The Journal of Military History* 67, no. 2 (April 2003): 494-495.

¹²⁰ Roger J. Spiller, “In the shadow of the dragon: Doctrine and the US army after Vietnam,” *The RUSI Journal* 142, no. 6 (1997): 53, Lock-Pullan, “‘An Inward Looking Time,’” 487-488 and Benjamin M. Jensen, *Forging the Sword*, 29.

¹²¹ Colonel Harry G. Summers, “The Astarita Report: A Military Strategy For The Multipolar World” (Occasional Paper, Strategic Studies Institute, U.S. Army War College, 1981), 21, 23-24 and 39.

¹²² Benjamin M. Jensen, *Forging the Sword*, 31-32.

¹²³ William E. DePuy, “Presentation to the TRADOC Commanders’ Vision ’91 Conference,” in *Selected Papers of General William E. DePuy*, edited by Donald L. Gilmore and Carolyn D. Conway, compiled by Colonel Richard M. Swain (Fort Leavenworth, KS: Combat Studies Institute, 1994), 431.

¹²⁴ Roger J. Spiller, “In the shadow of the dragon;,” 46.

lethal than those that came before, making the battlefield potentially more hazardous than ever before. Second, to survive and win in this deadly environment, a combined arms effort involving infantry, artillery, and armor was required. Third, to make this combined arms effort effective, it requires highly trained and professional soldiers and leaders.¹²⁵

The last lesson in particular had special significance for the development and dissemination of doctrine and was probably the most important lesson. Based on U.S. Army simulations of the war, the Israelis should have lost every single battle they fought in during the war. The reason they did not was attributed to the higher quality of Israeli training and leadership. This led to the deduction that leadership and training were more critical than actual weapons systems. The foundation of what was taught in training, and that also developed professional leadership, was the actual doctrine that was taught.¹²⁶ The three decisions made by Abrams significantly influenced the revision of the 1968 edition of *Operations of Army Forces in the Field FM 100-5* into the 1976 edition of *FM 100-5 Operations*.

On 1 July 1973, General DePuy, who would lead the doctrinal change that resulted in the 1976 edition of *FM 100-5 Operations*, became the first commander of Training and Doctrine Command (TRADOC). In July 1974, DePuy sent a framework draft, incorporating the lessons learned from the 1973 Middle East War, to his immediate subordinates at the U.S. Army schools and centers, seeking their feedback and input on a revised edition of FM 100-5. This was followed in 1975 by several conferences to shape the evolution of the new edition, as well as consultation with the German Army. Based on the report by the Strategic Assessment Group, the central challenge it had to address concerning the European theater of operations was how to defeat a quantitatively superior opponent on “An armor dominated European battlefield.”¹²⁷ The introduction of the 1976 edition of *FM 100-5 Operations* and the doctrine it contained sparked considerable debate within the U.S. Army, ultimately leading to the introduction of the operational level of war, situated between the strategic and tactical levels, in the 1982 edition of *Operations FM 100-5*. That debate, the introduction of operational level of war in the 1982 edition of *Operations FM 100-5*, is the primary focus of the next chapter.

¹²⁵ William E. DePuy, “Implications of the Middle East War on U.S. Army Tactics, Doctrine and Systems,” in *Selected Papers of General William E. DePuy*, edited by Donald L. Gilmore and Carolyn D. Conway, compiled by Colonel Richard M. Swain (Fort Leavenworth, KS: Combat Studies Institute, 1994), 76.

¹²⁶ William E. DePuy, “Letter to General Creighton W. Abrams, Chief of Staff, 14 January 1974,” in *Selected Papers of General William E. DePuy*, edited by Donald L. Gilmore and Carolyn D. Conway, compiled by Colonel Richard M. Swain (Fort Leavenworth, KS: Combat Studies Institute, 1994), 73.

¹²⁷ John L. Romjue, *From Active Defense to AirLand Battle*, 4-5.

Chapter Four – The Introduction of Operational Thought in the U.S. Army

With the American withdrawal from Vietnam, the U.S. Army's focus shifted back to Europe and the ongoing Cold War confrontation with the Soviet Union. While the U.S. military had been focused on the war in Vietnam, the Soviet Union continued to develop its military capabilities in Europe. The U.S. Army, therefore, had to reorient from fighting an asymmetric, infantry-centric war in Asia to being able to fight a combined arms battle against a similarly capable peer opponent. This U.S. Army reorientation was significantly shaped by the 1973 Middle East War, which the U.S. Army examined in detail at the direction of General Abrams, the Chief of Staff of the U.S. Army at the time. The destructive effects of modern weapons, the importance of combined arms operations and the challenges of close air support all had a substantial impact on U.S. Army doctrine.¹

In the aftermath of the Vietnam War, doctrinal change was led by the newly formed Training and Doctrine Command (TRADOC) commanded by General DePuy. The immediate subject of change was the 1968 edition of FM 100-5, *Operations of Army Forces in the Field*. Doctrine plays a central role in defining what the U.S. Army is and in how it executes the missions assigned by the U.S. government. In 2001, the Chief of Staff of the Army, General Eric K. Shinseki, stated that “the Army is a doctrine-based institution.”² It imposes order on the Army by providing a range of options for conducting military operations, thereby mitigating opportunities for informal practices. Doctrine provides the foundation of military education, shaping the thinking of both officers and Non-Commissioned Officers, and it is used by Army senior leadership to ensure the Army remains relevant to the government it serves, while at the same time justifying the future of the Army.³

To develop a clear understanding of the evolution of U.S. Army operational thought, this chapter focuses on defining and describing operational art in U.S. Army doctrine. It also considers other concepts supporting operational thought, such as elements of operational art and operational design. Consequently, this chapter begins with the U.S. Army's doctrinal change in 1973, marked by the establishment of the Training and Doctrine Command (TRADOC), as the U.S. Army's participation in the Vietnam War was coming to a close. It concludes with the introduction of the operational level of war in 1982, setting the stage for the subsequent development of operational art in U.S. Army operational doctrine in the next chapter.

The Introduction of Operational Thought into the U.S. Army

FM 100-5 first referred to doctrine with the 1941 edition of *Field Service Regulations Operations FM 100-5*. It stated that, “It contains the doctrine of leading

¹ Correspondence from General William E. DePuy to General Fred C. Weyand, Chief of Staff United States Army, 18 February 1976, 20182241MNBT1036359545F3407141003, Box 17, Folder 3, William E. DePuy Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

² *FM 3-0 Operations* (2001), Foreword.

³ Walter E. Kretchik, *U.S. Army Doctrine*, 284-286.

troops in combat and tactics of the combined arms and constitutes the basis of instruction of all arms and services for field service.”⁴ It went on to also state, “Knowledge of these doctrines and experience in their application provide all commanders a firm basis for action in a particular situation.”⁵ Every edition that followed, except the 1962 edition of *Field Service Regulations Operations FM 100-5*, addressed the doctrinal significance of FM 100-5 similarly to that of the 1941 edition.

Starting with the 1976 edition, doctrine would take on greater importance, being identified as an Army objective, emphasizing the importance of getting doctrine right and ensuring “an effective battle doctrine” was communicated throughout the Army.⁶ By the 1982 edition, there would be an even greater emphasis on the importance of doctrine and the role played by FM 100-5 in the Army doctrine system. The 1982 edition of *Operations FM 100-5* formed “the foundation of Army service school curricula and served as the basis for developing Army doctrine.”⁷ It would go on to identify AirLand Battle doctrine as a way to deal with worldwide challenges,⁸ while under “Combat Imperatives” it stated “Doctrine establishes common techniques of fighting throughout the force.”⁹

With the establishment of the Training and Doctrine Command (TRADOC) in 1973, DePuy combined combat developments with several schools to create integration centers that would integrate the development of both materiel, primarily equipment, and doctrine, addressing how the equipment would be utilized. One such center was the Combined Arms Center (CAC) at Fort Leavenworth,¹⁰ which included the U.S. Army Command and General Staff College (USACGSC). Proponency for FM 100-5 was held by the Department of Tactics at USACGSC at the time.¹¹ In 1974, DePuy sent out a framework draft of FM 100-5 to his immediate subordinates at the U.S. Army schools and centers, each a separate thought collective, seeking their feedback and input into a revised edition.¹² Major General John H. Cushman, as the Commandant of USACGSC, was, or should have been, the lead proponent for FM 100-5. DePuy viewed doctrine as a means to coordinate the broad range of activities within complex organizations; for him, the institutional purpose of doctrine was just as essential as the doctrine itself. Cushman, on the other hand, viewed substance as more critical; doctrine should not just train, but also educate, serving as a guide to judgment in combat.¹³ Due to this difference of opinion, Depuy rejected Cushman’s draft of FM 100-5 and moved responsibility for FM

⁴ *Field Service Regulations Operations FM 100-5* (1941), II.

⁵ *Field Service Regulations Operations FM 100-5* (1941), II.

⁶ *FM 100-5 Operations* (1977), 1-3.

⁷ *Operations FM 100-5* (1982), i.

⁸ *Operations FM 100-5* (1982), 1-1

⁹ *Operations FM 100-5* (1982), 2-6.

¹⁰ With responsibility for the training of Infantry, Armor, Artillery, Air Defense, Aviation and Engineers. Paul H. Herbert, *Deciding What Has to Be Done*, 28.

¹¹ Herbert, *Deciding What Has to Be Done*, 28 and 51.

¹² John L. Romjue, *From Active Defense to AirLand Battle*, 4-5.

¹³ Paul H. Herbert, *Deciding What Has to Be Done*, 54-55.

100-5 to TRADOC Headquarters.¹⁴ So, in the end, although the 1976 edition of *FM 100-5 Operations* states the USACGSC had proponentcy for the manual, the reality was that TRADOC had the actual proponentcy for it.

After sending the framework draft to U.S. Army schools and centers in July 1974 for feedback and input on a revised edition of FM 100-5, several conferences were held in 1975 to shape the evolution of the new edition, as well as consultations with the German Army.¹⁵ The central challenge it had to address, concerning the European theater of operations, was how to fight and win on the “modern, highly lethal battlefield” in the face of the “growth, lethality, range, and capabilities” of Soviet weapon systems.¹⁶ The 1976 edition of *FM 100-5 Operations* would shift the U.S. Army’s focus to Europe and the Cold War, and away from the failure of the Vietnam War, where there had been too great a focus on the material means of the war and not enough on achieving the strategic objectives, associated with the 1968 edition of *Operations of Army Forces in the Field FM 100-5*.¹⁷

1976 Edition FM 100-5 Operations – Active Defense

FM 100-5 Operations was officially issued on 1 July 1976 and was updated on 29 April 1977 by the inclusion of an index. Although it neither introduced the operational level nor operational art, the doctrinal debate surrounding the manual would be critical to the U.S. Army’s doctrinal shift from the army at war in Vietnam to an army prepared to fight the Soviets in central Europe and beyond, and the eventual introduction of the operational level to U.S. Army doctrine. Several factors contributed to the overall theme of the manual. With the end of the Vietnam War, combat against light and guerrilla forces also came to an end, followed by a period of equipment modernization by the U.S. Army, leading to the requirement for an update to U.S. Army doctrine. The illustration of the lethality of modern weapons during the Arab Israeli War of 1973 reinforced the need to update doctrine. Most significantly “the defense of central Europe against large, modern, Soviet armored forces once again became the Army’s main – almost exclusive – mission.”¹⁸ There were, however, several criticisms of the 1976 edition of *FM 100-5 Operations* when it was released.

One of the most outspoken critics of the new doctrine was William S. Lind, a legislative aide to Senator Gary Hart and former aide for Armed Services to Senator

¹⁴ Herbert, *Deciding*, 57 and 75.

¹⁵ John L. Romjue, *From Active Defense to AirLand Battle*, 4-5.

¹⁶ “Talking Paper on Field Manual 100-5, Operations” enclosed with correspondence from General William E. DePuy to General Fred C. Weyand, Chief of Staff United States Army, 8 July 1976, 20182241MNBT1036359545F3407141001, Box 17, Folder 3, William E. DePuy Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

¹⁷ Harry G. Summers, *On Strategy: A Critical Analysis of the Vietnam War* (Novato, CA: Presidio Press, 1995), 2-3.

¹⁸ Correspondence with enclosure from General (Retired) Bill (William E.) DePuy to General Donn Starry, 15 September 1980, 20184474MN5509, Box 22A, Folder 9, Donn A. Starry Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

Robert Taft Jr.¹⁹ One of Lind's criticisms, was that with the promotion of the "active defense," the 1976 edition of *FM 100-5 Operations* placed too much emphasis on the defense at the expense of the offense.²⁰ Although it was true that the general theme of the manual was focused on the defense as a phase of war, the term "active defense" was used only four times throughout the entire manual. The first reference was in Chapter Three, "How to Fight," then there were two references to the term in the fourteen-page long Chapter Five, "Defense," and it was referenced once in Chapter Fourteen, "Special Environments."²¹ That said, some doctrine writers, like Major Robert A. Doughty and Major L.D. Holder, argued that, under the operational circumstances of the period, in the face of Soviet superiority, defense would take precedence over offense, at least initially in any war. Some, such as Archer Jones, a military history professor who had taught at the U.S. Army Command and General Staff College, made the case that the Army had rediscovered the superiority of the defense as argued by Carl von Clausewitz in *On War*.²²

Lind also criticized the emphasis on the need to win the first battle of the war. The 1976 edition of *FM 100-5 Operations* stated, "Today the US Army must, above all else, prepare to win the first battle of the next war."²³ Lind argued that the focus on the first battle seemed to overlook any subsequent fighting, thus leaving the U.S. and her allies vulnerable to military defeat.²⁴ This, however, seems to ignore what followed in the 1976 edition of *FM 100-5 Operations*: "Once the war is upon us, we shall aim at emerging triumphant from the second, third, and final battles as well."²⁵

Another criticism from Lind was the perception that the manual emphasized firepower to the exclusion of maneuver. Lind was a maneuver warfare advocate, arguing the purpose of maneuver was to break the enemy's will to fight, not to enable the physical destruction of enemy forces.²⁶ Strategist Edward Luttwak also supported this criticism, and Steven Canby, a defense consultant, a partner of Luttwak's and a fellow defense reformer of Lind's, made a similar criticism of U.S. doctrine being focused on firepower

¹⁹ Lind, a close associate of Colonel John Boyd, was a leading advocate of maneuver warfare and was one of the Reformers, a group that attempted to change military thinking in the U.S. military in the 1970s. He wrote a number of articles on maneuver warfare in the late 1970s and early 1980s, as well as the book *Maneuver Warfare Handbook*, published in 1985. Along with Boyd, he lectured frequently to the Marine Corps on maneuver warfare. He was also a leading advocate of Fourth Generation Warfare, co-authoring the article, "The Changing Face of War: into the Fourth Generation," published in 1989 and republished in 2001 after the 9/11 terrorist attack.

²⁰ William S. Lind, "Some Doctrinal Questions for the United States Army," *Military Review* LVII no. 3 (March 1977), 62-64.

²¹ *FM 100-5 Operations* (1977), 3-9, 5-7, 5-13 and 14-20.

²² Major Robert A. Doughty and Major L.D. Holder, "Images of the Future Battlefield," *Military Review* LVIII, no. 1 (January 1978): 65-66 and Archer Jones, "The New FM 100-5: A View From the Ivory Tower," *Military Review* LVIII no. 2 (February 1978): 27, 30-31.

²³ *FM 100-5 Operations* (1977), 1-1.

²⁴ William S. Lind, "Some Doctrinal Questions," 57.

²⁵ *FM 100-5 Operations* (1977), 1-1.

²⁶ William S. Lind, "Some Doctrinal Questions," 58.

rather than maneuver.²⁷ There was also criticism from within the Army regarding the attritional focus of the 1976 edition of *FM 100-5 Operations*.²⁸

Lind also criticized the 1976 edition of *FM 100-5 Operations*, which envisioned lateral movement in the defense to reinforce defensive positions that would bear the brunt of the Soviet attack. He questioned whether military intelligence gathering would have the necessary information or analysis to enable this, and even if it did, whether the military command and control system would allow U.S. forces to act in a timely and decisive manner.²⁹ Archer Jones expressed similar concerns. However, overall he viewed the changes in the 1976 edition of *FM 100-5 Operations* favorably.³⁰ Jones, among others, was also critical of the elimination of the concept of retaining a reserve force, which enabled flexibility to prevent or mitigate failure, or to exploit any opportunities, as well as the negative psychological impact it could have on the defense.³¹

Yet another critique came from Phillip A. Karber, who had been involved in identifying lessons from the 1973 Middle East War for TRADOC, specifically regarding the change in the Soviet tactics for which active defense had been designed as a counter. The Soviets had shifted from planning or preparing for a massive breakout attack to a series of more minor penetrations, aiming to identify weaknesses in NATO's defense that a robust Soviet reserve or second echelon could exploit.³² Not all criticism came from academics and defense consultants; those within the Army also found fault with the new doctrine. One professional observation was that the 1976 edition of *FM 100-5 Operations* did not adequately address the threat posed by the Soviet second echelon or the importance of Soviet command and control in executing their battle plans.³³ Another criticism from within the Army was that the doctrine was too tactically focused and ignored formations larger than divisions. Furthermore, it was argued that formations above the divisional level played a greater role in coordinating multiple battles or engagements to achieve strategic objectives,³⁴ foreshadowing the introduction of the operational level and operational art.

²⁷ Edward N. Luttwak, "The American Style of Warfare and the Military Balance," *Survival* 21, no. 2 (March-April 1979): 58; and Steven Canby, "NATO: Reassessing the Conventional Wisdoms," *Survival* 19, no. 4 (July-August 1977): 164-165.

²⁸ Colonel Wayne A. Downing, "US Army Operations Doctrine," *Military Review* LXI, no. 1 (January 1981): 65-66.

²⁹ William S. Lind, "Some Doctrinal Questions," 63.

³⁰ Archer Jones, "The New FM 100-5," 35-36.

³¹ Jones, "The New FM 100-5," 34-35 and Colonel Robert E. Wagner, "Active Defense and All That," *Military Review* LX, no. 8 (August 1980): 12.

³² Phillip A. Karber, "The Tactical Revolution in Soviet Military Doctrine Part I," *Military Review* LVII no. 11 (November 1977): 83-85; and Phillip A. Karber, "The Tactical Revolution in Soviet Military Doctrine Part II," *Military Review* LVII no. 12 (December 1977): 33-34.

³³ Colonel Wayne A. Downing, "US Army Operations Doctrine," *Military Review* LXI, no. 1 (January 1981): 69-70.

³⁴ Major Paul E. Cate, "Large-Unit Operational Doctrine," *Military Review* LVIII no. 12 (December 1978): 41-45.

DePuy's view of Lind's article, in which he expressed the above criticisms, was that the article displayed "a very shallow understanding of the principles in FM 100-5." He argued Lind's article was based on "a partial preliminary draft" of FM 100-5. As a result, DePuy disagreed with both Lind's conclusions and analysis.³⁵ Shortly after DePuy made this assessment of Lind's argument, DePuy wrote to General Fred Weyand, Chief of Staff of the U.S. Army, outlining some key points regarding the drafting and contents of the 1976 edition of *FM 100-5 Operations*. He explained that the manual's focus was based on the Army's principal mission, as assigned to it by the Department of Defense, which was the defense of "NATO Europe." Furthermore, it was shaped by the need "to fight on the modern, highly lethal battlefield."³⁶ The manual had been drafted in coordination with "the major commands, Israelis, Germans, and Tactical Air Command." It was viewed as "consistent and compatible with the equivalent field manual of the German Army – 100/100."³⁷ The Israeli experience during the 1973 Arab-Israeli War had been central to U.S. Army doctrinal change since the end of the Vietnam War,³⁸ while TRADOC had consulted closely with the German Army to address the central challenge in the European theater of operations of how to defeat a quantitatively superior opponent and to make their mutual doctrines more compatible.³⁹ The support of Tactical Air Command was necessary for the U.S. Army to execute the ideas and concepts in Chapter Eight, "Air-Land Battle," in the 1976 edition of *FM 100-5 Operations*.⁴⁰

General Donn A. Starry, who replaced DePuy as the Commanding General of TRADOC, also commented on Lind's article. Starry had been heavily involved in the development and drafting of the 1976 edition of *FM 100-5 Operations*, having served as the commander of the U.S. Army Armor Center at Fort Knox from 1973 to 1976.⁴¹ Starry's view was that neither he nor anyone else knew what Lind was "really trying to

³⁵ Correspondence with enclosure from General W.E. DePuy to Major General James M. Lee, 18 May 1976, 20182241MNBT950594082F1463631003, Box 28A, Folder 10, William E. DePuy Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

³⁶ Correspondence with enclosure from General W.E. DePuy to General Fred C. Weyand, 8 July 1976, 20182241MNBT1036359545F3407141001, Box 17, Folder 3, William E. DePuy Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

³⁷ Correspondence with enclosure from General W.E. DePuy to General Fred C. Weyand, 8 July 1976.

³⁸ Donn A. Starry, "Reflections," in *Camp Colt to Desert Storm: The History of U.S. Armored Forces*, edited by George F. Hoffman and Donn A. Starry (Lexington: The University Press of Kentucky, 1999), 548-550.

³⁹ Correspondence from General Donn A. Starry to Lieutenant General John R. Thurman, 27 September 1978, 20184474MN3345, Box 13B, Folder 2, Donn A. Starry Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania; Ingo Trauschweizer, *The Cold War U.S. Army Building Deterrence for Limited War* (Lawrence, KS: University Press of Kansas, 2008), 200; John L. Romjue, *From Active Defense to AirLand Battle*, 59; and John L. Romjue, "The Evolution of the AirLand Battle Concept," *Air University Review* XXXV, no. 4 (May-June 1984): 12.

⁴⁰ Richard G. Davis, *The 31 Initiatives: A Study of Air Force-Army Cooperation* (Washington, D.C.: Office of Air Force History, 1987), 24-33.

⁴¹ John L. Romjue, *From Active Defense to AirLand Battle*, 23.

prove,” and that he was “one of those instant field marshals.”⁴² He took particular issue with Lind’s criticism that the manual placed too much emphasis on the defense. As the author of both the chapter on the offense and the chapter on the defense in the 1976 edition of *FM 100-5 Operations* he argued that there was no intent to argue “that because of modern weapons, defense now rules supreme,” instead on the modern battlefield one had to defend effectively during the first battle otherwise there would not be a second battle to worry about.⁴³ He concluded his observations about Lind and his article with the view that it was simply best to ignore Lind’s observations.

One can opine that the 1976 edition of *FM 100-5 Operations* faced a similar challenge that all military doctrine faces: it attempted to be specific and explicit enough to be useful without being either dogmatic and inflexible or so abstract as to be of little real value.⁴⁴ The attempt to achieve this balance made it difficult for readers to take away from the manual what the authors and approving authority had intended. Shortly after the manual’s release, General Alexander Haig, Supreme Allied Commander Europe, praised the manual as having “immense value to operational units and Service Schools.” He was also impressed by the chapter on operations with NATO and the cooperation that occurred when drafting the manual with the German, British and Israeli armies.⁴⁵ The significance of the Germans and the Israelis was addressed above; the British were important from Haig’s perspective as they commanded NATO’s Northern Army Group on NATO’s left flank in Central Europe. The British Army also recognized the challenge of defending against a quantitatively superior enemy. Throughout the late 1970s and 1980s, it developed a doctrinal solution that was very similar to the U.S. Army’s.⁴⁶

Upon reviewing the 1976 edition of *FM 100-5 Operations*, it can be argued that this doctrine did not depart radically from many of the previous editions. It took the five purposes for the defense listed in both the 1962 and the 1968 editions. It added two more, the preservation of capability, to “gain time” as well as to “retain tactical, strategic, or political objectives,” both of which, in the context of the period, seem quite reasonable

⁴² Correspondence from Lieutenant General Donn A. Starry to Major General George S. Patton, 11 November 1976, 20184474MN1580, Box 6, Folder 7, Donn A. Starry Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

⁴³ Correspondence from Lieutenant General Donn A. Starry to Major General George S. Patton, 11 November 1976.

⁴⁴ Jeffery S. McKittrick and Peter W. Chiarelli, “Defense Reform: An Appraisal,” in *The Defense Reform Debate: Issues and Analysis*, edited by Asa A. Clark, Peter W. Chiarelli, Jeffery S. McKittrick and James W. Reed (Baltimore: The Johns Hopkins University Press, 1984), 324.

⁴⁵ Correspondence from General Alexander M. Haig to General William E. DePuy, 4 August 1976, 20182241MNBT1036359547F3408361003, Box 15, Folder 7, William E. DePuy Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

⁴⁶ Correspondence from General Donn A. Starry to the Honorable Alexander M. Haig, Jr., Secretary of State, 25 June 1981, 20184474MN6360, Box 25A, Folder 7, Donn A. Starry Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania and Hew Strachan, “Operational Art and Britain, 1909-2009,” in *The Evolution of Operational Art: From Napoleon to the Present*, edited by John Andreas Olsen and Martin van Creveld (Oxford: Oxford University Press, 2011), 117-121.

additions.⁴⁷ Furthermore, the 1976 edition added no more space in the manual regarding the defense than the 1949 edition, but it did introduce a different nuance. The 1954 edition of *Field Service Regulations Operations FM 100-5*, in “Section V. Conduct of the Defense,” foreshadowed the controversial “active defense” that was introduced in 1976.⁴⁸ The language in the 1976 edition differed, but it conveyed a similar intent, of rapidly reinforcing defensive positions astride the main thrusts of the enemy attack. Where the two editions differed was in the source of the reinforcements. The 1954 edition did not specify, while the 1976 edition stated that it should be done “by moving units from less threatened flanks.”⁴⁹

Regarding the offense, the 1976 edition of *FM 100-5 Operations* identified the same five purposes for conducting the offense as the 1962 and 1968 editions. The 1976 edition took a strong position regarding the importance of the offense, stating that, “by taking the offensive, we gain the initiative, carry the fight to the enemy, fight in his positions, and seek decision on our terms.”⁵⁰ The 1976 edition stated that “to win the battle” required the concentration of force which should be controlled and directed at decisive locations using “cover, concealment, suppression, and combined arms teamwork” by soldiers “trained to use the maximum capabilities of their weapons.”⁵¹ The 1976 edition was no less offensively minded than the two previous editions, for which there had been no criticism for not being offensively minded enough. On balance, the 1976 edition was no more and no less offensively or defensively oriented than either the 1962 or the 1968 editions.

Starry was appointed as Commander TRADOC in July 1977 and, despite his disregard of Lind’s observations, soon set out to address the primary criticisms of the 1976 edition of *FM 100-5 Operations*. When considering the threat posed by the Soviet Army in Europe, Starry believed that three important Soviet operational concepts were mass, momentum, and continuous combat, based on the echeloning of forces over a depth of 100 kilometers. To shape the battle for a successful outcome, it was therefore necessary to be able to observe the enemy force to this depth, if not beyond.⁵² Seeing the enemy in depth was only the first step; it was also necessary to concentrate one’s forces, bring fires to bear on the enemy, and strike into the enemy’s depth. The dilemma, however, was that the deeper a commander had to see, the more likely he was to rely on resources he neither had nor controlled.⁵³ This challenge was one of the openings where the introduction of the operational level, which could coordinate tactical actions to achieve strategic objectives, would provide a solution to the challenge itself. The

⁴⁷ *Field Service Regulations Operations FM 100-5* (1962), 74; *Operations of Army Forces in the Field FM 100-5* (1968), 6-13; and *FM 100-5 Operations* (1977), 5-1.

⁴⁸ *Field Service Regulations Operations FM 100-5* (1954), 127.

⁴⁹ *FM 100-5 Operations* (1977), 5-3.

⁵⁰ *FM 100-5 Operations* (1977), 4-1.

⁵¹ *FM 100-5 Operations* (1977), 3-3.

⁵² General Donn A. Starry, “A Tactical Evolution,” 4 and 8.

⁵³ Starry, “Evolution,” 8 and 10; and Correspondence from General Donn A. Starry to Major General Jack N. Merritt, 7 August 1978, 20184474MN3313, Box 13B, Folder 1, Donn A. Starry Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

language used to find an answer, that of an operational concept,⁵⁴ presaged the future introduction of the operational level. Somewhere within the military chain of command, there would be a need to obtain the resources or effects needed to achieve strategic objectives. Furthermore, all the resources and effects available would need to be sequenced and synchronized to achieve the strategic objectives. By 1986, this would be accomplished at the operational level through the application of operational art.

In 1979, General Edward C. Meyer became Chief of Staff of the Army, and he felt that FM 100-5 needed to be revised, as he had several concerns regarding the 1976 edition of FM 100-5, *Operations*. First was the Central European focus of the doctrine, and that there needed to be broader applicability to the possibility of war elsewhere, particularly Korea. Second, there was a need to take the doctrine beyond the battalion and brigade levels; thinking needed to be elevated to the corps and theater level to address the execution of strategy and the sustainment of tactical efforts. Third, consideration had to be given to dealing with an enemy breakthrough on multiple axes rather than a single significant breakthrough. Finally, there was the defensive orientation of the 1976 edition, recognizing that although it may not have been the intent, it had, however, become the general perception.⁵⁵ These concerns strongly hint at the solution to the operational level of war that would eventually be introduced in the 1982 edition of FM 100-5.

In response to Meyer's first observation regarding the Central European focus, Starry agreed it needed to be broadened. However, this emphasis was necessary to reorient the Army away from Vietnam to its most challenging strategic problem, and to facilitate doctrinal alignment with the German Army. In the future, both Korea and the Middle East foci would be addressed, but broadening the geographical focus beyond that would be very challenging. Regarding the second concern, of expanding to address the corps and theater levels, Starry states that he is "not sure he understands exactly what Meyer means by that," but Starry goes on to state that it will be addressed in "the Corps manual."⁵⁶ The idea that thinking needed to be elevated to the corps and theater level to address the execution of strategy and the sustainment of tactical effort is central to the introduction of the operational level in the 1982 edition of *Operations FM 100-5*.⁵⁷

Regarding the concern about overemphasis on Soviet force concentration during a potential breakthrough of NATO defenses, Starry states that TRADOC was aware of this issue. Still, a focused attack presented a more difficult problem to solve. That being

⁵⁴ Starry, "Evolution," 8 and Correspondence from General Donn A. Starry to Major General Jack N. Merritt, 7 August 1978.

⁵⁵ General Meyer expressed these concerns to General Starry when he was Deputy Chief of Staff for Operations and Plans of the U.S. Army, as well as Chief of Staff Designate of the U.S. Army as a Lieutenant General. Correspondence from Lieutenant General E.C. Meyer to General Donn A. Starry, 13 June 1979, 20184474MN4187, Box 17A, Folder 7, Donn A. Starry Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

⁵⁶ Correspondence from General Donn A. Starry to Lieutenant General E.C. Meyer, 26 June 1979, 20184474MN4187, Box 17A, Folder 7, Donn A. Starry Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

⁵⁷ *Operations FM 100-5* (1982), 2-3.

said, the issue of Soviet force concentration during a potential breakthrough of NATO defenses would be addressed in the next revision of FM 100-5. Finally, concerning the charge of the 1976 edition's defensive orientation, Starry concurred that the focus on defense was not the intended outcome. Most notably, he argued that the emphasis on active defense was primarily due to a lack of a solution to the problem presented by the Soviet second echelon.⁵⁸ The solution to the Soviet second echelon is deep battle, a concept introduced in the 1982 edition of *Operations FM 100-5*.⁵⁹

Furthermore, Starry identified the immediate means to address Meyers' second, third and fourth concerns, the ones identified above relating to the operational level, as being the release very shortly of a revised Corps level manual.⁶⁰ This, however, did not happen. The 1973 edition of *FM 100-15 Field Manual Large Units Theater Army – Corps* would not be released until 13 September 1989. Instead, Meyer's concerns would be addressed in the 1982 edition of *Operations FM 100-5* through the introduction of the levels of war and the concepts of AirLand Battle. This exchange illustrates that Meyer, as Chief of Staff of the Army, directed the issuance of the 1982 edition, and Starry, the proponent of FM 100-5, shared a common vision of where U.S. Army doctrine had to go. It also foreshadowed the introduction of the operational level, particularly with concerns and discussions regarding the corps and theater levels, as well as deep battle being the solution to the Soviet second echelon.

AirLand Battle

Upon assuming command at TRADOC, Starry employed the concept of Central Battle to describe the bringing together of maneuver and firepower to achieve a military decision.⁶¹ This was the essence of tactical battle, and it was the responsibility of divisions and brigades to execute it effectively. Starry also brought to the table, from his experience as Commander of V Corps, an interest in the concept of deep battle, due to his concern about the Soviet second echelon that the 1976 edition did not address, given its focus on the first battle or first echelon. As Commander TRADOC, Starry put staff to work on the problem of how to deal with the Soviet second echelon and by late 1977, they had a much broader geographic view of potential NATO/Soviet combat operations than had previously been held by TRADOC.⁶²

The work on the concept of Central Battle was incorporated into the Battlefield Development Plan (BDP), which established the U.S. Army's combat development strategy based on its current state of combat development, its desired future state, and the necessary steps to achieve the goals. Within the BDP, as new weapon systems were developed as part of the combat development strategy, new operational concepts and

⁵⁸ Correspondence from General Donn A. Starry to Lieutenant General E.C. Meyer, 26 June 1979.

⁵⁹ *Operations FM 100-5* (1982), 11-4.

⁶⁰ Correspondence from General Donn A. Starry to Lieutenant General E.C. Meyer, 26 June 1979.

⁶¹ John L. Romjue, *From Active Defense to AirLand Battle*, 32.

⁶² Romjue, *AirLand Battle*, 25.

doctrine were necessary to determine how best to employ these systems.⁶³ This conceptual approach is equally valid today. After the initial development and use of the BDP, Starry felt it had broader applicability and could be used to guide both training strategy and sustainment strategy, encompassing Army logistics and administration. As concepts, such as Central Battle were developed, they were to be fed into the BDP, in part shaping it, but also in turn being shaped by the BDP. The goal was to produce “a single source of reference,” or plan, for how the U.S. Army as an institution would function.⁶⁴ As the BDP matured, it was viewed as a valuable tool to focus the programming of both near term force readiness and mid-range force modernization. It was soon updated to look beyond U.S. commitments in Europe to include Korea and the Middle East, as well as allied capabilities in addition to those of the U.S. and the Soviet Union.⁶⁵ The BDP in time, included the combat development study based on Corps 1986 that considered operations beyond those of the divisions and Central Battle, such as control and execution of the Air Land Battle, the actual employment of divisions, and combat and combat service support to divisions,⁶⁶ all things that would imbued within the operational level of war.⁶⁷

Throughout 1979, TRADOC and its subordinate centers and schools were working on the operational level problem of attacking enemy forces over time and space or interdicting the enemy’s second echelon. Later that year, the Field Artillery School developed a new interdiction concept that would seize the initiative from the enemy, using the enemy’s momentum against him rather than relying on the traditional concept of random interruption. On 18 December 1979, this idea led to an integrated battlefield concept that combined planning, command and control, the military intelligence process, target acquisition, communications, and fire support in a manner that could be used to target echeloned enemy forces in the depth areas of the theater of operations. Furthermore, it integrated the close battle with the first echelon and the deep battle with the second echelon as one continuous battle.

Early in 1980, Starry returned the preparation for FM 100-5 to the Fort Leavenworth USACGSC; however, as commander of TRADOC, he continued to have a

⁶³ Remarks by General Donn A. Starry at the British Army Convention, Washington, D.C., 24 September 1980, 20184474MN8186, Box 36, Folder 5B, Donn A. Starry Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

⁶⁴ Correspondence from General Starry to Lieutenant General Meyer, 15 December 1978, 20184474MN3654, Box 15A, Folder 3, Donn A. Starry Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

⁶⁵ Correspondence from General John W. Vessey to General Donn A. Starry, 5 May 1979, 20184474MN4083, Box 17A, Folder 1, Donn A. Starry Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania and Remarks by General Donn A. Starry at the British Army Convention, Washington, D.C., 24 September 1980.

⁶⁶ General Donn A. Starry, “Combat Development Study Directive: Corps 1986,” 15 August 1979, 20184474MN4444, Box 18A, Folder 7, Donn A. Starry Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

⁶⁷ *Operations FM 100-5* (1982), 2-3.

direct role in its development.⁶⁸ In the same year, the USACGSC had inserted thirty hours of instruction on the subject and that summer, Starry directed it to be contained in all U.S. Army training and doctrine material.⁶⁹ An essential component of doctrinal change is education, in this case through the professional military educational institutions in the U.S. Army, such as the Command and General Staff College.

Central Battle was replaced by the concept of “The Integrated Battlefield,” which expanded central battle to include those responsibilities above the divisional level, including coordination for the use of air and long-range missile systems, as well as nuclear weapons.⁷⁰ The integrated battlefield concept was incorporated into the Corps’ 86 project, part of the Army’s 86 Studies, which emphasized attacking the enemy in depth while simultaneously engaging enemy forces that were already in contact with one’s forward units. The intention is to destroy or disrupt the enemy forces in depth. At the same time, the integrated battlefield concept was also incorporated into the extended battlefield concept with a focus on seizing the initiative through offensive action. The integrated battlefield concept proved successful in the deep battle, or the attack in the enemy’s depth, as the key to winning at the tactical level. The extended battlefield concept was supported by work from the Field Artillery School conducted in 1980, which simulated European corps battles with and without interdiction, determining the former were noticeably more successful.⁷¹ The concept of “The Integrated Battlefield,” however, quickly became focused on the use of nuclear weapons on a nuclear battlefield.⁷² As a result, “The Integrated Battlefield” concept was replaced by the concept of “The Extended Battlefield” in October 1980. This doctrinal concept focused on the challenge of fighting a conventional war.⁷³

⁶⁸ General Donn A. Starry message for Commanders, “The TRADOC Doctrinal Literature Program,” 26 February 1980, 20184474MN11103, Box 49A, Folder 2B, Donn A. Starry Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania; Correspondence from Lieutenant Colonel Huba Wass de Czege for General Donn A. Starry, 30 September 1980, 20184474MN5459, Box 22A, Folder 7, Donn A. Starry Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania; and Message from Lieutenant General Richardson for General Starry, “FM 100-5,” 25 November 1980, 20184474MN11928, Box 52A, Folder 4A, Donn A. Starry Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

⁶⁹ John L. Romjue, *From Active Defense to AirLand Battle*, 32-39.

⁷⁰ General Donn A. Starry, Presentation to the Air University Airpower Symposium, 5 March 1980, 20184474MN8172, Box 36, Folder 5A, Donn A. Starry Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

⁷¹ General Donn A. Starry, “Extending the Battlefield,” *Military Review* LXI, no. 3 (March 1981), 38, 42 and 49.

⁷² General Donn A. Starry message to SSO Leavenworth, “The Integrated Battlefield,” 21 April 1980, 20184474MN11311, Box 50A, Folder 1B, Donn A. Starry Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

⁷³ General Donn A. Starry message for General Meyer, “Extended Battlefield Briefing Team,” 3 January 1981, 20184474MN12144, Box 53A, Folder 4B, Donn A. Starry Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

This new battlefield idea extended the area of combat in three ways. It extended it in depth engaging enemy units beyond the close battle, this in turn extended the battle in time so current actions in depth effected the close battle in the future. Lastly, it thereby extended it upwards, towards higher level units in terms of managing the entire battlefield. Central to this was the deep attack that had to be synchronized over time and space with the close battle. The objective of the deep attack was to, in the long run, create opportunities for offensive action. In Starry's view, "attacking deep was essential to winning," and the deep battle and the close battle were inseparable.⁷⁴ This fight was deeper than what the divisions and corps operated at,⁷⁵ and challenges presented in planning and synchronizing such a battle would eventually lead to the introduction of the operational level.

By January 1981, Starry felt that both ideas of Extended and Integrated Battlefields, although appropriate for communicating concepts, did not "accurately describe the battlefield in its totality."⁷⁶ By the end of January, Starry had directed that the term "Air Land Battle" would be used to unite these two concepts, as well as all others, particularly when addressing the total battlefield.⁷⁷ The Air Land Battle Concept was virtually identical to the Extended Battlefield concept; it also extended the battlefield in time, space, and level of command and execution. Central to the concept was the idea of deep attack and the need to coordinate both the close battle in the main battle area and the deep battle to maximize the strategic effect.⁷⁸ To win, the Soviet-based enemy had to be defeated rapidly. To achieve this, the commitment of the second echelon of the enemy's first echelon forces had to be prevented, as it was the only point at which the enemy could be defeated without decisive engagement.⁷⁹ For this to work effectively, the close battle and the deep battle required "that the plan stem from the concept of a single commander."⁸⁰

The term Air Land Battle was not new. Chapter Eight of the 1976 edition of *FM 100-5 Operations* was titled "Air-Land Battle," which focused on enabling the air battle so that it, in turn, could enable the land battle.⁸¹ Upon the release of the 1976 edition, the Commander of U.S. Air Force Tactical Air Command (TAC), General Robert J. Dixon,

⁷⁴ General Donn A. Starry, "Extending the Battlefield," 32, 38 and 49.

⁷⁵ Starry, "Extending," 32.

⁷⁶ General Donn A. Starry message to Lieutenant General Richardson, "Air Land Battle," 27 January 1981, 20184474MN12090, Box 53A, Folder 3A, Donn A. Starry Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

⁷⁷ General Donn A. Starry message for Commandants and Commanders, "The Air Land Battle," 29 January 1981, 20184474MN12084, Box 53A, Folder 3A, Donn A. Starry Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

⁷⁸ TRADOC, *US Army Operational Concepts: The AirLand Battle and Corps 86 TRADOC Pamphlet 525-5* (Fort Monroe, VA: TRADOC Headquarters, 25 March 1981), 2-3.

⁷⁹ Lieutenant Colonel John S. Doerfel, "The Operational Art of the AirLand Battle," *Military Review* LXII, no. 5 (May 1982): 5.

⁸⁰ *US Army Operational Concepts: The AirLand Battle and Corps 86 TRADOC Pamphlet 525-5*, 11.

⁸¹ *FM 100-5 Operations* (1977), 8-1 to 8-7.

wrote to General DePuy that the manual's articulation of "the air-land combat relationship" was "an excellent baseline" that would advance the two services' efforts to operate together.⁸² This relationship was enabled by the Air-Land Forces Application agency, which was established on 13 June 1975 to manage problems and working groups concerned with joint U.S. Army and Air Force combat capability utilizing existing service doctrine rather than developing new doctrine.⁸³ TRADOC continued to work with TAC as it evolved towards the AirLand Battle concept.

Starry believed that the Air-Land Battle could not be fought without the Air Force and that cooperative efforts between TAC and TRADOC were often hindered by Pentagon staff who were focused on service roles and missions.⁸⁴ Starry worked closely with General Wilbur Lyman "Bill" Creech, Commander TAC, to advance Air-Land Battle in the context of offensive air support and battlefield air interdiction.⁸⁵ Starry regularly met with Creech to resolve issues that challenged their respective staffs, such as the allocation and apportionment of offensive air support. On this issue, Creech engaged unilaterally with the Air Staff, arguing that the Army corps commander would determine targeting priorities for battlefield air interdiction. In contrast, the Air Force would determine what resources would be used to achieve those priorities.⁸⁶ TAC supported the development of the concept of air-land battle, which involved fighting both close battles and deep battles. Creech felt it leveraged cooperative gains made in "Battlefield Air Interdiction and combined war fighting capability."⁸⁷ Creech endorsed the AirLand Battle Concept⁸⁸ as it evolved from the idea of air land battle⁸⁹ and pledged continued

⁸² Correspondence from General Robert J. Dixon to General William E. DePuy, 29 July 1976, 20182241MNB T950594082F1463541007, Box 28A, Folder 1, William E. DePuy Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

⁸³ Richard G. Davis, *The 31 Initiatives: A Study of Air Force-Army Cooperation* (Washington, D.C.: Office of Air Force History, 1987), 26-27.

⁸⁴ Correspondence from General Starry to Lieutenant General Meyer, 15 December 1978, 20184474MN3654, Box 15A, Folder 3, Donn A. Starry Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

⁸⁵ Message from General Starry to General Meyer, 22 February 1980, 20184474MN11110, Box 49A, Folder 2B, Donn A. Starry Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

⁸⁶ Message from General Starry to General Meyer, "Results of Meeting with Gen Creech," 21 July 1980, 20184474MN11602, Box 51A, Folder 2B, Donn A. Starry Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

⁸⁷ Correspondence from General W.L. Creech to General Donn A. Starry, 1 December 1980, 20184474MN5806, Box 23A, Folder 9, Donn A. Starry Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

⁸⁸ AirLand Battle was "based on securing or retaining the initiative and exercising it aggressively to defeat the enemy." *Operations FM 100-5* (1982), 2-1.

⁸⁹ AirLand Battle, as articulated in the 1976 edition of FM 100-5, was focused on the Air Force's contribution to success in land-based operations. *FM 100-5 Operations* (1977), 8-2.

cooperation with TRADOC regarding their joint efforts to fight the deep and close battle simultaneously.⁹⁰

A new draft of FM 100-5 was completed in January 1981. It was distributed throughout the Army for comment and feedback, incorporating the ideas of AirLand Battle. Chapter Seven was titled “Coordinating Air-Land Battle Operations,” and the first section of the chapter described “The Air-Land Battle.”⁹¹ The draft, however, made no mention of the operational level or operational art. The new draft of FM 100-5 was generally viewed favorably, in part due to its wide distribution and request for feedback. There were suggestions for changes and additions, but they did not focus on any one area of what was presented in the draft. General Meyer, then U.S. Army Chief of Staff, felt the draft was well done overall and was particularly positive about the draft’s refocusing “on all aspects of warfare,” broader perspective, worldwide applicability and its use of historical examples.⁹² By mid-May, Starry felt that there was wide acceptance of the AirLand Battle concept as presented in the January Coordinating Draft of FM 100-5.⁹³

The purpose of AirLand Battle was to defeat the enemy “by creating opportunities for decisive offensive action.”⁹⁴ This aligns with the first idea of operational thought presented in the previous chapter, which observes that operational conceptualization or operational art lies between strategy and tactics, and enables offensive military action to tactically defeat an enemy military force across a broad geographic area, while also visualizing an extended temporal aspect to the engagement(s). As outlined above, the concept of AirLand Battle required coordination between the close battle and the deep battle to maximize its strategic effect.⁹⁵ The close battle would often result in the enemy’s destruction, typically through annihilation, which was achieved via offensive military action.⁹⁶ Second, the deep battle was about creating shock at the operational level, which was achieved through offensive military action, enabling success in the close fight.⁹⁷

⁹⁰ Message from General Starry to General Meyer, “Results of Meeting with Gen Creech,” 30 March 1981, 20184474MN12207, Box 53A, Folder 7A, Donn A. Starry Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

⁹¹ FM 100-5 Coordinating Draft, 24 January 1981, 20184474MN13220, Box 59, Folder 6, Donn A. Starry Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

⁹² General E.C. Meyer’s Notes on “FM 100-5 Coordinating Draft, 24 January 1981,” 21 March 1981, 20184474MN13220, Box 59, Folder 6, Donn A. Starry Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

⁹³ Message from General Starry to Lieutenant General Richardson, “Staff Planning Aids for Air Land Battle,” 15 May 1981, 20184474MN12391, Box 54, Folder 4A, Donn A. Starry Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

⁹⁴ Message from General Starry to Lieutenant General Richardson, “Implementation of Airland Battle,” 20 May 1981, 20184474MN12371, Box 54, Folder 3B, Donn A. Starry Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

⁹⁵ *US Army Operational Concepts: The AirLand Battle and Corps* 86 TRADOC Pamphlet 525-5, 2-3.

⁹⁶ *US Army Operational Concepts*, 14-15.

⁹⁷ *US Army Operational Concepts*, 11.

The three levels of war - strategic, operational and tactical - were first introduced by the U.S. Army in the AirLand 2000 concept paper, which was formally published on 4 September 1981.⁹⁸ This was because the operational level was the level that could create opportunities for decisive offensive action, as mentioned above. Brigadier General Donald R. Morelli, Deputy Chief of Staff for Doctrine (DCSDOC), argued that the operational level was at the corps level. He viewed the corps as central to the AirLand Battle concept because the corps commander would be the one “who most clearly sees the windows for offensive action development.”⁹⁹ Morelli went on to argue that the inclusion of the operational level facilitated the smooth transition from the strategic to the tactical levels. At the time, Starry had reservations about the terms and stated he had to be persuaded that they needed to be used.¹⁰⁰

On 1 August 1981, General Glenn K. Otis replaced Starry as Commander TRADOC. The levels of war, strategy, operational art, and tactics had been added to the July 1981 draft of FM 100-5 just before this change of command. Although, it must be noted that operational art (designing operational level campaigns) and operational level (interpretative conflict construct) were used interchangeably. Morelli saw their inclusion in FM 100-5 as a way of bridging the manual with the Airland Battle 2000 concept.¹⁰¹ The three levels of war had been incorporated into FM 100-5 by the time of the September 1981 draft.¹⁰² As of July 1982, the three levels of war, as defined by the U.S. Army, were still strategic, operational art and tactics. The level of operational art was still described as it had been in the September 1981 draft, as using battles to achieve strategic objectives.¹⁰³

Although it was Otis, as Commander TRADOC, who decided to add the operational level of war to the 1982 edition of *Operations FM 100-5*, directing “that the concept of ‘operational level of war’ be added to the doctrine written by [Lieutenant Colonel Huba] Wass de Czege and [Lieutenant Colonel L.D.] Holder,”¹⁰⁴ Starry gave full

⁹⁸ Message from Brigadier General Morelli for General Starry, “AirLand Battle 2000,” 2 June 1981, 20184474MN12493, Box 55, Folder 1B, Donn A. Starry Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania and TRADOC, *AirLand Battle 2000* (Fort Monroe, VA: TRADOC Headquarters, 10 August 1982), ii.

⁹⁹ Message from Brigadier General Morelli for General Starry, “AirLand Battle 2000,” 2 June 1981.

¹⁰⁰ Message from General Starry for Brigadier General Morelli, “AirLand 2000,” 8 June 1981, 20184474MN12493, Box 55, Folder 1B, Donn A. Starry Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

¹⁰¹ Attachment to note for General Starry from Brigadier General Morelli, 20 August 1981, 20184474MN13216, Box 59, Folder 6, Donn A. Starry Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

¹⁰² Inclosure to Memorandum from General Donn A. Starry for General Glenn Otis, “The Operational Art of the AirLand Battle,” 6 November 1981, 20184474MN13146, Box 57, Folder 5, Donn A. Starry Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

¹⁰³ Lieutenant Colonel (P) Huba Wass de Czege and Lieutenant Colonel L.D. Holder, “The New FM 100-5,” *Military Review* LXII, no. 7 (July 1982): 56.

¹⁰⁴ Richard M. Swain, “Filling the Void, 159-60.

credit for the U.S. Army's adoption of the operational level to his deputy, Morelli.¹⁰⁵ He stated:

Don Morelli took that as his personal task, wrote it up in concept, inserted it into the doctrinal stream, and somehow conveyed the worth of the idea to everyone without ever a hand being raised to accuse us of intellectual mimicry. It was a sterling piece of work on his part, and perhaps the best thing he did for us.¹⁰⁶

Starry had recognized that for AirLand Battle to work as a concept, it required success at the operational level, where the U.S. Army had suffered from a doctrinal gap. He hesitated, however, to implement it for fear of being accused of copying the Soviets by critics such as Lind and Luttwak, which would have led to the 1982 edition becoming embroiled in a similar level of criticism as directed at DePuy after the release of the 1976 edition. Morelli was able to convince everyone of the idea's value without any accusation of copying the Soviets.¹⁰⁷

1982 Edition *Operations FM 100-5*

The 1982 edition of *Operations FM 100-5* was issued on 20 August 1982, and was the first U.S. Army operational manual to clearly define military strategy, the operational level of war and tactics. However, while the 1982 edition of *Operations FM 100-5* defined military strategy, it did not define national strategy. The 1982 edition stated, "military strategy employs the armed forces of a nation to secure the national policy by applying force or the threat of force."¹⁰⁸ Military strategy was closely linked to policy, and the manual further linked military strategy to operations, stating, "military strategy sets the fundamental conditions for operations."¹⁰⁹ This linkage of policy to military strategy and military strategy to operations was more in line with German operational thinking as it evolved in the 1860s and 1870s, as well as the Soviet idea of operational art as developed in the 1920s, than previous editions of FM 100-5. All three linked politics to military strategy and military strategy to operations or operational art, unlike earlier editions of FM 100-5, which made no mention of an operational level of war, operational art or tactics, and only rarely addressed strategy.¹¹⁰

The 1982 edition of *Operations FM 100-5* went on to define the operational level of war as:

¹⁰⁵ Correspondence from General (Retired) Donn A. Starry to General William R. Richardson, Commander, TRADOC, 15 October 1984, 20184115MN002739, Box 15B, Folder 18, William R. Richardson Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

¹⁰⁶ Correspondence from General (Retired) Donn A. Starry to General William R. Richardson, Commander, TRADOC, 15 October.

¹⁰⁷ Correspondence from General (Retired) Donn A. Starry to General William R. Richardson, Commander, TRADOC, 15 October.

¹⁰⁸ *Operations FM 100-5* (1982), 2-3.

¹⁰⁹ *Operations FM 100-5* (1982), 2-3.

¹¹⁰ *Field Service Regulations Operations FM 100-5* (1962), 3-4 and *Operations of Army Forces in the Field FM 100-5* (1968), 1-2.

The operational level of war uses available military resources to attain strategic goals within a theater of war.

Most simply, it is the theory of larger unit operations.

It also involves planning and conducting campaigns.

Campaigns are sustained operations designed to defeat an enemy force in a specified space and time with simultaneous and sequential battles.

The disposition of forces, selection of objectives, and actions taken to weaken or to out-manuever the enemy all set the terms of the next battle and exploit tactical gains.

They are all part of the operational level of war.

In AirLand Battle doctrine, this level includes the marshalling of forces and logistical support, providing direction to ground and air maneuver, applying conventional and nuclear fires in depth, and employing unconventional and psychological warfare.¹¹¹

This definition reinforced the connection between strategy and operations. Furthermore, like German operational thought and practice in the latter part of the 19th century and World War Two, and like Soviet operational thought and practice, the operational level used battles to achieve operational objectives. The definition also contained a description of the term ‘campaign,’ viewing it as a tool for operational level practice. This was reinforced in the manual’s explanation of the tactical level, in which “Tactics are the specific techniques smaller units use to win battles and engagements which support operational objectives.”¹¹² More accurately, tactics were executed in response to operational requirements, as the closing sentence of the explanation for tactics illustrates, “An operation designed to defeat an enemy force in an extended area does so through operational maneuver and a series of tactical actions.”¹¹³ Thus, the strategic level provided the ends to be achieved, the operational level outlined the ways in which those ends would be accomplished, and the tactical level provided the means by which to enable the selected ways to achieve the ends.

The role of the operational level was explained in further detail in the section on “Dynamics of Battle,” specifically regarding combat power, which refers to the ability to combine maneuver, protection, and firepower. In this version of FM 100-5:

The object of maneuver at the operational level is to focus maximum strength against the enemy’s weakest point, thereby gaining strategic advantage. At this

¹¹¹ *Operations FM 100-5* (1982), 2-3.

¹¹² *Operations FM 100-5* (1982), 2-3.

¹¹³ *Operations FM 100-5* (1982), 2-3.

level, successful maneuver is achieved through skillful coordination of fire in depth with movement of large units.¹¹⁴

This was consistent with both German operational thought and practice, as well as Soviet operational art, as developed in the 1920s, practiced during the Second World War and as revived in the 1960s and 1970s.

In the case of both the Germans and the Soviets, operational thought and practice evolved out of the need to retain or achieve offensive action, through broad rapid movements avoiding the enemy's strength, by sufficiently large bodies of troops to pose a serious threat, thereby greatly expanding the battlespace, all in a reaction to the increasing strength of the defence. In the 1982 edition of *Operations FM 100-5*, the operational concept of AirLand Battle emphasized the importance of obtaining the initiative to defeat the enemy, arguing that initiative was seized through offensive action.¹¹⁵ Furthermore, the offensive was seen as "the decisive form of war" and as a means by which victory would be achieved.¹¹⁶ As argued above, the purpose of AirLand Battle was to defeat the enemy "by creating opportunities for decisive offensive action."¹¹⁷

Furthermore, the operational level was the conceptual region of war that created opportunities for decisive offensive action, and as Morelli argued, the operational level was at the corps level, would be the one to most clearly see "windows for offensive action development."¹¹⁸ In the 1982 edition of *Operations FM 100-5*, U.S. Army thinking regarding the operational level of war differed little from that of the Germans and the Soviets. Unlike the 1976 edition, the 1982 edition focused on operational rather than tactical outcomes. This offensive focus was made even more evident in the part of the manual dealing with the defense, which stated, "to win, one must attack," and "a successful defense consists of reactive and offensive elements."¹¹⁹ The offensive orientation of the manual was further reinforced under "Purposes of Defensive Operations." The manual went on to say, "An underlying purpose of all defensive operations is to create the opportunity to change to the offensive. All activities of the defense must contribute to that aim."¹²⁰ The purpose of the defense was to prevent the enemy from achieving his objectives, attrit his forces, and then regain the initiative by destroying his forces and his overall operational scheme of maneuver, thereby going on

¹¹⁴ *Operations FM 100-5* (1982), 2-4.

¹¹⁵ *Operations FM 100-5* (1982), 2-1 to 2-2.

¹¹⁶ *Operations FM 100-5* (1982), 8-1 and 10-1

¹¹⁷ Message from General Starry to Lieutenant General Richardson, "Implementation of Airland Battle," 20 May 1981, 20184474MN12371, Box 54, Folder 3B, Donn A. Starry Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

¹¹⁸ Message from Brigadier General Morelli for General Starry, "AirLand Battle 2000," 2 June 1981, 20184474MN12493, Box 55, Folder 1B, Donn A. Starry Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

¹¹⁹ *Operations FM 100-5* (1982), 10-1.

¹²⁰ *Operations FM 100-5* (1982), 10-3.

the offensive.¹²¹ The intention of AirLand Battle concerning the Soviet threat in Europe was to transition from an “initial defensive mode to an offensive mode to drive back the invader, reclaim terrain, and restore boundaries.”¹²² Although the operational level is intended to enable offensive action, it would use both the offense and defense as required in order to set the conditions for seizing the initiative.¹²³

Following on from the AirLand Battle concept and the preceding models, a key operational level feature or component of the 1982 edition of *Operations FM 100-5* was operations in depth, or deep attack and deep battle.¹²⁴ The 1982 edition of *Operations FM 100-5* devoted almost four and a half pages to deep attack. Its focus was on disrupting the enemy in depth, using long range fires, at the time mostly belonging to the U.S. Air Force, to slow the enemy’s rate of advance, thereby preventing the enemy from concentrating his forces, denying him the critical mass he needed to be successful in the main battle area. This, in turn, would allow friendly troops to create periods of friendly

¹²¹ Message from General Starry for General Meyer, General Vessey and Lieutenant General Otis, “Air/Land Battle ‘90’,” 28 November 1980, 20184474MN11919, Box 52A, Folder 4A, Donn A. Starry Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

¹²² General Glenn K. Otis, “Outline of Proposed COMCENTAG Remarks Advanced Military Studies Program (AMSP),” 18 March 1985, 20183844MNBT1036361417F0000000063614I003, Box 2A, Folder 7, Glenn K. Otis Speeches, Army Heritage and Education Center, Carlisle, Pennsylvania.

¹²³ John Boyd, a retired fighter pilot and military theorist, an associate of Lind’s, has often been seen as influential with respect to some of the ideas found in the 1982 edition of *Operations FM 100-5*. That said, whether he had any actual influence on the development of the doctrine is not really known. Like Lind, Boyd was a maneuver warfare advocate favoring maneuver over enemy destruction, who on a number of occasions, over a number of years had presented lectures on his view of maneuver warfare to students at both the U.S. Army War College and the U.S. Army Command and General Staff College. Wass de Czege, one of the writers of the 1982 edition of *Operations FM 100-5*, had invited Boyd to the U.S. Army Command and General Staff College and interacted with him on a regular basis. Whether Boyd’s influence was through this relationship is not known. However, it has been argued that Boyd’s influence on the 1982 edition is supposedly quite clear based on the inclusion of four tenets: initiative, agility, depth, and synchronization. But only the first three of these were in line with Boyd’s thinking, he completely rejected the inclusion of synchronization. Of the other three, depth has been historically addressed in U.S. Army operational doctrine usually in relation to the defense. Initiative was specifically highlighted in both the 1962 and 1968 editions of U.S. Army operational doctrine. The rejection of synchronization would make operational maneuver extremely difficult and, in the future, would challenge effective implementation of operational art. Robert Coram, *Boyd: The Fighter Pilot Who Changed the Art of War* (New York: Back Bay Books, 2002), 370 and 371; Grant T. Hammond, *The Mind of War: John Boyd and American Security* (Washington, D.C.: Smithsonian Books, 2001), 201; Frans P.B. Osinga, *Science, Strategy and War: The Strategic Theory of John Boyd* (New York: Routledge, 2007), 48 and 50; *Operations FM 100-5* (1982), 2-1; James G. Burton, *The Pentagon Wars: Reformers Challenge the Old Guard* (Annapolis, MD: Naval Institute Press, 1993), 54; *Operations of Army Forces in the Field FM 100-5* (1968), 3-2 and *Field Service Regulations Operations FM 100-5* (1962), 21.

¹²⁴ Lieutenant Colonel L.D. Holder, “Maneuver in the Deep Battle,” *Military Review* LXII, no. 5 (May 1982): 55.

superiority with which to seize the initiative from the enemy, which would result in the enemy's defeat.¹²⁵

Like German operational thought and practice, as well as Soviet operational art, the focus of the operational level was to enable offensive action focused on enemy destruction. This idea was reinforced by the perception that the 1982 edition was offensively focused to counter the perceived defensive focus of the 1976 edition. The application of operations within the AirLand Battle concept were focused on the offensive in its purest sense, rather than and not in the form of mobile defense or counterattacks. The operational level had to plan for the offensive while also planning a defensive that would both destroy enemy effectiveness and cohesion, as well as set the conditions for seizing the initiative.¹²⁶

Conclusion

FM 100-5 Operations was officially issued on 1 July 1976 and was updated on 29 April 1977 by the inclusion of an index. Although it neither introduced the operational level nor operational art, the doctrinal debate surrounding the manual would be critical to the U.S. Army's doctrinal shift from the army at war in Vietnam to an army prepared to fight the Soviets in central Europe and beyond, and the eventual introduction of the operational level to U.S. Army doctrine. The illustration of the lethality of modern weapons during the Arab Israeli War of 1973 reinforced the need to update doctrine. The 1976 edition of *FM 100-5 Operations* faced a similar challenge that all military doctrine faces: it attempted to be specific and explicit enough to be useful without being either dogmatic and inflexible or so abstract as to be of little real value.¹²⁷ The attempt to achieve this balance meant that it was difficult for readers to extract from the manual that which the authors and approving authority had intended.

Starry was appointed Commander of TRADOC in July 1977 and soon set out to address the primary criticisms of the 1976 edition of *FM 100-5 Operations*. With Meyer, who as Chief of Staff of the Army would direct the issuing of the 1982 edition, Starry shared a common vision of where U.S. Army doctrine had to go. Starry began by using the concept of Central Battle to describe the bringing together of maneuver and firepower to achieve a military decision,¹²⁸ which evolved into the Extended Battlefield and the Integrated Battlefield. By the end of January 1981, Starry felt these concepts did not

¹²⁵ *Operations FM 100-5* (1982), 7-13 to 7-14.

¹²⁶ Inclosure to Memorandum from General Donn A. Starry for General Glenn Otis, "The Operational Art of the AirLand Battle," 6 November 1981, 20184474MN13146, Box 57, Folder 5, Donn A. Starry Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

¹²⁷ Jeffery S. McKittrick and Peter W. Chiarelli, "Defense Reform," 324.

¹²⁸ John L. Romjue, *From Active Defense to AirLand Battle*, 32.

“accurately describe the battlefield in its totality,”¹²⁹ and directed that the term Air Land Battle be used, particularly when addressing the total battlefield.¹³⁰

The Air Land Battle Concept extended the battlefield in time, space and echelon of command and execution. Central to the concept was the idea of deep attack and the need to coordinate both the close battle in the main battle area and the deep battle to maximize the strategic effect with an intent to defeat the enemy through offensive action.¹³¹ This aligns with the first idea of operational thought presented in the previous chapter, which suggests that operational conceptualization or operational art lies between strategy and tactics, and enables offensive military action to tactically defeat an enemy military force across a broad geographic area, while also visualizing an extended temporal aspect to the engagement(s).

The 1982 edition of *Operations FM 100-5* was issued on 20 August 1982, and was the first U.S. Army operational manual to clearly define military strategy, the operational level of war and tactics. Starry gave full credit for the U.S. Army’s adoption of the operational level to his deputy, Morelli.¹³² The application of operations within the AirLand Battle concept focused on the offensive in its purest sense, rather than in the form of mobile defense or counterattacks. The operational level had to plan for the offensive while simultaneously planning a defensive operation, with the aim of both destroying enemy effectiveness and cohesion, as well as setting the conditions for seizing the initiative.¹³³

The next chapter examines how operational thought in the U.S. Army evolved, culminating in the introduction of operational art. Oriented around the operational concept of airland battle, it covers the period from the release of the 1986 edition of *FM 100-5 Operations* to just before the release of the 2001 edition of *FM 3-0 Operations*, including the 1993 edition of *FM 100-5 Operations*. Consideration is also given to the introduction of joint operational doctrine in 1993 and its potential impact on increasing the complexity of operational thought in the U.S. military.

¹²⁹ General Donn A. Starry message to Lieutenant General Richardson, “Air Land Battle,” 27 January 1981.

¹³⁰ General Donn A. Starry message for Commandants and Commanders, “The Air Land Battle,” 29 January 1981.

¹³¹ *US Army Operational Concepts The AirLand Battle and Corps 86 TRADOC Pamphlet 525-5*, 2-3.

¹³² Correspondence from General (Retired) Donn A. Starry to General William R. Richardson, Commander, TRADOC, 15 October 1984.

¹³³ Inclosure to Memorandum from General Donn A. Starry for General Glenn Otis, “The Operational Art of the AirLand Battle,” 6 November 1981.

Chapter Five – AirLand Battle

Based on the U.S. Army's experience with the 1976 edition, the release of the 1982 edition of *Operations FM 100-5* was anticipated to spark debate, both within and outside the U.S. Army, primarily in professional military journals, regarding the latest evolution of U.S. Army doctrine.¹ A new area of criticism was the emphasis placed by the 1982 edition on the deep battle. The argument was that putting too much emphasis on the deep battle would result in insufficient focus on the main battle area, and if the primary battle were lost, it would not matter how well the deep battle was conducted.² The 1982 edition, however, argued that deep battles were not new; instead, the U.S. Army had "historically made use of long-range interdiction to gain local battlefield advantages."³ Furthermore, deep battles or interdictions in the defense prevent the enemy from concentrating his forces, thereby enabling a friendly defensive battle. Much of the criticism, however, was only indirectly related to the doctrine itself and more focused on areas that interacted with doctrine, such as force design.⁴ Or that so much focus was put on developing and producing the 1982 edition of *Operations FM 100-5* that the supporting lower-level doctrine focused on the tactical level had been ignored.⁵ TRADOC was aware of these issues and took steps to address the "deficiencies and disconnects and develop the policy and management system necessary to overcome the problem areas."⁶

The introduction of the operational level of war into Army doctrine was noticed by the other services, most notably the U.S. Air Force. It noted the Army's definition of the operational level and argued there was "much confusion as to what the term" meant.⁷ Not everyone agreed with the Army definition, as seen in the case of Edward Luttwak, who argued, among other things, that the operational level was optional and should be used only when one is outnumbered.⁸ Regardless, the concept was now being used within the U.S. military, mostly informally and inconsistently, and the Air Force had to decide if

¹ Lieutenant Colonel (P) Huba Wass de Czege and Lieutenant Colonel L.D. Holder, "The New FM 100-5," 53.

² Colonel William G. Hanne, "AirLand Battle Doctrine, Not Dogma," *Military Review* LXIII, no. 6 (June 1983): 18 and Arie Van der Vlis, "AirLand Battle in NATO, A European View," *The US Army War College Quarterly: Parameters* XIV, no. 2 (Summer 1984): 12-13.

³ *Operations FM 100-5* (1982), 7-13 to 7-14.

⁴ Major James M. Dubik and Major (P) James J. Montano, "FM 100-5: Conceptual Models and Force Design," *Military Review* LXIV, no. 7 (July 1984): 17-21 and Major General John W. Woodmansee Jr., "Blitzkrieg and the AirLand Battle," *Military Review* LXIV, no. 8 (August 1984): 26, 28 and 39.

⁵ Lieutenant Colonel John A. Cope Jr., "Doctrinal Credibility: A Problem of Focus with FM 100-5," *Military Review* LXIV, no. 8 (August 1984): 68 and 73.

⁶ Message from General Richardson to Lieutenant General Vuono, "Training and Doctrinal Literature Disconnects," 12 March 1985, 20184115MNBW1013042868F0706201005, Box 70B, Folder 26, William R. Richardson Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

⁷ Colonel Clifford R. Krieger, "USAF Doctrine: An Enduring Challenge," 23.

⁸ Krieger, "USAF," 23.

the introduction and use of the operational level would have any value in U.S. Air Force doctrine.⁹ Not only did those within the Air Force try to understand the operational level of war, but there were also those in the Army who recognized a degree of doctrinal confusion caused by the conflicting discussion.¹⁰ During the review of the July 1985 draft of FM 100-5, one of the reviewers said, “the real problem is that the US Army Officer corps has not read, studied, or digested AirLand Battle as currently written in the 1982 manual.”¹¹ If they had not read or studied the 1982 edition of U.S. Army operational doctrine, they would have been unlikely to read or study anything about the operational level.

General William Rowland Richardson, the Commander of TRADOC, having assumed command from Otis on 11 March 1983, recognized that several ideas concerning the operational level of war were new and as such would take time to be truly learned and utilized by the officers, Non-Commissioned Officers (NCOs) and soldiers of the U.S. Army.¹² As a result, Richardson ordered a rewrite of the 1982 edition of *Operations FM 100-5*, focusing on the operational level of war, low-intensity conflict, deep battle and defense. This was to “restate AirLand Battle doctrine for the Army and to expand on some of the issues incompletely treated in the manual of 1982.”¹³ A revised FM 100-5 draft was sent for review on 1 July 1985. The revised draft was sent to reviewers along with a memorandum that explained the main changes to FM 100-5 in the revision and stated that the purpose of the review was to determine whether the changes resolved the challenges they sought to address. TRADOC felt that AirLand Battle met the needs of the U.S. Army. However, several misinterpretations needed to be addressed. The revision made a greater effort to highlight low intensity conflict, terrorism, motorized infantry, rapid deployments, and light forces, while also reinforcing the view that the human dimension and leadership were just as important as the physical aspects of war. The revised draft also addressed “apparent inconsistencies between AirLand Battle and NATO doctrine,” as well as any inconsistencies with U.S. Air Force doctrine.¹⁴

⁹ Krieger, “USAF,” 23-24.

¹⁰ John F. Meehan, “The Operational Trilogy,” *The US Army War College Quarterly: Parameters* XVI, no. 3 (Autumn 1986): 9.

¹¹ Memorandum for Record by Colonel Donald E. Nowland, “Review of FM 100-5, New Edition,” 27 August 1985, 20184115MN004775, Box 28A, Folder 13, William R. Richardson Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

¹² Correspondence from General William R. Richardson to Lieutenant General Sinclair L. Melner, Retired, Vice President, Hudson Institute, 20184115MN030190, Box 20A, Folder 10, William R. Richardson Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

¹³ Message from Lieutenant General Vuono for General Galvin, “Second Edition of FM 100-5,” 22 March 1985, 20184115MNBW1013042868F070620I013, Box 70B, Folder 26, William R. Richardson Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

¹⁴ Memorandum for Reviewers of FM 100-5 by Colonel Huba Wass de Czege, Special Assistant to Commander TRADOC, “The Nature and Reasons for Changes in This Edition,” 1 July 1985, 20184115MN004928, Box 29A, Folder 8, William R. Richardson Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

The memorandum also addressed the operational level of war introduced in the 1982 edition. In the revised edition, the hierarchy of war, campaign, major operation, battle, and engagement was related to strategy, operational art (a change from the operational level in the 1982 edition) and tactics. The application of AirLand Battle was placed in this context, “confirming the primacy of policy and strategy over the application of military principles at operational and tactical levels.”¹⁵ The expanded discussion regarding campaigns and major operations in the new version reinforced this. This document also recognized that, since the release of the 1982 edition, there had been confusion regarding the distinction between tactical and operational. One area where this was a problem was how some equated the operational level with maneuver, forward thinking and anticipation, while the tactical level was focused solely on fire and movement. This was incorrect and was corrected in the revised edition, which specifically pointed out that maneuver, forward thinking and anticipation applied to all levels of the war hierarchy. The memorandum went on to state that the tipping point occurred with the corps; it can function at either the lowest end of the operational level or the top end of the tactical level, depending on how they are employed. Lastly, to help clarify the operational level or operational art, the revised edition emphasized the conduct of major operations and campaigns.¹⁶

After comments were received on the 1 July 1985 draft, further revisions were made, resulting in the 24 September 1985 draft, which Colonel Wass de Czege, now Special Assistant to Commander TRADOC, reviewed with Richardson. This resulted in further revisions, where possible, with several critiques and suggestions from reviewers being deferred to the edition following what would be the 1986 edition of *FM 100-5 Operations*. Among the recommendations requiring extensive work was the “dilemma posed by the term operations and operational.”¹⁷ Central to the problem was that the term operations had become common usage when referring to military activities. The introduction of the operational level in 1982 created some confusion as to what one meant when referring to operations. Two things were done in the revision to address this problem. First, emphasis would be on campaigns and major operations when addressing the operational level. Second, the term operational would be used when discussing the operational level to avoid confusion with operations as military activities.¹⁸ By 31

¹⁵ Memorandum for Reviewers of FM 100-5 by Colonel Huba Wass de Czege, Special Assistant to Commander TRADOC, “The Nature and Reasons for Changes in This Edition,” 1 July 1985.

¹⁶ Memorandum for Reviewers of FM 100-5 by Colonel Huba Wass de Czege, Special Assistant to Commander TRADOC, “The Nature and Reasons for Changes in This Edition,” 1 July 1985.

¹⁷ Memorandum for Record by Colonel Huba Wass de Czege, Special Assistant to Commander TRADOC, “FM 100-5 IPR with General Richardson on 24 September 1985,” 30 September 1985, 20184115MN004928, Box 29A, Folder 8, William R. Richardson Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

¹⁸ Memorandum for Record by Colonel Huba Wass de Czege, Special Assistant to Commander TRADOC, “FM 100-5 IPR with General Richardson on 24 September 1985,” 30 September 1985.

January 1986, these FM 100-5 revisions were complete.¹⁹ The 1986 edition provided a more detailed description of the operational level of war than the 1982 edition. The 1986 edition aimed to clarify how the operational level serves as the link between the strategic and the tactical levels of war.²⁰

1986 Edition FM 100-5 Operations

Unlike the 1982 edition, which ignored the political level and briefly mentioned and defined strategy, the 1986 edition of *FM 100-5 Operations* touched on the political level and linked military strategy with politics. It defined strategy as “the art and science of employing the armed forces of a nation or alliance to secure policy objectives by the application or threat of force,” virtually identical to the definition in the 1982 edition.²¹ The main difference between the two was the inclusion of alliances. During the process of revising FM 100-5, General Bernard Rogers, Supreme Allied Commander Europe, commented that a key issue “to keep in mind and to emphasize” was that a war in Western Europe would be a “coalition war.”²² One of the recommendations for change following this review was to emphasize and elaborate on coalition warfare in the context of AirLand Battle. Richardson’s guidance addressed Roger’s concern about a lack of focus on coalition warfare. Furthermore, Richardson was particularly sensitive about incorporating comments from the European Command during the revision process.²³

The 1986 edition of *FM 100-5 Operations* also introduced the term or concept of operational art, the main elements of the description of operational art being:

Operational art is the employment of military forces to attain strategic goals in a theater of war or theater of operations through the design, organization, and conduct of campaigns and major operations.

Operational art thus involves fundamental decisions about when and where to fight and whether to accept or decline battle.

No particular echelon of command is solely or uniquely concerned with operational art, but theater commanders and their chief subordinates usually plan and direct campaigns.

¹⁹ Correspondence from General William R. Richardson to Lieutenant General Robert W. RisCassi, 20184115MN011919, Box 35, Folder 4, William R. Richardson Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

²⁰ General William R. Richardson, “FM 100-5: The AirLand Battle in 1986,” *Military Review* LXVI, no.3 (March 1986): 5.

²¹ Army Command and General Staff College, *FM 100-5 Operations* (Washington, D.C.: Department of the Army, May 1986), 1 and 9.

²² Correspondence from General Bernard W. Rogers to General William R. Richardson, 20184115MN021432, Box 28B, Folder 20, William R. Richardson Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

²³ Memorandum for Record by Colonel Huba Wass de Czege, Special Assistant to Commander TRADOC, “FM 100-5 IPR with General Richardson on 24 September 1985,” 30 September 1985.

Operational art requires broad vision, the ability to anticipate, a careful understanding of the relationship of means to ends, and effective joint and combined cooperation.²⁴

The manual provided considerably more detail regarding operational art than the 1982 edition did regarding the operational level of war. Despite this, the term “operational level” persisted and was used more frequently than “operational art,” even though the latter had been introduced to alleviate the confusion created by the former’s introduction in 1982. The term operational was used even more extensively, in line with Richardson’s guidance, when addressing the operational level.²⁵ In this context, the operational level was used to describe where operational art was applied and practiced.

In the 1986 edition, the “operational level of warfare” was central to AirLand Battle, with a focus on the initiative, retaining it and seizing it.²⁶ It argued that seeking and seizing the initiative was based on “offensive spirit.”²⁷ The manual articulated a view that the “decisive form of war” was the offense and that the defensive was only ever temporary; defeating the enemy required offensive action.²⁸ Even in the part of the manual on the defense, which was covered in considerable detail, the “ultimate objective” of the defense was to return to the offense.²⁹ The 1986 edition also focused considerably more on the theater, both the theater of war and the theater of operations, than the 1982 edition did, using it more extensively in the description of operational art. It addressed the synchronization and sequencing of battles and engagements as part of operational art. It clearly and directly broadened the temporal and geographic scale of AirLand Battle.³⁰ Thus, like the Germans and the Soviets, the defense was viewed as temporary until conditions favored a return to the offensive, which was the decisive form of war. That said, operational art would utilize both, whether in a tactical defense as part of an operational offense or an operational defense followed by an operational offense, to seize the initiative and act decisively across a broad geographic area over time.

The 1986 edition of *FM 100-5 Operations* linked campaigns and major operations to the operational level and battles and engagements to the tactical level, with campaigns and major operations consisting of a series of battles and engagements.³¹ Considerable space in the manual was devoted to describing the planning and conduct of campaigns and major operations in a theater of war, whereas the previous edition made no mention of this topic. According to this edition, commanders and staff at the

²⁴ *FM 100-5 Operations* (1986), 10.

²⁵ Memorandum for Record by Colonel Huba Wass de Czege, Special Assistant to Commander TRADOC, “FM 100-5 IPR with General Richardson on 24 September 1985,” 30 September 1985.

²⁶ *FM 100-5 Operations* (1986), ii and 14.

²⁷ *FM 100-5 Operations* (1986), 15.

²⁸ *FM 100-5 Operations* (1986), 91.

²⁹ *FM 100-5 Operations* (1986), 140.

³⁰ *FM 100-5 Operations* (1986), 10.

³¹ Major Wayne M. Hall, “A Theoretical Perspective of AirLand Battle Doctrine,” *Military Review* LXVI, no.3 (March 1986): 33 and Colonel William J. Bolt and Colonel David Jablonsky, “Tactics and the Operational Level of War,” *Military Review* LXVII, no. 2 (February 1987): 4.

operational level planned and executed campaigns to concentrate superior force “at the decisive time and place” to “mass or maneuver tactical formations to bring the enemy to battle under the best terms possible.”³² Tactics were also described in more detail than in the 1982 edition, and the role of tactics was linked to operational art within the structure of modern warfare. “Operational art sets the objectives and pattern of military activities,” while “tactics is the art” that “translates potential combat power into victorious battles and engagements.”³³

The fall of the Berlin Wall in 1989 signalled the beginning of the end of the Cold War and the diminution of the conventional Soviet military threat. For over forty years, the conventional battlefield had been shaped by the strategy of the bipolar Cold War world.³⁴ When the Cold War ended, the certainty it had provided on the battlefield was now gone, leading to a degree of strategic confusion regarding the military use of force.³⁵ On the one hand, the end of the Cold War seemed to herald a New World Order free from the threat of great power conflict, “the unipolar moment” with a single world superpower, on the other hand, the constraints the Cold War had placed on global conflicts were gone leading to an increase in ethnic and civil wars foreshadowing a possible New World Disorder.³⁶ Threats were now less well defined but still probable, and no less potentially dangerous, including several regional instabilities based on religious differences, border disputes and ethnic hostility that fueled national strife.³⁷ By the end of the Cold War the U.S. Army was still wrestling with what the concepts of operational art and the operational level meant and how they should be applied. Those who developed the doctrine had a clear understanding of the operational level and operational art, but others who learned of the concepts from doctrine, and as part of a broader professional military education did not share such a strong understanding.³⁸ The combination of a weak understanding of the operational level and operational art in the U.S. Army with the

³² *FM 100-5 Operations* (1986), 27 and 31.

³³ *FM 100-5 Operations* (1986), 10.

³⁴ General Frederick M. Franks, Jr., “Full-Dimensional Operations: A Doctrine for an Era of Change,” *Military Review* LXXII, no. 12 (December 1993): 8.

³⁵ David A. Fastbend, “Checking the Doctrinal Map: Can We Get There from Here with FM 100-5?” *The US Army War College Quarterly: Parameters* 25, no. 1 (Summer 1995): 38.

³⁶ Richard. Haass, *A World in Disarray: American Foreign Policy and the Crisis of the Old Order* (New York: Penguin Press, 2017), 210-211; Walter Russell Mead, *Power, Terror, Peace, and War: America's Grand Strategy in a World at Risk* (New York: Alfred A. Knopf, 2004), 4; Charles Krauthammer, “The Unipolar Moment,” *Foreign Affairs* 70, no.1 (1990/1991): 23; and Samuel P. Huntington, *The Clash of Civilizations and the Remaking of World Order* (New York: Simon & Schuster Paperbacks, 2011), 31-35.

³⁷ General Gordon R. Sullivan, “Doctrine A Guide to the Future,” 5 and Colonel James R. McDonough, “Building the New FM 100-5 Process and Product,” *Military Review* LXXI, no. 10 (October 1991), 3.

³⁸ Dwight L. Adams and Clayton R. Newell, “Operational Art in Joint and Combined Arenas,” *The US Army War College Quarterly: Parameters* XVIII, no. 2 (June 1988): 33-34 and Colonel Wayne A. Posschl, “To Fly and Fight at the Operational Level,” *Airpower Journal* II, no. 4 (Winter 1988): 22.

elimination of a traditional peer threat to focus on seemed to have disrupted American thought on the operational level of war and operational art.

The Gulf War – Operations DESERT SHIELD and DESERT STORM

The first real test of formal U.S. Army operational thought was the Gulf War. This conflict started with the Iraqi invasion of Kuwait on 2 August 1990. This was followed by American military and later American-led coalition intervention in the form of Operation DESERT SHIELD. DESERT SHIELD commenced on 7 August 1990, as a defensive staging operation, with the deployment of U.S. Air Force and U.S. Army units into the region. Through January 1991, U.S., coalition and allied forces continued to build up in the region as Iraq refused to withdraw from the Kuwaiti territory it had occupied. On 17 January 1991, Operation DESERT STORM began with a series of aerial attacks against Iraq. The ground campaign commenced on 24 February 1991, resulting in an overwhelming victory for the U.S. coalition and its allies by 28 February 1991.³⁹

The concept of an operational level between the strategic and tactical was part of the thinking for Operation DESERT STORM, certainly for the Army, during the planning and conduct of U.S. military operations during the Gulf War. This extended to the joint level, with General H. Norman Schwarzkopf, an army general, serving as Commander-in-Chief, Central Command (CINCCENT) and in overall command of Western allied military forces engaged in the Gulf War. The role of operational thought in the planning of Operation DESERT STORM is highlighted by Schwarzkopf's request for the U.S. Army graduates from the U.S. Army School of Advanced Military Studies (SAMS) because of their expertise in "the theory and practice of warfare at the operational level (corps and above) and campaign planning."⁴⁰

The ground operation in Operation DESERT STORM commenced on 21 February 1991 with Joint Force Command – East (including both VII Corps and XVIII Airborne Corps) launching its attack as units of the 1 Marine Expeditionary Force (1MEF) and Joint Force Command – East breached the berm along the Kuwaiti border heading for Kuwait City.⁴¹ As of the cease fire, 28 February 1991, XVIII Airborne Corps had advanced into Iraq, cutting off retreating Iraqi units and personnel while supporting the destruction of the Republican Guard. VII Corps had established a blocking position

³⁹ Richard W. Stewart, ed. *American Military History Volume II*, 416-427; Major Ronald N. Mazzia, "Tracking the Storm," *Military Review* LXXI, no. 9 (September 1991): 65-78; and, Spencer C. Tucker, ed., *Persian Gulf War Encyclopedia: A Political, Social, and Military History* (Santa Barbara, CA: ABC-CLIO, 2014), 107-119.

⁴⁰ Stephen Robinson, *The Blind Strategist: John Boyd and the American Art of War* (Dunedin, NZ: Exisle Publishing Pty Ltd, 2021), 250-251 and Department of Defense, *Conduct of the Persian Gulf War: Final Report to Congress* (Washington, D.C.: Government Printing Office, April 1992), 313.

⁴¹ Frank N. Schubert and Theresa L. Kraus, *The Whirlwind War: The United States Army in Operations DESERT SHIELD and DESERT STORM* (Washington, D.C.: Center of Military History United States Army, 1995), 174 and 177-179; Department of Defense, *Conduct of the Persian Gulf War*, 360, 365 and 368; and HRH General Khaled bin Sultan with Patrick Seale, *Desert Warrior* (New York: HarperCollins Publishers, Inc., 1996), 403.

south of the Euphrates River, destroying more than a dozen Iraqi divisions. 1MEF, along with coalition forces, were in defensive positions outside Kuwait City as Joint Force Command – East and Joint Force Command – North secured the Egyptian and Saudi Embassies and commenced clearing the city itself.⁴²

Operation DESERT STORM demonstrated the application of operational art. Based on the characteristics of operational art identified in the last two chapters, the battles and engagements conducted during the operation were dispersed in breadth and depth due to the lethality of the battlespace. Most importantly, U.S. and coalition forces simultaneously conducted two engagements, the amphibious demonstration by the 5th Marine Expeditionary Brigade and the feint by the 1st Cavalry Division, as well as three battles, the supporting attacks by 1MEF and coalition forces, the economy-of-force maneuver by XVIII Airborne Corps and the main attack by VII Corps. The fact that Operation DESERT STORM went off more or less as planned demonstrates that the military leadership had been able to visualize simultaneous and sequential battles and engagements across the depth and breadth of the battlespace.

By achieving the six operational objectives⁴³ and securing military victory over Iraq, two strategic objectives were outright accomplished: the expulsion of Iraqi forces from Kuwait and the protection of American lives. This military triumph also set the stage for the realization of the remaining two strategic objectives: the restoration of Kuwait's legitimate government and the establishment of security and stability in the region. It is important to note that the latter was not solely dependent on the military situation in Iraq and Kuwait, but on a complex interplay of factors. The achievement of these strategic objectives was a testament to the intricate planning and execution of the military operations.

In the aftermath of Operations DESERT SHIELD and DESERT STORM, the U.S. military's view was that U.S. victory was due, in part, to "new doctrinal concepts."⁴⁴ Notable among the new doctrinal concepts mentioned was the U.S. Army's AirLand Battle doctrine, which focused on offensive operations along the entire depth of the battlefield and intellectually divided the conduct of military effort into "operations conducted at corps and above, and tactics, conducted below corps."⁴⁵ The final concept of

⁴² Department of Defense, *Conduct of the Persian Gulf War*., 407-410 and HRH General Khaled bin Sultan, *Desert Warrior*, 412.

⁴³ U.S. and coalition ground operations during Operation DESERT STORM achieved three of the six operational objectives; 1) control of critical lines of communication into and out of Kuwait, 2) cut off and destroyed units of the Republican Guard while also removing other Iraqi military forces from Kuwait, and 3) liberated Kuwait City. Air operations supported ground forces in achieving these objectives. In addition, air operations before the ground war went a long way towards achieving the three remaining operational objectives: 1) attack Iraqi political-military leadership and command & control, 2) gain and maintain air superiority, and 3) destroy known nuclear, biological and chemical production, storage and delivery capabilities.

⁴⁴ Department of Defense, *Conduct of the Persian Gulf War*, 413.

⁴⁵ Department of Defense, *Conduct of the Persian Gulf War*, 329 and John S. Brown, "The Maturation of Operational Art: Operations DESERT SHIELD and DESERT STORM," in

operation developed for Operation DESERT STORM represented the original idea of operational art, first articulated in the 19th century; the operational plan would enable the tactical offense to achieve strategic success. This was accomplished by the main allied attack, which swept around the right flank of the Iraqis in an envelopment to destroy the Iraqi strategic reserve. It was an operation between tactics and strategy that enabled offensive action to successfully achieve strategic objectives through the tactical defeat of enemy forces.⁴⁶

Joint Warfare of the US Armed Forces was issued in November 1991, a little over eight months after the successful conclusion of Operation DESERT STORM, which reinforced the ideas surrounding emerging operational practice. It argued “that the offensive campaign illustrated the richness of the joint operational art. The commander’s concept directed toward the accomplishment of strategic objectives and oriented on the enemy’s centers of gravity, unified campaign planning.”⁴⁷ It went on to state that Operation DESERT STORM was “a triumph of the joint operational art,”⁴⁸ based on the use of supporting relationships within and across a joint force and the ability to exploit “asymmetries available to the joint force.”⁴⁹

Other explanations put forward for the swift American and allied victory in the Gulf War included political and strategic mistakes made by Saddam Hussein, primarily due to the technical advantage the Allies had over the Iraqis.⁵⁰ The U.S. military acknowledged that, given the rapid pace of the ground war, it was too brief a period to make detailed, conclusive deductions on a range of possible reasons for the rapid Allied and American success. Furthermore, the lack of comparable examples due to the uniqueness of the enemy, the theater in which the war occurred, and the geopolitical situation at the time, made any conclusion about American success challenging. That said, the U.S. military felt it had reason to believe that coalition and American success was due to various reasons that had been developed for several years, including new doctrine concepts such as the levels of war and operational art.⁵¹ The next chapter examines the evolution of U.S. operational thought within the U.S. Army from its inception in 1982 and 1986, and as it may have been shaped by the Gulf War, through to the editions of operational doctrine released after the digestion of the lessons from OIF.

Historical Perspectives of the Operational Art, edited by Michael D. Krause and R. Cody Phillips (Washington, D.C.: Center of Military History United States Army, 2005), 444.

⁴⁶ Department of Defense, *Conduct of the Persian Gulf War*, 338; Milan N. Vego, *Operational Warfare*, 475; Robert M. Citino, *Blitzkrieg to Desert Storm*, 287 and Colonel (Retired) Harry G. Summers, Jr., *On Strategy II: A Critical Analysis of the Gulf War* (New York: Dell Publishing, 1992), 175-176.

⁴⁷ Joint Chiefs of Staff, *JP 1 Joint Warfare of the US Armed Forces* (Washington, D.C.: Department of Defense, November 1991), 66.

⁴⁸ *JP 1 Joint Warfare of the US Armed Forces* (1991), 68.

⁴⁹ *JP 1 Joint Warfare of the US Armed Forces* (1991), 68.

⁵⁰ Thomas G. Mahnken, *Technology and the American Way of War Since 1945* (New York: Columbia University Press, 2008), 175 and Shimon Naveh, *In Pursuit of Military Excellence*, 323.

⁵¹ Department of Defense. *Conduct of the Persian Gulf War*, 413.

Post Gulf War to the 1993 Edition of *FM 100-5 Operations*

Two main changes influenced U.S. Army doctrine, thinking, and operational thought in this period. The first was the end of the Cold War, 26 December 1991, with the official dissolution of the Soviet Union. This resulted in the U.S. losing its primary enemy, the focus of U.S. military strategy for the past 45 years. In the search for new threats to focus U.S. military planning, regional strongmen, non-state actors and failing states replaced the Soviet Union.⁵² The second change was the longer-term effects of the Goldwater-Nichols Department of Defense Reorganization Act of 1986 (Goldwater-Nichols Act), which took effect on 1 October 1986. The act made the Chairman of the Joint Chiefs of Staff responsible for planning, advice (to the President and Secretary of Defense) and policy formulation on doctrine, training and education of the United States Armed Forces, specifically for developing doctrine for the joint employment of the armed forces.⁵³ As a result of these two changes, the U.S. Army started considering the concept of AirLand Battle and whether it still retained relevance in the new operating environment. It also began considering the relationship of U.S. Army doctrine with U.S. joint doctrine.

General Franks, Commanding General of TRADOC from 1991 to 1994, assessed that how the 1986 edition of *FM 100-5 Operations* addressed operations across the spectrum of conflict needed revision.⁵⁴ AirLand Battle or Airland Operations were losing support within TRADOC as interest shifted to operations across the spectrum and the continuum of military operations reflective of the New World (Dis)order.⁵⁵ This led to a greater focus on regional threats below that of a peer competitor and a broader view of operations, including those beyond war, in the redrafting of *FM 100-5 Operations*.⁵⁶ When the 1993 edition of *FM 100-5 Operations* was released, it acknowledged that AirLand Battle had evolved “into a variety of choices for a battlefield framework” and that Army forces operated “across the range of military operations.”⁵⁷ Outside of the 1993 edition’s introduction, there was no mention of AirLand Battle or AirLand Operations; however, neither did the 1993 edition replace it with some other operational concept. Although the introduction of the manual stated it was “truly doctrine for full dimensions

⁵² Benjamin M. Jensen, *Forging the Sword*, 87.

⁵³ Goldwater-Nichols Department of Defense Reorganization Act of 1986, Public Law Number 99-433, 100 Stat. 1007-1008.

⁵⁴ General Franks’ message for General Sullivan, “Executive Summary of Doctrine Development Seminar,” 4 June 1992, 20183794MN00I003, Box 10C, Folder 30, Force Development Office of the Deputy Assistant Chief of Staff for Operations and Plans Collection, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

⁵⁵ Briefing, “FM 100-5 Laydown,” 26 June 1992, 20183794MN000978, Box 10C, Folder 28, Force Development Office of the Deputy Assistant Chief of Staff for Operations and Plans Collection, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

⁵⁶ Memorandum for Chief of Staff Army, “FM 100-5, Operations – INFORMATION BRIEFING,” 28 August 1992, 20183794MN000964, Box 10C, Folder 27, Force Development Office of the Deputy Assistant Chief of Staff for Operations and Plans Collection, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

⁵⁷ *FM 100-5 Operations* (1993), vi.

of the battlefield” and that the “manual offers a doctrine for full-dimension operations,” it also said, “Winning wars is the primary purpose of the doctrine in the manual,” emphasizing the manual’s “primary focus is warfighting.”⁵⁸ According to General Gordon R. Sullivan, then the Chief of Staff of the Army, the 1993 edition of *FM 100-5 Operations* was a stepping stone from the operational concept of airland battle to full spectrum operations.⁵⁹ *Force XXI Operations: A Concept for the Evolution of Full-Dimension Operations for the Strategic Army of the Early Twenty-First Century*, TRADOC Pamphlet 525-5, was the next step that outlined the “concept for the evolution of full-dimensional operations.”⁶⁰ This shift to a broader scope of possible military operations eventually replaced AirLand Battle with “Full Spectrum Operations” in 2001.⁶¹

Before the Goldwater-Nichols Act of 1986, no organization or individual in the U.S. Department of Defense was responsible for developing and producing joint doctrine for the U.S. military. Its effects took root in the late 1980s. Joint publications, known as JCS Pubs, existed before this, but there was no standard process for their development or distribution. They did not attempt to address differences with service doctrine, nor was there a mechanism to leverage U.S. military joint knowledge and expertise.⁶² One of the first Joint Publications was *JCS Pub 0-2 Unified Action Armed Forces (UNAAF)* issued on 1 December 1986. The Goldwater-Nichols Act and DOD Directive 5100.1, dated 25 September 1987 were the references used to produce *Joint Pub 1-01 Joint Publication System Joint Doctrine and Joint Tactics, Techniques, and Procedures Development Program* issued on 15 April 1988. This publication provided “the principles, guidelines, and conceptual framework for initiating, validating, developing, coordinating, evaluating, approving, and maintaining joint doctrine.”⁶³ This meant some part of the American defense establishment had to be assigned the responsibility.

That task was assigned to the Chairman of the Joint Chiefs of Staff. The Chairman approved the Joint doctrine, “in consultation with the other members of the Joint Chiefs of Staff.”⁶⁴ The actual development, coordination, and evaluation, leading to

⁵⁸ *FM 100-5 Operations* (1993), v.

⁵⁹ Army Training and Doctrine Command, *Force XXI Operations: A Concept for the Evolution of Full-Dimension Operations for the Strategic Army of the Early Twenty-First Century*, TRADOC Pamphlet 525-5 (Fort Monroe, VA: Headquarters, U.S. Training and Doctrine Command, 1994), Foreword.

⁶⁰ *Force XXI Operations: A Concept for the Evolution of Full-Dimension Operations for the Strategic Army of the Early Twenty-First Century*, i.

⁶¹ *FM 3-0 Operations* (2001), vii and 1-14; and Combined Arms Doctrine Directorate, *ADRP 3-0 Operations* (Washington, D.C.: Department of the Army, November 2016), v.

⁶² David A. Sawyer, “The Joint Doctrine Development System,” *Joint Force Quarterly* 14 (Winter 1996-97): 37.

⁶³ Joint Chiefs of Staff, *Joint Pub 1-01 Joint Publication System Joint Doctrine and Joint Tactics, Techniques, and Procedures Development Program* (Washington, D.C.: Department of Defense, April 1988), I-1 to I-2.

⁶⁴ *Joint Pub 1-01 Joint Publication System Joint Doctrine and Joint Tactics, Techniques, and Procedures Development Program* (1988), II-1.

doctrine approval, was a collaborative effort involving the Joint Staff and all the services. The need for consensus led to the joint doctrine being diluted and made more generic, particularly when certain portions of the draft doctrine were strongly opposed by one or more of the services. This could lead to internal inconsistencies within a joint doctrine publication, resulting in indistinct, contradictory or ambiguous concepts.⁶⁵ These difficulties could be more significant when one of the services was assigned as the lead agent for a particular joint doctrine publication.⁶⁶

The challenges in achieving consensus and lead agent bias resulted from differences among the various services, particularly in the different ways they defined and used doctrine.⁶⁷ The U.S. Army viewed doctrine as “the condensed expression of its approach to fighting campaigns, major operations, battles and engagements.”⁶⁸ As addressed earlier in Chapter One, the Marine Corps did not view doctrine as a definitive body of work regarding the conduct of war but rather as a warfighting philosophy. Similarly, the U.S. Navy viewed doctrine as a shared mindset and, like the U.S. Air Force, was more focused on technology. The Air Force also went further than the Navy, focusing on technology and the systems that developed and managed it. This led to the subordination of doctrine and operating procedures to technological requirements. The differences could be best summed up in the fact that the Army and Marine Corps equipped the man, while the Navy and Air Force manned the equipment. Put differently, the Air Force developed doctrine for existing capabilities, while the Army used doctrine to determine its required capabilities.⁶⁹ These differing views on doctrine and its role “can produce widely differing interpretations and confusion” when developing joint doctrine.⁷⁰

The U.S. Army led the first formal iteration of U.S. joint operational doctrine, *Joint Pub 3-0 Doctrine for Joint Operations*.⁷¹ This means the Army was developing both the U.S. Army’s and the U.S. joint doctrine for operations simultaneously. Joint doctrine took its lead from the U.S. Army, which was unsurprising given the Army’s experience in

⁶⁵ Douglas C. Lovelace, Jr. and Thomas-Durell Young, “Joint Doctrine Development: Overcoming a Legacy,” *Joint Force Quarterly* 14 (Winter 1996-1997): 95.

⁶⁶ “The Lead Agent (LA) is responsible for developing, coordinating, reviewing, and maintaining an assigned doctrine.” *Joint Pub 1-01 Joint Publication System Joint Doctrine and Joint Tactics, Techniques, and Procedures Development Program* (1988), II-2.

⁶⁷ John P. White, Chairman, *Directions for Defense, Report of the Commission on Roles and Missions of the Armed Forces* (Washington, D.C.: Department of Defense, May 1995), 2-4.

⁶⁸ *FM 100-5 Operations* (1986), 6.

⁶⁹ Douglas C. Lovelace, Jr. and Thomas-Durell Young, “Joint Doctrine Development: Overcoming a Legacy,” *Joint Force Quarterly* 14 (Winter 1996-1997): 98.

⁷⁰ John P. White, Chairman, *Directions for Defense, Report of the Commission on Roles and Missions of the Armed Forces*, 2-3.

⁷¹ *Joint Pub 1-01 Joint Publication System Joint Doctrine and Joint Tactics, Techniques, and Procedures Development Program* (1988), VI-6 and ⁷¹ Joint Chiefs of Staff, *JP 3-0 Doctrine for Joint Operations* (Washington, D.C.: Department of Defense, September 1993), i.

doctrine development compared to the other services.⁷² This, in turn, would lead to the expectation that they would be the same, or at least similar, in terms of the concepts that they both presented. They were, and the 1993 edition of *Joint Pub 3-0 Doctrine for Joint Operations*, issued in September 1993, was very similar to the 1993 edition of *FM 100-5 Operations*, issued in June 1993, with a few notable differences to be addressed below.

The 1993 edition reintroduced the operational level, which the 1986 edition of *FM 100-5 Operations* had replaced with operational art in the structure of modern warfare used in the 1986 edition. In the 1993 edition, operational art was how the operational level exercised its responsibilities. The objective of the operational level was to achieve strategic ends through the “design, organization and execution of subordinate campaign and major operations.”⁷³ This wording mirrored that in the description of operational art. The 1993 edition of *FM 100-5 Operations* described operational art similarly to the 1986 edition; however, several noticeable differences were present. The 1986 edition defined operational art as, “the employment of military forces to attain strategic goals in a theater of war or theater of operations through the design, organization, and conduct of campaigns and major operations.”⁷⁴

The 1993 edition made a minor addition to the definition by broadening it to the “skillful employment of military force.”⁷⁵ More importantly, it broadened the attainment of goals or objectives beyond strategic to include operational objectives as well.⁷⁶ This was important for several reasons. First, major operations employing operational art would most likely achieve operational objectives that support the campaign plan, which would, in turn, contribute to achieving strategic goals. Second, Army units would operate within a joint task force construct aimed at achieving success at the tactical level through battles, or possibly at the operational level, achieving objectives through major operations.⁷⁷

The definition in the 1993 edition also went beyond designing, organizing and conducting; it also integrated.⁷⁸ Effective firepower required the integration of a wide range of firepower systems of both the Army and joint forces at both the tactical and operational levels to maximize combat power.⁷⁹ Furthermore, integration was one of the key characteristics of tactical and operational logistics that improved military effectiveness and efficiency in achieving operational objectives.⁸⁰ The 1993 edition went

⁷² John M. Shalikashvili, “A Word from the Chairman,” *Joint Force Quarterly* 14 (Winter 1996-97): 5 and David A. Fastbend, “Checking the Doctrinal Map: Can We Get There from Here with FM 100-5?” *The US Army War College Quarterly: Parameters* 25, no. 1 (Summer 1995): 45.

⁷³ *FM 100-5 Operations* (1993), 6-2.

⁷⁴ *FM 100-5 Operations* (1986), 10.

⁷⁵ *FM 100-5 Operations* (1993), 6-2.

⁷⁶ *FM 100-5 Operations* (1993), 6-2.

⁷⁷ *FM 100-5 Operations* (1993), 4-4 to 4-5.

⁷⁸ *FM 100-5 Operations* (1993), 6-2.

⁷⁹ *FM 100-5 Operations* (1993), 2-10.

⁸⁰ *FM 100-5 Operations* (1993), 12-3 to 12-4.

beyond the planning and conduct of campaigns and major operations to include battles.⁸¹ Including battles was vital as they were how operational art applied operational ways to achieve operational and strategic objectives.

The description of operational art in the 1993 edition was broader than that in the 1986 edition, introducing essential concepts into the description of operational art. It emphasized the use of means to achieve strategic objectives, utilizing operational design to define how these means could be employed. The description of operational art in the 1993 edition also emphasized the need to clearly understand what achieving objectives entailed to avoid the unnecessary expenditure of one's means. It also underlined the sequencing of means to achieve goals, partly to prevent exceeding one's means.⁸² Overall, the 1993 edition was less tactically focused than the 1986 edition, providing a broader and deeper perspective on U.S. Army operational thought and practice while emphasizing the critical linkage to strategic thought and practice. The 1993 edition of *FM 100-5 Operations* focused on the linkage and relationship between strategic thought and operational practice, with the tactical level providing the means to achieve and enable both.

A significant difference between the descriptions of operational art in the 1986 edition of *FM 100-5 Operations* and the 1993 edition was that the former addressed campaigns while the latter did not. Furthermore, unlike the 1986 edition, which included a chapter on operational planning with a sizable section dedicated to campaign planning, no such chapter or section existed in the 1993 edition. This was because the 1993 edition viewed campaign planning as a Joint Task Force (JTF) responsibility, not an army responsibility. Commanders of army units prepared operational plans for major operations, which supported the JTF Commander's campaign plan for the theater of operations.⁸³

Returning to the Army's lead on joint operational doctrine and *Joint Pub 3-0 Doctrine for Joint Operations*, was there validity to the expectation that they would be the same, or at least similar in terms of the concepts they both presented? There are several minor differences. The Army looked to the "skillful employment of military forces," while joint doctrine looked at the "use of military forces."⁸⁴ Joint doctrine sought "the arrangement of battles," while the Army looked to "the sequencing of successive battles,"⁸⁵ and arrangement and sequence were interchangeable.⁸⁶ There were a couple of other cases where synonyms were used; one used "help" while the other used "assist."⁸⁷

⁸¹ *FM 100-5 Operations* (1993), 6-2.

⁸² *FM 100-5 Operations* (1993), 6-2.

⁸³ *FM 100-5 Operations* (1993), 4-6 and 6-0 to 6-1.

⁸⁴ *FM 100-5 Operations* (1993), 6-2 and *JP 3-0 Doctrine for Joint Operations* (1993), II-3.

⁸⁵ *JP 3-0 Doctrine for Joint Operations* (1993), II-3 and *FM 100-5 Operations* (1993), 6-2.

⁸⁶ Marié Weir Kay, ed., *Merriam-Webster's Collegiate Thesaurus* (Springfield, MA: Merriam-Webster, Incorporated, 1988), 45 and 663.

⁸⁷ *JP 3-0 Doctrine for Joint Operations* (1993), II-3 and *FM 100-5 Operations* (1993), 6-2.

These minor differences, however, do not change the fact that the definitions and descriptions of operational art were, for the most part, very similar.

There were, however, two exceptions. First, there were two inclusions in the joint description of operational art that were not found in the Army description. In both instances, the joint description referred to “joint operational art” instead of operational art, which was used throughout the remainder of the description. The first instance of its usage addressed the arrangement of military forces’ efforts “in time, space, and purpose.”⁸⁸ The second instance reinforced the first, focusing “on the fundamental methods and issues associated with the synchronization⁸⁹” of joint forces.⁹⁰ The U.S. Army did not utilize the concepts of time, space and purpose, nor the concept of synchronization, in its description of operational art at the operational level, nor in any direct relationship with operational art at that level.⁹¹ Instead, throughout the 1993 edition of *FM 100-5 Operations*, the U.S. Army put a much greater focus on tactical synchronization related to combined arms, battle effects and combat power, thereby applying the concepts of time, space, purpose, and synchronization at the tactical level rather than the operational level.⁹² The Army focused primarily on battles and engagements, while the Joint level focused on campaigns and major operations.

This does not mean that the U.S. Army did not consider using synchronization at the operational level in support of operational art; instead, its focus was on battle at the tactical level. This leads to the second exception between the U.S. Army and joint definitions and descriptions of operational art, specifically regarding the level at which operational art is used. In the description of operational art in joint doctrine, it was practiced by the Joint Force Commander, “their senior staff officers and subordinate commanders,” or component commanders.⁹³ The U.S. Army’s view on this had changed since the 1986 edition and had become somewhat more elusive, identifying “no specific level of command” as “solely concerned with operational art.”⁹⁴ All strategic, operational and tactical levels may be, and arguably should be, concerned with operational art, but this does not tell us who was expected to practice it in the U.S. Army.

It is necessary to look elsewhere in the 1993 edition of *FM 100-5 Operations* to determine how the U.S. Army’s operational doctrine views operational art. It identifies the combatant and theater commander as practitioners of operational art.⁹⁵ It goes on to

⁸⁸ *JP 3-0 Doctrine for Joint Operations* (1993), II-3.

⁸⁹ The Army defined synchronization as “the ability to focus resources and activities in time and space to produce maximum relative combat power at the decisive point.” Army Training and Doctrine Command, *FM 100-5 Operations* (1993), G-8.

⁹⁰ *JP 3-0 Doctrine for Joint Operations* (1993), II-3 to II-4.

⁹¹ “It is inherently a joint doctrine that recognizes the teamwork required of all the services and the extension of the battlefield in time, space and purpose through all available resources and campaign design.” *FM 100-5 Operations* (1993), 2-0.

⁹² *FM 100-5 Operations* (1993), 2-3, 2-12 and 6-7.

⁹³ *JP 3-0 Doctrine for Joint Operations* (1993), II-3.

⁹⁴ *FM 100-5 Operations* (1993), 6-2.

⁹⁵ *FM 100-5 Operations* (1993), 4-5 and 6-1.

state that both these commanders “plan and execute campaigns.”⁹⁶ After this, things become less clear. Combatant commanders are responsible for developing strategic concepts based on a strategic estimate that forms the basis of their respective combatant commands’ strategies.⁹⁷ Based on the strategic concept selected to achieve strategic military objectives, the combatant commander develops a campaign plan using operational art to “arrange tactical, operational, and strategic actions to accomplish strategic and operational objectives.”⁹⁸ Looking specifically at the U.S. Army, several factors influenced what level an Army unit functioned at, most importantly its intended purpose. An Army unit at the highest level would typically “design major ground operations” and thereby, through implication, practice operational art; anything below this level was focused on battles and engagements and thus tactical thought and practice.⁹⁹ Based on this, combatant, theater, and joint forces commanders practice operational art, along with U.S. Army commanders who planned major ground operations.

The descriptions of operational art in *Joint Pub 3-0 Doctrine for Joint Operations* and the 1993 edition of *FM 100-5 Operations* were essentially the same. There were a few minor differences between the two. Still, those differences did not change the fact that the definitions and descriptions of operational art were, for the most part, very similar. Concerning the two exceptions where the direct differences are somewhat more significant, a deeper examination reveals that the fundamental differences were less than they appeared and are more a matter of focus. Regarding synchronization, the U.S. Army used time, space and purpose, as well as synchronization, throughout the 1993 edition of *FM 100-5 Operations*. Still, with a much greater focus on tactical synchronization related to combined arms, battle effects and combat power, the Army focused primarily on means. In contrast, the joint focus was on ways. This was understandable for joint operations as the joint level focused on the strategic and operational levels, while the Army was focused on the operational and tactical levels; the operational level is where they share a commonality. Concerning the second exception between the U.S. Army and joint definitions and descriptions of operational art as to who or what level used operational art, like the first exception, it was more a matter of focus, with combatant commanders, theater commanders and joint forces commanders practicing operational art, along with army commanders who planned major ground operations.

So, the terms and concepts of U.S. joint operational doctrine and U.S. Army operational doctrine were similar to one another. Thus, joint doctrine reflected Army doctrine, making joint doctrine land-centric in its focus on air operations, if not maritime operations,¹⁰⁰ subordinate to the interests of land or Army operations. Joint doctrine

⁹⁶ *FM 100-5 Operations* (1993), 6-2.

⁹⁷ *JP 3-0 Doctrine for Joint Operations* (1993), III-1 and III-3

⁹⁸ *JP 3-0 Doctrine for Joint Operations* (1993), III-6 to III-7.

⁹⁹ *FM 100-5 Operations* (1993), 6-2.

¹⁰⁰ “Since World War II, the role of the (aircraft) carrier has evolved to one that supports a land battle or reinforces diplomacy.” Capt (N) (Ret’d) David A. Gerrish, “Sea-Based Air Power and the AirLand Campaign,” *Military Review* LXIX, no. 7 (July 1989): 24.

addressed the concerns of land and naval commanders regarding enemy capabilities and interdiction, designating them as the supported commander.¹⁰¹ Joint doctrine directly addressed action at sea and action on land in isolation, at the exclusion of the Air Force, based on the physical geography on which the Army and Navy operated.¹⁰²

The commonality between joint operational doctrine and Army operational doctrine made it easier for the Army to understand, thereby increasing the Army's likelihood of embracing joint operational doctrine. This was reinforced by a joint operational doctrine focused on ground maneuvers. The land focus of the joint operational doctrine meant that the Army¹⁰³ was more likely to dominate joint operational doctrine at the expense of the Air Force and Navy. Army dominance of joint operational doctrine was made all the more likely due to the weaker role doctrine played in both the U.S. Navy and the U.S. Air Force,¹⁰⁴ as outlined in Chapter One. This was significant because, from the U.S. joint perspective, doctrine shaped thinking about the U.S. use of military force and the "development of a common joint culture."¹⁰⁵

1993 to Full Spectrum Operations 2001

The 1993 edition of *FM 100-5 Operations* was released during a period of significant change that would shape U.S. Army operational thinking in the lead-up to the next edition of FM 100-5. In 1993, several security crises around the globe heightened regional instability. The fragmentation of what had become the Former Republic of Yugoslavia started with the succession of Slovenia in 1991, turning into a civil war in 1992 between ethnic Croats, Serbians and Bosnians. At that time, the U.S. provided limited support to air and naval forces in support of the United Nations' efforts. By spring 1994, the U.S. Air Force was attacking Serbian troops in support of stabilization efforts. Somalia had devolved into a failed state with the U.S. committing forces in December 1992, to Operation RESTORE HOPE in support of United Nations humanitarian efforts. After declaring success in the spring of 1993, the situation regressed and then spiraled out of control with the U.S. abandoning the country that summer after a bloody battle in the streets of Mogadishu that left 19 dead Americans and between 300 and 500 dead Somalis. Haiti was also heading towards being a failed state, resulting in a steady flow of refugees to the U.S. In October 1993, the U.S. blockaded Haiti to stop the flow of refugees with limited success that eventually turned into direct U.S. military intervention in the fall of 1994. In Rwanda, the United Nations Security Council authorized a peacekeeping

¹⁰¹ *JP 3-0 Doctrine for Joint Operations* (1993), IV-21 to IV-22 and *JP 3-0 Doctrine for Joint Operations* (1995), IV-14 to IV-15.

¹⁰² *JP 3-0 Doctrine for Joint Operations* (1993), IV-21 to IV-23.

¹⁰³ General Gordon R. Sullivan, "Projecting Strategic Land Combat Power," *Joint Force Quarterly* 1 (Summer 1993): 9 and 10.

¹⁰⁴ David A. Fastbend, "Checking the Doctrinal Map," 45.

¹⁰⁵ Director for Operational Plans and Joint Force Development (J-7), *JP 1 Joint Warfare of the Armed Forces of the United States* (Washington, D.C.: Department of Defense, November 2000), I-8 to I-9 and Alvin H. Bernstein, "From Desert One to Desert Storm," *Joint Force Quarterly* 1 (Summer 1993): 6.

mission that would fail in the spring of 1994, which led to the Rwandan genocide, resulting in the death of over half a million people, mostly Tutsis.¹⁰⁶

In the fall of 1993, Russian President Boris Yeltsin dismissed the Russian Parliament summarily. In response, opposition members named their own President. In turn, Yeltsin used the military to suppress the revolt.¹⁰⁷ The collapse of the Soviet Union had changed the focus of U.S. threat analysis. The need to deter Soviet aggression had diminished significantly, and the U.S. was unsure where the next threat might come from. Subsequently, the U.S. military adopted a flexible, regionally oriented strategy. This new regional defense strategy was aligned with the President's *National Security Strategy of the United States*.¹⁰⁸ With the collapse of the Soviet Union, the National Security Strategy and the Defense Strategy viewed global security as being threatened by regional instability, resulting in the U.S. shifting from a containment strategy to a regional defense plan.¹⁰⁹

The Defense Strategy argued that the U.S. needed to maintain a sufficient military capability to address potential regional crises anywhere in the world, which would require a high level of readiness. To achieve this, the new strategy prioritized science and technology as key to maintaining and growing the U.S. qualitative edge in military doctrine and combat systems.¹¹⁰ One element of this effort included investments in maneuver capability, including the ability to deny maneuver to the enemy. For the U.S. Army, this resulted in investments in the Javelin anti-tank guided missile system, and more significantly, the Army Armored Gun System, which would later become the Stryker wheeled infantry fighting vehicle. This acquisition would enhance the Army's maneuver capability and increase rapidly deployable combat power.¹¹¹ The Stryker would become an essential element of Army Transformation at the beginning of the 21st century.

In March 1993, the new Secretary of Defense ordered a review of U.S. military capabilities and the national defense strategy, due to the changing global security environment resulting from the end of the Cold War. The primary security threat was no longer the Soviet Union. Instead, it was perceived as a possible act of aggression by

¹⁰⁶ Seyom Brown, *Faces of Power: Constancy and Change in United States Foreign Policy from Truman to Obama Third Edition* (New York: Columbia University Press, 2015), 550-551 and 582-583; Allan R. Millett, Peter Maslowski and William B. Feis, *For the Common Defense*, 613-620; and Richard W. Stewart, ed., *American Military History Volume II*, 433-445.

¹⁰⁷ Brown, *Faces*, 550-551 and 554-555.

¹⁰⁸ Chairman of the Joint Chiefs of Staff, *National Military Strategy of the United States* (Washington, D.C.: Joint Chiefs of Staff, 1992), 1.

¹⁰⁹ George H. W. Bush, President, *A National Security Strategy of the United States* (Washington, D.C.: The White House, 1993), 1 and 13; and Dick Cheney, Secretary of Defense, *Defense Strategy for the 1990s: The Regional Defense Strategy* (Washington, D.C.: Department of Defense, 1993), 1.

¹¹⁰ Cheney, *Defense Strategy for the 1990s*, 18.

¹¹¹ Dick Cheney, Secretary of Defense, *Annual Report to the President and the Congress* (Washington, D.C.: Department of Defense, 1993), 78-79.

regional powers.¹¹² To address the potential threat posed by aggressive regional powers, the U.S. required a strategy to defeat aggressors, deter conflict, and preserve stability through the forward presence of U.S. forces while also being able to conduct smaller intervention operations when necessary. To achieve this, it was assessed that the U.S. needed a military capability to defeat two regional aggressors simultaneously.¹¹³ This would be directly addressed in the 1994 National Security Strategy.

The 1993 edition of *FM 100-5 Operations* was shaped directly by the National Military Strategy.¹¹⁴ The 1991 National Security Strategy identified regional crises as the “predominant military threat,” resulting in the need to maintain the ability to project military power.¹¹⁵ In turn, the 1992 National Military Strategy recognized that, in light of the changed threat environment, the U.S. military needed to be strategically agile and maintain and improve its ability to project power globally while also maintaining its technological supremacy. The U.S. military needed “the ability to rapidly assemble the forces needed to win – the concept of applying decisive force to overwhelm our adversaries and thereby terminate conflicts swiftly with a minimum loss of life.”¹¹⁶

As a result, the National Military Strategy focused on adaptive regional planning based on strategic mobility to mass overwhelming force. It was oriented toward regional threats rather than global confrontation while leveraging technological superiority.¹¹⁷ From this, the 1993 edition of *FM 100-5 Operations* identified power projection as a fundamental principle and force projections were deemed “fundamental to Army operations doctrine.”¹¹⁸

AirLand Battle was anticipated to evolve in response to changes in the international security environment, enabling the Army to conduct a range of possible operations.¹¹⁹ The 1993 edition of *FM 100-5 Operations* was viewed as “truly doctrine for the full dimensions of the battlefield in a force-projection environment.”¹²⁰ The global scope of the U.S. national strategy meant Army forces could be committed anywhere in the world on short notice; forward defense had been replaced by force projection as the primary means of U.S. Army force employment.¹²¹ The 1993 edition devoted a whole

¹¹² Les Aspin, Secretary of Defense, *Report on the Bottom-Up Review* (Washington, D.C.: Department of Defense, 1993), iii.

¹¹³ Aspin, *Report on the Bottom-Up Review*, 7, 9, 13 and 19.

¹¹⁴ *FM 100-5 Operations* (1993), iv.

¹¹⁵ George H.W. Bush, President, *National Security Strategy of the United States* (Washington, D.C.: The White House, 1991), 28.

¹¹⁶ Chairman of the Joint Chiefs of Staff, *National Military Strategy of the United States* (Washington, D.C.: Joint Chiefs of Staff, 1992), 9-10.

¹¹⁷ *National Military Strategy of the United States* (1992), 26.

¹¹⁸ *FM 100-5 Operations* (1993), iv.

¹¹⁹ *FM 100-5 Operations* (1993), vi.

¹²⁰ *FM 100-5 Operations* (1993), vi.

¹²¹ *FM 100-5 Operations* (1993), 1-1 to 1-2.

chapter to force projection, which addressed considerations for force projection and the conduct of force projection operations.¹²²

The 1993 Bottom-Up Review played a significant role in shaping U.S. strategy from 1993 to 1994, while taking advantage of the peace dividend to reduce force structure and costs in research, development, and, in particular, procurement.¹²³ This review determined that the U.S. needed to focus on its ability to project power into areas important to U.S. national interests and to defeat hostile regional powers. It recommended to the President that the U.S. be able to win two major regional conflicts simultaneously.¹²⁴ The National Security Strategy identified the U.S. as the only country capable of conducting large-scale expeditionary operations. To deter aggression, the U.S. needed to be capable of “projecting and sustaining U.S. power in more than one region.”¹²⁵ It also made it clear that the primary purpose of U.S. military forces was to fight and win America’s wars; their purpose was not to conduct peace operations, which were considered the responsibility of the citizens of the state in question.¹²⁶ The Department of Defense deduced from this that there would be little to no warning of regional threats; America needed to be able to project power rapidly to protect U.S. interests and those of its allies.¹²⁷

At the time, the Secretary of Defense noted recent changes to Army doctrine that addressed power projection, the broad range of possible military operations and the need for greater cooperation.¹²⁸

In order to keep pace with these developments (end of the Cold War, the Bottom-Up Review and changes to U.S. strategy), the Army recently revised the intellectual foundation for its operations. The Army published a new *FM 100-5, Operations*, both to accommodate new strategic realities and to ensure continuity. This manual reflects how the Army thinks about its mission to fight and win the nation’s wars. It is the Army’s keystone warfighting doctrine. FM 100-5 addresses the full range of military operations while emphasizing joint operations as the basis for conducting military campaigns and a wide range of operations other than war.¹²⁹

¹²² *FM 100-5 Operations* (1993), 3-1 to 3-12.

¹²³ Les Aspin, Secretary of Defense, *Report on the Bottom-Up Review*, iii-iv.

¹²⁴ William J. Clinton, President, *A National Security Strategy of Engagement and Enlargement* (Washington, D.C.: The White House, 1994), 2 and Les Aspin, Secretary of Defense, *Annual Report to the President and the Congress* (Washington, D.C.: Department of Defense, 1994), xvi.

¹²⁵ Clinton, *A National Security Strategy of Engagement and Enlargement* (1994), 6.

¹²⁶ Clinton, *A National Security Strategy of Engagement and Enlargement* (1994), 14.

¹²⁷ Les Aspin, Secretary of Defense, *Annual Report to the President and the Congress*, 5.

¹²⁸ Aspin, *Annual Report to the President and the Congress* (1994), 163.

¹²⁹ Togo D. West, Jr., Secretary of the Army, “Report of the Secretary of the Army,” in *Annual Report to the President and the Congress*, Les Aspin, Secretary of Defense (Washington, D.C.: Department of Defense, 1994), 259.

The Secretary acknowledged the Army's efforts to adapt to the changing global security environment and support U.S. strategy.

The 1993 edition of *FM 100-5 Operations* briefly touched on full-dimensional operations, stating it was “truly doctrine for the full dimensions of the battlefield in a force-projection environment.”¹³⁰ It did not, however, elaborate any further elsewhere in the manual. In 1994, TRADOC introduced the concept of full-dimensional operations, which included a threat spectrum model.¹³¹ It did not foresee a return to a strategic framework based on a single threat like the Cold War, but rather the further evolution of doctrine based on a framework of principles to be creatively applied, dependent on the strategic circumstances.¹³² The 1994 edition of *FM 1, The Army* did not mention full-dimensional operations.¹³³ What it did state about the United States in general and the U.S. Army in particular was that they must be prepared to engage in “the entire range of military operations, from humanitarian assistance to peace operations, through confrontations short of war, to a range of wartime conventional or even nuclear operations.”¹³⁴

Both the 1994 and the 1995 National Security Strategies identified several potential destabilizers, including the complex, even problematic, political and economic transition of the former communist states in eastern Europe, the spread of weapons of mass destruction, militant nationalism along with ethnic and religious conflict, and transnational security risks.¹³⁵ Based on this, the 1995 National Military Strategy identified four main threats in the international environment: regional instability, weapons of mass destruction, transnational dangers, and dangers to democracy and reform in the former Soviet Union and Eastern Bloc states.¹³⁶ From this, it was deduced that the U.S. had two national military objectives: to promote stability and thwart aggression. This, in turn, led to three military tasks: peacetime engagement, deterring aggression and preventing conflict, and winning wars.¹³⁷ The most important of these tasks was that the U.S. military had to be capable of fighting and winning two wars simultaneously.¹³⁸

¹³⁰ *FM 100-5 Operations* (1993), vi.

¹³¹ *Force XXI Operations: A Concept for the Evolution of Full-Dimension Operations for the Strategic Army of the Early Twenty-First Century*, 2-3.

¹³² *Force XXI Operations: A Concept for the Evolution of Full-Dimension Operations for the Strategic Army of the Early Twenty-First Century*, 3-17.

¹³³ Army Chief of Staff, *FM 1 The Army* (Washington, D.C.: Department of the Army, June 1994).

¹³⁴ *FM 1 The Army* (1994), 18.

¹³⁵ William J. Clinton, President, *A National Security Strategy of Engagement and Enlargement* (Washington, D.C.: The White House, 1994), 1 and William J. Clinton, President, *A National Security Strategy of Engagement and Enlargement* (Washington, D.C.: The White House, 1995), 1.

¹³⁶ Chairman of the Joint Chiefs of Staff, *National Military Strategy of the United States of America: A Strategy of Flexible and Selective Engagement* (Washington, D.C.: Joint Chiefs of Staff, 1995), 2.

¹³⁷ *National Military Strategy of the United States of America* (1995), 4 and 6.

¹³⁸ *National Military Strategy of the United States of America* (1995), 5.

The original intent had been to update the 1993 edition of *FM 100-5 Operations* sometime in or around 1996. As the date approached, however, it was decided to defer any revisions to a later date. In light of the experiences in Somalia, Operation RESTORE HOPE, Haiti, Operation UPHOLD DEMOCRACY, and Bosnia and Herzegovina, Operation JOINT ENDEAVOR, it was apparent that there was confusion about Operations Other Than War (OOTW) introduced in the 1993 edition.¹³⁹ The broadening of the levels of war beyond the conduct of war and applying them to operations other than war in the 1993 edition of *FM 100-5 Operations* had been a significant shift because, up until that time operational thought and practice had been focused on the prosecution of war in general, to enable offensive action. It was challenging to comprehend the application of tactics in a peacetime environment to “influence world events that routinely occur between nations,” such as peacebuilding.¹⁴⁰ Likewise, it was difficult to comprehend the application of operational art, which “links and integrates tactical battles and engagements that, when fought and won, achieve the strategic aim,” in a peacetime environment to achieve peacebuilding.¹⁴¹ After several false starts, a working draft would not be produced until 2000.¹⁴²

In 1996, the Clinton Administration, for the first time, came out directly to state the U.S. military needed to be capable of defeating two major regional aggressors simultaneously and, therefore, required to “maintain a ‘two war’ force,” as identified in the 1993 Bottom-Up Review.¹⁴³ Previously, the need to address two major regional aggressors had been implied in the National Security Strategy, as a requirement to deal with aggression in more than one region simultaneously.¹⁴⁴ Once re-elected at the end of 1996 for a second term in office, the 1997 National Security Strategy provided more details on addressing two regional aggressors simultaneously. The need to win two major theater wars simultaneously led to three requirements. First, maintaining the ability to defeat two enemies quickly in rapid succession. Second, the U.S. had to be ready to deal with unconventional approaches using asymmetric means. Third, the U.S. military had to be able to transition seamlessly from warfighting to peacetime global engagement and to multiple and varied contingency operations.¹⁴⁵

The global security environment remained unpredictable, so the U.S. military also needed to be prepared to execute a variety of contingency operations that were

¹³⁹ David A. Fastbend, “The Categorization of Conflict,” *The US Army War College Quarterly: Parameters* 27, no. 2 (Summer 1997): 75 and Walter E. Kretchik, *U.S. Army Doctrine*, 232-242.

¹⁴⁰ *FM 100-5 Operations* (1993), 2-0 to 2-1.

¹⁴¹ *FM 100-5 Operations* (1993), 6-2.

¹⁴² Del Stewart, *Victory Starts Here: A Short 45-Year History of the US Army Training and Doctrine Command* (Fort Leavenworth, KS: Combat Studies Institute Press, 2018), 51-52 and Walter E. Kretchik, *U.S. Army Doctrine*, 242-246.

¹⁴³ William J. Clinton, President, *A National Security Strategy of Engagement and Enlargement* (Washington, D.C.: The White House, 1996), 14.

¹⁴⁴ William J. Clinton, President, *A National Security Strategy* (1994), 6 and William J. Clinton, President, *A National Security Strategy* (1995), 8 and 9.

¹⁴⁵ William J. Clinton, President, *A National Security Strategy for a New Century* (Washington, D.C.: The White House, 1997), 12-13.

expected to cover the entire range of military operations just short of major warfare. As such, the U.S. military needed to remain multi-mission capable.¹⁴⁶ In light of this, the Department of Defense recognized that it needed to maintain the capability to address “the full spectrum of threats.”¹⁴⁷ Therefore, the U.S. military had to be capable of fighting two major theater wars simultaneously while also responding to a variety of contingencies and asymmetric threats. As such, the U.S. military had to be able to address the full spectrum of crises as they arose and as forces were directed. Deterrence of potential adversaries was based, in part, on conventional warfighting capabilities that could operate effectively across “the full spectrum of military operations,” including “deployable power-projection forces.”¹⁴⁸ The need to conduct full spectrum military operations resulted in changes to force structure, that led to a decrease in the number of active-component U.S. Army divisions from 10 to 18 between 1991 and 1995.¹⁴⁹

The U.S. Army had been working on the concept of full-dimensional operations for some time, as early as the 1993 edition of *FM 100-5 Operations*, which introduced the idea of full-dimensional operations and the need for force projection. The U.S. Army then expanded on the concept in *Force XXI Operations: A Concept for the Evolution of Full-Dimension Operations for the Strategic Army of the Early Twenty-First Century*, TRADOC Pamphlet 525-5, which outlined the “concept for the evolution of full-dimensional operations.”¹⁵⁰ The Army’s efforts in both the 1993 edition of *FM 100-5 Operations* and the 1994 TRADOC Pamphlet 525-5 were validated by the Department of Defense, which recognized that achieving full spectrum dominance required, among other things, developing new advanced concepts and doctrine.¹⁵¹

The 1998 National Security Strategy continued to balance maintaining the ability to defeat two enemies in rapid succession, while being ready to deal with unconventional approaches using asymmetric means. In addition, it sought to ensure that the U.S. military could transition without pause from major warfighting to peacetime global engagement to multiple and varied contingency operations short of war, and back again reminiscent of the 1993 Bottom-Up Review.¹⁵² The Department of Defense, in turn, focused on shaping the international security environment to the U.S. advantage, the ability to defeat two major regional aggressors, while also preparing for the future through modernization.¹⁵³ The Revolution in Military Affairs (RMA) took on “crucial”

¹⁴⁶ Clinton, *A National Security Strategy* (1997), 12.

¹⁴⁷ William S. Cohen, Secretary of Defense, *Report of the Quadrennial Defense Review* (Washington, D.C.: Department of Defense, 1997), iv.

¹⁴⁸ Cohen, *Report* (1997), 9-12.

¹⁴⁹ Cohen, *Report* (1997), 29 and John Sloan Brown, *Kevlar Legions: The Transformation of the U.S. Army, 1989-2005* (Washington, D.C.: Center of Military History, 2011), 124-125.

¹⁵⁰ *Force XXI Operations: A Concept for the Evolution of Full-Dimension Operations for the Strategic Army of the Early Twenty-First Century*, i.

¹⁵¹ William S. Cohen, *Report of the Quadrennial Defense Review* (1997), 14-16.

¹⁵² William J. Clinton, President, *A National Security Strategy for a New Century* (Washington, D.C.: The White House, 1998), 22.

¹⁵³ William S. Cohen, Secretary of Defense, *Annual Report to the President and the Congress* (Washington, D.C.: Department of Defense), 1998, vii.

importance, enabling the development and exploitation of new operational concepts.¹⁵⁴ This included concepts developed by the Army in *Army Vision 2010* and through the Army's Force XXI efforts.¹⁵⁵ Concepts such as "full-dimensional operations" and "full spectrum operations" would be implemented in the 2001 edition of *FM 3-0 Operations*.¹⁵⁶ While the RMA received attention within the Department of Defense, transformation was the focus of the Army.¹⁵⁷

Strategic mobility remained an essential element of the National Security Strategy in 1999 because it was a significant component of power projection.¹⁵⁸ In part, strategic mobility would be enhanced through a military transformation that aimed to leverage doctrinal and other force development "innovations to give U.S. forces greater capabilities and flexibility."¹⁵⁹ The 1999 National Security Strategy considered

¹⁵⁴ Cohen, *Report* (1998), 117-118. U.S. interest in the RMA originated in 1993 with Andrew W. Marshall, Director of the Office of Net Assessment, which conducts strategic evaluations for the Department of Defense. The original idea considered the possibility of a military-technical revolution; however, Marshall felt that this concept needed to be revised due to the increasing emphasis on technology. He felt it was better to think of it as an emerging military revolution or a potential revolution that considered concepts of operation and new organizations. He spoke about a potential military revolution that would probably take about twenty years to mature, with two areas that it needed to focus on: regional contingencies and the possible emergence of a major competitor to the U.S. A.W. Marshall, "Some Thoughts on Military Revolutions – Second Version" (Memorandum for the Record, Office of the Secretary of Defense, 23 August 1993), 1-8.

¹⁵⁵ Cohen, *Report* (1998), 120.

¹⁵⁶ *Force XXI Operations A Concept for the Evolution of Full-Dimension Operations for the Strategic Army of the Early Twenty-First Century*, 1-3 and Gossary-4; and Army Chief of Staff, *Army Vision 2010* (Washington, D.C.: Department of the Army, August 1996), 9 and 18.

¹⁵⁷ During the Clinton Administration, Secretary of Defense Les Aspin had little interest in the RMA. In contrast, his successor, William J. Perry, showed considerable interest and backed the effort to explore the RMA. This changed again when Perry was replaced by William S. Cohen, who went so far as to seriously consider transferring Marshall and the Office of Net Assessment from the Secretary's Office to the National Defense University. There were many in the Pentagon, as well as Congress and the Administration, who did not want to push the RMA; many in the military wanted to avoid rapid change. Neither *Joint Vision 2010*, published in 1995, nor *Joint Vision 2020*, published in 2000, addressing the U.S. military's vision on how it would transform to achieve U.S. strategic objectives in the future, mentioned the RMA. The Army did not emphasize the idea of the RMA when addressing transformation, in part because of the congressional audience that was not interested in it, but also because of the focus on technology and the Army's concerns about how much new technology would influence or change land warfare. Thomas G. Mahnken, "Net Assessment and Its Customers," in *Net Assessment and Military Strategy: Retrospective and Prospective Essays* edited by Thomas G. Mahnken (Amherst, NY: Cambria Press, 2020), 109-110; Robert A. Blaker, *Understanding the Revolution in Military Affairs: A Guide to America's 21st Century Defense* (Washington, D.C.: Progressive Policy Institute, 1997), 6-7; *Joint Vision 2010* (1995), 1-39; Joint Chiefs of Staff, *Joint Vision 2020* (Washington D.C.: Department of Defense, May 2000), 1-40; and John Sloan Brown, *Kevlar Legions*, 4-6.

¹⁵⁸ William J. Clinton, President, *A National Security Strategy for a New Century* (Washington, D.C.: The White House, 1999), 11.

¹⁵⁹ Clinton, *A National Security Strategy* (1999), 21.

employing military force in light of a broad range of threats that would shape the full spectrum of operations.¹⁶⁰ The Department of Defense argued that addressing challenges at the beginning of the 21st century required a full spectrum force to deal with everything from humanitarian operations to peacekeeping, low-level contingencies, and defeating a major regional aggressor.¹⁶¹ Looking to the future, transformation, based on technological advances and information superiority, would achieve full spectrum dominance through the rapid evolution of weapons systems and doctrine.¹⁶² Chief of Staff of the U.S. Army, General Eric K. Shinseki, believed the Army needed to update equipment, concepts and doctrine, leading to a series of change initiatives that collectively became known as Transformation. This would result in a renewed effort by TRADOC to update the 1993 edition of *FM 100-5 Operations*, which would lead to the 2000 and later the 2001 editions.¹⁶³

The 2000 National Security Strategy argued that addressing the broad range of new threats would require the transformation of capabilities based on advances in science and technology, as well as experimentation by the armed services, thereby including the Army, to develop and implement new concepts and weapons systems.¹⁶⁴ Transformation, however, extended beyond new military systems to include leveraging doctrine, among other areas of force development, to enhance operational capability and flexibility. The military transformation required balancing three resource priorities: maintaining force readiness to meet operational requirements, modernizing existing military forces, and exploiting the revolution in military affairs to “maintain unparalleled capabilities” to “respond effectively in the future.”¹⁶⁵

To maintain force readiness, U.S. forces had to be trained, organized and equipped to perform multiple missions simultaneously, generating a “credible warfighting capability across the full spectrum of conflict,” from humanitarian operations to peacekeeping and low-level contingencies to defeating a major regional aggressor.¹⁶⁶ The Department of Defense view was that “The Army supported the National Military Strategy by maintaining a force capable of full spectrum military operations.”¹⁶⁷ The Army also supported transformation by seeking to bridge the gap between the force of today and the competent Objective Force of the future, by fielding an Interim Force of six to eight brigade combat teams. Interim Brigade Combat Teams (IBCT) could deploy anywhere in the world within 96 hours. In support of this effort, Army doctrine would be

¹⁶⁰ Clinton, *A National Security Strategy* (1999), 18.

¹⁶¹ William S. Cohen, Secretary of Defense, *Annual Report to the President and the Congress* (Washington, D.C.: Department of Defense, 1999), 17

¹⁶² Cohen, *Report* (1999), 123-124.

¹⁶³ Del Stewart, *Victory Starts Here*, 51-52 and Walter E. Kretchik, *U.S. Army Doctrine*, 242-248.

¹⁶⁴ William J. Clinton, President, *A National Security Strategy for a Global Age* (Washington, D.C.: The White House, 2000), 4.

¹⁶⁵ Clinton, *A National Security Strategy* (2000), 34.

¹⁶⁶ Clinton, *A National Security Strategy* (2000), 18 and 32.

¹⁶⁷ Louis Caldera, Secretary of the Army, “Report of the Secretary of the Army,” in *Annual Report to the President and the Congress*, William S. Cohen, Secretary of Defense (Washington, D.C.: Department of Defense, 2000), 177.

redrafted in parallel with the development of the Interim Force.¹⁶⁸ This effort would lead to the 2001 edition of *FM 3-0 Operations*, which is the opening subject of the next chapter.

¹⁶⁸ William S. Cohen, Secretary of Defense, *Annual Report to the President and the Congress* (Washington, D.C.: Department of Defense, 2000), 125-126.

Chapter Six – Full Spectrum Operations

This chapter considers the evolution of U.S. Army operational thought from the introduction of the 2001 edition of *FM 3-0 Operations* just before the 11 September 2001 terrorist attack against the U.S., through the U.S. Global War on Terrorism, including Operation ENDURING FREEDOM, and, for this dissertation, focused on OIF. From 2001 through to 2011 U.S. operational thought was framed in the context of the operational concept of full spectrum operations, a term that refers to the U.S. Army's capability to conduct a wide range of operations, from humanitarian missions to high-intensity combat, as adopted in the 2001 edition of *FM 3-0 Operations*.¹ This was the operational doctrine for the U.S. Army when it began the Iraq War and was used throughout the conflict. Full spectrum operations remained the operational concept for the 2008 and 2011 editions of FM 3-0, the latter issued on 22 February 2011. Other ideas linked to U.S. Army operational thought, including the questions used to guide operational art and the increasing emphasis on operational design, will also be examined below. The most crucial change in 2008 for U.S. Army operational thought was the redefinition of operational art itself. This examination will conclude with an analysis of the changes to the 2008 edition of *FM 3-0 Operations* in 2011, specifically the shift from elements of operational design to elements of operational art, as well as the corresponding interaction of U.S. Army operational thought with U.S. joint operational thought.

The 2001 edition of *FM 3-0 Operations*

By 2001, the Department of Defense was taking the full spectrum of threats seriously.² For the Army, deployments focused on military operations other than war had increased considerably since 1990, with a growing number of non-state threats expanding the complexity of the security environment.³ This threat environment required an Army that could transition seamlessly from one type of operation to another, then back again, from promoting peace to deterring war through to fighting and winning a war; it had to be able to address requirements across the full spectrum of operations.⁴ The Army was, in turn, resourced to transition from an Army focused on winning a theater war to an one able to address full spectrum operations.⁵ This included investing in military training and education, as well as sustainment, to ensure Army forces would be both agile and robust

¹ *FM 3-0 Operations* (2001), 1-4; *FM 3-0 Operations* (2008), viii; and *ADRP 3-0 Operations* (2016), v.

² William S. Cohen, Secretary of Defense, *Annual Report to the President and the Congress* (Washington, D.C.: Department of Defense, 2001), 19, 21, 23, 31 and 176-177.

³ Army Chief of Staff, *FM 1 The Army* (Washington, D.C.: Department of the Army, June 2001), 15.

⁴ *FM 1 The Army* (2001), 31.

⁵ W. Blair Haworth, Jr., *Department of the Army Historical Summary Fiscal Year 2000* (Washington, D.C.: Center of Military History, 2011), 16, 41 and 129.

enough to respond to threats across the entire spectrum of operations.⁶ The final draft of FM 3-0 Operations identified full spectrum operations as the Army's intended operational concept. It presented an Army history of conducting full spectrum operations, most recently in Iraq, Rwanda, Haiti, Bosnia, and Kosovo.⁷ It went on to state, "The Army's warfighting focus enables a full spectrum force that meets the needs of the joint force commander (JFC) in war, conflict, and peace."⁸

The 2001 edition of *FM 3-0 Operations* was released for distribution on 14 June 2001. To address the confusion about Operations Other Than War (OOTW) introduced in the 1993 edition, the 2001 edition introduced the operational concept of full spectrum operations.⁹ Full spectrum operations consisted of offense, defense, stability, and support (ODSS) operations that could be executed simultaneously, sequentially, or in combination, as the situation dictated, showcasing the military's flexibility and ability to respond to changing circumstances.¹⁰ The 2001 edition viewed the offense as "the decisive form of war," aimed at defeating or destroying the enemy.¹¹ The key to the operational level offense, was attacking the decisive points simultaneously and/or sequentially. The focus of defensive operations was much more tactical, making little reference to the operational level or operational art. The Army's operational focus initially shifted from offense to defense, with little deliberate capacity or interest in support operations at any level, reflecting the strategic thinking behind military operations.¹²

Concerning operational art, the 2001 edition of *FM 3-0 Operations* described it as the 1993 edition; however, even the small changes it made took it further from the description used in the 1986 edition.

Operational art— the use of military forces to achieve strategic goals through the design, organization, integration, and conduct of theater strategies, campaigns, major operations, and battles.¹³

⁶ General Accounting Office, *Military Transformation: Army Has a Comprehensive Plan for Managing Its Transformation but Faces Major Challenges* (Washington, D.C.: United States General Accounting Office, November 2001), 44.

⁷ Army Training and Doctrine Command, *FM 3-0 (FM 100-5) Operations (Final Draft)* (Washington, D.C.: Department of the Army, April 2000), v and 1-2.

⁸ *FM 3-0 (FM 100-5) Operations (Final Draft)* (2000), 1-2.

⁹ *FM 3-0 Operations* (2001), vii.

¹⁰ *FM 3-0 Operations* (2001), 1-14 to 1-16. Stability operations protect and promote U.S. national interests through developmental and coercive actions short of violence. Support operations assist civil authorities during crises and the relief of suffering. *FM 3-0 Operations* (2001), 9-1 and 10-0.

¹¹ *FM 3-0 Operations* (2001), 7-2.

¹² *FM 3-0 Operations* (2001), 10-3. The 2001 concept of full spectrum operations viewed "warfighting as the Army's primary focus" and "the ability of Army forces to dominate land warfare," enabling them to "dominate any situation in military operations other than war." *FM 3-0 Operations* (2001), vii.

¹³ *FM 3-0 Operations* (2001), 2-3 to 2-4.

Operational art determines when, where, and for what purpose major forces are employed to influence the enemy disposition before combat. It governs the deployment of those forces, their commitment to or withdrawal from battle, and the arrangement of battles and major operations to achieve operational and strategic objectives.¹⁴

The description of operational art addressed operational vision, stating operational art was to be focused on opportunities that should be “visualized, anticipated, created and seized.”¹⁵ At the same time, the description of operational art became somewhat more focused. The central idea was the arrangement of tactical actions to achieve both strategic and operational objectives rather than the less precise “major objectives.”¹⁶

The 2001 edition retained the operational level between the strategic and the tactical. Whereas the 1993 edition included operational art under the operational level, the 2001 edition went further and clearly stated that the “focus at this level (operational) is on operational art.”¹⁷ Therefore, the description of the operational level was not surprisingly focused on the description of operational art. Furthermore, the linkage to the strategic level was not as strong as in the 1993 edition, returning instead to the more direct linkage with the tactical level of the 1986 edition.¹⁸

Both campaigns and major operations remained central to operational art:

A campaign is a related series of military operations aimed at accomplishing a strategic or operational objective within a given time and space. A *major operation* is a series of tactical actions (battles, engagements, strikes) conducted by various combat forces of a single or several services, coordinated in time and place, to accomplish operational, and sometimes strategic objectives in an operational area. These actions are conducted simultaneously or sequentially under a common plan and are controlled by a single commander.¹⁹

Despite this, the 2001 edition of *FM 3-0 Operations* offered little on campaign planning, as it was presented as a joint responsibility, not an army responsibility. Army commanders developed plans for major operations that supported the joint campaign plan.²⁰ Joint doctrine, however, addressed campaign planning in considerable detail. The 2001 edition of *JP 3-0 Doctrine for Joint Operations* had a chapter on “Planning Joint Operations” and had a section on “The Campaign.”²¹ The 2002 edition of *JP 5-00.1 Joint*

¹⁴ *FM 3-0 Operations* (2001), 2-3 to 2-4.

¹⁵ *FM 3-0 Operations* (2001), 2-4.

¹⁶ *FM 100-5 Operations* (1993), 6-2 and *FM 3-0 Operations* (2001), 2-3 to 2-4.

¹⁷ *FM 3-0 Operations* (2001), 2-3.

¹⁸ *FM 100-5 Operations* (1993), 6-3 and *FM 3-0 Operations* (2001), 2-5.

¹⁹ *FM 3-0 Operations* (2001), 2-3.

²⁰ *FM 3-0 Operations* (2001), 6-3.

²¹ Director for Operations (J-3), *JP 3-0 Doctrine for Joint Operations* (Washington, D.C.: Department of Defense, September 2001), iii and III-4 to III-9.

Doctrine for Campaign Planning, published a little over four months after *JP 3-0 Doctrine for Joint Operations*, included a whole chapter on “Campaign Plan Design.”²² That said, for *FM 3-0 Operations*, plans for major operations were viewed in the same way as campaign plans, only with a narrower focus.²³ The 2001 edition of *FM 3-0 Operations* did refer to *FM 5-0* regarding planning. However, *FM 5-0 Army Planning and Orders Production* was not issued until January 2005 and replaced *FM 101-5 Staff Organization and Operations*, which was issued in May 1997. The latter provided no details on campaign planning, while the former stated it was the responsibility of combatant commanders.²⁴ Regardless, the army campaign planning or planning for major operations was to be based on the military decision-making process.²⁵

Operational design received considerably greater attention in the 2001 edition of *FM 3-0 Operations* than in either the 1986 or the 1993 editions.²⁶ Laying out a flow of design with the four concepts of operational design from 1993 worked after a fashion, but considerable detail was lacking relative to later versions:

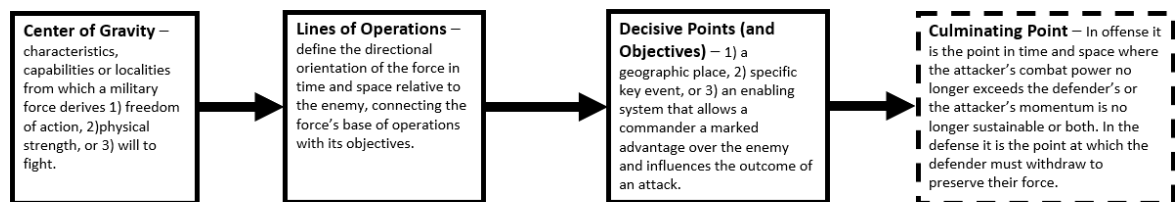


Figure 6.1 The 1993 Concepts of Theater and Operational Design²⁷

The sequencing of the concepts or elements would seem somewhat out of synch, as intuitively, it would be more logical that decisive points and objectives would determine

²² Director for Operational Plans and Joint Force Development (J-7), *JP 5-00.1 Joint Doctrine for Campaign Planning* (Washington, D.C.: Department of Defense, January 2002), II-1 to II-20.

²³ *FM 3-0 Operations* (2001), 6-3.

²⁴ Army Doctrine Proponency Division, *FM 5-0 Army Planning and Orders Production* (Washington, D.C.: Department of the Army, January 2005), I-3.

²⁵ *FM 3-0 Operations* (2001), 6-4.

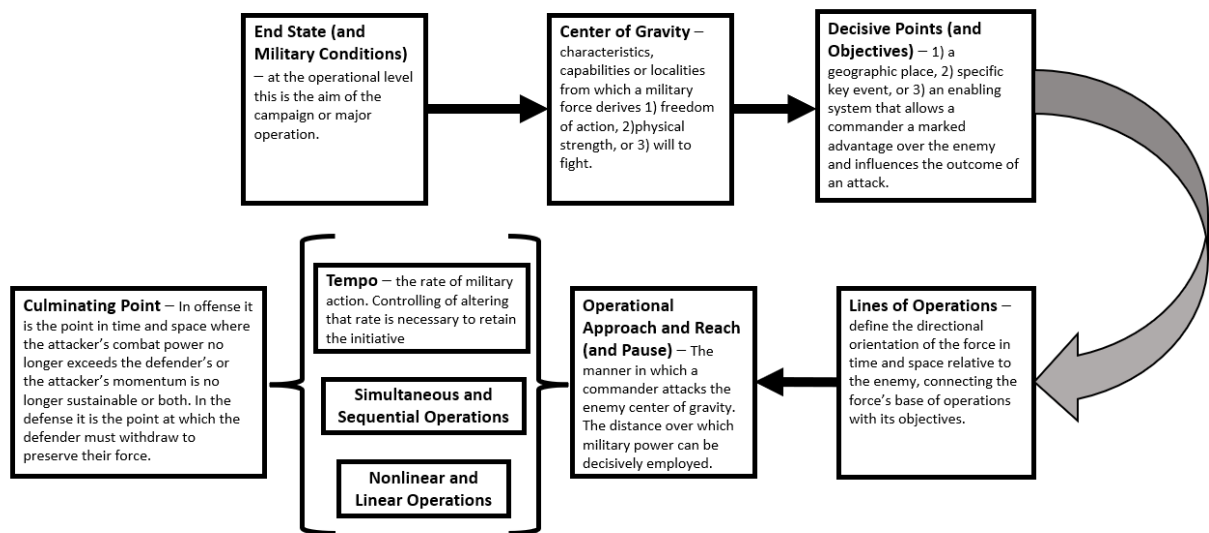
²⁶ The 1986 edition of *FM 100-5 Operations* reintroduced three critical concepts of operational design: culminating points, lines of operation and the center of gravity. However, this FM provided no guidance or description on how they enabled operational design. Furthermore, the 1986 edition did not describe or define operational design. *FM 100-5 Operations* (1986), 179-182. All three concepts of operational design from the 1986 edition remained part of the concepts of theater and operational design in the 1993 edition. A fourth concept, decisive points, was also added. Decisive points were generally geographical, providing the commander a significant advantage over the enemy and often supporting command and control. *FM 100-5 Operations* (1993), 6-7 to 6-8.

²⁷ *FM 100-5 Operations* (1993), 6-7 to 6-9. The 1986 edition of *FM 100-5 Operations*, with its three key concepts of operational design, was even more limiting, despite also identifying the vital importance of culminating points elsewhere in the manual. *FM 100-5 Operations* (1986), 32.

the lines of operation. The 1993 edition defined operational design as linking and integrating “the tactical battles and engagements that, when fought and won, achieve the strategic aim.”²⁸

The 2001 edition of *FM 3-0 Operations* defined operational design as providing “a conceptual linkage of ends, ways, and means.”²⁹ It is also related to “decisive, shaping, and sustaining operations to time and space.”³⁰ The 2001 edition employed operational design to translate operational art into operational plans by assisting the commander in visualizing an operation; the commander was also aided by the application of METT-TC,³¹ as well as his own experience and judgment.³² The design was the idea that guided the conduct of a campaign or major operation, including, but not limited to, planning, preparations and actual execution of the operation. The design was aimed to determine how the means available or created achieved the ends sought, whether operational or strategic. The elements of operational design helped the commander visualize the operation itself.³³

The elements of operational design for the 2001 edition of *FM 3-0 Operations* are illustrated below:



²⁸ *FM 100-5 Operations* (1993), 6-2.

²⁹ *FM 3-0 Operations* (2001), 5-6.

³⁰ *FM 3-0 Operations* (2001), 5-13.

³¹ METT-TC is a mnemonic for the key factors a commander must plan for and visualize. The factors are Mission, Enemy, Terrain and Weather, Troops and Support available, Time and Civil considerations. *FM 3-0 Operations* (2001), 5-3.

³² *FM 3-0 Operations* (2001), 2-4 and 4-1.

³³ *FM 3-0 Operations* (2001), 5-6.

Figure 6.2 The 2001 Elements of Operational Design³⁴

The determination and arrangement of the elements of operational design, as presented in the 2001 edition of *FM 3-0 Operations* and illustrated previously, led to the design or visualization of the operation itself.³⁵ When designing an operation, the first thing established was the actual aim of the operation, the end state. Once the aim had been identified, it was necessary to determine the enemy's strengths (centers of gravity) that needed to be overcome or avoided and one's strengths (centers of gravity) that would assist with achieving this or that needed to be protected. Decisive points, once determined, would provide the objectives necessary for undermining the enemy's center of gravity, while the lines of operation would provide the path that linked the decisive points.³⁶ The operational approach involved 'following' the lines of operation to achieve the objectives based on the decisive points that would undermine the enemy's center of gravity. The indirect approach, which avoided enemy strength, was preferred to the direct approach.³⁷ The operational approach would also be based on simultaneous and sequential operations, which can be both linear and nonlinear. It aims to control the tempo of operations for one's advantage and to the enemy's disadvantage. Finally, operational reach and potential culmination would limit the operational approach.

Since the introduction of operational art in U.S. Army doctrine, several questions have been posed to assist commanders and staff with enabling operational art. It started with three questions in the 1986 edition of *FM 100-5 Operations* based on the idea that one must determine the end(s) one seeks to achieve, then identify the way(s) to do it, and finally allocate the means to enable the way(s) to reach the end(s).³⁸ Starting with the 2001 edition of *FM 3-0 Operations*, the questions used in operational art were linked directly to the ends-ways-means construct. In the same edition, the number of questions increased to four with the addition of the question about risk, specifically: "What are the likely costs or risks in performing that sequence of actions?"³⁹ The U.S. Army introduced risk management into training and material acquisition in the late 1980s and incorporated

³⁴ *FM 3-0 Operations* (2001), 5-6 to 5-12.

³⁵ *FM 3-0 Operations* (2001), 5-6.

³⁶ *FM 3-0 Operations* (2001), 5-7 to 5-8.

³⁷ *FM 3-0 Operations* (2001), 5-10.

³⁸ The three questions from the 1986 edition were: 1) What military condition must be produced in the theater of war or operations to achieve the strategic goal? 2) What sequence of actions is most likely to produce that condition? 3) How should the force's resources be applied to accomplish that sequence of actions? *FM 100-5 Operations* (1986), 10.

³⁹ *FM 3-0 Operations* (2001), 2-5. All the following editions of U.S. Army operational doctrine included a question about risk, thereby shifting the focus to one of addressing ends, ways, means, and risk. The Army initially posed six questions for the 2008/11 edition of *FM 3-0 Operations*, but ultimately settled on five questions. As risk remains consistent throughout, this question will not be examined further.

it into all its processes, including doctrine, by the early 1990s; however, this was too late for integration into the 1993 edition of *FM 100-5 Operations*.⁴⁰

The first question addressing “ends” in the 2001 edition of *FM 3-0 Operations* used the exact wording as the 1986 edition: “What military (or related political and social) conditions must be produced in the operational area to achieve the strategic goal (ends)?”⁴¹ The wording of the first question changed in 2008, with the direct linkage of military conditions to the strategic goal being dropped.⁴² From 2008 onwards, U.S. Army operational doctrine focused on conditions rather than objectives, thereby decoupling this question from the attainment of the strategic goal or objectives. In the 2001 edition of *FM 3-0 Operations*, the second question addressed “ways,” asking, “What sequence of actions is most likely to produce that condition (ways)?”⁴³ This question pertained to the military conditions necessary to achieve the strategic goal or the “ways” to achieve the strategic goal or “ends.” It remained pretty much consistent throughout subsequent editions. The third question, introduced in the 1986 edition regarding means, asked: “How should the force’s resources be applied to accomplish that sequence of actions?”⁴⁴ and it remained constant up to and including the 2001 edition of *FM 3-0 Operations*.⁴⁵

In summary, the use of the ends-ways-means framework was explicit in the 2001 edition. The ends were no longer about achieving military conditions but also “related political and social conditions.”⁴⁶ The fundamental nature of the questions for operational art in the U.S. Army changed between 2001 and 2008. They shifted in purpose from addressing the historical idea of enabling offensive action by deliberately linking the

⁴⁰ TRADOC, *FM 100-14 Risk Management* (Fort Monroe, VA: TRADOC Headquarters, April 1998), iii.

⁴¹ *FM 3-0 Operations* (2001), 2-5.

⁴² *FM 3-0 Operations* (2008), 6-4. This change remained constant throughout all subsequent Army editions of operational doctrine. *FM 3-0 Operations* (2008), 6-4; *FM 3-0, CI Operations* (2011), 7-4; *ADRP 3-0 Unified Land Operations* (2012), II-4; and Combined Arms Doctrine Directorate, *ATP 5-0.1 Army Design Methodology* (Washington, D.C.: Department of the Army, July 2015), 1-5. Ultimately, Army doctrine posed the question: What conditions, when established, constitute the desired end state?

⁴³ *FM 3-0 Operations* (2001), 2-5.

⁴⁴ *FM 100-5 Operations* (1986), 10.

⁴⁵ The Army then attempted to hold on to the how but also added the what that had previously been implied: “What resources are required, and how can they be applied to accomplish that sequence of actions (means)?” *FM 3-0 Operations* (2001), 2-5. The means question was linked to the ways question, but the more complex ‘how’ changed to simply ‘what’ in 2008. *FM 3-0 Operations* (2008), 6-4. This continued through to 2016, when, with the addition of a second question, it also addressed how resources (or forces) or means should be used to achieve the ends. *ATP 5-0.1 Army Design Methodology* (2015), 1-5. The 2016 edition of *ADRP 3-0* refers to the 2015 edition of *ATP 5-0.1* regarding questions related to operational art. Combined Arms Doctrine Directorate, *ADP 3-0 Operations* (Washington, D.C.: Department of the Army, November 2016), 2-2.

⁴⁶ *FM 3-0 Operations* (2001), 2-5.

tactical action of the enemy's destruction and shock over time and space to strategy to support a style of planning and executing military operations.⁴⁷

The Global War on Terrorism

After the 11 September 2001 terrorist attacks against America, U.S. forces launched attacks against the Taliban government in Afghanistan because they supported al-Qaeda, who had perpetrated the attacks. U.S. Special Forces began operations in Afghanistan on 19 October 2001, and soon, there were about three hundred Special Forces soldiers supporting indigenous efforts to defeat the Taliban. The first conventional U.S. Army forces to deploy to Afghanistan was a company from the 10th Mountain Division. By the end of the year there were about 5,000 soldiers on the ground in Afghanistan.⁴⁸ The focus of U.S. forces in Afghanistan from 2002 to 2004 was hunting fugitive Taliban and al-Qaeda leaders. From 2004 onwards, the U.S. also played a more significant role in nation-building along with coalition partners, notably NATO allies, whose overall contribution was larger than that of the U.S. at the time.⁴⁹ Although the U.S. launched operations against Afghanistan because of the 11 September 2001 terrorist attack against the U.S. before invading Iraq, operations in Iraq were the primary U.S. focus until the end of OIF.⁵⁰

Since the end of the Gulf War in 1991 the U.S. had contained Iraq and had used military force against Iraq on a number of occasions, primarily for violations of numerous United Nations Security Council (UNSC) resolutions. This changed with the terrorist attacks against the United States, 11 September 2001.⁵¹ The decision to invade Iraq took over a year of incremental decision making.⁵² As early as 2 October 2001, Donald H. Rumsfeld, Secretary of Defense, issued "Strategic Guidance for the Campaign Against Terrorism" to enable the development of campaign plans. Most significantly, the strategic guidance directed the development of plans for operations against Iraq, as well as others, and the need to be prepared to execute the plans if directed.⁵³ Focusing specifically on Iraq, Rumsfeld provided the U.S. Joint Staff with planning guidance for "combat operations against Iraq" so as to be able to develop a strategic concept for any such

⁴⁷ *FM 3-0 Operations* (2008), 6-4.

⁴⁸ Richard W. Stewart, ed., *American Military History Volume II*, 468-474 and 508-509; and Barbara Salazr Torreon and Sofia Plagakis, *Instances of Use of United States Armed Forces Abroad, 1798-2023*, 22-23.

⁴⁹ Stewart, *Volume II*, 509-511; and Torreon and Plagakis, *Instances*, 23-25.

⁵⁰ U.S. operations in Afghanistan post 9/11 will only receive further reference, as appropriate, as they may relate to changes in U.S. Army operational doctrine, in keeping with the focus of this dissertation on OIF.

⁵¹ National Commission on Terrorist Attacks Upon the United States, *The 9/11 Commission Report* (Washington, D.C.: National Commission on Terrorist Attacks upon the United States, 2004), 334-335.

⁵² James P. Pfiffner, "Policy Making in the Bush White House," *Issues in Governance Studies* no. 21 (October 2008): 13-14.

⁵³ "Strategic Guidance for the Campaign Against Terrorism," 2 October 2001, 2001-10-03 To Deputy SecDef et al re Strategic Guidance for Campaign Against Terrorism, Donald Rumsfeld Archive accessed 15 March 2021 at <https://www.rumsfeld.com/archives/>.

combat operations.⁵⁴ Not long after Rumsfeld issued his strategic guidance, President Bush issued *National Security Presidential Directive – 9* on 25 October 2001 in response to the 11 September attacks. The third objective of the directive, related indirectly to Iraq, and sought to, “Convince, and if necessary compel, states and non-state entities to cease harboring, sponsoring, and providing safe-havens to such terrorists.”⁵⁵

Just after Christmas, on 28 December 2001, General Tommy R. Franks, the CINC of U.S. Central Command (CENTCOM), briefed President Bush that he was updating the plan for the invasion of Iraq.⁵⁶ Franks provided an update to the President 29 March 2002 that started off by addressing actions taken to that date to prepare for a possible invasion of Iraq.⁵⁷ On 11 May 2002, Rumsfeld and Franks briefed the President at Camp David, on the plan to invade Iraq. The assumed mission was to “conduct offensive operations in Iraq to support the overthrow of the regime, destroy WMD capability, and reduce the threat to the Iraqi people, the region, and the U.S. On order, conduct follow-on operations to facilitate transition from war to peace.”⁵⁸ Then 5 August 2002, Franks provided an update on the planning of military operations against Iraq before the President went to Texas for a summer break. The main focus of the update was to review options for the timing and duration of phases for the military operation based on when and how the decision was made to commence operations.⁵⁹ Through the fall of 2002 and into the winter of 2003 CENTCOM continued to refine the details of the plan to conduct military operations in Iraq. By 27 February 2003, the CENTCOM plan, *USCENTCOM OPLAN 1003V – CHANGE 1*, for the invasion and conduct of military

⁵⁴ “OSD Request: Planning Guidance of Combat Operations against Iraq,” 1 October 2001, 0380. PlanningGuidance1Oct01, CENTCOM Iraq Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

⁵⁵ President of the United States, *National Security Presidential Directive – 9* (Washington, D.C.: The White House, 25 October 2001), 2.

⁵⁶ “POTUS BRIEF 28 DEC 2001,” 28 December 2001, 0547. POTUS final 28 DEC 01, CENTCOM Iraq Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

⁵⁷ “POTUS UPDATE 29 March 2002,” 29 March 2002, 0549. POTUS BRIEF 29 Mar 02 (28 Mar – v10), CENTCOM Iraq Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

⁵⁸ “Compartmented Plan Update 11 May 2002,” 11 May 2002, 0584. Camp David (final) – 17 May 02 new support slide, CENTCOM Iraq Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

⁵⁹ George W. Bush, *Decision Points* (New York: Crown Publishers, 2010), 235. The briefing also included several backup slides to address potential lines of inquiry. The topics of backup slides included the current situation in Iraq at the time, the rotation of forces into Iraq, strategic risks, strategic support requirements to enable operations, preparatory tasks and actions, targeting, identification of Iraq airfields and oilfields, command and control arrangements, and regional support in place. “Compartmented Plan Update 5 Aug 2002,” 5 August 2002, 0986. 5 AUG POTUS final(05 Aug 02), CENTCOM Iraq Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

operations in Iraq was ready. It included virtually all the elements of operational design starting with a clear identification of the campaign's endstate as "regime change."⁶⁰

The plan made extensive use of the center of gravity or centers of gravity, the plan addressed the Iraqi strategic, operational and tactical centers of gravity, as well as friendly strategic and operational centers of gravity.⁶¹ The use of decisive points can be inferred from the operational fires and operational maneuver lines of operation, as "key leadership targets, internal security and regime support apparatus," as well as key terrain, "WMD delivery systems and infrastructure," and Iraqi forces.⁶² The seven lines of operation were confirmed as: 1) operational fires, 2) operational maneuver, 3) special operations, 4) unconventional warfare and support to opposition groups, 5) information operations, 6) political-military operations, and 7) civil-military operations.⁶³ Lines of operations were to change during Phase IV to: 1) unity of effort, 2) security, 3) humanitarian relief and resettlement, 4) civil administration, 5) rule of law, 6) governance, and 7) economic development.⁶⁴ The culminating point, although not explicitly stated, would clearly be the transition from Phase III to Phase IV, with the defeat of Iraqi forces and the end of Saddam's regime bringing to an end major combat operations and resulting in the shift to stability operations and reconstruction efforts.⁶⁵

The commander's intent contained within the plan was divided into two parts with a paragraph on the purpose of the campaign and five paragraphs on the method of achieving the campaign objectives. Two sentences outline the broad operational approach of the campaign:

We will create overwhelming effects by attacking simultaneously along several lines of operation thereby creating multiple sets of conditions to which the Iraqi strategic and operational leadership cannot respond..... We will compel the regime to capitulate or render it ineffective by eliminating its influence and control over combat forces, security forces and populace; thereby reducing its legitimacy, degrading its security and creating disarray in its inner circle.⁶⁶

The method under commander's intent also addressed two other elements of operational design, simultaneous and sequential operations as well as tempo. The quote above directly addresses simultaneous execution along several lines of operation. Under the method the commander's intent spoke directly to "higher operation tempo" and stressed

⁶⁰ "USCENTCOM OPLAN 1003V – CHANGE 1," 0987. 1003V27Feb03, CENTCOM Iraq Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania, 20.

⁶¹ "USCENTCOM OPLAN 1003V – CHANGE 1," 6-8 and 14.

⁶² "USCENTCOM OPLAN 1003V – CHANGE 1," 18-19.

⁶³ "USCENTCOM OPLAN 1003V – CHANGE 1," 20-22.

⁶⁴ "USCENTCOM OPLAN 1003V – CHANGE 1," 36-38. The four phases were "Phase I – Preparation, Phase II – Shape the Battlespace, Phase III – Decisive Operations, and Phase IV – Post-hostilities." "USCENTCOM OPLAN 1003V – CHANGE 1," 22.

⁶⁵ "USCENTCOM OPLAN 1003V – CHANGE 1," 30-32.

⁶⁶ "USCENTCOM OPLAN 1003V – CHANGE 1," 17.

need for speed.⁶⁷ Under command relationships, the Combined Force Land Component Commander (CFLCC) was given responsibility for the “synchronization of all land operations within the ITO (Iraqi Theater of Operations)” which has direct implications for simultaneous and sequential operations as well as tempo.⁶⁸

The CFLCC was also given responsibility for “land space usage” for all land operations within the ITO, that has direct implications for nonlinear and linear operations.⁶⁹ Furthermore, USCENTCOM was tasked with identifying and targeting specific areas of interest to facilitate strike operations through the use of kill boxes, a concept that supports nonlinear operations.⁷⁰ By 2008, the idea of linear and nonlinear operations had been eliminated, replaced with contiguous and noncontiguous areas of operations, with an emphasis on noncontiguous areas, as a result of the Army’s Transformation and the adoption of the Modular Force, which will be addressed later in this discussion.⁷¹

USCENTCOM OPLAN 1003V – CHANGE 1 used all the elements of operational design based on the 2001 edition of *FM 3-0 Operations* as well as what would come in the 2008 edition of *FM 3-0 Operations*. This was indicative of operational thought in line with operational art as defined by the U.S. Army. Furthermore, the plan further conformed to the description of operational art as it identified the U.S. strategic objectives it would help achieve through a series of operational objectives also clearly articulated in the plan.⁷² These operational objectives were elaborated on further in the direction for Phase III and then linked through the lines of operations to tactical tasks for the component commanders.⁷³ The successful execution of these tactical tasks would achieve the operational objectives and thereby in turn the strategic objectives. Tactical tasks were widely dispersed geographically, particularly for the CFLCC, and many would be executed simultaneously in support of the various lines of operation.⁷⁴

The plan also conformed to the first grammar of operational art. The problem was well-defined, with considerable detail in the plan regarding Saddam’s regime, including a detailed explanation of Iraq’s strategic, operational, and tactical centers of gravity, as well as its vulnerabilities. The plan went on to outline probable Iraqi courses of action in response to a U.S. attack as well as an assessment of Iraq’s military capabilities.⁷⁵ Secondly, the plan clearly identified lines of operation, and although a number of these lines of operation were really lines of effort, the priority of effort was on operational fires, operational maneuver and special operations.⁷⁶ The operational line of

⁶⁷ “USCENTCOM OPLAN 1003V – CHANGE 1,” 17.

⁶⁸ “USCENTCOM OPLAN 1003V – CHANGE 1,” 89.

⁶⁹ “USCENTCOM OPLAN 1003V – CHANGE 1,” 89.

⁷⁰ “USCENTCOM OPLAN 1003V – CHANGE 1,” 74.

⁷¹ *FM 3-0 Operations* (2008), C-1 and D-4.

⁷² “USCENTCOM OPLAN 1003V – CHANGE 1,” 13-14.

⁷³ “USCENTCOM OPLAN 1003V – CHANGE 1,” 29-31 and 39-63.

⁷⁴ “USCENTCOM OPLAN 1003V – CHANGE 1,” 17-18, 20-22, 41-44 and 89.

⁷⁵ “USCENTCOM OPLAN 1003V – CHANGE 1,” 2-13.

⁷⁶ “USCENTCOM OPLAN 1003V – CHANGE 1,” 20-22.

operational maneuver, in particular, lends itself to a lines of operation approach at subordinate levels that would practice operational art. This was further reinforced by the fact the plan used a direct approach to achieve the strategic and operational objectives it had identified, in particular by forcing the regime to surrender or by making it ineffective “by eliminating its influence and control over combat forces and security forces.”⁷⁷ The *USCENTCOM OPLAN 1003V – CHANGE 1*, which utilized the elements of operational design outlined in the 2001 edition of *FM 3-0 Operations*, was indicative of operational thought in general and the practice of operational art in particular. This was reinforced by its articulation of the factors that made up operational art as well as the use of factors indicative of the first grammar of operational art.

Full Spectrum Operations – 2001 to 2008

Even before 11 September 2001, however, the U.S. Army had been in the process of modernizing and exploring transformation in line with the Department of Defense as mentioned in the previous chapter. At the end of the Cold War, much of the focus was on budget cuts as the threat of nuclear war with the Soviet Union had disappeared. As a result, there were limited resources to support Army transformation. By the middle to late 1990s, transformational efforts had to be balanced with limited budgets and increasing operational tempo, in the latter case due to operational commitments in the Balkans. By the end of the 1990s technological initiatives focused primarily on command-and-control systems were mature enough that implementation could start to be seriously considered.⁷⁸ Army Transformation was formally launched on 12 October 1999 by the Army Chief of Staff, General Eric K. Shinseki.⁷⁹

The rationale behind Army Transformation was the change in the security environment at the end of the Cold War that led to an increase in small-scale contingency operations and peace operations due in part to an expanded threat posed by nontraditional threats. What was needed was a medium force that had better tactical mobility and more combat power than light forces while being more strategically mobile, particularly easier to move both by air and road, and with lesser sustainability needs than heavy forces. The solution was the medium-weight Interim Brigade Combat Teams (IBCTs) based on the Light Armored Vehicle III that was to be called Stryker by the U.S. Army.⁸⁰ The first

⁷⁷ “USCENTCOM OPLAN 1003V – CHANGE 1,” 17.

⁷⁸ John Sloan Brown, *Kevlar Legions: The Transformation of the U.S. Army, 1989-2005* (Washington, D.C.: Center of Military History, 2011), 85, 139-140, 159, and 183.

⁷⁹ Brown, *Kevlar Legions*, 195 and Army Chief of Staff, *United States Army White Paper: Concepts for the Objective Force* (Washington, D.C.: Department of the Army, November 2001), Foreword.

⁸⁰ Thomas E. White, Secretary of the Army, “Report of the Secretary of the Army,” in *Annual Report to the President and the Congress*, Donald H. Rumsfeld, Secretary of Defense (Washington, D.C.: Department of Defense, 2002), 117-121 and Carol A. Shuster, Director, Defense Capabilities and Management, *Military Transformation: Army Has a Comprehensive Plan for Managing Its Transformation but Faces Major Challenges* (Washington, D.C.: United States General Accounting Office, November 2001), 7-10.

Stryker Brigade Combat Team commenced fielding in 2002 and achieved initial operating capability in 2003.⁸¹

New equipment and new organizations also meant new doctrine. In March 2003, the U.S. Army released FM 3-21.31, “The Stryker Brigade Combat Team.” This publication described the Stryker Brigade Combat Team (SBCT) as providing unique full spectrum capabilities to “division, corps and joint task force commanders.”⁸² Nine capabilities were identified, one of which was simultaneous operations, which had the most significant implications for the concept of operational art in the U.S. Army.⁸³ It was argued that an SBCT could plan and execute military activities spread across time and space due to its information systems, which enhanced situational understanding and the organization’s effectiveness. The ability to conduct simultaneous operations spread across time and space is very similar to the concept of the Extended Battlefield, explored in the previous chapter, which posits that operations would be geographically dispersed and occur over an extended period. Furthermore, the idea of conducting simultaneous operations spread across time and space or coordinated in time and place reflects the wording of operational art from the 2001 edition of *FM 3-0 Operations*. It could have three battalions performing different tasks in three separate locations simultaneously. The manual argued that this capability was critical to SBCT’s “success in smaller-scale contingency and peacetime military engagement as these environments require a wide range of tasks to be executed in conjunction with one another.”⁸⁴ It concludes the description of this capability by stating, “The brigade has the capability to successfully plan and execute several types of missions simultaneously.”⁸⁵ The implication is that the

⁸¹ Donald H. Rumsfeld, Secretary of Defense, *Annual Report to the President and the Congress* (Washington, D.C.: Department of Defense, 2003), 155-156 and John Sloan Brown, *Kevlar Legions: The Transformation of the U.S. Army, 1989-2005*, 204.

⁸² US Army Infantry School, *FM 3-21.31 The Stryker Brigade Combat Team* (Washington, D.C.: Department of the Army, March 2003), 1-1.

⁸³ The capabilities were: “(1) combined arms assault in the close fight, (2) mobility, (3) reach, (4) enhanced common operational picture (COP), (5) lethality, (6) force protection and survivability, (7) joint, multinational, or interagency operability, (8) full spectrum flexibility and augmentation, and (9) simultaneous operations.” *FM 3-21.31 The Stryker Brigade Combat Team* (2003), 1-1.

⁸⁴ *FM 3-21.31 The Stryker Brigade Combat Team* (2003), 1-4. The U.S. Army defines a smaller-scale contingency as “an emergency involving military forces caused by natural disasters, terrorists, subversives, or by required military operations. Due to the uncertainty of the situation, contingencies require plans, rapid response, and special procedures to ensure the safety and readiness of personnel, installations, and equipment.” Combined Arms Center, *FM 1-02 Operational Terms and Graphics* (Washington, D.C.: Department of the Army, September 2004), 1-44. It defines peacetime military engagement as, “all military activities that involve other nations and are intended to shape the security environment in peacetime. It includes programs and exercises that the US military conducts with other nations to shape the international environment, improve mutual understanding with other countries, and improve interoperability with treaty partners or potential coalition partners. Peacetime military engagement activities are designed to support a combatant commander’s objectives as articulated in the theater engagement plan.” *FM 1-02 Operational Terms and Graphics* (2004), 1-145.

⁸⁵ *FM 3-21.31 The Stryker Brigade Combat Team* (2003), 1-5.

commander and staff of the SBCT can and should practice operational art, an implication that would not be addressed until the 2011 edition of *ADP 3-0 Unified Land Operations*.

Transformational efforts were soon overshadowed by the Bush Administration's focus on Iraq.⁸⁶ By March 2003, President Bush felt the plan to invade Iraq was ready after a "year of probing and questioning."⁸⁷ By the middle of the month, President Bush gave Saddam an ultimatum to leave Iraq or face forcible removal by U.S. and coalition forces; he was given 48 hours to act on the ultimatum. With no indication that Saddam had heeded the ultimatum, and with indications to the contrary, President Bush ordered the execution of OIF on 19 March 2003.⁸⁸ Although warning against the use of WMD, the primary focus of OIF was ending Saddam's regime.⁸⁹ The actual ground campaign of the 2003 U.S. invasion of Iraq was broken down into three stages. The first stage involved crossing the Kuwaiti-Iraqi border and gaining and securing a hold in Iraq. The second stage was the approach to Baghdad up the Euphrates River. The third stage was the attack on Baghdad that resulted in the fall of Saddam's regime.

While planning and executing the invasion of, and major combat operations in, Iraq during OIF, CENTCOM and the CFLCC practiced operational art in the traditional

⁸⁶ In 2004, as part of Army Transformation, the Army introduced the Modular Force restructuring initiative to transition the Army from a division-based force structure to a brigade-based force structure. This initiative was based on Brigade Combat Teams (BCTs), which enabled the Army to generate forces without the overhead and support necessary for a division-sized organization. The term 'modularity' refers to the ability to create forces with a specific mission or capability without the need for a large, complex organization. The modular brigade-based Army would enhance the Army's ability, as the BCTs themselves were designed to be self-sufficient based on a standardized organization that would improve planning and logistical support and increase interoperability. Modularity also further improved communications and logistics capability, ensuring deployed forces would be more capable of independent action, thereby facilitating greater operational independence. Francis J. Harvey, Secretary of the Army, "Report of the Secretary of the Army," in *Annual Report to the President and the Congress*, Donald H. Rumsfeld (Washington, D.C.: Department of Defense, 2005), 35. The new brigade-based force structure would consist of standardized, modular brigades with many former division enablers integrated into the brigade structure. This would make these modular brigades self-sufficient, stand-alone organizations. There were two general types of modular brigades: brigade combat teams (BCTs) and multi-functional support brigades. The modular force concept would combine modular Headquarters Units, formerly division headquarters, with functional support brigades that would command, control and support a number of brigade combat teams and multi-functional support brigades. Janet A. St. Laurent, Director, Defense Capabilities and Management, *Force Structure: Better Management Controls Are Needed to Oversee the Army's Modular Force and Expansion Initiatives and Improve Accountability for Results* (Washington, D.C.: United States General Accounting Office, December 2007), 7.

⁸⁷ George W. Bush, *Decision Points*, 250

⁸⁸ Tommy Franks with Malcolm McConnell, *American Soldier* (New York: Harper-Collins Publishers, Inc., 2004), 430-431; Donald Rumsfeld, *Known and Unknown A Memoir* (New York: The Penguin Group, 2011), 458-461; and Bush, *Decision Points*, 253-255.

⁸⁹ Donald H. Rumsfeld, *Secretary of Defense Donald H. Rumsfeld, Department of Defense Briefing*, transcribed, Washington, D.C.: The Federal News Service, 20 March 2003.

sense of both war's first grammar and the first grammar of operational art. During major combat operations the tactical actions and operational effects as planned and executed by the Combined Force Air Component Commander (CFACC) and the CFLCC achieved in large part the military strategic objectives. Battles and engagements were conducted simultaneously by both the CFACC and CFLCC to achieve these military strategic objectives, as well as by the U.S. V Corps and the 1 Marine Expeditionary Force (MEF) as part of a unified CFLCC effort. These battles and engagements took place across the breadth of Iraq from Kirkuk in the north to Al Basrah in the south, culminating in the engagements and battle for Baghdad in the center of the country.⁹⁰ The achievement of military strategic objectives, in turn, supported the achievement of the U.S. strategic objectives.

The achievement of these military strategic objectives was based on a relatively well-defined military problem. Iraq's military strengths and weaknesses, as well as its strategic, operational and tactical centers of gravity, were identified by the U.S. military, resulting in a relatively clear understanding of the military problem that U.S. and coalition forces faced when attacking Iraq.⁹¹ OIF was to be conducted in four phases; the first two, Preparation and Shape the Battlespace, were completed before the invasion of Iraq. Phase III, Decisive Operations, was the actual invasion of Iraq and the period of major combat operations, utilizing linear operations, which ended on or about 14 April. Phase IV, Post Hostilities, would focus on re-establishing internal stability and supporting reconstruction efforts within Iraq.⁹²

The CFLCC conducted linear operations using clear lines of operation to coordinate the tactical actions of its subordinates. U.S. V Corps was one line of operation running up the west side of the Euphrates River, while 1 MEF was on a second line of operation running up the east side of the Euphrates River. The key terrain at An Najaf and Karbala constituted decisive points for the V Corps' line of operation, and An Nasiriyah and, subsequently, An Numaniyah were both decisive points for the 1 MEF line of operation.⁹³ The CFLCC lines of operation culminated in the decisive point of the Baghdad city center, key terrain for achieving the operational objective of neutralizing regime leadership. This, in turn, supported the military strategic objective of overthrowing the regime and would help achieve the U.S. strategic objective of a stable Iraq with a broad-based government. These lines of operation could be traced back across the Kuwaiti border to the CFLCC rear area. Finally, as an example of the first grammar of operational art, the invasion of Iraq and the Combined Forces Command (CFC) conduct of major combat operations, was based on a direct approach using "overwhelming force"

⁹⁰ Colonel Joel D. Rayburn and Colonel Frank K. Sobchak, eds., *The U.S. Army in the Iraq War Volume 1*; 84-86, 91-97, 102, 110 and Col Gregory Fontenot, U.S. Army Retired, LTC E.J. Degen, U.S. Army and LTC David Tohn, U.S. Army, *On Point: The United States Army in Operation Iraqi Freedom* (Fort Leavenworth, KS: Combat Studies Institute Press, 2004), 88, 120-121, 132-135, 141, 161, 209, 227-230, 247-248, 264, 284-285, 299, 313-321, 340-347, 351-353, 372-377.

⁹¹ "USCENTCOM OPLAN 1003V – CHANGE 1," 2-13.

⁹² "USCENTCOM OPLAN 1003V – CHANGE 1," 22.

⁹³ "USCENTCOM OPLAN 1003V – CHANGE 1," 29.

and “shock and awe” focused on the “destruction of regime security forces, and defeat of opposing military forces.”⁹⁴ The direct approach was further reinforced by the CFLCC, which was to, and did, “seize key terrain and defeat enemy forces in zone in order to complete Regime removal” with a focus on gaining control of Baghdad.⁹⁵

After the successful invasion and defeat of Iraq in 2003, the U.S. became embroiled in an insurgency that eventually broadened to include a sectarian conflict, the war had transitioned from war’s first grammar to war’s second grammar, and operational art transitioned with it. Throughout OIF, operational art was practiced to achieve both operational and strategic objectives. The Multi-National Force – Iraq (MNF-I) and in particular, Multi-National Corps – Iraq (MNC-I), used tactical actions separated by geography, conducted simultaneously, to achieve these operational and strategic objectives. From the beginning of Phase IV, operational art shifted from arranging battles and employing military forces to complete them, to the application of creative imagination by commanders and staffs to design operations and organize and employ military forces in more than just battles and engagements.

With the end of hostilities, the biggest challenge for the Combined Joint Task Force (CJTF) -7, then MNF-I and MNC-I, was defining the actual problem to be addressed and figuring out how to deal with the population to achieve the desired operational and strategic objectives. They had to deal with not only hostile belligerents but also a wide range of Iraqi civilians with a broad range of needs and wants, meaning any solution was not just about the application of physical force through military action.⁹⁶ Furthermore, the problems were continually changing, often with incomplete and at times, seemingly contradictory requirements for a solution. This made it challenging to define a solution in the first place, and even more difficult to execute the solution once one was specified.

This led to a shift towards operational art’s second grammar, characteristic of the Creative school. During General George W. Casey, Jr.’s tenure as Commander MNF-I, the shift was noticeable but not complete. Although the multiple lines of operation and effects in Casey’s MNF-I Campaign Plan focused on governance and economic development, suggestive of an indirect approach indicative of the second grammar, the actual focus of effort was on a more direct approach, seeking to neutralize the insurgency leading to more kinetic operations, in line with the first grammar.⁹⁷ MNC-I at the time also followed suit with *Multi-National Corps -Iraq Operations Order 05-02* using a blended approach that arguably straddled the two grammars of operational art. Much of

⁹⁴ “USCENTCOM OPLAN 1003V – CHANGE 1,” 17-18 and 29-30.

⁹⁵ “USCENTCOM OPLAN 1003V – CHANGE 1,” 30.

⁹⁶ “V CORPS OPORD [OPERATION FINAL VICTORY].” 0991. OPORD Final Victory (261000z APR), CENTCOM Iraq Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania and “CDRCJTF7 SITREP 050200ZAUG03 TO 060200ZAUG03(U),” 0564. 2003 08 06, 0400Z, CJTF-7 SitRep 5-6 Aug, CENTCOM Iraq Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

⁹⁷ “MULTI-NATIONAL FORCE-IRAQ CAMPAIGN PLAN: OPERATION IRAQI FREEDOM,” 0893. THE CAMPAIGN PLAN, CENTCOM Iraq Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania, 14-19.

the operational concept addressed efforts to implement an indirect approach like the second grammar, but the priority of effort and emphasis was on a direct approach like the first grammar, to neutralize the Anti-Iraqi Forces by killing, capturing or co-opting Former Regime Elements and Terrorists.⁹⁸

The strategic situation fundamentally changed with the destruction of the Askariyah Shrine in Samarra by al-Qaeda in Iraq on 22 February 2006, from an insurgency to an internal sectarian conflict, if not a low intensity civil war. MNC-I issued OPORD 06-02 on 21 April 2006 and OPORD 06-03 on 5 November 2006 due to the changes in the security environment caused by the Askariyah Shrine bombing.⁹⁹ The operational objectives outlined in OPORD 06-03 identified the ends to be achieved, while the effects that would lead to each objective or describe the ways each objective would be reached were identified under their respective objectives.¹⁰⁰ In response, the subordinate formations of MNC-I, the five Multi-National Divisions and Multi-National Force-West, all coordinated the execution of multiple lines of operation or effort, executed simultaneously, linking a range of tactical tasks to operational and strategic objectives.¹⁰¹ Narrowing the focus, the U.S. Army's 4th Infantry Division, responsible for Multi-National Division-Baghdad, had seven separate brigade combat teams across the city, each with three to four different areas of operation, conducting simultaneous operations. All seven brigades utilized the direction and guidance they received from Multi-National Division-Baghdad; however, each had its own operational framework, with its lines of operation, which emphasized these lines to varying degrees depending on their unique operating environment.¹⁰²

By the end of 2006, the U.S. strategy for Iraq changed. It was no longer focused on shifting the burden of security to the Iraqi Government; instead, it aimed at protecting the population and defeating al-Qaeda Iraq, with a particular emphasis on securing Baghdad.¹⁰³ The OPORDs adopted an indirect approach, in keeping with the second grammar of operational art. At the same time, the synchronization of tasks and effects was a central element in the operational design of the OPORDs, with many tasks and effects co-occurring. Operations were also nonlinear in the OPORDs, more in keeping with operational art's second grammar, spread across the breadth and depth of Iraq in a noncontiguous manner.¹⁰⁴

⁹⁸ "Multi-National Corps-Iraq Operations Order 05-02," 0909. MNC-I OPORD 05-02, CENTCOM Iraq Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania, 18-19.

⁹⁹ "MNC-I Operations Order 06-03," 0097. OPORD 06-03 05 1000 Nov 06, CENTCOM Iraq Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania, 22.

¹⁰⁰ "MNC-I Operations Order 06-03," 26-30.

¹⁰¹ "4 Dec 06," 0998.1 MNC-I Ops Dec 06-Jun 07 Weekly, CENTCOM Iraq Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania, 6-29.

¹⁰² "4th Infantry Division MND-B BCT CDRs AO Assessments 5 Nov 06," 0472. 4ID BCT CDRs AO Assessments 5 Nov 06, CENTCOM Iraq Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

¹⁰³ National Security Council, *National Strategy for Victory in Iraq* (Washington, D.C.: The White House, November 2005), 7-8.

¹⁰⁴ "MNC-I Operations Order 06-03," 18-22.

The change in strategy led to a change in command for MNF-I from Casey to General David H. Petraeus, who almost immediately changed the priorities of MNF-I to align with the new strategy.¹⁰⁵ MNC-I issued Operations Order 07-01 to align its efforts with the change in strategy. The Operations Order outlined operations in a nonlinear manner due to the noncontiguous areas of operations spread across the breadth of Iraq, where positional reference to the enemy had limited applicability; instead, lines of logic or lines of effort were used, particularly when nonmilitary capabilities were required, to achieve operational and strategic objectives.¹⁰⁶ Unlike previous operations orders that had mimicked MNF-I lines of operation, this time MNC-I had its own unique lines of operation that focused on supporting the MNF-I security line of operation, while also supporting the other MNF-I lines of operation. MNC-I had two lines of operation, secure environment and capable, credible ISF, that focused on the MNF-I security line of operation and its strategic objectives. MNC-I's third line of operation was legitimate, capable government of Iraq that supported the MNF-I political and economic lines of operation and their respective strategic objectives along with, to a lesser extent, the diplomatic line of operation and its strategic objectives. MNC-I integrated a fourth line of operation, effective communication, into all three of its other lines of operation.¹⁰⁷

Operations also continued to favor the indirect approach, in keeping with operational art's second grammar, which utilizes both military and non-military effects to solve a variety of problems. MNC-I had three operational objectives associated with its secure environment line of operation: 1) "population secured, violence reduced," 2) "violent enemy actors defeated, neutralized or disrupted," and 3) "security of Iraq's borders improved."¹⁰⁸ These objectives, or ends, would be achieved by: 1) "protecting the population," 2) "facilitating reconciliation," and 3) "defeat al-Qaeda Iraq and extremists."¹⁰⁹ These ways of achieving the operational objectives, and therefore in turn the strategic objectives, would be accomplished through tasks executed by the major subordinate commands of MNC-I, tasks like "Defeat al-Qaeda Iraq and neutralize Sunni insurgency", "Interdict accelerants of Baghdad sectarian violence," and "Neutralize militias that attack security forces and intimidate the population."¹¹⁰ There were seven divisional sized major subordinate commands that had anywhere from seven to fourteen tasks to execute

¹⁰⁵ "Commander's Conference (Luncheon) 10 Feb 07," 0513. Commander's Conference Luncheon 10 Feb 07, CENTCOM Iraq Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

¹⁰⁶ "MNC-I Operations Order 07-01," 0094. MNC-I OPORD 07-01 1 Jun 07, CENTCOM Iraq Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania, 12-26.

¹⁰⁷ "MNC-I Operations Order 07-01," 12-26.

¹⁰⁸ "MNC-I Operations Order 07-01," 26-27.

¹⁰⁹ "MNC-I Operations Order 07-01," 8-9.

¹¹⁰ "MNC-I Operations Order 07-01," 42-46.

from a list of 31 different tasks.¹¹¹ The execution of these tasks were the means by which MNC-I would accomplish its ways of achieving its operational objectives and were indicative of an indirect approach.

Likewise, MNC-I had two operational objectives associated with its capable, credible ISF line of operation: 1) “ISF capability enhanced, sectarian behavior reduced,” and 2) “Security responsibilities transitioned to Iraqis.”¹¹² These objectives, or ends, would be achieved by “Continuing to develop ISF capacity.”¹¹³ This way of achieving the operational objectives, and therefore in turn the strategic objectives, would be accomplished through an appropriate selection from the 31 tasks, to be executed by the major subordinate commands of MNC-I. The last major line of operation for MNC-I was focused on four operational objectives: 1) “Representative local and provincial governments established and functioning,” 2) “Government of Iraq capacity enhances to provide essential services and strategic infrastructure maintenance and security,” 3) “Government of Iraq perceived as representative and legitimate, pursuing national goals,” and 4) “Foundation for self-sustaining economic growth established.”¹¹⁴ The ways of achieving the operational objectives were by facilitating reconciliation, and assisting in efforts to build and improve the government’s capacity to govern.¹¹⁵ These were, in turn, to be accomplished through the appropriate selection from the 31 tasks, to be executed by the major subordinate commands of MNC-I, leading to the accomplishment of the operational objectives, reinforcing an indirect approach.

Based on U.S. Army COIN doctrine, the use of operational design elements was adjusted. Although Operations Order 07-01 had a clearly defined end state, it did not identify a center of gravity that aligned with COIN doctrine, which may or may not be a suitable construct to support operational planning.¹¹⁶ Additionally, rather than using decisive points, the design was shaped by conditions that served a similar role to those outlined in doctrine concerning stability operations.¹¹⁷ Due to the weighting towards COIN operations, operational reach was a more tactical consideration and therefore was not directly addressed in the operations order. Finally, there was no identified culmination point during stability operations, as culmination is largely condition-based and

¹¹¹ “MNC-I Operations Order 07-01,” 42-46. It must be noted that Multinational Division-North East had only one task, to “Sustain non-kinetic operations to maintain current levels or stability.” “MNC-I Operations Order 07-01,” 46.

¹¹² “MNC-I Operations Order 07-01,” 27-28.

¹¹³ “MNC-I Operations Order 07-01,” 9.

¹¹⁴ “MNC-I Operations Order 07-01,” 29-31.

¹¹⁵ “MNC-I Operations Order 07-01,” 9.

¹¹⁶ “MNC-I Operations Order 07-01,” 9 and Combined Arms Doctrine Directorate, *FM 3-24 Counterinsurgency* (Washington, D.C.: Department of the Army, December 2006), 6-6.

¹¹⁷ “MNC-I Operations Order 07-01,” 26-31 and *FM 3-0 Operations* (2008), 6-11.

consequently difficult to plan for.¹¹⁸ By Operations Order 07-01, the U.S. Army operational art had transitioned to operational art's second grammar.

Operations Order 08-01 continued the trend set by Operations Order 07-01, marking the U.S. Army's transition to the second grammar of operational art. As part of this transition, the U.S. Army followed the elements of operational design, adjusting them as necessary, often in response to the influence of COIN doctrine.¹¹⁹ Further illustrative of the shift to operational art's second grammar was *MND-C OPORD 08-02 (OPERATION BLUE RIDGE MOUNTAIN)*, issued 10 August 2008, that viewed itself as a campaign plan.¹²⁰ Concerning operational art, it deliberately used the ends-ways-means model to link tactical effects to operational and strategic objectives. MND-C OPORD 08-02 used the elements of operational design, beginning with the identification of an end state, which was in turn nested within the MNC-I end state, that in turn nested within the MNF-I end state.¹²¹ As part of the shift to operational art's second grammar Multi-National Division – Center (MND-C) understood that subordinate units, in particular the BCTs, would have to replicate the Divisional campaign plan at their level based upon the unique circumstances in their specific areas of operation, and that they would have to synchronize a broad range of different activities simultaneously throughout the late summer and fall, into 2009.¹²²

As the U.S. Army spent more time conducting COIN and gained more experience, the practice of operational art was conducted at increasingly lower levels, down to the company level.¹²³ This became necessary as brigades, battalions, and companies no longer received specific, definitive tasks from their higher headquarters; instead, they dealt with “abstract, long-term tasks as communicated through intent and mission orders.”¹²⁴ The U.S. Army recognized this practice during OIF, along with the understanding that due to the complexity of operations at the time, divisions would conduct major operations and, therefore, needed to develop campaign plans, and that Army brigades would need to have the same capability.¹²⁵

¹¹⁸ *FM 3-24 Counterinsurgency* (2006), 8-8 and *FM 3-0 Operations* (2008), 6-18.

¹¹⁹ “MNC-I Operations Order 08-01,” 0095. MNC-I OPORD 08-01 20Dec07, CENTCOM Iraq Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania, 6 and 10; and *FM 3-24 Counterinsurgency* (2006), 6-6.

¹²⁰ “MND-C OPORD 08-02 (OPERATION BLUE RIDGE MOUNTAIN),” 0884. OPORD 08-02 BASEORD (OBR), CENTCOM Iraq Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania, 1.

¹²¹ “MND-C OPORD 08-02 (OPERATION BLUE RIDGE MOUNTAIN),” 4, 5 and 8.

¹²² “MND-C OPORD 08-02 (OPERATION BLUE RIDGE MOUNTAIN),” 10-11, 16 and 18-21.

¹²³ Aaron J. Kaufman, *Learning From Our Military History: The United States Army, Operation Iraqi Freedom, and the Potential for Operational Art and Thinking* (Fort Leavenworth, KS: Army University Press, 2013), 13.

¹²⁴ Kaufman, *Learning*, 131.

¹²⁵ Army Capabilities Integration Center, *TRADOC Pam 525-3-1 The United States Army Operating Concept 2016-2028* (Fort Monroe, VA: TRADOC Headquarters, 19 August 2010), 24 and 18-19.

This argument was supported by changes in doctrine below *FM 3-0 Operations*. *FM 3-90.6 The Brigade Combat Team* stated BCTs could simultaneously conduct various operations based on an “operational framework.”¹²⁶ Such a framework would arrange forces over time and space to achieve the BCT Commander’s objectives. Subordinate battalions could execute military tasks in a geographically dispersed manner linked by the BCT operational concept.¹²⁷ The BCT could plan and execute military activities across time and space because its information systems enabled enhanced situational awareness. As argued in the 2003 Stryker Brigade Combat Team doctrine, the BCT could have three battalions carrying out different things in three different locations simultaneously. If military tasks were conducted simultaneously and sequentially by subordinate battalions spread out geographically, thereby achieving or supporting the achievement of operational and strategic objectives; then, in that case, the brigade was practicing operational art. The battalion-level doctrine took a similar approach, arguing that the battalion could conduct offensive, defensive, and stability operations simultaneously.¹²⁸ Like the BCT, the battalion practiced operational art if military tasks were conducted simultaneously and sequentially by subordinate companies spread out geographically to achieve or support operational and strategic objectives.

As early as 2005, the 1st Cavalry Division had developed a campaign plan based on five lines of operation: “conduct combat operations, train Iraqi security forces, promote economic pluralism, promote Iraqi governance, and restore essential services,” within information operations embedded within each of the five lines of operation.¹²⁹ The 1st BCT of the 1st Cavalry Division, in turn, used the same five lines of operations to guide its operations.¹³⁰ The 1st Brigade of the 25th Infantry Division also had a brigade level campaign plan, but with four lines of operation: economic, government, security, and information, with the security line of operation being the main effort of the brigade.¹³¹ When combat operations were less intense, a greater emphasis was placed on training security forces, promoting economic and governance, and repairing essential services, pushing resources, authority and responsibility down to lower levels. Battalion commanders would focus on the district level, while company commanders would focus on neighborhoods.¹³²

¹²⁶ Army Armor Center and Army Infantry School, *FM 3-90.6 The Brigade Combat Team* (Washington, D.C.: Department of the Army, August 2006), 2-2.

¹²⁷ *FM 3-90.6 The Brigade Combat Team* (2006), 2-2.

¹²⁸ Army Infantry School, *FM 3-21.20 The Infantry Battalion* (Washington, D.C.: Department of the Army, December 2006), 4-3, 4-60, 5-3, 6-17 and 11-27.

¹²⁹ COL Robert Abrams, interview by Major Jim Tenpenny, 15 November 2005, Combat Studies Institute, Fort Leavenworth, transcription (Contemporary Operations Studies Team, Combat Studies Institute, Fort Leavenworth, Kansas), 7.

¹³⁰ COL Robert Abrams, interview by Major Jim Tenpenny, 2.

¹³¹ COL Emmett Schall, interview by Lawrence Lessard, 24 January 2007, Combat Studies Institute, Fort Leavenworth, transcription (Operational Leadership Experiences Project, Combat Studies Institute, Fort Leavenworth, Kansas), 13-14.

¹³² COL Robert Abrams, interview by Major Jim Tenpenny, 8.

Companies were given the responsibility to develop and conduct operations in their own individual Areas of Operation, including granting them control of their targeting because most of the information used to make targeting decisions was sourced at lower levels.¹³³ Companies would have platoons working independently up to ten, even 20, kilometers apart. In one company, one platoon was conducting a direct action against Anti-Iraqi Forces, another was supporting a city council meeting, while a third was providing security for a town market.¹³⁴ Companies were synchronizing simultaneous activities to achieve operational objectives, either over a broad geographic rural area or in complex urban terrain. They were practicing operational art based on its second grammar. Formally delegating the practice of operational art below the corps and divisional levels was not addressed until the 2011 edition of *ADP 3-0 Unified Land Operations*.

The 2008 edition of *FM 3-0 Operations*

The 2008 edition of *FM 3-0 Operations* recognized the significance of Army Transformation, specifically the transition to the Army Modular Force. It addressed the Army's need to adopt the BCT as the basic building block for expeditionary operations, as it facilitated a greater range of options for meeting the diverse needs of full spectrum operations. Operations had become more simultaneous over time and more dispersed over space. The proliferation of the latest information systems supporting command and control, further enabled by satellite-based communications, encouraged the tactical and operational execution of noncontiguous operations. Shortly after, this would lead to operational art being pushed down to lower levels of command for execution.

With the release of the 2008 edition of *FM 3-0 Operations*, for the first time, a whole chapter was devoted to operational art, rather than it being primarily addressed under the operational level of war, while complementary and supplementary pieces on operational art were scattered throughout the manual elsewhere. Several ideas that had come under operational art in previous editions were shifted to the operational level, with operational art now focusing on conceptualization, and the operational level concentrating on execution and command.¹³⁵ The 2008 edition of *FM 3-0 Operations* described operational art as follows:

Operational art is the application of creative imagination by commanders and staffs—supported by their skill, knowledge, and experience—to design strategies, campaigns, and major operations and organize and employ military forces. Operational art integrates ends, ways, and means across the levels of war (JP 3-0).¹³⁶

¹³³ Maj Douglas Merritt, interview by Major Brian Pedersen, 22 August 2007, Combat Studies Institute, Fort Leavenworth, transcription (Operational Leadership Experiences Project, Combat Studies Institute, Fort Leavenworth, Kansas), 12 and 15.

¹³⁴ MAJ Chris Budihas, interview by John McCool, 31 January 2006, Combat Studies Institute, Fort Leavenworth, transcription (Operational Leadership Experiences Project, Combat Studies Institute, Fort Leavenworth, Kansas), 14.

¹³⁵ *FM 3-0 Operations* (2008), 6-3.

¹³⁶ *FM 3-0 Operations* (2008), 6-1.

Operational art reflects an intuitive understanding of the operational environment and the approach necessary to establish conditions for lasting success.¹³⁷

Operational art determines when, where, and for what purpose commanders employ major forces.¹³⁸

Operational art was introduced as representing “the creative aspect of operational-level command,” marking a significant shift in how operational art was defined.¹³⁹

When operational art was introduced to the U.S. Army in the 1986 edition of *FM 100-5 Operations*, it was defined as, “the employment of military forces to attain strategic goals in a theater of war or theater of operations through the design, organization, and conduct of campaigns and major operations.”¹⁴⁰ This changed in 2008 to “operational art is the application of creative imagination” to accomplish several tasks.¹⁴¹ This indicates a shift from operational art, which focuses on enabling offensive action to defeat the enemy, to a more conceptual approach to military operations. Dr. Antulio Echevarria II, an associate professor and the director of research at the Strategic Studies Institute of the U.S. Army War College, argued that the use of ‘creative imagination’ is problematic, as the idea of creativity is “highly subjective, and has little to do with effectiveness.”¹⁴²

Operational art in the 2008 edition was first about conceptualization; it is now described as the use of “creative imagination” to design military operations.¹⁴³ This conceptualization would, in turn, facilitate the organization of military forces. Conceptualization was aided by “an intuitive understanding” of the environment one was operating in and the approach necessary in that environment to make the achievement of success more likely.¹⁴⁴ What had been conceptualized then enabled the planning of when, where and why military forces would be employed.

In 2005, Brigadier General (Retired) Shimon Naveh, formerly of the Israel Defence Force, began teaching a small number of students at the U.S. Army’s School of Advanced Military Studies, Systemic Operational Design (SOD). Naveh had fought in a number of Israel’s war and had commanded at a number of levels up to the divisional level. In 1997 he published his PhD dissertation, from King’s College London, titled *In Pursuit of Military Excellence: The evolution of operational theory*.¹⁴⁵ SOD is:

¹³⁷ *FM 3-0 Operations* (2008), 6-1.

¹³⁸ *FM 3-0 Operations* (2008), 6-3.

¹³⁹ *FM 3-0 Operations* (2008), 6-1.

¹⁴⁰ *FM 100-5 Operations* (1986), 10.

¹⁴¹ *FM 3-0 Operations* (2008), 6-1.

¹⁴² Antulio J. Echevarria II, “American Operational Art, 1917-2008,” 160-161.

¹⁴³ *FM 3-0 Operations* (2008), 6-1.

¹⁴⁴ *FM 3-0 Operations* (2008), 6-1.

¹⁴⁵ Łukasz Przybyło, “Systemic Operational Design – a study in failed concept,” *Security & Defence Quarterly* 42, no. 2 (2023), 40-41.

An application of systems theory on operational art. It is an attempt to rationalize complexity through systemic logic employing a holistic approach that translates strategic direction and policy into operational level designs. SOD focuses upon the relationships between entities within a system to develop rationale for systemic behaviors that accounts for the logic of the system, facilitating a cycle of design, plan, act, and learn. This is accomplished through seven discourses, leading to a holistic design of an operation that will facilitate planning.¹⁴⁶

SOD evolved out of the Operational Theory Research Institute that was created in Israel in 1994 after examining a number of ideas including general systems theory and Soviet operational art, Naveh was one of the founding members.¹⁴⁷ In early 2006 the Israeli military leadership replaced SOD with effects-based operations and system-of-system analysis and shelved all plans based on SOD.¹⁴⁸

The purpose of the study of SOD by the students at the U.S. Army's School of Advanced Military Studies was to determine if it would offer an alternative way to understand operational art. They determined that using SOD for deliberate planning by Combatant Commanders would be challenging although there was scope for it during shorter more hasty planning cycles. They concluded that SOD may promote problem-setting and designs as well encourage better situational understanding, however, it had its own vocabulary that did not align with traditional operational thought and aspects of SOD were not "directly transferable to the U.S. military scale of operations."¹⁴⁹ Furthermore, The U.S. Army already had well established methods for planning complex operations and any design methodology would have to compliment it.¹⁵⁰

In the 2008 edition of *FM 3-0 Operations*, the operational design conceptualized and created a framework for a campaign or major operation plan. The operational design consisted of three main activities, each utilizing distinct elements of operational design to develop the framework for a campaign or major operation, as well as its follow-on execution. The three activities were: framing the problem, formulating the design, and refining the design to enable practical execution.¹⁵¹ Framing the problem involved determining the end state, which was what the operational environment should look like based on national policy and interests, as well as the adversary's and one's centers of

¹⁴⁶ Lieutenant Colonel William T. Sorrellis, Lieutenant Colonel Glen R. Downing, Major Paul J. Blakesley, Major David W. Pendall, Major Jason K. Walk, and Richard D. Wallwork, "Systemic Operational Design: An Introduction" (Monograph, School of Advanced Military Studies, U.S. Army Command and General Staff College, 2005), 15.

¹⁴⁷ Łukasz Przybyło, "Systemic Operational Design," 40.

¹⁴⁸ Brigadier General Huba Wass de Czege, U.S. Army, Retired, "Systemic Operational Design: Learning and Adapting in Complex Missions," *Military Review* LXXXIX no. 1 (January-February 2009), 3-4.

¹⁴⁹ Sorrellis, Downing, Blakesley, Pendall, Walk, and Wallwork, "Systemic Operational Design," 11, 37-38, and 43-44.

¹⁵⁰ Colonel Stefan J. Banach and Alex Ryan, Ph.D., "The Art of Design: A Design Methodology," *Military Review* LXXXIX no. 2 (March-April 2009), 106.

¹⁵¹ *FM 3-0 Operations* (2008), 6-6.

gravity. The military end state, the objective of operational art, was to determine the conditions that supported a military end state based on the strategic end state. At the same time, centers of gravity were sources of power that provided moral or physical strength, freedom of action, or the will to act.¹⁵² The end state and centers of gravity defined the problem space that the commander needed to address by formulating an operational design.

The formulation of the operational design was based on determining how to achieve the military end state by undermining the adversary's centers of gravity while leveraging one's centers of gravity. This process began by deciding on the operational approach—direct or indirect—which the commander wished to adopt, one that could contend with the adversary's centers of gravity.¹⁵³ Operational design favored the indirect approach, which employed combat power against decisive points.¹⁵⁴ The description of decisive points altered somewhat, where the 2001 version was focused on the attack, the 2008 version was more applicable to the entire spectrum of operations.¹⁵⁵ Lines of operation were based on the selected decisive points.¹⁵⁶ In addition to lines of operation, there were also lines of effort that could be used in conjunction with or separate from lines of operation.¹⁵⁷ Several elements assisted with the refinement of the design. These included simultaneity and depth, operational reach, tempo, and culmination, which remained essentially unchanged from the 2001 edition. They used less kinetically oriented language that provided greater relevance for operations in Afghanistan and Iraq when the 2008 edition was released. Phasing and transitions were introduced to enable the arrangement of more complex and challenging operations, facilitating the synchronization of defensive, offensive, stability and civil support operations.

¹⁵² *FM 3-0 Operations* (2008), 6-7 to 6-8.

¹⁵³ The direct approach was applying combat power against the adversary's centers of gravity. The indirect approach focused on attacking decisive points while avoiding the adversary's centers of gravity. *FM 3-0 Operations* (2008), 6-9.

¹⁵⁴ *FM 3-0 Operations* (2008), 6-9.

¹⁵⁵ *FM 3-0 Operations* (2001), 5-7 and *FM 3-0 Operations* (2008), 6-11.

¹⁵⁶ *FM 3-0 Operations* (2008), 6-11 to 6-12.

¹⁵⁷ Lines of operation were limited to defeating an enemy and capturing terrain and did very little to assist operational design beyond offensive and defensive kinetic operations. Lines of effort were more applicable when geographical locations were less critical. They were more relevant to stability and civil support efforts than lines of operation, and thus had greater applicability to COIN. Lines of effort supported stability and civil support efforts and could be complemented by or complementary to the offensive tasks of lines of operation. *FM 3-0 Operations* (2008), 6-12 to 6-14.

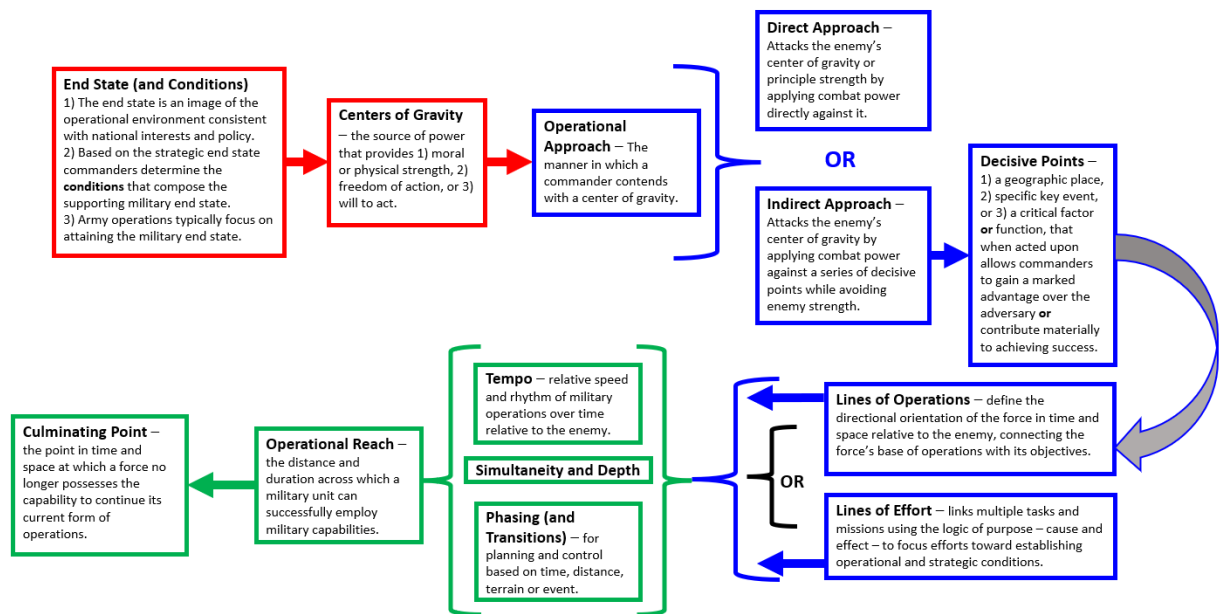


Figure 6.3 The 2008 Elements of Operational Design¹⁵⁸

Compared to the 2001 edition, the order of elements in the description of operational design had become more nuanced. In the 2001 edition, the flow of elements after the center of gravity was decisive points – lines of operation – operational approach, each element being used as a stepping stone to the next element, gradually fleshing out the concept of operations linearly. In the 2008 edition, the idea was to conceptualize an approach that would contend with a center of gravity; the operational approach, in turn, would then help determine the decisive points, lines of operation and lines of effort.¹⁵⁹ The design helped define the operational problem to be solved and conceive a course of action to solve it. As an example, in 2004 the 1st Marine Division deployed into western Iraq and the commander, Major General James N. Mattis, in defining his operational problem divided the population in his area of operation into three groups: the tribes, foreign fighters, and former regime elements with criminal elements mixed into each of these groups in varying degrees. The design then guided the planning necessary to execute the solution to the problem. Based on his analysis he determined broad operational approach to guide planning based on three lines of effort. The first line of effort was to diminish support for the insurgency, the second line of effort was to neutralize bad actors, and the third line of effort was to use information operations to leverage and reinforce the other two. The design envisioned the conditions required to achieve the desired end state, while the plan defined those conditions as tasks in a manner that enabled synchronized execution. The first line of effort for Mattis had to establish local security, while to what degree this would be achieved would be based in part on the

¹⁵⁸ FM 3-0 Operations (2008), 6-6 to 6-19.

¹⁵⁹ FM 3-0 Operations (2008), 6-9.

second line of effort. The plan had to understand the design to devise the actions necessary to affect the adversary in the manner desired by the design. “The design enabled 1st Marine Division to adjust the blend of “diminishing support for insurgents” and “neutralizing bad actors” to meet the local challenges.”¹⁶⁰

In the 2008 edition of *FM 3-0 Operations*, the operational level was where the operational concept was developed through operational art and then turned into action by employing tactical means to achieve strategic ends. The operational plan fleshed out the operational concept to be executed at the operational level.¹⁶¹ The operational level involved implementing the operational plan developed through the application of operational art, focusing on operational practice.¹⁶² The operational plan used the science of planning to establish the details necessary to execute the concept created through operational art.¹⁶³ The operational plan, informed by military science, served as a bridge between operational art and operational command, which facilitated the transition from operational art to operational practice.¹⁶⁴ The application of operational art enabled the achievement of both operational and strategic ends through the application of operational command. Operational art provided operational commanders with the understanding to conduct campaigns and major operations.¹⁶⁵

Execution at the operational level links tactical means to strategic ends, using tactical means to achieve strategic ends. For the effectiveness of operational ways or courses of action, there had to be tactical success, resulting in a more vital linkage between the operational and tactical levels, as long as the operational objectives supported the achievement of the strategic end.¹⁶⁶ The combatant commander was responsible for military strategy, while the Joint Force Commander practiced operational art at the operational level of war.¹⁶⁷ Campaigns and major operations continued to be central to the art of operational warfare. Creative imagination was used to design major operations by the services and campaigns by the Joint Force Commander. “Campaigns are always joint operations,” based on applying individual service capabilities.¹⁶⁸ While the joint force commander used operational art to design a campaign plan, Army commanders at the highest level used operational art to design major operations. This was

¹⁶⁰ *FM 3-0 Operations* (2008), 5-17 to 5-18 and 6-4 to 6-6; and *FM 3-24 Counterinsurgency* (2006), 4-2 to 4-3 and 4-7 to 4-8.

¹⁶¹ *FM 3-0 Operations* (2008), 6-1 to 6-2.

¹⁶² *FM 3-0 Operations* (2008), 6-3.

¹⁶³ *FM 5-0 Army Planning and Orders Production* (2005), 1-3.

¹⁶⁴ “Operational commanders need to understand the complexities of the operational environment, look beyond the immediate situation, and consider the consequences of their approach and subordinates’ actions.” *FM 3-0 Operations* (2008), 6-3 and 6-5.

¹⁶⁵ “Operational commanders position and maneuver forces to shape conditions in their area of operations for their decisive operation. Commanders exploit tactical victories to gain strategic advantage or reverse the strategic effects of tactical losses.” *FM 3-0 Operations* (2008), 6-3 and 6-5.

¹⁶⁶ *FM 3-0 Operations* (2008), 6-2 to 6-3.

¹⁶⁷ *FM 3-0 Operations* (2008), 6-1, 6-3 and 6-5.

¹⁶⁸ *FM 3-0 Operations* (2008), 1-10 and 6-5.

reinforced in the 2005 edition of *FM 5-0 Army Planning and Orders Production*, which stated that campaign planning was the responsibility of combatant commanders and, therefore, not the direct responsibility of the Army.¹⁶⁹

The U.S. Army's operational concept continued to be full spectrum operations, emphasizing the need to combine lethal and non-lethal actions simultaneously to "seize, retain and exploit the initiative," to achieve operational effects and strategic ends.¹⁷⁰ According to the 2008 edition of *FM 3-0 Operations*, this was the operational concept to be used in Iraq for OIF and Afghanistan for Operation ENDURING FREEDOM (OEF).¹⁷¹ In a departure from previous editions, the 2008 edition did not have separate chapters on the offense and the defense like the 2001 edition of *FM 3-0 Operations*, which had each element receive its own chapter, addressing them independently rather than as a single system.¹⁷² The 2008 edition included a chapter on full spectrum operations that addressed the offense and defense as elements of full spectrum operations, along with stability and civil support as a single system. The offensive and defensive strategies focused on the military enemy, while civil support and stability focused on civil authorities and the general civil population.¹⁷³ The operational level was addressed directly as part of full spectrum operations, encompassing both the offensive and the defensive,¹⁷⁴ but was not mentioned under either stability or civil support. The idea of deep, close, and rear was gone, and this was confirmed under the summary of major changes found in Appendix D. Furthermore, the term deep area had been rescinded, along with the terms close area and rear area.¹⁷⁵

The changes in ideas of the 2008 edition of *FM 3-0 Operations* represented the beginning of a paradigm shift in the operational thinking of the U.S. Army arising from OIF. The shift from "the employment of military forces" to "the use of creative imagination" between 2001 and 2008 was a significant change in the meaning and focus of operational art. Furthermore, several ideas previously categorized under operational art were relocated to the operational level, with operational art now focusing on conceptualization based on creative imagination, and the operational level concentrating on execution and command. The operational concept was fleshed out in detail through the operational plan, utilizing the science of planning as the bridge between operational art and operational command, which facilitated the transition from operational art to operational practice.

Following the release of the 2008 edition of *FM 3-0 Operations* on 1 September 2008, U.S. forces transferred security responsibility to Iraqi security forces in Anbar Province, the first province to receive such a transfer. In November 2008, the Iraqi Parliament approved a security agreement with the U.S. that would lead to the

¹⁶⁹ *FM 5-0 Army Planning and Orders Production* (2005), I-3.

¹⁷⁰ *FM 3-0 Operations* (2008), Foreword, viii and 3-1.

¹⁷¹ *FM 3-0 Operations* (2008), vii.

¹⁷² *FM 3-0 Operations* (2008), 7-1 to 7-2.

¹⁷³ *FM 3-0 Operations* (2008), 3-2 and 3-7.

¹⁷⁴ *FM 3-0 Operations* (2008), 3-8 to 3-10.

¹⁷⁵ *FM 3-0 Operations* (2008), D-4 and D-6.

withdrawal of U.S. troops from Iraq by the end of 2011. This led to the beginning of a strategic shift in focus for the U.S. from Iraq to Afghanistan. In January 2009, the United States deployed an additional 4,500 troops to Afghanistan, which President Bush referred to as the “quiet surge.”¹⁷⁶

In December 2009, President Obama surged an additional 30,000 troops into Afghanistan with the intent to start withdrawing forces by July 2011. In 2010, the *National Security Strategy* viewed U.S. strategy as being in transition, focused on ending the war in Iraq and committing to success in Afghanistan while remaining focused on defeating terrorism.¹⁷⁷ U.S. commanders then knew that 2010 would see a complete shift by U.S. forces to stability operations, reinforced by President Obama’s order to end combat operations by September 2010. At the same time, it would be a year of reductions; troop strength in Iraq would decrease from 100,000 down to 50,000 by the end of August, when the last U.S. combat brigade would also leave Iraq. On 1 September 2010, General Lloyd Austin assumed command of US Forces-Iraq (USF-I) from General Raymond Odierno, signalling the end of the combat mission in Iraq and the transition from Operation IRAQI FREEDOM to Operation NEW DAWN.¹⁷⁸

The 2011 edition of *FM 3-0, C1 Operations*

A little less than ten months before U.S. forces would withdraw from Iraq, the 2008 edition of *FM 3-0 Operations* was reissued as Change 1 to FM 3-0. Changes were based on Army operational experience in both Iraq and Afghanistan. Based on nine years of operational experience with effective lower-level initiative, responsibility was pushed to lower levels of command. The Army had learned that understanding the operational environment and the problems being faced were critical for Army operational success. This was enabled by “creating teams among modular forces to work closely with joint, interagency, intergovernmental, and multinational assets, which is critical to mission success.”¹⁷⁹ Based on operational experience, authority needed to be decentralized, and commanders at all levels required to be able to act independently.¹⁸⁰ Full spectrum operations remained central to the thinking in the 2011 edition of *FM 3-0 Operations*, with stability operations now being viewed as tactical tasks “applicable at all echelons of Army forces deployed outside the United States.”¹⁸¹

For the most part, however, the 2011 edition reinforced the change in the U.S. Army’s thinking about operational art, as expressed in the 2008 edition of *FM 3-0*

¹⁷⁶ Richard D. Hooker, Jr. and Joseph J. Collins, eds., *Lessons Encountered: Learning from the Long War* (Washington, D.C.: National Defense University Press, 2015), 447 and 462.

¹⁷⁷ Barack Obama, President, *National Security Strategy* (Washington, D.C.: The White House, 2010), 7.

¹⁷⁸ Colonel Joel D. Rayburn, and Colonel Frank K. Sobchak, eds., *The U.S. Army in the Iraq War Volume 2*, 491 and 519; and Richard D. Hooker, Jr. and Joseph J. Collins, eds., *Lessons Encountered*, 448-449 and 463.

¹⁷⁹ *FM 3-0, C1 Operations* (2011), vii.

¹⁸⁰ *FM 3-0, C1 Operations* (2011), vii.

¹⁸¹ *FM 3-0, C1 Operations* (2011), x.

Operations.¹⁸² Like the 2008 edition, the 2011 edition of *FM 3-0 Operations* used the joint definition for operational art, defining it as “the application of creative imagination by commanders and staffs—supported by their skill, knowledge, and experience—to design strategies, campaigns, and major operations and organize and employ military forces.”¹⁸³ The most significant adjustment to the 2011 edition of *FM 3-0 Operations* was the change from operational design to operational art elements. This change could be argued to be a more accurate reflection of the changes implemented in 2008. The shift to operational art, which focuses on the conceptualization and operational level that emphasizes execution and command, supports the idea that the former elements of operational design are fundamental to operational art.¹⁸⁴ In the 2011 edition of *FM 3-0 Operations*, operational art supported by design used the elements of operational art, just as the 2008 edition employed the elements of operational design to develop a broad operational approach to address an operational problem. Central to design was now design methodology with three distinct elements: framing the operational environment, framing the problem, and considering operational approaches.¹⁸⁵

The U.S. joint operational doctrine had undergone a similar shift previously, but in the opposite direction. Elements of operational art in the 2001 edition of *JP 3-0 Doctrine for Joint Operations* were changed to aspects of operational design in the 2006 edition of *JP 3-0 Joint Operations*, a change that occurred in joint doctrine as of 2002.¹⁸⁶ The 2006/2008 edition of *JP 3-0 Joint Operations* viewed operational design as the physical expression of operational art: “operational art is the manifestation of informed vision and creativity, operational design is the practical extension of the creative process.”¹⁸⁷

Less than seven months after the 2011 edition of *FM 3-0, C1 Operations* was issued, it was replaced by the 2011 edition of *ADP 3-0 Unified Land Operations*. The 2011 edition of *ADP 3-0 Unified Land Operations* was released when U.S. forces had less than three months remaining in Iraq, as their withdrawal date, 18 December 2011, approached.¹⁸⁸ The change was driven by the view that soldiers were not reading doctrine because it was too long. The 2011 edition of *ADP 3-0 Unified Land Operations* was undoubtedly more compact than the 2011 edition of *FM 3-0, C1 Operations*, which it replaced.

Conclusion

¹⁸² Lieutenant General Robert L. Caslen, Jr., “Change 1 to Field Manual 3-0 The Way the Army Fights Today,” *Military Review* LCI, no. 2 (March-April 2011): 86.

¹⁸³ *FM 3-0, C1 Operations* (2011), 7-1.

¹⁸⁴ *FM 3-0 Operations* (2008), 6-3 and *FM 3-0, C1 Operations* (2011), 7-3.

¹⁸⁵ Combined Arms Doctrine Directorate, *FM 5-0 The Operations Process* (Washington, D.C.: Department of the Army, March 2010), 3-7.

¹⁸⁶ *JP 5-00.1 Joint Doctrine for Campaign Planning* (2002), II-1.

¹⁸⁷ *JP 3-0 Joint Operations* (2008), IV-3.

¹⁸⁸ Colonel Joel D. Rayburn, and Colonel Frank K. Sobchak, eds., *The U.S. Army in the Iraq War Volume 2*, 557.

Based on the evolution of U.S. Army operational doctrine and its application during OIF, there are two groups of factors that are indicative of the use and practice of operational thought. First, several factors are indicative of the first idea, the Traditional school, as well as the second idea, the Creative school. Three factors are common to both, indicative of operational art in general, and four factors differentiate between the two ideas. Second, are the elements of operational design, or from 2011 onward, the elements of operational art. These can be easily identified during planning and in orders, but may be difficult, if not impossible, to determine during operational practice.

With respect to the first set of factors, the first factor is the application of operational art to achieve strategic and/or operational objectives.¹⁸⁹ Regarding the first idea, the focus is on strategic objectives. In contrast, the second idea, which is practiced at much lower command levels than the first, involves a greater use of operational objectives that, in turn, support the attainment of strategic objectives. The following two factors relate to the use of battles and engagements, based on the application of tactics that will achieve the operational or strategic objectives. The second common factor is the use of tactical actions separated by geography, whether dispersed over open terrain or isolated in an urban environment. The third common factor is the simultaneity of tactical actions in time.¹⁹⁰ The plan for the invasion of Iraq, *USCENTCOM OPLAN 1003V – CHANGE I*, as well as MNC-I Operations Order 06-03 and the plans and orders of MNC-I's subordinate formations used these three factors; they were focused on strategic and operational objectives, and used tactical actions separated by geography simultaneously to achieve those objectives.

The first of four distinguishing factors is the degree to which the operational problem is defined. For the invasion of Iraq and *USCENTCOM OPLAN 1003V – CHANGE I*, the focus was on the military problem that was relatively well defined strategically.¹⁹¹ Although the issue was ultimately a political one, the initial solution was militarily defeating Saddam's forces, after which other elements of national power would again reassert themselves. As illustrated above, for MNC-I and its subordinate formations, OPOD 06-03 and plans and orders of MNC-I's subordinate formations the immediate and primary problems they faced were political, meaning the military difficulties were much more challenging to define, in part, because the solutions were not primarily about the application of military force. Countering an insurgency is much more complex than traditional warfare because the problem has changing, incomplete and contradictory requirements.¹⁹²

¹⁸⁹ *FM 100-5 Operations* (1993), 6-2; *FM 3-0 Operations* (2001), 2-2 to 2-3; *FM 3-0 Operations* (2008), 6-5; and *FM 3-0, C1 Operations* (2011), 7-3.

¹⁹⁰ *FM 100-5 Operations* (1993), 6-2; *FM 3-0 Operations* (2001), 2-3 to 2-4; *FM 3-0 Operations* (2008), 6-3 and 6-5; and *FM 3-0, C1 Operations* (2011), 7-3 to 7-5.

¹⁹¹ "USCENTCOM OPLAN 1003V – CHANGE I," 2-13.

¹⁹² Traditional warfare is defined in footnote 6 of Chapter 1. "Insurgency is described as an organized, protracted politico-military struggle designed to weaken government control and legitimacy while increasing insurgent control." *FM 3-24 Counterinsurgency* (2006), 4-1.

The next factor to differentiate between the two ideas was whether or not operations were linear or nonlinear. As outlined above, *USCENTCOM OPLAN 1003V – CHANGE 1* adopted linear operations where force ratios and geographic positioning were more critical, making it easier to concentrate force in both time and space. Furthermore, the use of linear operations was more fitting since the problem it faced was traditionally defined with Saddam's forces arranged linearly and in depth. MNC-I and its subordinate formations, as illustrated previously, employed nonlinear operations based on noncontiguous areas of operations, focusing on multiple decisive points, often simultaneously. The design of *MNC-I Operations Order 07-01* was shaped by conditions that served a similar role to decisive points as outlined in doctrine with respect to stability operations.¹⁹³ These decisive points or conditions would help achieve the operational objectives for the lines of operation: secure environment, capable credible ISF, legitimate capable government of Iraq, and integrated into each of these lines of operation effective communication.¹⁹⁴ The three main lines of operation used five phases: 1) Setting Key Conditions, 2) Clear, Control, Retain, 3) Tactical Overwatch, 4) Operational Overwatch, and 5) Strategic Overwatch, to manage as much as possible operational tempo through the sequencing of operations thereby also enabling simultaneous operations when necessary. The operations order understood the diverse range of conditions across the country and acknowledged that this would result in different Areas of Operation progressing "through the phases at different rates."¹⁹⁵ This is because military operations other than war are more likely to favor nonlinear operations, particularly in the cases of stability operations and counter-insurgency.¹⁹⁶

Closely related to this was how tactical tasks were linked to the overall concept of operation. The major combat operations for the invasion of Iraq, based on *USCENTCOM OPLAN 1003V – CHANGE 1*, employed lines of operation to geographically link a series of tactical actions to achieve the operational objective.¹⁹⁷ The CFLCC used U.S. V Corps and 1 MEF to conducted separate simultaneous tactical actions separated by geography, seizing the Rumaylah oil fields while at the same time fighting their way further into Iraq along two separate axes, aimed towards common operational objectives. The Iraqi military forces that the CFLCC and his subordinate forces faced had been reasonably accurately defined based on the forces U.S. V Corps and 1 MEF encountered. The CFLCC was clearly conducting linear operations using lines of operation to coordinate the tactical actions of his subordinates with U.S. V Corps lines of operation running up the west side of the Euphrates River while 1 MEF lines of operation ran up the east

¹⁹³ "MNC-I Operations Order 07-01," 26-31 and *FM 3-0 Operations* (2008), 6-11.

¹⁹⁴ "MNC-I Operations Order 07-01," 12-26.

¹⁹⁵ "MNC-I Operations Order 07-0131-35 and *FM 3-0 Operations* (2008), 6-17.

¹⁹⁶ *FM 3-0 Operations* (2001), 1-15 and 5-11 to 5-12.

¹⁹⁷ *FM 3-0 Operations* (2001), 5-7.

side of the Euphrates River.¹⁹⁸ For MNC-I and its subordinate formations, when positional reference to the enemy was of little applicability, lines of logic or lines of effort were used, particularly when nonmilitary capabilities were also utilized in conjunction with purely military capabilities to achieve operational outcomes.¹⁹⁹ MND-C OPOD 08-02 had three lines of effort: 1) Professionalize the ISF, 2) Develop Governance and Economic Organizations, and 3) Secure the Iraqi population.²⁰⁰

The third distinguishing factor was the operational approach each idea was more likely to apply when finding a solution to the problem it faced. MNC-I and its subordinate formations employed indirect approaches, applying a variety of military and non-military effects against multiple problems. These effects were used to create a more secure environment, enabling other effects to maximize their efficiency and effectiveness in achieving a solution.²⁰¹ *USCENTCOM OPLAN 1003V – CHANGE 1* used a direct approach that applied U.S. combat power against Saddam’s strength to destroy it or shock it into submission.²⁰²

As already mentioned under the common factors of operational art, the traditional school, exemplified by the U.S. invasion of Iraq, focused on strategic objectives. On the other hand, the Creative school, exemplified by COIN operations conducted by MNC-I, and particularly its subordinate formations, focused on operational and strategic objectives that would support the attainment of national strategic objectives. This is due to the fourth differentiating factor of what or which levels of command practice operational art. For *USCENTCOM OPLAN 1003V – CHANGE 1*, operational art was practiced by the Combined Force Component Commanders, specifically the Combined Force Land Component Commander.²⁰³ As illustrated above, for MNC-I and its subordinate formations, operational art was practiced down to the lowest levels of command, extending down to the company level. The change in doctrine with the introduction of the 2011 edition of *ADP 3-0 Unified Land Operations*, that supported the paradigm shift towards the second idea, the Creative school, of operational thought, and that resulted in a change of operational concept from full spectrum operations to unified land operations, is examined in the next chapter.

¹⁹⁸ Colonel Joel D. Rayburn and Colonel Frank K. Sobchak, eds., *The U.S. Army in the Iraq War Volume 1*, 84-86 and Col Gregory Fontenot, U.S. Army Retired, LTC E.J. Degen, U.S. Army and LTC David Tohn, U.S. Army, *On Point*, 88, 120-121, 132-135 and 161.

¹⁹⁹ *FM 3-0 Operations* (2001), 5-9; *FM 3-0 Operations* (2008), 6-13; and Combined Arms Doctrine Directorate, *FM 3-24 Insurgencies and Countering Insurgencies* (Washington, D.C.: Department of the Army, May 2014), 7-7.

²⁰⁰ “MND-C OPOD 08-02 (OPERATION BLUE RIDGE MOUNTAIN),” 9.

²⁰¹ *FM 3-24 Insurgencies and Countering Insurgencies* (2014), 1-1, 1-5 and 10-1.

²⁰² *FM 3-0 Operations* (2008), 6-9.

²⁰³ “USCENTCOM OPLAN 1003V – CHANGE 1,” 39-45.

Chapter Seven – Unified Land Operations

This chapter will first examine the third idea of operational thought, the Grand Strategic School, which gained popularity in the wake of the inconclusive wars in Afghanistan and Iraq.¹ This idea takes the view that (military) strategy became subsumed by policy, operational art in turn replaced strategy (which became grand or national strategy) as the link between policy ([grand or national] strategy) and tactics. It will then consider U.S. Army operational doctrine from 2012 to 2017, starting with the operating concept of unified land operations introduced in the 2011 edition of *ADP 3-0 Unified Land Operations*.² This is followed by the 2012 edition of *ADRP 3-0 Unified Land Operations*, which was released four and a half months after U.S. Army forces left Iraq and was doctrinally cojoined to the 2011 edition of *ADP 3-0 Unified Land Operations*. The U.S. Army operational doctrine coming five to six years after OIF is explored to determine whether or not it confirms the lessons from OIF regarding operational thought by examining the 2016 and 2017 editions of ADP 3-0 and ADRP 3-0, the 2017 edition of FM 3-0 as shaped by the Doctrine 2015 initiative, and the 2014 edition of *ADP 1-01 Doctrine Primer*. In addition, consideration is given to the notable changes during this time regarding who in the U.S. Army was expected to practice operational art, and the end of any direct reference to the levels of war starting with the 2012 edition of *ADRP 3-0 Unified Land Operations*.

The Third Idea

The third school of thought, the Grand Strategic school, argues that after World War II, strategy became subsumed by policy, and the operational level in turn replaced strategy as the bridge between policy, which was now considered a form of strategy, and tactics. This change arose during WWII when the United States, Great Britain and their allies practiced national or grand strategy, the “application of national policy in war.”³ As a result, policy and strategy had become conflated, a situation reinforced by the Cold War. In the initial stages of the Cold War, strategy was absorbed by the political level due to the importance of nuclear strategy, which was being developed at the time. It is then argued that civilian “strategists” had greater influence than military “strategists” regarding the development of nuclear strategy.⁴ The rise of atomic weaponry put the

¹ Alexander Mattelaer, “The Crisis in Operational Art”, 14-15; Hew Strachan, *The Direction of War*, 17-19, 20-21, 38, 40-41, 212-213, 215-216 and 248; Hew Strachan, “The Lost Meaning of Strategy,” 44 and 47; Hew Strachan, “Strategy or Alibi?” 159-161, 162 and 164; Justin Kelly and Mike Brennan, *Alien*, 61-63 and 67; Lawrence Freedman, *Strategy*, 206-207, 209, 240-244; Emile Simpson, *War from the Ground Up*, 140-141, 228 and 243-244; and Colin S. Gray, *The Strategy Bridge*, 20-21 and 45-46.

² *ADP 3-0 Unified Land Operations* (2011), Foreword.

³ Hew Strachan, *The Direction of War*, 16-18; and Hew Strachan, “The Lost Meaning of Strategy,” 42-43.

⁴ Bernard Brodie, *War and Politics* (New York: Macmillan Publishing Co., Inc., 1973), 453; Lawrence Freedman and Jeffrey Michaels, *The Evolution of Nuclear Strategy*, 4th ed. (London: Palgrave Macmillan, 2019), 37-38, 2013-230, 259 and 666; Colin S. Gray, “Strategy in the nuclear age: The United States, 1945-1991,” in *The Making of Strategy: Rulers, States, and War*, editors

decisions for executing a war using atomic weapons in the hands of civilian politicians rather than in the military leadership. The military would engage in tactics, while the civilian politicians would make the strategic decisions about whether or not to initiate an atomic war.

The influence of civilian strategists led to a focus on nuclear deterrence strategy, which resulted in two key outcomes. First, nuclear deterrence strategy focused on the use of nuclear weapons, or not, to achieve strategic outcomes, to the exclusion of the study of the application of other types of military force. Second, the military was supposedly excluded from the planning of strategy, in particular nuclear strategy.⁵ However, several challenges are associated with this specific idea. The military was not excluded from the planning of nuclear strategy; instead, it played a significant role in the acquisition, development, configuration, and deployment of nuclear weapons systems. Furthermore, it was the plans developed by the military that would determine the actual use of nuclear weapons.⁶ In December 1960 the U.S. military adopted a Single Integrated Operations Plan (SIOP) that planned the targeting of nuclear weapons for carrier based naval aviation and aircraft of the U.S. Air Force, Polaris submarine launched ballistic missiles, and the ballistic missiles of Strategic Air Command (SAC). For the most part the plan followed the same SAC preferences for targeting that were in place prior to the adoption of the SIOP.⁷

Although civilian strategists may not have studied the application of other types of military force, the U.S. Army certainly did. As already mentioned in Chapter Three, the first post-World War Two edition of FM 100-5 was *Field Service Regulations Operations FM 100-5* issued 15 August 1949 followed by the 1954 edition of *Field Service Regulations Operations FM 100-5* that would stay in use until 1962, and went through three significant changes. Furthermore, the 1954 edition of *Field Service Regulations Operations FM 100-5* reintroduced the link between politics and the use of military force. It was a first step in highlighting the relationship between politics, strategy and war, which increased in 1962.⁸ This manual reemphasized the offense while recognizing the complexity of the defense, refocusing it in line with the offense, and presenting options for its execution.

The 1962 edition of *Field Service Regulations Operations FM 100-5* expanded U.S. Army thought on the relationship between politics, strategy and war. The first chapter is titled “Strategy and Military Force,” including a “General” section that addresses “Terms,” “National Objectives,” “National Strategy,” “U.S. National

Williamson Murray, MacGregor Knox and Alvin Bernstein, (New York: Cambridge University Press, 1994), 585; Francis J. Gavin, “The Elusive Nature of Nuclear Strategy,” in *The New Makers of Modern Strategy* edited by Hal Brands (Princeton, NJ: Princeton University Press, 2023), 695 and 696; Hew Strachan, *The Direction of War*, 38; Hew Strachan, “The Lost Meaning of Strategy,” 44; and Hew Strachan, “Strategy or Alibi?” 159-161.

⁵ Strachan, *Direction*, 212; and Strachan, “Strategy or Alibi?” 159-161.

⁶ Francis J. Gavin, “The Elusive Nature of Nuclear Strategy,” 695.

⁷ Lawrence Freedman and Jeffrey Michaels, *The Evolution of Nuclear Strategy*, 259.

⁸ *Field Service Regulations Operations FM 100-5* (1954), 5-8.

Objectives and National Strategy,” and “Military Strategy.”⁹ For the first time in FM 100-5, strategy was described. National Strategy was portrayed as “the sum of the national policies, plans, and programs designed to support the national interests” ... it “is the long-range plan through which a nation applies its strength toward the attainment of its objectives.”¹⁰ Military strategy was described as directing “the development and use of the military means which further national strategy through the direct or indirect application of military power.”¹¹ What is important to note is that there were two meanings to the term ‘strategy,’ and the U.S. Army employed both. So, although the political level may have absorbed the idea of strategy, strategy at that level was national strategy while military strategy was what would be practiced by the military subordinate to the national strategic, or the political level, similar to strategy put forward in the construct of war introduced by both Clausewitz and Jomini.

Concerning nuclear strategy, the 1962 edition of *Field Service Regulations Operations FM 100-5* was issued as the strategy of flexible response was replacing the strategy of massive retaliation. The administration of President John F. Kennedy realized nuclear weapons would not deter local wars that may not directly involve both the U.S. and the Soviet Union, but may directly affect the U.S. Furthermore, nuclear weapons were of questionable utility in places like Europe.¹² This resulted in an expansion of conventional military capability to increase both military defensive capabilities and to enhance credible deterrence. The defense budget, which had been between \$35 billion and \$40 billion under President Eisenhower, was increased to \$60 billion under President Kennedy.¹³ The shift in strategy from massive retaliation to flexible response also raised questions about the role and influence of civilian strategists on actual policymakers, if not necessarily during the period of the massive retaliation strategy, then from the inception of the flexible response strategy.¹⁴

⁹ *Field Service Regulations Operations FM 100-5* (1962), 3-4.

¹⁰ *Field Service Regulations Operations FM 100-5* (1962), 3.

¹¹ *Field Service Regulations Operations FM 100-5* (1962), 4.

¹² Lawrence Freedman and Jeffrey Michaels, *The Evolution of Nuclear Strategy*, 296.

¹³ Edward A. Kolodziej, “Living with the Long Cycle: New Assumptions to Guide the Use and Control of Military Force,” in *American Security Policy and Policy-Making: The Dilemmas of Using and Controlling Military Force*, edited by Robert Harkavy and Edward A. Kolodziej (Lexington, MA: D.C. Heath and Company, 1980), 23-25; and Bernard Brodie, *War and Politics*, 396-397.

¹⁴ It has been argued that there is a division between practitioners and policy-makers on the one hand, and researchers and academics on the other. The former deals with real-world situations, while the latter deals with theoretical concepts, and the two can be very different from each other. Robert Harkavy and Edward A. Kolodziej, eds., *American Security Policy and Policy-Making: The Dilemmas of Using and Controlling Military Force*, x and 229. This argument has been made again, more recently, arguing that although the academic work of civilian strategists may have been “impressive in its own right,” it was “disconnected from how policymakers thought about and deployed nuclear weapons to advance America’s interests in the world.” Francis J. Gavin, “The Elusive Nature of Nuclear Strategy,” 692. McGeorge Bundy, National Security Advisor to Presidents John F. Kennedy and Lyndon B. Johnson held the view that: “There is an enormous

The third school of thought, the Grand Strategic school, argues that one of the main results of this conflation of policy and strategy was that the American military “invented a new level of war,” the operational level as a level free from political interference to replace the (military) strategy of old where the military were free to function without civilian political interference.¹⁵ As has been argued, the U.S. Army addressed the conflation of policy and strategy with the 1962 edition of *Field Service Regulations Operations FM 100-5*, which broke out strategy into national strategy and military strategy. Furthermore, the U.S. Army did not invent the operational level of war to replace strategy; it evolved to address a well-thought-out military need.

As outlined in Chapter Four, in 1979, the U.S. Army considered attacking enemy forces over time and space or interdicting the enemy second echelon. This work led to an integrated battlefield concept that combined planning, command and control, the military intelligence process, target acquisition, communications, and fire support in a manner that could be used to target echeloned enemy forces in the depth areas of the theater of operations. It also integrated the close battle with the enemy first echelon and the deep battle with the enemy second echelon as one continuous battle. This concept, “The Integrated Battlefield,” expanded the idea of central battle to include those responsibilities above the divisional level, including coordination for the use of air and long-range missile systems, as well as nuclear weapons.¹⁶ With further work, “The Integrated Battlefield” concept was replaced by the idea of “The Extended Battlefield” in October 1980, which focused on the challenge of fighting a conventional war.¹⁷

This new battlefield idea, explained in Chapter Four, extended combat in time so actions in the deep battle would affect the close battle in the future. It extended combat in depth beyond the close battle and extended its control upwards to higher level units in terms of managing the entire battlefield. For this to work effectively the deep attack had to be synchronized over time and space with the close battle. The aim of the deep attack was to create the conditions for offensive action. This created challenges for planning and synchronization because the extension in combat was greater than what the divisions and corps operated at, eventually leading to the introduction of the operational level.

gulf between what political leaders think about nuclear weapons and what is assumed in complex calculations of relative “advantage” in simulated strategic warfare. Think-tank analysts can set levels of “acceptable” damage well up in the tens of millions of lives. They can assume that the loss of dozens of great cities is somehow a real choice for the sane man. They are in an unreal world.” McGeorge Bundy, “To Cap the Volcano,” *Foreign Affairs* 48, no. 1 (October 1969): 9-10.

¹⁵ Hew Strachan, *The Direction of War*, 38 and 213; Hew Strachan, “The Lost Meaning of Strategy,” 44; Hew Strachan, “Strategy or Alibi?” 160; and Colin S. Gray, *The Strategy Bridge*, 20-21.

¹⁶ General Donn A. Starry, Presentation to the Air University Airpower Symposium, 5 March 1980, 20184474MN8172, Box 36, Folder 5A, Donn A. Starry Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

¹⁷ General Donn A. Starry message for General Meyer, “Extended Battlefield Briefing Team,” 3 January 1981, 20184474MN12144, Box 53A, Folder 4B, Donn A. Starry Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

Chapter Four also highlighted that the three levels of war - strategic, operational and tactical - were first introduced by the U.S. Army in the AirLand 2000 concept paper, which was formally published on 4 September 1981.¹⁸ Brigadier General Donald R. Morelli, Deputy Chief of Staff for Doctrine (DCSDOC), argued that the corps was central to the AirLand Battle concept because the corps commander would be the one “who most clearly sees the windows for offensive action development.”¹⁹ Morelli went on to argue that the inclusion of the operational level facilitated the smooth transition from the strategic to the tactical levels.²⁰

In addition to the argument that the American military invented the operational level as a level free from political interference to replace the strategy, this school of thought also tends to conflate operational art and the operational level.²¹ Chapter Five shows the 1986 edition of *FM 100-5 Operations* introduced the term or concept of operational art, and by doing so focused considerably more on the theater, both the theater of war and the theater of operations, than the 1982 edition did, using it more extensively in the description of operational art. The 1986 edition of *FM 100-5 Operations* addressed the synchronization and sequencing of battles and engagements as part of operational art, clearly and directly broadening the temporal and geographic scale of AirLand Battle.²² It linked campaigns and major operations to the operational level, and battles and engagements to the tactical level, with campaigns and major operations consisting of a number of battles and/or engagements.²³ The purpose or “essence” of operational art in the 1986 edition of *FM 100-5 Operations* was “the design of actions which will ultimately expose it (the enemy) to attack and destruction.”²⁴ Operational art, as described, was an operational conceptualization that lay between strategy and tactics, enabling offensive military action to tactically defeat an enemy military force across both time and space. In the main battle area, this would be achieved through the destruction of the enemy, typically by annihilation, which was generally accomplished via offensive operational action. Deep operations complemented this, focused on operational shock or

¹⁸ Message from Brigadier General Morelli for General Starry, “AirLand Battle 2000,” 2 June 1981, 20184474MN12493, Box 55, Folder 1B, Donn A. Starry Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania and TRADOC, *AirLand Battle 2000* (Fort Monroe, VA: TRADOC Headquarters, 10 August 1982), ii.

¹⁹ Message from Brigadier General Morelli for General Starry, “AirLand Battle 2000,” 2 June 1981.

²⁰ Message from General Starry for Brigadier General Morelli, “AirLand 2000,” 8 June 1981, 20184474MN12493, Box 55, Folder 1B, Donn A. Starry Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

²¹ Hew Strachan, *The Direction of War*, 212; Hew Strachan, “Strategy or Alibi?” 159-160; and Justin Kelly and Mike Brennan, *Alien*, 67.

²² *FM 100-5 Operations* (1986), 10.

²³ Major Wayne M. Hall, “A Theoretical Perspective of AirLand Battle Doctrine,” *Military Review* LXVI, no.3 (March 1986): 32 and Colonel William J. Bolt and Colonel David Jablonsky, “Tactics and the Operational Level of War,” *Military Review* LXVII, no. 2 (February 1987): 4.

²⁴ *FM 100-5 Operations* (1986), 180.

paralysis, rather than enemy destruction. That disruption was to be completed through offensive operational action.

The operational level of war or warfare is different from operational art. The operational level of war or warfare is a construct to describe and explain the interaction among “national objectives, the operational approach, and tactical tasks.”²⁵ The intention of the levels of warfare for the U.S. Army is to delineate what particular role a military headquarters will play based on the primary task it is to accomplish, either “creating strategy, synchronizing and sequencing battles and engagements, or conducting tactical tasks.”²⁶ In this context, the focus of strategy is on theater strategy. Operational art, on the other hand, is a more cognitive approach that focuses on accomplishing a mission by arranging actions across time and space that are unified in purpose, situated between strategy and tactics, to achieve strategic and/or operational objectives.²⁷ The operational level of war is not the same as operational art, the former is an interpretative conflict construct while the latter is more cognitive approach to conceptualization.

Alternative Approach to the Third Idea

Another approach to the third idea regarding operational thought, the Grand Strategic school, is not that strategy became subsumed by policy, but rather that the operational level and operational art subsumed strategy.²⁸ This particular school of thought argues that the creation of the operational level of war changed the purpose of operational art from “facilitating the dialogue between tactics and strategy,” through the creation of a new level of command, the operational level, “that has usurped the role of strategy.”²⁹ Central to this argument is that “campaign objectives are laid down by strategy.”³⁰ Yet, the practice of operational art as the operational level of war has “assumed responsibility for campaign planning.”³¹ As such, operational art, associated with the operational level of war, requires the independent operational commander to design and execute campaigns despite the fact he does not have control over all “the other instruments of national power.”³² In simple terms, operational art, practiced at the operational level, superseded campaign planning from the strategic level.³³

Definitions are pivotal to this argument, and to a large extent, the first argument presented, for the third idea regarding operational thought, the Grand Strategic school. In both cases, how strategy is defined and described is critical to their argument; in this case,

²⁵ *ADP 1-01 Doctrine Primer* (2014), 4-9; and Combined Arms Doctrine Directorate, *ADP 1-01 Doctrine Primer* (Washington, D.C.: Department of the Army, July 2019), 4-7.

²⁶ *ADP 1-01 Doctrine Primer* (2014), 4-9; and *ADP 1-01 Doctrine Primer* (2019), 4-7.

²⁷ *ADP 1-01 Doctrine Primer* (2014), 4-8; and *ADP 1-01 Doctrine Primer* (2019), 4-6.

²⁸ Justin Kelly and Mike Brennan, *Alien*, vii-viii, 59-71 and 92-98; Hew Strachan, *The Direction of War*, 231; and Hew Strachan, “Strategy or Alibi?” 176.

²⁹ Kelly and Brennan, *Alien*, 63.

³⁰ Kelly and Brennan, *Alien*, viii.

³¹ Kelly and Brennan, *Alien*, viii.

³² Kelly and Brennan, *Alien*, 4.

³³ Kelly and Brennan, *Alien*, 93.

how the campaign is defined and described is also vital. As early as the 1962 edition of *Field Service Regulations Operations FM 100-5* strategy had two distinct definitions and descriptions. There was a National Strategy that utilized national policies to achieve national interests, and a Military Strategy that employed military means, through the application of military power, to support the National Strategy.

The argument that operational art took over campaign planning from the strategic level extensively utilizes the 1982 and 1986 editions of *FM 100-5 Operations*. The 1982 edition defined strategy as military strategy that applies force or the threat of force to achieve “the objectives of national policy.”³⁴ In other words, military strategy played a crucial role in achieving the objectives of the national strategy. In this case, the operational level used military power to attain military strategic objectives (that support the achievement of national policy or national strategy objectives) “within a theater of war.”³⁵ Confusion can arise from the 1986 edition, which appears to equate operational art with the operational level, when the manual inserts operational art between strategy and tactics in the manual’s description of the structure of modern warfare.³⁶ Upon closer reading, however, the structure of modern warfare, in this case, is not divided into levels, but rather “broad divisions of activity,” so operational art is, in fact, not turned into a level of war.³⁷

The levels of war or warfare are a construct used to describe and explain the interaction among tactical means, operational ways and national ends as a way to delineate the particular role a military headquarters will play based on the primary task it is to accomplish.³⁸ The 1993 edition of *FM 100-5 Operations* returned to the strategic, operational and tactical levels of war, further breaking out strategy into National Security Strategy, National Military Strategy and Theater Strategy.³⁹ The levels of war paradigm

³⁴ *Operations FM 100-5* (1982), 2-3.

³⁵ *Operations FM 100-5* (1982), 2-3.

³⁶ *FM 100-5 Operations* (1986), 9.

³⁷ *FM 100-5 Operations* (1986), 9.

³⁸ As explained in Chapter One, ends explain what is to be accomplished; they are the conditions to be created to achieve the political or military objectives. Nathan K. Finney and Francis J.H. Park, “A Brief Introduction to Strategy,” 5 and *JP 3-0 Doctrine for Joint Operations* (1995), II-3. Ways explain how the ends are to be achieved, or the sequence of actions to accomplish the objectives. Finney and Park, “Brief,” 5; *JP 3-0 Doctrine for Joint Operations* (1995), II-3; and *3-0 Joint Operations* (2008), IV-3. Means are the resources to be used or the application of military force. Finney and Park, “Brief,” 5 and *FM 100-5 Operations* (1986), 13. Therefore the idea of ends-ways-means can also be used to describe the link in purpose between the three levels of war: the strategic level provides the ends to be achieved, the operational level outlines the ways in which the ends will be achieved, and the tactical level provides the means by which to enable the ways selected to achieve the desired ends. Stephen Biddle, *Military Power: Explaining Victory and Defeat in Modern Battle* (Princeton, NJ: Princeton University Press, 2004), 252-253 and Antulio J. Echevarria II, “American Operational Art, 1917-2008,” 138. The ends are why one is at war: to achieve something. The ways are how the war will be waged to achieve the ends. Means are the tools used to achieve the ends.

³⁹ *FM 100-5 Operations* (1993), 1-3 to 1-5 and 6-1 to 6-3.

continues in principle through the later editions of FM 3-0 as well as being used by joint operational doctrine as its interpretative conflict construct.⁴⁰

Operational art, as described in the 1986 edition of *FM 100-5 Operations*, “is the employment of military forces to attain strategic goals in a theater of war or theater of operations through the design, organization, and conduct of campaigns and major operations.”⁴¹ It went on to define a campaign as a “series of joint actions designed to attain a strategic objective in a theater of war.”⁴² The manual also described a major operation as comprising “the coordinated actions of large forces in a single phase of a campaign or in a critical battle,” and “major operations decide the course of campaigns.”⁴³ What was unclear was whether the strategic goals to be achieved were national strategic goals or military strategic goals.

The 1986 edition of *FM 100-5 Operations* included a chapter on “Operational and Tactical Planning and Execution,” which contained a section on “Campaign Planning.”⁴⁴ In the section on Campaign Planning, the manual describes how it was the theater commander who developed the “campaign plan to implement the joint or combined strategic guidance.”⁴⁵ The 1993 edition of *FM 100-5 Operations* expanded on the responsibilities for campaign planning. Theater of war commanders produced a campaign plan. In contrast, their subordinate theater of operations commanders drafted “subordinate campaign plans,” and Joint Task Force commanders would have developed a campaign plan if they had been given a strategic objective to achieve.⁴⁶

The 1993 edition of *FM 100-5 Operations* went on to describe in reasonable detail the strategic and operational level involvement in campaign planning. At the strategic level:

The NCA (National Command Authorities) and the CJCS (Chairman of the Joint Chiefs of Staff) translate strategy into military policy and requirements, which are the starting points for developing campaign plans. Theater commanders participate in national and alliance or coalition discussions as the theater military experts. They design the campaign plan so that it relates to both national strategies and operational activities. The campaign plan derives from policy and

⁴⁰ *FM 3-0 Operations* (2001), 2-2 to 2-6; *FM 3-0 Operations* (2008), 6-1 to 6-4; *FM 3-0, CI Operations* (2011), 7-1 to 7-3; *JP 3-0 Doctrine for Joint Operations* (1993), II-2 to II-4; *JP 3-0 Doctrine for Joint Operations* (1995), II-1 to II-3; Joint Chiefs of Staff, *JP 3-0 Doctrine for Joint Operations* (Washington, D.C.: Department of Defense, September 2001), II-2 to II-3; *3-0 Joint Operations* (2008), II-1 to II-3; and Director for Operational Plans and Joint Force Development (J-7), *JP 3-0 Joint Operations* (Washington, D.C.: Department of Defense, August 2011), I-12 to I-14.

⁴¹ *FM 100-5 Operations* (1986), 10.

⁴² *FM 100-5 Operations* (1986), 10.

⁴³ *FM 100-5 Operations* (1986), 10.

⁴⁴ *FM 100-5 Operations* (1986), 27 and 28-31.

⁴⁵ *FM 100-5 Operations* (1986), 29.

⁴⁶ *FM 100-5 Operations* (1993), 4-6.

requirements, sets theater-strategic goals, and is the basis for operational level planning.⁴⁷

It then went on to further clarify the expectations at the operational level:

The operational level is the vital link between national- and theater-strategic aims and the tactical employment of forces on the battlefield. The focus at this level is on conducting joint operations—the employment of military forces to attain theater-strategic objectives in a theater of war and operational objectives in the theaters of operations through design, organization, and execution of subordinate campaigns and major operations.⁴⁸

The manual continued by noting that more than one campaign could take place simultaneously in the same theater.⁴⁹ This was reinforced in the 2001 edition of *FM 3-0 Operations*, which, in simpler terms, states that the combatant commander develops the theatre campaign plan, and subordinate unified command commanders develop subordinate campaign plans. Additionally, a Joint Task Force commander can also develop subordinate campaign plans. Land component commanders, in turn, were responsible for planning major operations that supported the campaign plan.⁵⁰

U.S. joint military doctrine supported this approach to campaign planning. The 1995 edition of *JP 3-0 Doctrine for Joint Operations* identified the combatant commander as being responsible for campaign planning when ordered to conduct military operations by the National Command Authorities. Combatant commanders based their theater strategy on national strategic objectives, which in turn were based on national policy and strategic guidance. The combatant commander's strategy would then form the basis for the design of the campaign. Subordinate unified commanders also developed campaign plans, while Joint Force commanders develop campaign plans to achieve theater strategic objectives.⁵¹ The manual also provided a list of the twelve fundamentals of campaign plans, along with a definition of the term "campaign plan."⁵² The 2001 edition of *JP 3-0 Doctrine for Joint Operations* echoes the previous edition, including that the planning and execution of campaigns is based on the application of operational art.⁵³ This was further reinforced by the 1995 edition of *JP 5-0 Doctrine for Planning Joint Operations*, which included a comprehensive section on campaign planning, as well

⁴⁷ *FM 100-5 Operations* (1993), 6-1 to 6-2.

⁴⁸ *FM 100-5 Operations* (1993), 6-2.

⁴⁹ *FM 100-5 Operations* (1993), 6-3.

⁵⁰ *FM 3-0 Operations* (2001), 6-3.

⁵¹ *JP 3-0 Doctrine for Joint Operations* (1995), III-1 to III-9.

⁵² *JP 3-0 Doctrine for Joint Operations* (1995), III-8. "Campaign plan – A plan for a series of related military operations aimed to achieve strategic and operational objectives within a given time and space." *JP 3-0 Doctrine for Joint Operations* (1995), GL-3.

⁵³ *JP 3-0 Doctrine for Joint Operations* (2001), III-1 to III-9.

as the 2002 edition of *JP 5-00.1 Joint Doctrine for Campaign Planning*, which focused explicitly on campaigns and campaign planning.⁵⁴

In both the U.S. Army and joint operational doctrine, combatant commanders and unified command commanders develop campaign plans at the strategic level based on military strategy. Although the combatant commander and unified command commanders may not have control over all the instruments of national power, military strategy and campaigns interact with the other instruments of national power as part of national strategy.⁵⁵ In both the U.S. Army and the U.S. joint doctrine, the military component of the national security strategy emphasizes the use of military force as an element of national power, complemented by the other elements of national power. Campaigns, therefore, are not isolated from other government efforts aimed at achieving national strategic objectives. When planning, combatant commanders are expected to consider the other instruments of national power for their contributions to gaining and maintaining strategic advantage so that unified action can achieve national strategic objectives. A military campaign may be the main effort, or it may support diplomatic or economic efforts that are part of the national strategy. Under these circumstances, it is the combatant commander and the forces under his command that support the other instruments of national power.⁵⁶ Follow-on editions of the U.S. Army and joint operational planning doctrine reinforce this.⁵⁷

For U.S. operational doctrine, multiple campaigns can occur simultaneously, even within the same theater. The combatant commander develops the theater campaign plan. Subordinate unified commanders can develop subordinate campaign plans, and Joint Task Force commanders may also develop subordinate campaign plans. The National Command Authority and the national security strategy provide the strategic objectives that commanders at the theater strategic and operational levels use to help design, organize, and conduct campaigns and major operations using battles and engagements arranged sequentially and/or simultaneously. Military campaigns and major operations consider and, when necessary, coordinate other instruments of national power to contribute to gaining a military strategic advantage, ensuring unified action can achieve national strategic objectives. Operational art helps connect theater strategy with the conduct of major operations, while the strategic level designs, organizes, and

⁵⁴ Director for Operational Plans and Interoperability (J-7), *JP 5-0 Doctrine for Planning Joint Operations* (Washington, D.C.: Department of Defense, April 1995), II-18 to II-21 and *JP 5-00.1 Joint Doctrine for Campaign Planning* (2002), I-1 to I-8.

⁵⁵ Other instruments of national power are diplomatic, economic and informational. *JP 5-00.1 Joint Doctrine for Campaign Planning* (2002), I-4.

⁵⁶ *FM 100-5 Operations* (1993), 1-3, 1-4 and 6-1; *JP 3-0 Doctrine for Joint Operations* (1995), I-6, III-2 and III-4; and *JP 5-00.1 Joint Doctrine for Campaign Planning* (2002), I-4 and III-2.

⁵⁷ *FM 5-0 The Operations Process* (2010), 43, 48-49 and 51; Army Capabilities Integration Center, *TRADOC Pam 525-3-1 The United States Army Commander's Appreciation and Campaign Design* (Fort Monroe, VA: TRADOC, 28 January 2008), 8, 21 and 32; and Director for Operational Plans and Joint Force Development (J-7), *JP 5-0 Joint Operation Planning* (Washington, D.C.: Department of Defense, December 2006), I-1, III-8, III-11, III-18 to 19, III-24, IV-3 and IV-20 to 22.

conducts the strategic plan or global campaign.⁵⁸ The focus of operational art is on achieving strategic objectives by arranging battles and engagements across time, space and purpose. At the same time, strategy seeks to achieve national objectives, integrating and synchronizing all the instruments of national power.⁵⁹

2011 to 2012 – The Introduction of Unified Land Operations

Returning to the evolution of U.S. Army operational doctrine, a little over seven months after introducing the 2011 edition of *FM 3-0, C1 Operations*, it was superseded by *ADP 3-0 Unified Land Operations*.⁶⁰ As early as 2009, senior leaders in the U.S. Army had become concerned about the state of doctrine, primarily because it was too lengthy and soldiers were not reading it. This collective concern led to Doctrine Reengineering by the Combined Arms Center later in the year, with the intention of reducing the size of the Army's doctrinal manuals and the actual number of manuals. The initiative gained the attention of General George S. Casey, Jr., Chief of Staff of the Army, in 2010, who approved the Doctrine 2015 initiative in 2011.⁶¹ In 2011, the U.S. Army restructured its doctrine under the Doctrine 2015 initiative or strategy so that Army doctrine publications (ADP) provided the "intellectual underpinnings of how the Army operates," Army doctrine reference publications (ADRP) provided more detailed explanations of ADPs, and field manuals (FM) "contain principles, tactics and procedures."⁶² As a result, the 2011 edition of *ADP 3-0 Unified Land Operations* was the first manual published under the Doctrine 2015 initiative.⁶³

The 2011 edition of *ADP 3-0 Unified Land Operations* introduced the operating concept of unified land operations, a shift that was influenced by the introduction of *FM 3-24 Counterinsurgency*. This shift in operational focus from full spectrum operations to counterinsurgency necessitated a reevaluation of the Army's operational doctrine.⁶⁴ The development of the operating concept of unified land operations was an attempt to correct that impression and bring counterinsurgency back under the full spectrum of unified land operations.⁶⁵

⁵⁸ Army Chief of Staff, *FM 101-5 Staff Officers Field Manual: Staff Organization and Procedure* (Washington, D.C.: Department of the Army, July 1960), 64 and Combined Arms Doctrine Directorate, *FM 5-0 Planning and Orders Production* (Washington, D.C.: Department of the Army, May 2022), 2-4.

⁵⁹ *FM 5-0 Planning and Orders Production* (2022), 2-1.

⁶⁰ *ADP 3-0 Unified Land Operations* (2011), i.

⁶¹ Colonel Clinton J. Ancker, III, U.S. Army, Retired and Lieutenant Colonel Michael A. Scully, U.S. Army, Retired, "Army Doctrine Publication 3-0 An Opportunity to Meet the Challenges of the Future," *Military Review* XCIII, no. 1 (January-February 2013): 39-40.

⁶² *ADP 1-01 Doctrine Primer* (2014), 1-1 and 2-5; and Combined Arms Center, *Doctrine 2015 Information Brief* (Fort Leavenworth, KS: United States Army Combined Arms Center, n.d.). Based on information in the briefing, it was produced sometime before 31 August 2012.

⁶³ *ADP 3-0 Unified Land Operations* (2011), ii.

⁶⁴ *FM 3-0 Operations* (2001), 9-9.

⁶⁵ Institute of Land Warfare, *U.S. Army Training for Unified Land Operations* (Arlington, VA: Association of the United States Army, September 2011), 6.

By 2010, the view of the national security environment was transitioning with the looming end of the war in Iraq, a shift towards Afghanistan, and a re-emphasis on defeating al-Qaida. In turn, the U.S. government refocused on global security and the need to rebalance long-term priorities beyond the wars it was fighting and to consider the security implications of other challenges and countries.⁶⁶ There was already concern about China's military modernization and the need for the U.S. and its allies to ensure their interests were not negatively affected.⁶⁷ For the Department of Defense, this meant that in the medium to long term, U.S. forces had to plan on prevailing in a broad range of operations, across different theaters, at similar times.⁶⁸ At the same time, the U.S. Army was looking beyond Iraq and Afghanistan to consider a wide range of potential security threats including near peer military powers that would seek to deter U.S. military intervention, terrorist groups and others with less advanced military capabilities who would resort to irregular warfare and terrorism, and "emerging military powers and advanced nonstate entities" who would take a blended approach.⁶⁹ To address this situation, the U.S. Army developed an operating concept that blended combined arms maneuver and wide area security to gain a psychological, physical and temporal advantage over an adversary and enable freedom of action, helping to consolidate strategic and operational gains.⁷⁰

From the operating concept developed in 2010, it was a simple step to formalize it as unified land operations.

Unified land operations describes how the Army seizes, retains, and exploits the initiative to gain and maintain a position of relative advantage in sustained land operations through simultaneous offensive, defensive, and stability operations in order to prevent or deter conflict, prevail in war, and create conditions for favorable conflict resolution.⁷¹

The operating concept of 'unified land operations' combined the three-dimensional aspect of modern warfare and the idea of warfare spread across time and space from AirLand Battle with the mix of offensive, defensive, and stability operations from full spectrum operations. This adaptability of the Army's operating concept also reassured the U.S. government about the Army's ability to respond to changing threats.⁷² Unified land operations were achieved through the two core competencies of wide area security and

⁶⁶ Barack Obama, *National Security Strategy* (2010), 1, 7 and 9.

⁶⁷ Obama, *National* (2010), 43

⁶⁸ Robert M. Gates, Secretary of Defense, *Quadrennial Defense Review Report* (Washington, D.C.: Department of Defense, 2010), vi.

⁶⁹ *TRADOC Pam 525-3-1 The United States Army Operating Concept 2016-2028*, 8-9.

⁷⁰ *TRADOC Pam 525-3-1 The United States Army Operating Concept 2016-2028*, 11.

⁷¹ *ADP 3-0 Unified Land Operations* (2011), Foreword and 1.

⁷² Colonel Bill Benson, "Unified Land Operations: The Evolution of Army Doctrine for Success in the 21st Century," *Military Review* XCII, no. 2 (March-April 2012), 2; *ADP 3-0 Unified Land Operations* (2011), Foreword; and Robert M. Gates, Secretary of Defense, *Quadrennial Defense Review Report*, 2 and 20.

combined arms maneuver, which balanced the warfighting functions intrinsic to the tactical tasks of offensive, defensive and stability operations.⁷³

The 2011 edition of *ADP 3-0 Unified Land Operations* focused on the description of operational art. It did not attempt to explain how to understand operational art, nor did it describe what it was under the levels of war, as seen in the 2008 edition of *FM 3-0 Operations* and the 2011 edition of *FM 3-0, CI Operations*.⁷⁴ The 2011 edition of *ADP 3-0 Unified Land Operations* defined operational art succinctly as “the pursuit of strategic objectives, in whole or in part, through the arrangement of tactical actions in time, space, and purpose.”⁷⁵ This was a significant shift away from the description of operational art in the 2008 and 2011 editions. It modified the first idea, or the Traditional school of operational thought, which posits that operational practice, lying between strategy and tactics, is about the destruction of the enemy or creating operational paralysis, to the creation of conditions that favor reaching strategic objectives.⁷⁶ Of the three paragraphs used to describe operational art, the most succinct yet comprehensive description was found in the final paragraph. It stated, “operational art is how commanders balance risk and opportunity to create and maintain conditions necessary to seize, retain, and exploit the initiative and gain a position of relative advantage while linking tactical actions to reach a strategic objective.”⁷⁷ There was nothing else on operational art beyond the three paragraphs on operational art, and the 2011 edition of *ADP 3-0 Unified Land Operations* made no mention of the operational level or levels of war. However, it still viewed the operational plan as using military science to bridge operational art and conceptualization with execution.⁷⁸

Although the 2011 edition of *ADP 3-0 Unified Land Operations* touched on operational art,⁷⁹ a more detailed description of operational art had to wait yet another

⁷³ Wide area security was defined as “the application of the elements of combat power in unified action to protect populations, forces, infrastructure, and activities; to deny the enemy positions of advantage; and to consolidate gains in order to retain the initiative.” *ADP 3-0 Unified Land Operations* (2011), Glossary-1. Combined arms maneuver was defined as “the application of the element of combat power in unified action to defeat enemy ground forces; to seize, occupy, and defend land areas; and to achieve physical, temporal, and psychological advantage of the enemy to seize and exploit the initiative.” *ADP 3-0 Unified Land Operations* (2011), Glossary-1. The warfighting functions are mission command, movement and maneuver, intelligence, fires, sustainment, and protection. Each consists of related tasks and systems united in a common purpose. *ADP 3-0 Unified Land Operations* (2011), 13-14. The idea of unified land operations comes from the Combined Arms Doctrine Directorate, *ADP 3-0 Unified Land Operations* (2011), 5.

⁷⁴ *FM 3-0 Operations* (2008), 6-1 to 6-3 and *FM 3-0, CI Operations* (2011), 7-1 to 7-3.

⁷⁵ *ADP 3-0 Unified Land Operations* (2011), 9.

⁷⁶ *ADP 3-0 Unified Land Operations* (2011), 10.

⁷⁷ *ADP 3-0 Unified Land Operations* (2011), 10.

⁷⁸ *ADP 3-0 Unified Land Operations* (2011), 10 and Major Steven T. Brackin, “Reframing Army Doctrine Operational Art, the Science of Control, and Critical Thinking,” *Military Review* XCII, no. 6 (November-December 2012): 68.

⁷⁹ *ADP 3-0 Unified Land Operations* (2011), Foreword.

seven months, until the release of the 2012 edition of *ADRP 3-0 Unified Land Operations* in May 2012, which focused on the application and the elements of operational art. Much of the wording resembled the 2011 edition of *FM 3-0, C1 Operations*. It explained how operational art used operational design to develop an operational approach. Concerning the description of operational art, the 2012 edition of *ADRP 3-0 Unified Land Operations* used both the joint definition and the Army definition from the 2011 edition of *ADP 3-0 Unified Land Operations*:

Operational art is the cognitive approach by commanders and staffs—supported by their skill, knowledge, experience, creativity, and judgment—to develop strategies, campaigns, and operations to organize and employ military forces by integrating ends, ways, and means (JP 3-0). For Army forces, operational art is the pursuit of strategic objectives, in whole or in part, through the arrangement of tactical actions in time, space, and purpose. This approach enables commanders and staffs to use skill, knowledge, experience, and judgment to overcome the ambiguity and intricacies of a complex, ever changing, and uncertain operational environment to better understand the problem or problems at hand. Operational art applies to all aspects of operations and integrates ends, ways, and means, while accounting for risk. Operational art is applicable at all levels of war, not just to the operational level of war.⁸⁰

Compared to the 2011 edition of *FM 3-0 Operations*, the description of operational art in the 2012 edition of *ADRP 3-0 Unified Land Operations* had been tempered from the application of creative imagination to a cognitive approach, broadening it beyond just creativity, also to include skill, knowledge, experience and judgement. Operational art refocuses on the process of solving a problem, rather than a specific approach to solving it.⁸¹ At the same time, it reinforced the idea of operational art from the 2011 edition of *ADP 3-0 Unified Land Operations* – that operational thought and practice were about creating conditions of advantage to reach strategic objectives rather than enemy destruction or paralysis.⁸²

Additionally, two other noticeable changes were evident. First, there was a complete lack of reference to and description of the three levels of war: strategic, operational and tactical. None of the core doctrinal publications of the U.S. Army at the time defined or described the three levels of war, despite occasional references to levels of war and even one publication mentioning them by name.⁸³ The second change pertained to who practiced operational art.

⁸⁰ *ADRP 3-0 Unified Land Operations* (2012), 4-1.

⁸¹ *ADRP 3-0 Unified Land Operations* (2012), 4-1.

⁸² *ADRP 3-0 Unified Land Operations* (2012), 4-1.

⁸³ This includes the 2011 edition of *ADP 3-0 Unified Land Operations*, the 2012 edition of *ADRP 3-0 Unified Land Operations*, the 2012 edition of *ADP 5-0 The Operations Process*, and the 2012 edition of *ADRP 5-0 The Operations Process*. The 2012 edition of *ADP 1-0 The Army* mentions the “tactical, operational, and strategic levels” twice. Combined Arms Doctrine Directorate, *ADP 1 The Army* (Washington, D.C.: Department of the Army, September 2012), 3-1 and 3-2.

Returning to operational art's introduction to the U.S. Army, the 1986 edition of *FM 100-5 Operations* stated, "No particular echelon of command is solely or uniquely concerned with operational art."⁸⁴ It did, however, go on to state that campaigns are the responsibility of theater commanders. At the same time, major operations were the responsibility of army groups and armies, and "tactics is the art by which corps and smaller unit commanders translate potential combat power into victorious battles and engagements."⁸⁵ Thus, it is reasonably clear who or what level of command was generally responsible for operational art and operational practice, and who was responsible for tactical actions, army groups and armies, the former, corps and smaller unit commanders, the latter.

The 1993 edition of *FM 100-5 Operations* was unclear, stating, "No specific level of command is solely concerned with operational art."⁸⁶ It was viewed more as a bridging function between strategy and tactics; this meant that who would practice it would vary depending on the scale of military activity. The argument for the idea of a bridging function was based on:

Operational art translates theater strategy and design into operational design which links and integrates the tactical battles and engagements that, when fought and won, achieve the strategic aim. Tactical battles and engagements are fought and won to achieve operational results.⁸⁷

The 2001 edition of *FM 3-0 Operations* took the joint doctrinal view of operational art practiced by the Joint Force Commander and their subordinate commanders.⁸⁸ Subordinate commanders could include the land component commander, who could be the commander of the largest army unit in the theater. The 2008 edition of *FM 3-0 Operations* clearly stated that operational art "is applied only at the operational level."⁸⁹ So operational art was neither the strategic level nor the tactical level.

In the 2011 edition of *FM 3-0, CI Operations*, operational art became more of a link between strategy and tactics, like the 1993 edition of *FM 100-5 Operations*. The exact wording used in the 2011 edition of *FM 3-0, CI Operations* was, "Operational art spans a continuum—from comprehensive strategic direction to concrete tactical actions."⁹⁰ In isolation, this could mean that operational art is applied to all levels, including strategic, operational and tactical. However, the 2011 edition of *FM 3-0, CI Operations* goes on to state, "Bridging this continuum requires creative vision coupled with broad experience and knowledge."⁹¹ The concepts of creative vision or imagination, experience and knowledge were derived from the definition of operational art used in the

⁸⁴ *FM 100-5 Operations* (1986), 10.

⁸⁵ *FM 100-5 Operations* (1986), 10.

⁸⁶ *FM 100-5 Operations* (1993), 6-2.

⁸⁷ *FM 100-5 Operations* (1993), 6-2.

⁸⁸ *FM 3-0 Operations* (2001), 2-4 and *JP 3-0 Doctrine for Joint Operations* (1995), II-3.

⁸⁹ *FM 3-0 Operations* (2008), 6-1.

⁹⁰ *FM 3-0, CI Operations* (2011), 7-4.

⁹¹ *FM 3-0, CI Operations* (2011), 7-4.

2011 edition of *FM 3-0, CI Operations*.⁹² So, operational art was needed to bridge this continuum.

Up to this point, U.S. Army operational doctrine either identifies a type or group of organizations or identifies a particular level of war as the one that practices operational art. This changed with the 2012 edition of *ADRP 3-0 Unified Land Operations*, which states, “Operational art is applicable at all levels of war, not just to the operational level of war.”⁹³ The 2016 edition of *ADRP 3-0 Operations* went on to be more specific, stating, “Operational art applies to all levels of warfare, strategic, operational, and tactical.”⁹⁴ The 2017 edition of *ADRP 3-0 Operations* continued the theme of operational art applying to all levels: “Operational art encompasses all levels, from strategic direction to tactical actions.”⁹⁵ In some respects, the 2017 edition of *FM 3-0 Operations* went further than any other recent U.S. Army operational doctrine publications, stating, “Not all elements of operational art apply at all levels of warfare.”⁹⁶ It reinforces this selective approach to operational art, adding, “The application of specific elements of operational art is situation and echelon dependent.”⁹⁷ After 2011, the U.S. Army’s operational doctrine came to view operational art as more of a style of conceptualizing military operations or as a manifestation of creativity. It informed vision rather than as a means to achieve offensive operational and tactical action. As mentioned in the previous chapter, this shift occurred during OIF, as the U.S. Army became more focused on COIN. Battalions, and companies no longer received specific, definitive tasks from their higher headquarters, so operational art was conducted at lower levels, all the way down to the company level to deal with abstract, long term problems.

In practice, during OIF, the seven division/force campaign plans were nested within the Combined Joint Task Force plan.⁹⁸ In the fall of 2003, divisions received little direct guidance from the Combined Joint Task Force; therefore, they developed their campaigns for their area of operations and coordinated with adjacent divisions regarding enemy activity and reconstruction projects that crossed divisional boundaries.⁹⁹ This led, “over time to the management of the Iraq campaign being decentralized to the brigade level.”¹⁰⁰ This was especially true in cases where divisions had immense areas of operation or ‘battlespace’ to manage, often with a broad range of operating

⁹² *FM 3-0, CI Operations* (2011), 7-1.

⁹³ Colonel Bill Benson, “Unified Land Operations,” 9 and *ADRP 3-0 Unified Land Operations* (2012), 4-1.

⁹⁴ *ADRP 3-0 Operations* (2016), 2-1.

⁹⁵ *ADRP 3-0 Operations* (2017), 2-1 and *ADP 3-0 Operations* (2019), 2-2.

⁹⁶ *FM 3-0 Operations* (2017), 1-20.

⁹⁷ *FM 3-0 Operations* (2017), 1-20.

⁹⁸ Dr. Donald P. Wright and Colonel Timothy R. Reese, *The United States Army in Operation IRAQI FREEDOM May 2003-January 2005 On Point II: Transition to the New Campaign* (Fort Leavenworth, KS: Combat Studies Institute Press, 2008), 123.

⁹⁹ Colonel Joel D. Rayburn and Colonel Frank K. Sobchak, eds., *The U.S. Army in the Iraq War Volume 1*, 196.

¹⁰⁰ Colonel Joel D. Rayburn and Colonel Frank K. Sobchak, eds., *The U.S. Army in the Iraq War Volume 2*, 636.

environments. In April 2004, the 1st Armored Division developed a campaign plan based on four lines of operation: combat operations, information operations, re-establishment of the Iraqi Security Forces, and stability and reconstruction operations.¹⁰¹ Operations conducted by special operations forces had to be closely coordinated with “the campaign plan of the conventional unit that owned the battle space,” down to at least the brigade level.¹⁰² U.S. Army leaders of brigades, battalions, and companies developed campaign plans for their respective areas of operations, simultaneously conducting offensive, defensive, and stability operations to support political outcomes.¹⁰³

This practice during OIF was recognized by the U.S. Army, along with the understanding that, due to the complexity of operations at the time, divisions would conduct major operations and, therefore, had to develop campaign plans. Additionally, Army brigades needed to have the same capability.¹⁰⁴ The 2011 edition of *ADP 3-0 Unified Land Operations* clearly stated: “operational art is not associated with a specific echelon or formation.”¹⁰⁵ Instead, operational art was to be used by “any formation that must effectively arrange multiple, tactical actions in time, space, and purpose to achieve a strategic objective, in whole or in part.”¹⁰⁶ Thus, a company achieving an operational objective as part of a campaign plan could help to achieve a strategic objective. By 2012, the U.S. Army recognized that to accomplish its missions, it required leaders and staff who were the “masters of operational art” in an environment where operational art was not associated with any particular echelon, formation, or unit.¹⁰⁷

Turning to the changes in the elements of operational art, the actual flow or linkage of the elements of operational art in the 2011 edition of *ADP 3-0 Unified Land Operations*, from one to the next was now more simplified with decisive points assisting with the establishment of both lines of operation and lines of effort.

¹⁰¹ Dr. Donald P. Wright and Colonel Timothy R. Reese, *The United States Army in Operation IRAQI FREEDOM May 2003-January 2005 On Point II*, 324.

¹⁰² Colonel Joel D. Rayburn and Colonel Frank K. Sobchak, eds., *The U.S. Army in the Iraq War Volume 1*, 461.

¹⁰³ Colonel Joel D. Rayburn and Colonel Frank K. Sobchak, eds., *The U.S. Army in the Iraq War Volume 2*, 638.

¹⁰⁴ *TRADOC Pam 525-3-1 The United States Army Operating Concept 2016-2028*, 18-19 and 24.

¹⁰⁵ *ADP 3-0 Unified Land Operations* (2011), 9

¹⁰⁶ *ADP 3-0 Unified Land Operations* (2011), 9

¹⁰⁷ Army Capabilities Integration Center, *TRADOC Pam 525-3-0 The U.S. Army Capstone Concept* (Fort Monroe, VA: TRADOC Headquarters, 19 December 2012), 24 and 28.

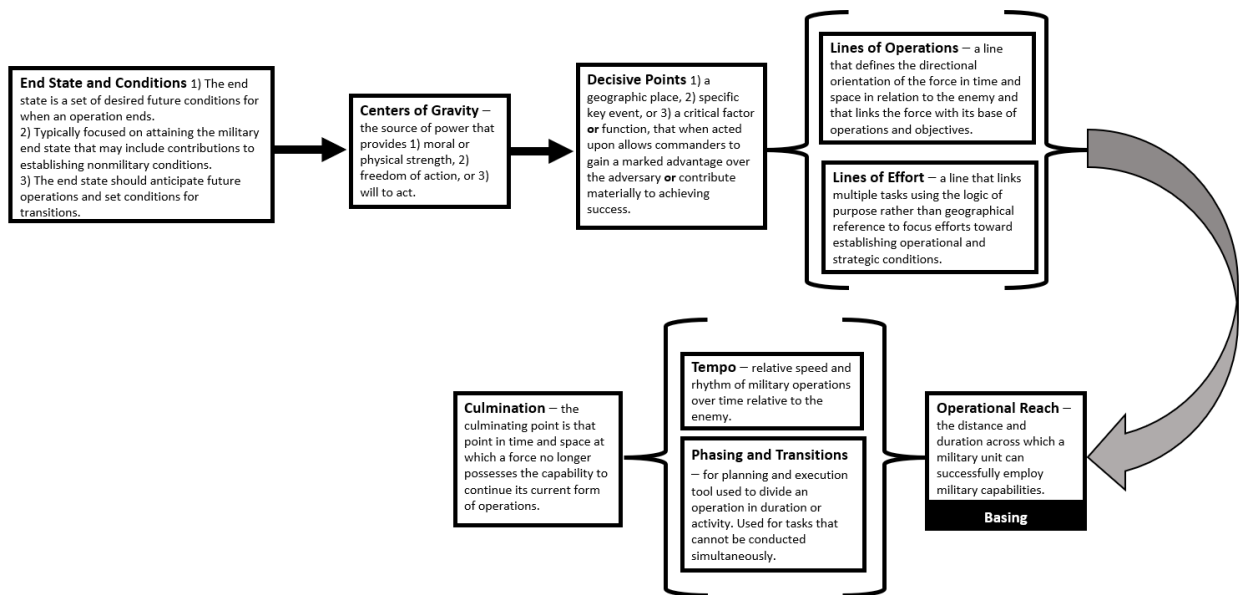


Figure 7.1 The 2012 Elements of Operational Art¹⁰⁸

Like the previous editions, the 2012 edition of *ADRP 3-0 Unified Land Operations* started with the end state to determine the operation's objective. Next were centers of gravity, determining both one's own and the adversary's sources of power. This enabled one to protect, avoid, neutralize or destroy them as necessary to achieve one's end state. Then, unlike the 2008 elements of operational design that carried over to the 2011 edition of *FM 3-0, C1 Operations*, as the elements of operational art, one determined the decisive points, not the approach to be taken, the decisive points were the stepping stones for one's lines of operation. An alternative to, or an accompaniment to, the lines of operation was the lines of effort. The lines of operation and effort used were shaped by operational reach and heavily influenced by basing, particularly in relation to one's starting point. The actual execution of the operational approach was based on lines of operation and effort and constrained by operational reach, which were managed by the tempo. When it was impossible to attain or maintain the tempo desired during the execution of an operation, it could be controlled through phasing and transitions. Ultimately, operations, whether offensive or defensive, were limited by their culminating point.¹⁰⁹

The 2011 edition of *ADP 3-0 Unified Land Operations* heralded a paradigm shift from operational art practiced by larger units to smaller units down to the company level. It also focused on describing operational art, rather than attempting to explain how to understand it.¹¹⁰ The 2011 edition of *ADP 3-0 Unified Land Operations* defined operational art succinctly as, "the pursuit of strategic objectives, in whole or in part,

¹⁰⁸ *ADRP 3-0 Unified Land Operations* (2012), 4-2 to 4-9.

¹⁰⁹ *ADRP 3-0 Unified Land Operations* (2012), 4-8.

¹¹⁰ *FM 3-0 Operations* (2008), 6-1 to 6-3 and *FM 3-0, C1 Operations* (2011), 7-1 to 7-3.

through the arrangement of tactical actions in time, space, and purpose.”¹¹¹ The 2012 edition of *ADRP 3-0 Unified Land Operations* used the joint definition of operational art, emphasizing cognition and creativity more than the Army definition found in *ADP 3-0 Unified Land Operations*.

As the U.S. Army left Iraq at the end of 2011, operational art had been tempered from the application of creative imagination to a cognitive approach to solving military problems. Operational art had evolved into a process or way of solving problems, rather than a specific approach to solving a problem like the Traditional school that focused on offensive action to militarily defeat an enemy. Furthermore, the purpose of operational art was to create conditions that would provide tactical advantage to achieve strategic objectives, rather than the specific destruction or paralysis of the enemy. In addition, operational art was no longer reserved for the higher echelons of command; it had been brought to lower echelons, to any level of command that had to coordinate several activities simultaneously across a broad geographic area while visualizing synchronization over time.

Unified Land Operations: The New Steady State

By the beginning of 2012, President Obama viewed the war in Iraq as over, the security situation in Afghanistan as having progressed sufficiently to start transferring responsibility to the Afghan government, and al-Qaida on the way to being defeated. Based on this, the Department of Defense changed its strategic focus from the wars the U.S. was or had been engaged in to the future security challenges, highlighted by the “drawdown” of operations in Iraq and Afghanistan. As a result, stability and counter-insurgency operations would no longer be at the forefront of U.S. strategy, although the capability to conduct such operations would be retained if required.¹¹²

By 2014, the shift in strategy to focus on the Asia-Pacific region was well entrenched due to its economic, security and political importance to the U.S. The Department of Defense was focused on an Army fully capable of sustained land combat “as part of large, multi-phase joint and multinational operations.”¹¹³ In 2014, this would require the Army to continue with modernization efforts, evolve its operational doctrine as necessary, and reacquire its ability to conduct combined arms maneuvers and forcible entry against a possible peer adversary.¹¹⁴

Evolving U.S. Army operational doctrine would include the introduction of the 2014 edition of *ADP 1-01 Doctrine Primer*. The U.S. Army had restructured its doctrine under the Doctrine 2015 initiative, starting in 2011. The 2014 edition of *ADP 1-01 Doctrine Primer* described operational art as “the cognitive approach by commanders and

¹¹¹ *ADP 3-0 Unified Land Operations* (2011), 9.

¹¹² Leon E. Panetta, Secretary of Defense, *Sustaining U.S. Global Leadership: Priorities for 21st Century Defense* (Washington, D.C.: Department of Defense, 2012), 1, 3 and 6.

¹¹³ Chuck Hagel, Secretary of Defense, *Quadrennial Defense Review* (Washington, D.C.: Department of Defense, 2014), ix.

¹¹⁴ Hagel, *Quadrennial*, 36 and 59.

staffs – supported by their skill, knowledge, experience, creativity, and judgement – to develop strategies, campaigns, and operations to organize and employ military forces by integrating ends, ways, and means.”¹¹⁵ The stated purpose of operational art was to provide a set of “cognitive” or “intellectual” tools to assist commanders and staff with planning.¹¹⁶ The 2014 edition of *ADP 1-01 Doctrine Primer* reinforced the blending of the first and second ideas of operational thought, that operational art had been tempered from the application of creative imagination to a cognitive approach for solving military problems, to create the conditions of tactical advantage necessary to reach strategic objectives, rather than the specific destruction or paralysis of the enemy.

The 2016 edition of *ADP 3-0 Operations* maintained the description of operational art from the previous edition. This continuity in the definition of operational art is essential as it provides a consistent framework for understanding military operations over time.¹¹⁷ The 2016 edition of *ADRP 3-0 Operations* continued to use both the joint definition and the Army definition of operational art:

Operational art is the cognitive approach by commanders and staffs—supported by their skill, knowledge, experience, creativity, and judgment—to develop strategies, campaigns, and operations to organize and employ military forces by integrating ends, ways, and means (JP 3-0). For Army forces, operational art is the pursuit of strategic objectives, in whole or in part, through the arrangement of tactical actions in time, space, and purpose.¹¹⁸

This reinforced the concepts introduced in the 2011 edition of *ADP 3-0 Unified Land Operations* and the 2012 edition of *ADRP 3-0 Unified Land Operations*. It reiterated that operational art is a cognitive approach that utilizes skill, knowledge, experience, creativity and judgement to solve military problems and create the conditions of tactical advantage necessary to reach strategic objectives, rather than the specific destruction or paralysis of the enemy. This transition from the 2011 edition to the 2016 edition highlights the evolution of operational art in military strategy.

In the 2016 edition of *ADRP 3-0 Operations*, there was a change in the order of the elements of operational art relative to the 2012 edition. Once the lines of operation and effort have been determined, the basing requirements required to project and/or support operations can be defined and arranged. This change in the order of the elements of operational art reflects a shift in the strategic approach to military operations.¹¹⁹ The lines of operation and/or effort would be controlled by the tempo at which the operations were conducted. When it was not possible to attain or maintain the desired tempo during the execution of an operation, it could be managed through phasing and transitions.¹²⁰ Upon reaching the culminating point, the full extent of operational reach would have

¹¹⁵ *ADP 1-01 Doctrine Primer* (2014), 4-8.

¹¹⁶ *ADP 1-01 Doctrine Primer* (2014), 4-8.

¹¹⁷ *ADP 3-0 Operations* (2016), 4.

¹¹⁸ *ADRP 3-0 Operations* (2016), 2-1.

¹¹⁹ *ADRP 3-0 Operations* (2016), 2-6.

¹²⁰ *ADRP 3-0 Operations* (2016), 2-7 to 2-9.

been identified; the operational reach was managed through the operational tempo and by phasing and transitioning.¹²¹

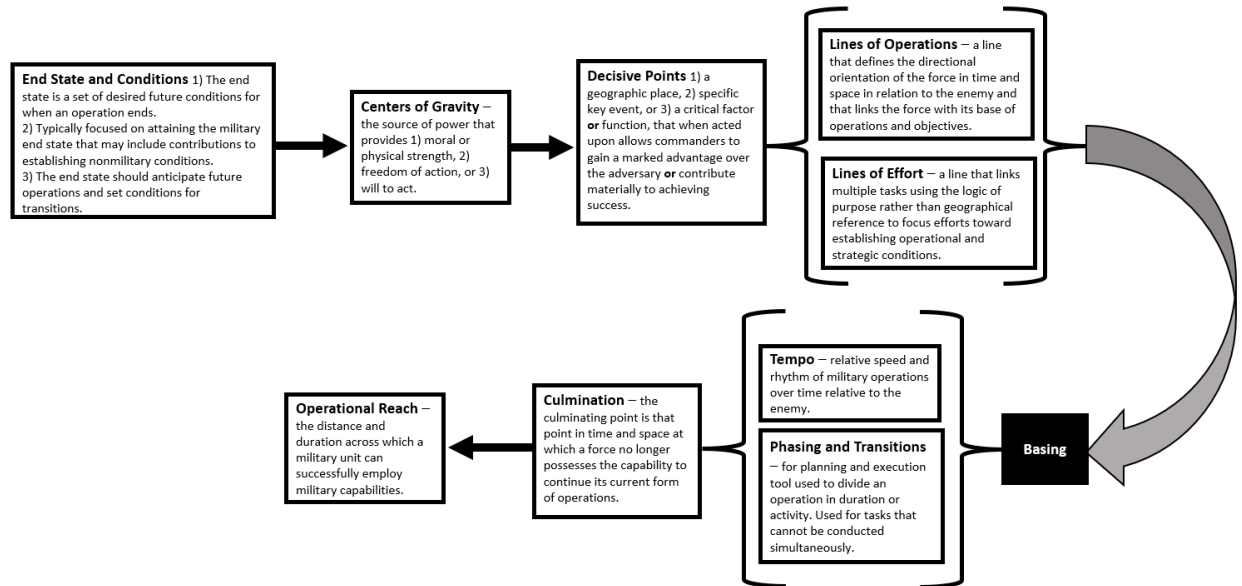


Figure 7.2 The 2016 Elements of Operational Art¹²²

The operational concept of unified land operations was modified in the 2016 edition of *ADRP 3-0 Operations* from how unified land operations would be achieved based on a selection of methods focused on a particular purpose, to what methods would achieve unified land operations, how they would do that and why they would be doing it.

Unified land operations are simultaneous offensive, defensive, and stability or defense support of civil authorities tasks to seize, retain, and exploit the initiative and consolidate gains to prevent conflict, shape the operational environment, and win our Nation's wars as part of unified action.¹²³

Unified land operations were achieved through decisive action,¹²⁴ seizing, retaining and exploiting the initiative, and consolidating gains.¹²⁵ From 2012, the two core competencies of wide area security and combined arms maneuver were replaced by six

¹²¹ *ADRP 3-0 Operations* (2016), 2-9.

¹²² *ADRP 3-0 Operations* (2016), 2-4 to 2-10.

¹²³ *ADRP 3-0 Operations* (2016), 3-1.

¹²⁴ "Decisive action is the continuous, simultaneous combinations of offensive, defensive, and stability or defense support of civil authorities tasks." *ADRP 3-0 Operations* (2016), 3-1.

¹²⁵ *ADRP 3-0 Operations* (2016), 3-1 to 3-7.

principles of land operations¹²⁶ that now guided how to think and approach the execution of operations.¹²⁷

The idea of design had also evolved. It now consisted of two ideas that worked together, army design methodology and the military decision-making process (MDMP). Army design methodology applied “critical and creative thinking to understand, visualize, and describe problems and approaches to solving them.”¹²⁸ Like the 2010 edition of *FM 5-0 The Operations Process*, the army design methodology did this by framing the operational environment, then framing the problem, and lastly considering operational approaches. To create operational plans, commanders and their staffs, would take the understanding of the operational environment, the understanding of the problem, and the broad general operational approach from the army design methodology and would use them in the MDMP to produce executable operations orders.¹²⁹ MDMP was the planning methodology “to understand the situation and mission, develop a course of action, and produce an operation plan or order.”¹³⁰

FM 3-0 Operations was reintroduced in 2017, after a six-year absence, but was now subordinate to *ADP 3-0 Operations* and *ADRP 3-0 Operations*.¹³¹ Despite its title, the 2017 edition of *FM 3-0 Operations* was focused on the tactical level of war and the execution of large-scale unit tactics.¹³² The manual comprised 364 pages, with less than three pages addressing operational art, and it was barely mentioned outside of these three pages.¹³³ Operational art was covered in two paragraphs, and the elements of operational art were covered in another three paragraphs. The 2017 edition of *FM 3-0 Operations* followed an identical approach to operational art and the elements of operational art as the 2016 edition of *ADRP 3-0 Operations*. The focus of the 2017 edition of *FM 3-0 Operations* was no longer on the full spectrum of operations but “large scale combat operations in highly contested, lethal environments where enemies” have capabilities that rival those of the U.S. military, however, the operational concept remained unified land operations.¹³⁴ That said, although seizing, retaining and exploiting the initiative, and consolidating gains were touched on, the focus was clearly on decisive action, in keeping

¹²⁶ The six principles are mission command, developing the situation through action, combined arms, adherence to the law of war, establishing and maintaining security, and creating multiple dilemmas for the enemy. *ADRP 3-0 Operations* (2016), 3-9.

¹²⁷ *ADRP 3-0 Operations* (2016), 3-9.

¹²⁸ Combined Arms Doctrine Directorate, *ADRP 5-0 The Operations Process* (Washington, D.C.: Department of the Army, May 2012), 2-4 to 2-5; *ATP 5-0.1 Army Design Methodology* (2015), 1-3 to 1-5; and *ADRP 3-0 Operations* (2016), 2-4.

¹²⁹ *ADRP 3-0 Operations* (2016), 2-4.

¹³⁰ *ADRP 5-0 The Operations Process* (2012), 2-11.

¹³¹ Field manuals also “describe how the Army executes operations described in the Army doctrine publications.” *ADP 1-01 Doctrine Primer* (2014), 2-5.

¹³² Lieutenant General Mike Lundy and Colonel Rich Creed, “The Return of U.S. Army Field Manual 3-0, Operations,” *Military Review* 97 no. 6 (November-December 2017): 14, 16 and 21, and *ADP 1-01 Doctrine Primer* (2019), 2-4 and 5-1.

¹³³ *FM 3-0 Operations* (2017), 1-19 to 1-22.

¹³⁴ *FM 3-0 Operations* (2017), Foreword, vii. ix, 1-1 to 1-2, and 1-16.

with the manual's concentration on large scale combat operations against a peer or near-peer rival.¹³⁵

The 2017 edition of *ADP 3-0 Operations* was released less than a year after the 2016 edition. The description of operational art began with a statement of its purpose, followed by a joint definition of operational art similar to the 2016 edition of *ADRP 3-0 Operations*. This reinforced the idea that operational art is a cognitive approach using skill, knowledge, experience, creativity, and judgment to solve military problems and create the tactical advantage necessary to achieve strategic objectives. For the 2017 edition of *ADP 3-0 Operations*, the focus on applying operational art was based philosophically on a shared understanding and collaboration, while the 2016 edition had viewed operational art as being applied through the use of the elements of operational art.¹³⁶ The 2016 edition focused on understanding the operational environment, while the 2017 edition oriented towards developing a concept of operations.¹³⁷

As was the case in 2016, the 2017 edition of *ADRP 3-0 Operations* was released simultaneously with the ADP. Like the 2017 edition of *ADP 3-0 Operations*, the 2017 edition of *ADRP 3-0 Operations* employed both the joint definition of operational art and the Army definition. The 2017 edition of *ADRP 3-0 Operations* made only two changes from the 2016 edition. First, the 2017 edition of *ADRP 3-0 Operations* did not include the idea that understanding the operational environment is an integral part of operational art, rather than was the responsibility of the army design methodology. This change reinforced the idea that operational art was more about the style of planning and employing military forces than about achieving a decisive military outcome. The second change concerned the elements of operational art, which were essentially the same as in the 2016 edition, except that basing was moved from immediately after lines of operations and lines of effort to the support of operational reach, reminiscent of the 2012 edition of *ADRP 3-0 Unified Land Operations*.¹³⁸

¹³⁵ *FM 3-0 Operations* (2017), 1-16 to 1-19.

¹³⁶ *ADP 3-0 Operations* (2016), 5 and *ADP 3-0 Operations* (2017), 6.

¹³⁷ *ADP 3-0 Operations* (2016), 4 to 5 and *ADP 3-0 Operations* (2017), 6.

¹³⁸ *ADRP 3-0 Operations* (2017), 2-9.

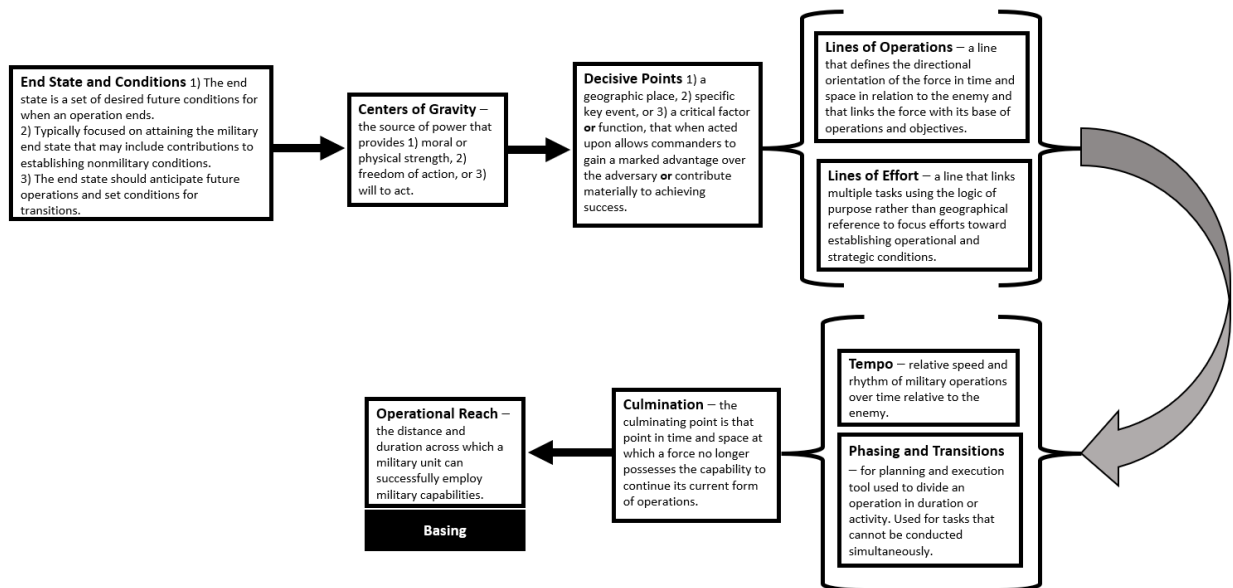


Figure 7.3 The 2017 Elements of Operational Art¹³⁹

Unified land operations remained the operational concept for the 2017 edition of *ADP 3-0 Operations* and the 2017 edition of *ADRP 3-0 Operations*. Unified land operations continued to be achieved through decisive action, seizing, retaining and exploiting the initiative, and consolidating gains.¹⁴⁰ Both also reinforced the shift in focus to large scale combat operations. Finally, army design methodology continued to enable an “understanding of the operational environment and its problems” as well as assist with the visualization of an operational approach, that in turn supported the MDMP with the development of executable plans.¹⁴¹

Conclusion

The lessons identified during OIF had been confirmed, with the 2016 editions of U.S. Army operational doctrine staying reasonably close to what it had been in the 2011 and 2012 editions, operational art was about pursuing strategic objectives through the arrangement of tactical actions in time, space and purpose, based on a solid understanding of the operational environment. The 2016 editions focused on understanding the operational environment, while the 2017 editions were about developing a concept of operations. With the 2017 editions of U.S. Army operational doctrine, the focus of operational art had shifted to a cognitive approach, using a broader range of competencies rather than just creativity, including skill, knowledge, experience and judgement, to solve military and security problems, to create the conditions for

¹³⁹ *ADRP 3-0 Operations* (2017), 2-4 to 2-10.

¹⁴⁰ *ADRP 3-0 Operations* (2017), 3-1.

¹⁴¹ *ADRP 3-0 Operations* (2017), 2-2.

tactical advantage to reach strategic objectives, rather than the specific destruction or paralysis of the enemy.

In 2017, the U.S. Army operational doctrine argued for the use of operational art to achieve strategic and/or operational objectives, the use of tactical actions separated by geography, and simultaneous execution of tactical actions in time, like the first idea, or the Traditional school of operational thought and the second idea, or the Creative school of thought.¹⁴² The 2017 operational doctrine recognized the need to define the operational problem military forces faced before they could develop a practical solution, characteristic of the second idea of operational thought, primarily because there was no identifiable enemy or threat to focus on.¹⁴³ War's first grammar would still be characterized by linear operations where force ratios and geographic positioning tend to be more critical. Major combat operations would use lines of operation to geographically link a series of tactical actions to achieve the operational objective, more in line with the Traditional school of operational thought as was the case of the ground campaign in Operation DESERT STORM or the execution of the CFLCC's ground campaign during the invasion of Iraq in 2003.¹⁴⁴ When conducting operations based on war's second grammar lines of effort would be employed avoiding a linear approach, using a logic of purpose rather than orienting the conduct of operations on physical geography characteristic of the Traditional school of operational thought like operations conducted during the insurgency in Iraq based on the *MNC-I Operations Order 07-01*.¹⁴⁵ When addressing war's first grammar it was seen as more likely that a direct approach, or defeat mechanisms would be used to achieve the operational and strategic objectives. An indirect approach based on stability mechanisms would more likely be used to address war's second grammar.¹⁴⁶ Finally, operational art was seen as something that could be practiced by all levels of warfare, as far down as the company level, but not all elements of operational art were necessarily applicable to all levels of warfare, all the time.¹⁴⁷ U.S. Army operational doctrine provided the flexibility so that for war's first grammar the Traditional school of thought would be more applicable, practicing operational art at a higher level of command, while for war's second grammar operational art could be practiced all the way down to the company level.

¹⁴² *FM 3-0 Operations* (2017), 1-20; *ADP 3-0 Operations* (2017), 6; and *ADRP 3-0 Operations* (2017), 2-1.

¹⁴³ *FM 3-0 Operations* (2017), 1-4 to 1-5; *ADP 3-0 Operations* (2017), Foreword; and *ADRP 3-0 Operations* (2017), 1-1 to 1-2.

¹⁴⁴ *FM 3-0 Operations* (2017), 5-6.

¹⁴⁵ *ADRP 3-0 Operations* (2017), 2-6.

¹⁴⁶ *FM 3-0 Operations* (2017), 1-21 to 1-22 and *ADRP 3-0 Operations* (2017), 2-3 to 2-4.

¹⁴⁷ *FM 3-0 Operations* (2017), 1-20; *ADP 3-0 Operations* (2017), 6; and *ADRP 3-0 Operations* (2017), 2-1.

Chapter Eight – Conclusion

Since the United States Army's introduction of the operational level of war, the conceptual region between strategy and tactics, in 1982, and its introduction of operational art in 1986, every other component of the American military has also adopted the concept in some form along with most, if not all, of America's allies. The use of the idea "operational art" did facilitate the planning of Operation IRAQI FREEDOM by the United States Army, as well as the execution of the invasion of Iraq. The application of operational art initially struggled, after the invasion's initial success, with stability operations, but due to a paradigm shift in U.S. Army operational thought, operational art adapted such that it facilitated the execution of counterinsurgency and stability operations. The genesis of the introduction of the operational level of war, and later the operational art into U.S. military doctrine, was a result of the U.S. Army's experience during the Vietnam War and its reflection on its performance during the war. In an attempt to come to terms with the American loss in Vietnam, the U.S. Army discovered, or even rediscovered operational art.

The U.S. military's formal introduction of operational thought occurred in the U.S. Army in August 1982, when the operational level of war was formally introduced in the doctrinal manual *Operations FM 100-5*. In 1986 the U.S. Army formally introduced the concept of operational art through the latest version of doctrinal manual *FM 100-5 Operations*, while still retaining the operational level of war. Operational art uses military operations and campaigns to achieve military strategic objectives through the use of battles and engagements that use effective tactics to achieve success. There are a number of different ideas regarding operational thought between the ideas of strategy and tactics over time and space.

The first idea, or the Traditional school, is that operational thought and practice, lying between strategy and tactics, is about enabling offensive military action with a view to tactically defeating an enemy military force. There are two views, or ways, as to how the enemy military force is to be defeated. The first is about the destruction of the enemy, generally through annihilation, achieved through offensive operational action. The second is about operational shock or operational paralysis, rather than enemy destruction, achieved through offensive operational action.

The second idea, the Creative school, is that operational art is focused on applying creative imagination to design campaigns and major operations. U.S. military doctrine describes operational art as "the manifestation of informed vision and creativity," and "the application of creative imagination."¹ Over time, this is tempered to a cognitive approach, broadened beyond just creativity, to also include skill, knowledge, experience and judgement. Unlike the Traditional school that used a specific approach to solving military problems, focused on offensive action to militarily defeat an enemy, operational art under the Creative school had evolved into a process or way of solving problems. The campaigns or major operations that are the result of this idea still find

¹ 3-0 *Joint Operations* (2008), IV-3 and *FM 3-0, C1 Operations* (2011), 7-1.

ways to use military means, including tactics, synchronized over time and space, to achieve strategic or operational objectives.

There is also a third idea, that after WWII (military) strategy became subsumed by policy, operational art in turn replaced military strategy (which became grand or national strategy / policy) as the connection between policy ([grand or national] strategy) and tactics. There are two branches to this argument. The first argues that after WWII strategy became subsumed by policy, and the operational level in turn replaced strategy as the link between policy, that was now strategy, and tactics. The second branch argues that the creation of the operational level of war changed the purpose of operational art from a bridge between strategy and tactics, to that of formulating strategy by taking over campaign planning from the strategic level. However, the evidence did not support the idea that strategy became subsumed by policy, so that operational art in turn replaced military strategy as the bridge between policy and tactics.

U.S. Army Interpretive Conflict Construct

The levels of warfare are a framework for defining and clarifying the relationship among national objectives, the operational approach, and tactical tasks. The purpose of the levels of warfare is to focus a headquarters on one of three broad roles – creating strategy, synchronizing and sequencing battles and engagements or conducting tactical tasks.²

The U.S. Army first formally articulated an interpretative construct of war in the 1982 edition of *FM 100-5 Operations*, which viewed war as “a national undertaking which must be coordinated from the highest levels of policymaking to the basic levels of execution.”³ This was reinforced when the manual described the strategic level, stating, “military strategy employs the armed forces of a nation to secure the objectives of national policy by applying force or the threat of force.”⁴ This confirmed that a war should be fought for political or policymaking reasons. The 1982 edition described the operational level of war as the level that used “available military resources to attain strategic goals within a theater of war,” by “planning and conducting campaigns.”⁵ As such, the operational level used military means to achieve strategic ends. Finally, the tactical level provided the means to achieve strategic ends. The 1982 edition of *FM 100-5 Operations* stated, “tactics are the specific techniques smaller units use to win battles and engagements which support operational objectives.”⁶ The 1986 edition of *FM 100-5 Operations* essentially used the same interpretative construct of war as the 1982 edition.⁷

² *ADP 1-01 Doctrine Primer* (2014), 4-9.

³ *Operations FM 100-5* (1982), 2-3.

⁴ *Operations FM 100-5* (1982), 2-3.

⁵ *Operations FM 100-5* (1982), 2-3.

⁶ *Operations FM 100-5* (1982), 2-3.

⁷ *FM 100-5 Operations* (1986), 9.

The 1993 edition of *FM 100-5 Operations* described the concept of war like the 1982 and 1986 editions, focusing on the execution of battles and engagements.⁸ Although the actual terminology differed, this was still remarkably similar to the thinking of Clausewitz and Jomini concerning the tactical level. The operational level also remained very similar to the 1982 and 1986 editions, achieving strategic objectives by conducting major operations and campaigns that use battles and engagements to achieve operational and strategic objectives.⁹ However, there was a considerable change in the area of strategy compared to the previous editions of *FM 100-5 Operations*, as the strategic level became much more layered. First, there was the national security strategy, which focused on “deterrence and capability to project power,” and was focused on “national security interests and objectives.”¹⁰ These interests and objectives were established by “national security policies.”¹¹ Next, the national military strategy was derived from the national security strategy and focuses on the use of military force, to be combined “with other elements of national power” to advance the “interests of the United States.”¹² Lastly, there was a theater strategy that aimed to use military force to achieve terms favorable to the interests and objectives established by national security policies.¹³ This construct of strategy was very similar to the construct of strategy found in the 1962 edition of *Field Service Regulations Operations FM 100-5*, introduced on 19 February 1962, which was not used in any subsequent editions.¹⁴

The 2001 edition of *FM 3-0 Operations* continued to describe the tactical level much as the previous editions had, providing a somewhat richer description by noting that tactics involved the utilization of units in close combat.¹⁵ Likewise, the explanation of the operational level remained essentially unchanged, focusing on the execution of campaigns and major operations to achieve strategic objectives.¹⁶ The description of the

⁸ *FM 100-5 Operations* (1993), 1-3 and 6-3.

⁹ *FM 100-5 Operations* (1993), 1-3 and 6-2.

¹⁰ *FM 100-5 Operations* (1993), 1-3.

¹¹ *FM 100-5 Operations* (1993), 1-3.

¹² *FM 100-5 Operations* (1993), 1-3 to 1-4.

¹³ *FM 100-5 Operations* (1993), 1-4 to 1-5.

¹⁴ The 1962 edition of *Field Service Regulations Operations FM 100-5* formally defined strategy for the first time. National Strategy was defined as “the sum of the national policies, plans, and programs designed to support the national interests.” The manual went on to state it “is the long range plan through which a nation applies its strength toward the attainment of its objectives.” *Field Service Regulations Operations FM 100-5* (1962), 3. Military Strategy was defined as directing “the development and use of the military means which further national strategy through the direct or indirect application of military power.” *Field Service Regulations Operations FM 100-5* (1962), 4. In turn, military power was defined as “that element of national strength which is designed to apply physical force in the implementation of national policy and in the attainment of national objectives.” *Field Service Regulations Operations FM 100-5* (1962), 6. The operative element of military power was military forces, which “consist of men, weapons and other material formed into units capable of military operations.” *Field Service Regulations Operations FM 100-5* (1962), 6.

¹⁵ *FM 3-0 Operations* (2001), 2-5.

¹⁶ *FM 3-0 Operations* (2001), 2-2 to 2-3.

strategic level was simplified, but retained the core elements of the 1993 description. Policy provided the direction and guidance used to determine national military strategic objectives, which in turn enabled theater strategic planning.¹⁷ The description of both the tactical and the operational levels in the 2008 edition of *FM 3-0 Operations* remained essentially unchanged from earlier editions. The portrayal of the strategic level also remains unchanged in meaning, based on national policy to determine national strategic objectives that guide theater strategic planning.¹⁸ The 2011 edition of *FM 3-0, C1 Operations* made no changes to the description of the levels of war and continued to use the exact wording as the 2008 edition.¹⁹

With the implementation of Doctrine 2015, the U.S. Army's levels of war construct was barely touched on. No mention was made of the levels of war in the 2011 edition of *ADP 3-0 Unified Land Operations*, and "levels of war" was mentioned in the 2012 edition of *ADRP 3-0 Unified Land Operations*. Still, it failed to state what they were or provide any description.²⁰ The 2012 edition of *ADP 1 The Army* identified the three levels of war but also did not describe what they were,²¹ while the 2012 edition of *ADP 5-0 The Operations Process* also made no mention of the levels of war.

The 2014 edition of *ADP 1-01 Doctrine Primer* was the first major U.S. Army doctrinal publication to differentiate between war and warfare.²²

War is socially sanctioned violence to achieve a political purpose. Warfare is the mechanism, method, or modality of armed conflict against an enemy. Warfare is how combatants wage war. All armies have an understanding of war that underlies their visions of warfare.²³

The transition from levels of war to levels of warfare was carried over into the 2016 editions of *ADP 3-0 Operations* and *ADRP 3-0 Operations* as well as the 2017 edition of *FM 3-0 Operations*.²⁴ The description of the tactical level of warfare in both the 2016 and the 2017 editions of *ADRP 3-0 Operations* no longer mentions battle or combat, only that it "involves the employment and ordered arrangement of forces in relation to each other."²⁵ At the strategic level, the direct linkage of strategy to policy was now gone; instead, "leaders develop an idea or set of ideas for employing instruments of national power in a synchronized and integrated fashion to achieve national objectives."²⁶ The concepts of policy, national military strategy and theater strategy are no longer mentioned

¹⁷ *FM 3-0 Operations* (2001), 2-2.

¹⁸ *FM 3-0 Operations* (2008), 6-2 to 6-3.

¹⁹ *FM 3-0, C1 Operations* (2011), 7-2 to 7-3.

²⁰ *ADRP 3-0 Unified Land Operations* (2012), 4-1 and 4-5.

²¹ *ADP 1 The Army* (2012), 3-1 and 3-2.

²² *ADP 1-01 Doctrine Primer* (2014), 4-9.

²³ *ADP 1-01 Doctrine Primer* (2014), 1-3.

²⁴ *ADP 3-0 Operations* (2016), 1-1; *ADRP 3-0 Operations* (2016), 1-1; and *FM 3-0 Operations* (2017), 1-5.

²⁵ *ADP 3-0 Operations* (2016), 1-1 and *ADRP 3-0 Operations* (2017), 1-1.

²⁶ *ADP 3-0 Operations* (2016), 1-1 and *ADRP 3-0 Operations* (2017), 1-1.

or addressed. This void of ideas created challenges for the operational level. However, it is perhaps the least changed, linking “the tactical employment of forces to national and military strategic objectives” to enable the “execution of operations using operational art.”²⁷ The idea in the 2016 edition of *ADRP 3-0 Operations* made the shallow description of the operational level less helpful: “operational art applies to all levels of warfare, strategic, operational, and tactical.”²⁸ The 2017 edition of *ADRP 3-0 Operations* used different wording but conveyed the same meaning concerning the application of operational art.²⁹

U.S. joint operational doctrine during the same period (2011-2017/18) suffered none of the vagueness that U.S. Army operational doctrine did, despite needing to serve a myriad of services. In the 2011 edition of *JP 3-0 Joint Operations*, the paragraph describing the strategic level of war started with an introductory sentence that was essentially the same as the description of the strategic level of warfare in the 2016 and 2017 editions of *ADRP 3-0 Operations*. The description of the strategic level in the 2011 edition of *JP 3-0 Joint Operations*, however, went on to describe it in considerably more detail:

The president, aided by the National Security Staff, establishes policy and national strategic objectives. SecDef translates these into strategic military objectives that facilitate theater strategic planning. CCDRs³⁰ usually participate in strategic discussions with the President and SecDef through the CJCS³¹ and with allies and multinational members. Thus the CCDR’s strategy is an element that relates to both US national strategy and operational-level activities within the theater. Military strategy, derived from national policy and strategy and informed by doctrine, provides a framework for conducting operations.³²

Likewise, the paragraph describing the operational level of war started with an introductory sentence that was essentially the same as the description of the operational level of warfare in the 2016 and 2017 editions of *ADRP 3-0 Operations*. Again, however, the 2011 edition of *JP 3-0 Joint Operations* went into more detail. Although the operational level used operational art, in joint operational doctrine, “Joint Force Commanders and component commanders use operational art to determine how, when, where, and for what purpose major forces will be employed” to “achieve operational and strategic objectives.”³³ The description of the tactical level followed a similar pattern, with the 2011 edition of *JP 3-0 Joint Operations* providing more detail. After the introductory sentence, it went on to state, “joint doctrine focuses this term on planning and executing battles, engagements, and activities at the tactical level to achieve military

²⁷ *ADP 3-0 Operations* (2016), 1-1 and *ADRP 3-0 Operations* (2017), 1-1.

²⁸ *ADP 3-0 Operations* (2016), 2-1.

²⁹ “Operational art encompasses all levels, from strategic direction to tactical action.” *ADRP 3-0 Operations* (2017), 2-1.

³⁰ *JP 3-0 Joint Operations* (2011), GL-1.

³¹ *JP 3-0 Joint Operations* (2011), GL-1.

³² *JP 3-0 Joint Operations* (2011), I-13.

³³ *JP 3-0 Joint Operations* (2011), I-13 to I-14.

objectives.”³⁴ The 2017 edition of *JP 3-0 Joint Operations* and the revised 2018 edition used virtually identical descriptions of the levels of warfare as the 2011 edition of *JP 3-0 Joint Operations*.³⁵

Returning to U.S. Army operational doctrine, the 2017 edition of *FM 3-0 Operations* used virtually the same description of the levels of warfare as the 2016 and 2017 editions of *ADRP 3-0 Operations*, except for the tactical level. In *FM 3-0 Operations*, however, a second sentence in the description also includes “the planning and execution of battles and engagements.”³⁶ Looking beyond 2017 and the post-OIF era, the 2019 edition of *ADP 3-0 Operations* used the exact wording to describe the levels of warfare as previous editions of *ADRP 3-0 Operations*.³⁷ This, however, changed dramatically with the 2019 edition of *ADP 5-0 The Operations Process* that went into considerable detail regarding the levels of warfare, despite the failure to mention the levels of war or warfare in either the 2012 edition of *ADP 5-0 The Operations Process* or the 2012 edition of *ADRP 5-0 The Operations Process*. The 2019 edition began by stating, “the levels of warfare are a framework for defining and clarifying the relationship among national objectives, the operational approach, and tactical tasks.”³⁸ The reference for this introductory sentence is *ADP 1-01 Doctrine Primer*.

The 2014 edition of *ADP 1-01 Doctrine Primer*, from which the quote above was taken, was the first edition issued of this manual. It went on to posit, “the purpose of the levels of warfare is to focus a headquarters on one of three broad roles – creating strategy, synchronizing and sequencing battles and engagements or conducting tactical tasks.”³⁹ The manual then went into considerable detail, describing the strategic, operational and tactical levels of warfare, like the 1993 edition of *FM 100-5 Operations*. The 2019 edition of *ADP 1-01 Doctrine Primer* uses the exact wording as the 2014 edition and was issued concurrently with the 2019 edition of *ADP 5-0 The Operations Process*, which reintroduced the detailed descriptions of warfare into U.S. Army operational doctrine.⁴⁰

The 2019 edition of *ADP 5-0 The Operations Process* builds upon the levels of warfare from the 2014 and 2019 editions of *ADP 1-01 Doctrine Primer* and further expands upon them, returning the levels of warfare to something resembling the levels of war in the 1993 edition of *FM 100-5 Operations*. In the 2019 edition of *ADP 5-0 The Operations Process* national strategy outlines the concepts for using the elements of national power to achieve national objectives. The guidance provided by the national strategy enabled theater strategy to plan for achieving both national and theater objectives. The operational level conducted campaigns and major operations using

³⁴ *JP 3-0 Joint Operations* (2011), I-14.

³⁵ *JP 3-0 Joint Operations* (2018), I-12 to I-14.

³⁶ *FM 3-0 Operations* (2017), 1-5.

³⁷ Combined Arms Doctrine Directorate, *ADP 3-0 Operations* (Washington, D.C.: Department of the Army, July 2019), 1-1.

³⁸ Combined Arms Doctrine Directorate, *ADP 5-0 The Operations Process* (Washington, D.C.: Department of the Army, July 2019), 2-7.

³⁹ *ADP 1-01 Doctrine Primer* (2014), 4-9.

⁴⁰ *ADP 1-01 Doctrine Primer* (2019), 4-7.

military forces to achieve theater and operational objectives, while the tactical level used battles and engagements to achieve military objectives.⁴¹

The 2022 edition of *FM 3-0 Operations* used a similar amount of detail to describe the tactical and operational levels of warfare, and does the same with the strategic level of warfare; however, in this case, with a difference. The strategic level is divided into a political level and a military level of strategy, paragraph 1-56 addressed the national strategic level, while paragraph 1-57 addressed the theater strategic level. At the national strategic level, “the U.S. government formulates policy goals and ways to achieve them by synchronizing action across government and unified action partners and employing the instrument of national power.”⁴² Theater strategy, on the other hand, “is an overarching construct outlining a combatant commander’s vision for integrating and synchronizing military activities and operations with other instruments of national power to achieve national strategic objectives.”⁴³ The last time there was this level of precise detail was the 1993 edition of *FM 100-5 Operations*.⁴⁴ In all the following editions, the description of national strategy and theater strategy was blended to varying degrees until 2012, when levels of war were barely touched on.

In summary, the U.S. Army views war as a national undertaking which must be coordinated from the highest levels of policymaking to the basic levels of execution. The strategic level is where the armed forces of a nation are employed to secure the objectives of national policy by applying force or the threat of force. The operational level of warfare, meanwhile, plans and conducts campaigns using available military resources to attain strategic goals within a theater of war. In contrast, at the tactical level, smaller units engage in combat to win battles and engagements. Strategy in U.S. Army doctrine evolves to focus on the employment of instruments of national power in a synchronized and integrated fashion to achieve national objectives. Doctrinally, strategy is further subdivided into three types of strategy. First, the national security strategy is based on deterrence and the capability to project power to achieve national security interests and objectives established by national security policies. Second, national military strategy focuses on the use of military force to advance American interests. Third, is theater strategy that uses military force to achieve terms favorable to the interests and objectives established by national security policies.

Based on U.S. operational doctrine, guidance provided by national strategy enables theater strategy to plan the achievement of national and theater objectives. At the national strategic level, the U.S. government formulates policy goals and develops ways to achieve them by synchronizing actions across the government and employing various instruments of national power. At the strategic level of the theater, a combatant commander synchronizes and integrates military operations and activities with other instruments of national power to achieve national strategic objectives. The operational

⁴¹ *ADP 5-0 The Operations Process* (2019), 2-7 to 2-9.

⁴² Combined Arms Doctrine Directorate, *FM 3-0 Operations* (Washington, D.C.: Department of the Army, October 2022), 1-12.

⁴³ *FM 3-0 Operations* (2022), 1-13.

⁴⁴ *FM 100-5 Operations* (1993), 1-3 to 1-5 and 6-1 to 6-2.

level is where campaigns and major operations are conducted using military forces to achieve theater and operational objectives. In contrast, the tactical level uses battles and engagements to achieve military objectives.

The Ideas of Operational Thought

There was no evidence to support the third idea of operational thought, the Grand Strategic School, the notion that strategy became subsumed by policy, so that operational art in turn replaced military strategy as the link between policy and tactics. The third idea of operational thought, the Grand Strategic school, argued that one of the main results of the conflation of policy and strategy was that the American military invented the operational level as a level free from political interference to replace the (military) strategy of old where the military were free to function without civilian political interference. However, the U.S. Army did not invent the operational level of war to replace strategy, the operational level evolved to address a well thought out military need, starting with “The Integrated Battlefield” concept which expanded to become “The Extended Battlefield” concept and finally the AirLand Battle concept that led to the introduction of the operational level and then operational art.

This school of thought also conflated operational art with the operational level; however, the operational level of war or warfare is different from operational art. The levels of warfare for the U.S. Army is to delineate the specific role a military headquarters will play based on the primary task it is to accomplish, either creating strategy, conducting campaigns and operations, or executing tactical tasks. Operational art, on the other hand, is a cognitive approach that focuses on accomplishing a mission by arranging actions across time and space that are unified in purpose, situated between strategy and tactics, to achieve strategic and/or operational objectives. The operational level of war is distinct from operational art; the former is an interpretative conflict construct while the latter is a cognitive approach to conceptualization.

The other approach taken by the third idea regarding operational thought, the Grand Strategic school, is not that strategy became subsumed by policy; instead, the operational level and operational art subsumed strategy. Central to this argument is that operational art, practiced at the operational level, took over campaign planning from the strategic level. In reality, both the U.S. Army and joint operational doctrine, as well as combatant commanders and unified command commanders, develop campaign plans at the strategic level based on military strategy. Furthermore, in both the U.S. Army and the U.S. joint doctrine, the military component of the national security strategy emphasizes the use of military force as an integral part of national power, complemented by other elements of national power. Campaigns, therefore, are not isolated from other government efforts aimed at achieving national strategic objectives. Additionally, for U.S. operational doctrine, more than one campaign can occur simultaneously, even in the same theater. The combatant commander develops the theater campaign plan. Subordinate unified commanders can develop subordinate campaign plans, and Joint Task Force commanders may also develop subordinate campaign plans. Ultimately, operational art facilitates the connection between theatre strategy and the conduct of major operations, while the strategic level designs, organizes, and executes the strategic plan or global

campaign plan. The focus of operational art is on achieving strategic objectives by arranging battles and engagements across time, space and purpose. At the same time, strategy seeks to achieve national objectives, integrating and synchronizing all the instruments of national power.

There is also no evidence that operational thought and practice in the U.S. Army was based on a combination of all three ideas. However, by 2017 the lessons learned about operational art coming out of OIF led to the blending of both the first and second ideas of operational thought, a transition in operational art from the application of creative imagination to a cognitive approach for solving military problems to create the conditions of tactical advantage necessary to reach strategic objectives, rather than the specific destruction or paralysis of the enemy. As a result, just as war has two grammars, operational art also has two grammars relative to the two grammars of war. War's first grammar is the procedures and principles "to overthrow an opponent by armed force," generally a war between states.⁴⁵ War's second grammar involves at least one major actor that is not a state; this type of war is commonly referred to as "insurgency, guerrilla warfare, or irregular warfare."⁴⁶ Operational art's first grammar is that of the first idea or Traditional school of thought, arguing that operational practice, lying between strategy and tactics, is about the destruction of the enemy, generally through annihilation, or the operational shock/or paralysis of the enemy, in both cases achieved through offensive operational action. Operational art's second grammar is that of the second idea, or the Creative school, a more cognitive approach that utilizes knowledge, skill, experience and judgement in a creative process to solve a problem rather than a particular approach to solving a problem. Operational art's first grammar is best suited to wars where the problem to be addressed is relatively well-defined with a reasonably straightforward solution, such as World War II, Operation DESERT STORM, or the execution of the COBRA II campaign plan during OIF. Operational art's second grammar is best applied to military operations where it is necessary to define the problem a military force faces first, to determine the best solution based on the means and ways available.

During the planning and execution of the invasion of, and major combat operations in, Iraq during OIF, CENTCOM and the CFLCC practiced operational art in the traditional sense of both war's first grammar and the first grammar of operational art. As planned and executed, the tactical actions and operational effects of the CFACC and the CFLCC, in particular, during major combat operations, largely achieved the military strategic objectives, which in turn supported the achievement of the U.S. strategic objectives. Battles and engagements were conducted simultaneously by both the CFACC and CFLCC to achieve these military strategic objectives, as well as by U.S. V Corps and 1 MEF as part of a unified CFLCC effort.

⁴⁵ Antulio J. Echevarria II, "American Operational Art, 1917-2008," 137; Antulio J. Echevarria II, "War's Second Grammar," 2; and General Rupert Smith, *The Utility of Force*, 19, 28, 334 and 374.

⁴⁶ Echevarria, "American," 137; Echevarria, "War's," 2; and Smith, *Utility*, 19, 28, 334 and 374.

Furthermore, the achievement of military strategic objectives was based on a relatively well-defined military problem. The CFLCC conducted linear operations using clear lines of operation to coordinate the tactical actions of its subordinates. The CFLCC lines of operation culminated at the decisive point of the Baghdad city center, key terrain for achieving the operational objective of neutralizing regime leadership. This, in turn, supported the military strategic aim of overthrowing the regime and would help achieve the U.S. strategic objective of a stable Iraq with a broad-based government. Finally, as an example of the first grammar of operational art, the invasion of Iraq and the CFC's conduct of major combat operations was based on a direct approach using overwhelming force and destruction of the enemy.

After the successful invasion and defeat of Iraq in 2003, the U.S. became embroiled in an insurgency that eventually broadened to include a sectarian conflict, the war had transitioned from war's first grammar to war's second grammar, and operational art transitioned with it. From the beginning of Phase IV, operational art shifted from arrangements of battles and the use of military forces to conduct battles, to the application of creative imagination by commanders and staffs to design operations and organize and employ military forces in more than just battles and engagements. In August 2003 the three campaign objectives were: "A) create a secure environment, B) facilitate the establishment of local government, and C) support economic development."⁴⁷ The main ways or tasks that would achieve these objectives were: "1) isolate and defeat the middle level former regime leadership, 2) isolate and defeat terrorists and foreign fighters, 3) eliminate attacks and criminal activity against key infrastructure, and 4) neutralize the former Iraqi military prior to them becoming a security threat."⁴⁸ By Operations Order 07-01 MNC-I had three lines of operation or lines of effort: 1) Secure Environment, 2) Capable, Credible Iraqi Security forces, and 3) Legitimate, Capable Government of Iraq. The last major line of operation focused on four operational objectives: 1) "Representative local and provincial governments established and functioning," 2) "Government of Iraq capacity enhances to provide essential services and strategic infrastructure maintenance and security," 3) "Government of Iraq perceived as representative and legitimate, pursuing national goals," and 4) "Foundation for self-sustaining economic growth established."⁴⁹

The greatest challenge was defining the actual problem to be addressed and determining how to effectively engage with the population to achieve both operational and strategic objectives. In addition, the issues were continually changing, often with incomplete and at times seemingly contradictory requirements for a solution. This made it challenging to define a solution in the first place, and even more difficult to execute the

⁴⁷ "CDRCJTF7 SITREP 050200ZAUG03 TO 060200ZAUG03(U)," 0564. 2003 08 06, 0400Z, CJTF-7 SitRep 5-6 Aug, CENTCOM Iraq Papers, U.S. Army Heritage and Education Center, Carlisle, Pennsylvania.

⁴⁸ "CDRCJTF7 SITREP 050200ZAUG03 TO 060200ZAUG03(U)."

⁴⁹ "MNC-I Operations Order 07-01," 29-31.

solution once one was specified. This led to a shift towards operational art's second grammar, characteristic of the Creative school. During General George W. Casey, Jr.'s tenure as Commander of MNF-I, the MNF-I Campaign Plan focused on governance and economic development, suggesting an indirect approach indicative of the second grammar; the actual focus of effort was on a more direct approach, in line with the first grammar.

The strategic situation changed in February 2006 from an insurgency to an internal sectarian conflict, if not a low intensity civil war. By the end of 2006, the U.S. strategy for Iraq changed. It was no longer focused on shifting the burden of security to the Iraqi Government; instead, it aimed at protecting the population and defeating al-Qaeda Iraq, with a particular emphasis on securing Baghdad. MNC-I issued Operations Order 07-01 to align its efforts with the change in strategy. As illustrated above, the Operations Order outlined operations in a nonlinear manner due to the noncontiguous areas of operations spread across the breadth of Iraq, where positional reference to the enemy had limited applicability; instead, lines of logic or lines of effort were used, particularly when nonmilitary capabilities were needed, to achieve operational and strategic objectives. Based on U.S. Army COIN doctrine, the use of operational design elements was adjusted. Design was now shaped by conditions as outlined in stability operations doctrine, rather than decisive points. By Operations Order 07-01 U.S. Army operational art had transitioned to operational art's second grammar.

Operations Order 08-01 continued the trend set by Operations Order 07-01, marking the U.S. Army's transition to the second grammar of operational art. As part of this transition, the order followed the elements of operational design but adjusted them as necessary, often in response to the influence of COIN doctrine. Further illustrative of the shift to operational art's second grammar was *MND-C OPOD 08-02 (OPERATION BLUE RIDGE MOUNTAIN)*, issued 10 August 2008, that viewed itself as a campaign plan. As part of the shift to operational art's second grammar Multi-National Division – Center (MND-C) understood that subordinate units, in particular the BCTs, would have to replicate the Divisional campaign plan at their level based upon the unique circumstances in their specific areas of operation, and that they would have to synchronize a broad range of different activities simultaneously.

This was the final part of the shift, by the U.S. Army, to operational art's second grammar, the practice of operational art by lower levels of command, those often considered as being solely concerned with tactical matters. Starting with CJTF-7 and the tenure of Lieutenant General Ricardo S. Sanchez through to Odierno's command of USF-I, the nature of operations during OIF led to divisions having to have multiple lines of effort as the coalition attempted to establish a safe and secure environment and aid the rebuilding of Iraq to support the transition to Iraqi self-governance. At any one time, divisions would be executing combat operations, supporting political reform, brokering economic and development agreements and assisting with civic improvement. Brigades and battalions faced similar challenges of conducting both combat and non-combat tasks simultaneously. Even at the company level, there was a need to address multiple tasks simultaneously, generally along several lines of effort. Using both a direct approach to address the tactical problems it faced and an indirect approach to effect efforts made to

restore essential services, support the development of functioning local governance, and improve the economy at the regional level.

In summary, the evidence examined did not support the idea that strategy became subsumed by policy. That operational art, in turn, replaced military strategy as the link between policy and tactics. There is also no evidence that operational thought and practice in the U.S. Army were based on a combination of all three ideas. However, the evidence did support the possibility of adapting the grammar of operational art to match the grammar of war. Documentary evidence related to OIF was used to support the determination of the extent to which the two concepts of operational art were practiced by the U.S. Army, specifically, and the U.S. military generally, during OIF. Specifically, evidence supports the idea that operational thought and practice, situated between strategy and tactics, is about enabling offensive military action through the use of tactical actions over time and space, to defeat an enemy military force and achieve strategic aims tactically. Evidence also supported the notion that actions shaped by operational art primarily focused on the destruction of the enemy, generally through annihilation, achieved through offensive operational action, and/or operational shock or operational paralysis. Finally, evidence supports the idea that operational art was more a style of planning and executing military operations based on vision, imagination, creativity, skill, knowledge, experience and/or judgement, focused more on defining and solving a problem than the actual approach to solving a problem, dependent on war's grammar.

Conclusion

Any examination of operational art, and its application by the U.S. military in general and the U.S. Army in particular, has potential implications for how the U.S. Army and the U.S. military approach and subsequently conduct operations in the future. This dissertation has identified several aspects of operational thought that have not been previously addressed in either professional military literature or academic literature. First, determining the origins of the official introduction of operational thought into the U.S. Army in 1982 by Brigadier General Donald R. Morelli, Deputy Chief of Staff for Doctrine at TRADOC. This was identified in General Starry's letter to General Richardson, which also addressed how TRADOC wanted to avoid being accused of copying Soviet doctrine. Unfortunately, by placing it in a levels of war construct, it eventually led to the confusion of the third idea, the Grand Strategic school, of operational thought.

This leads to a second unique finding in this dissertation, which addresses the misunderstanding of the third idea of operational thought. Operational art and the operational level did not replace strategy. A simple fix by the U.S. Army that addressed this confusion was to change the terminology from 'levels of war' to 'levels of warfare.' This means that the levels of war can be categorized as politics – strategy – tactics, representing the ends – ways – means of war, as put forward by Clausewitz and Jomini. Meanwhile, the levels of warfare are strategy, operations, and tactics, again representing the ends, ways, and means, in this case, of warfare. The first is focused on war, "a state of armed conflict between different nations, state-like entities, or armed groups to achieve

policy objectives,” with a primary focus on political outcomes.⁵⁰ The second is about warfare, the actual physical conduct of the war to achieve military objectives.⁵¹ Further clarity was provided by the 2019 edition of *ADP 3-0 Operations* and the 2022 edition of *FM 3-0 Operations*, which differentiate between national strategy, which is political and uses all instruments of national power, and theater strategy, which is primarily militarily focused on the conduct of warfare.

The third unique contribution is the identification of a paradigm shift in U.S. operational thought from the first idea, the Traditional school, of operational thought, lying between strategy and tactics, that is focused on enabling offensive military action to tactically defeat an enemy military force to the second idea, the Creative school, of operational thought that operational art is focused on applying creative imagination to design campaigns and major operations. Following the Global War on Terrorism, this approach has evolved into a more nuanced framework, broadening beyond creativity to encompass skill, knowledge, experience, and judgment. It evolved into a process to solve a problem rather than a specific approach. The campaigns or major operations that result from this idea still employ military means, including tactics synchronized over time and space, to achieve strategic or operational objectives. The central core of operational thought remains constant, coordinating battles or tactical actions over time and space to achieve strategic or political objectives. The difference lies in the emphasis of operational thought, which is dependent on the type of conflict or operation the military forces are engaged in.

In the case of war’s first grammar, generally exhibited during a war between states, emphasis is usually focused on a direct approach using lines of operation to defeat a relatively well-defined and known enemy with a high level of operational control. In the case of war’s second grammar, generally a small war not between states but characterized by irregular warfare or an insurgency, emphasis is on first defining the actual problem or problems to be addressed if one is to ultimately find a strategic or political solution to the problem or problems. Once this is done, an indirect approach is frequently used, based on lines of effort that are nested from the company level upwards.

This has implications for professional military education. If operational art can be practiced at the company level, officers educated to command at that level need to receive familiarization in operational doctrine focused on operational art, if not proper military education in it. Likewise, the second contribution has implications for academic education, particularly for those studying security studies or professional military education. In addition, those making and executing security policy need to understand the difference between war and the relationship among politics, strategy, and tactics, representing the ends, ways, and means of war. Furthermore, they must comprehend the relationship among strategy, operations, and tactics, representing the ends, ways, and means of warfare. Due to the widespread adoption of the operational level of war and

⁵⁰ *FM 3-0 Operations* (2022), 1-6.

⁵¹ *FM 3-0 Operations* (2022), 1-8.

operational art by NATO and most, if not all, of America's allies, the consequences of these findings on operational thought extend to them as well.

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