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Blitzkrieg: The Evolution of Modern Warfare and the Wehrmacht's Impact on American
Military Doctrine during the Cold War Era

A thesis
presented to
the faculty of the Department of History
East Tennessee State University

In partial fulfillment
of the requirements for the degree
Master of Arts in History

by
Briggs Evans
August 2021

Dr. Stephen Fritz, Chair
Dr. Henry Antkiewicz
Dr. Steve Nash

Keywords: Blitzkrieg, doctrine, operational warfare, American military, Wehrmacht, Luftwaffe, World War II, Cold War, Soviet Union, Operation Desert Storm, AirLand Battle, Combined Arms Theory, mobile warfare, maneuver warfare.

ABSTRACT

Blitzkrieg: The Evolution of Modern Warfare and the Wehrmacht's Impact on American Military Doctrine during the Cold War Era

by

Briggs Evans

The evolution of United States military doctrine was heavily influenced by the Wehrmacht and their early Blitzkrieg campaigns during World War II. This thesis traces the origins of this development and shows how the context of the Cold War led to a heavy influence by the Wehrmacht on American military doctrine. By analyzing studies conducted by the United States Army Historical Division from 1946-1961, I will show how these studies left a profound impact on American Military doctrine, particularly in the context of the Cold War. I will show the development of the Active Defense Doctrine and AirLand Battle during the 1970s and 1980s were largely influenced by lessons learned from the Wehrmacht. By comparing these doctrines with the Wehrmacht's *Truppenführung*, the influence is undeniable. Finally, I will show how the American military put these lessons into practice during Operation Desert Storm in 1991.

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DEDICATION

First and foremost, I would like to dedicate this thesis to my grandmother Peggy Evans who passed this year. I would also like to thank my parents Jeannie Williams, Joseph Evans and Matthew Williams for their support and encouragement throughout my academic career. I also must thank my brother Joseph for his help with editing and our mental spars at the dinner table. I also would like to thank Dr. Stephen Fritz for his constant guidance and advice on both these thesis, and other graduate coursework, without him, this project would not have been possible. I would also like to acknowledge the support of some current and former students in the program, specifically Seth Walker, Bianka Adamatti, Josh Groomes, and Emily Lu. Their feedback and moral support made this process much more manageable. Finally, I would like to thank a handful of friends I consider to be family: Zach Beckner, Timmy Callahan, Tanner Trent, Clayton Walker, Brett Golackey, Peter Tran, Tim Foutz, Cade East, Andrew Mills, and Bailey Hutton. This past year working on this project has been one of the most challenging of my life, and the support and encouragement of these friends was more essential than they will ever know.

ACKNOWLEDGMENTS

Research and writing during this project was conducted during the Covid-19 pandemic. As a result, most of the research and discussions regarding the project were conducted online. Without the guidance of Dr. Stephen Fritz this project would have not been possible. Dr. Fritz provided reading suggestions, critical discussions, chapter revisions, and quick feedback that was essential to the development of this project. I would also like to thank Dr. Henry Antkiewicz, and Dr. Steve Nash for agreeing to be on my committee and for their feedback. Finally, I would like to thank Dr. Brian Maxson for his support in the first semester of the program. I must thank all of these professors for helping me become a better historian, writer, thinker, and person.

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CHAPTER 1. INTRODUCTION AND HISTORIOGRAPHY

The Coming Storm: Blitzkrieg Origins and Myths

On May 10th, 1940, Nazi Germany and the Wehrmacht shocked the world with a rapid aggressive military operation into the Republic of France. After a successful breakthrough at Sedan, German forces subdued the French Military and conquered France in just six and a half weeks, an achievement that was unobtainable over the course of four years from 1914-1918 during the First World War.¹ Using innovative motorized infantry tactics supported by close coordination with Luftwaffe air power, the Wehrmacht executed Fall Gelb, Case Yellow, with a blend of experience, intuition, and understanding, that success even surprised its German planners.² This new style of modern warfare became known as Blitzkrieg or “lighting war” and the Wehrmacht's innovative strategy definitively set the tone for the rest of the war. The German ability to achieve strategic results so efficiently and effectively with minimal casualties caught the attention of militaries around the world and arguably changed the conduct of warfare forever.

The purpose of this project is to analyze how Blitzkrieg doctrine has influenced modern warfare, particularly in the United States. As this issue is hotly debated among historians and military minds alike, I will also explore the historiographical discussions pertaining to Blitzkrieg and its complexities. Some historians, such as Karl-Heinz Frieser and Robert Citino, have even demonstrated that there was no official Blitzkrieg doctrine at all, as there is no example of the term throughout interwar Wehrmacht doctrine. This paper will explore the historiographical controversies of the word but will refer back to the term for the sake of simplicity and structure. Ultimately, I intend to show that American military planners were drawn to the success of the

¹ Lloyd Clark, *Blitzkrieg: Myth, Reality, and Hitler's Lighting War, France, 1940* (New York: Atlantic Monthly Press, 2016), 25-27.

² *Ibid.*, 483-486.

German new style of warfare and in many ways tried to emulate its principles throughout the twentieth century. Though the United States invested time and effort into learning from Blitzkrieg, they did not successfully execute its principles until the first Gulf War in 1991.

In the first chapter of this project, I will explore the origins and development of the Blitzkrieg doctrine leading up to World War Two, as well as the historiographical debates regarding its initial success. While some military historians argue that Blitzkrieg had little success and France was merely a stroke of luck, others have attributed the victory to superior operational planning.³ I will discuss the controversy of the term itself and how different historians have wrestled with its meaning. The first chapter will also establish that Blitzkrieg doctrine and its shocking success attracted Allied military leaders, and subsequently defined military operations for the rest of the war. I will argue that the Wehrmacht's ability to revisit traditional German military principles and integrate them with modern technology led to the initial success of lighting war in first three years of the war. Though the United States and other Allied powers ultimately achieved victory, they were never able to achieve the swift victories that emulated Germany's invasion of France in 1940.⁴

The next chapter will examine the influence of Blitzkrieg doctrine on American military doctrine during the postwar years. As ideological tensions developed between the United States and Soviet Union almost immediately following the defeat of Nazi Germany, another large-scale modern war seemed almost certain. Seeking to learn from the success and failures of the German struggle on the Eastern Front, the United States sought to examine any information that

³ Ibid., 477.

⁴ Robert Citino, *Blitzkrieg to Desert Storm: The Evolution of Operational Warfare* (Lawrence: University Press of Kansas, 2004), 77

could give them the edge against the Soviets. From 1945 to 1961, the United States Army Historical Division interviewed and reviewed reports of German officers to write a history of the war on the Eastern Front. As the relations between the United States and Soviet Union deteriorated, these interviews and reports became crucial to war planning for a future conflict.⁵ In this chapter I will show the United States military's desire to learn from the Germans by examining a collection of two hundred and thirteen of these reports. I will also examine studies from American military institutions and how they contributed to the American military's understanding of Blitzkrieg doctrine. Finally, this chapter will compare and contrast the official German military doctrine of the Second World War, *Die Truppenführung*, and the development of the United States doctrine of "Airland Battle."

The final chapter will examine what the American lessons derived from Blitzkrieg looked like in actual practice. By examining the events of the 1991 Gulf War with Iraq, I will demonstrate how the United States was able to achieve what was considered a successful modern Blitzkrieg. I will show similarities of the Gulf War and the 1940 invasion of France. Military historians such as Robert Citino have cited the development of the Airland Battle doctrine as direct evidence of Blitzkrieg's influence on American military doctrine.⁶ Developed in the 1980s, Airland Battle doctrine laid out the principles for how the United States was to conduct warfare. At the core of this doctrine, the most important concepts include initiative, depth, agility, and synchronization.⁷ This chapter will emphasize how the United States carried out these principles in its brief successful war with Iraq. It will also support my argument that

⁵ Robert W. Hutchinson, "The Weight of History: Wehrmacht Officers, the U.S. Army Historical Division, and U.S. Military Doctrine, 1945-1946," *Journal of Military History* 4 (October 2014): 1321.

⁶ Citino, *Blitzkrieg to Desert Storm*, 9.

⁷ [https://www.bits.de/NRANEU/others/amd-us-archive/fm100-5\(93\).pdf](https://www.bits.de/NRANEU/others/amd-us-archive/fm100-5(93).pdf) date accessed, December 4, 2020.
P 7-0-7-12

though the United States had a longstanding desire to emulate Blitzkrieg, it was not successful in doing so until 1991.

Before diving into the historiographical discussions about the origins and development of Blitzkrieg, I believe it is important to understand how historians have defined military doctrine and its functions. Geoffrey Sloan's article "Military Doctrine, Command Philosophy, and the Generation of Fighting Power: Genesis and Theory" examines the controversy surrounding the definition. The North Atlantic Treaty Organization defines doctrine as "the fundamental principles by which military forces guide their actions of objectives."⁸ In a literal definition the word doctrine means "what is taught" as it comes from the Latin word doctrine. Sloan's own definition describes doctrine as bridge between thought and action or in other terms how military doctrine articulates war.⁹ There are many different contributing factors into how doctrine functions, and ideally it must remain universally cohesive from top to bottom in a fighting force. In 1997, Professor John Gooch identified six components that include: the nature of weapons and technology, the influence of formative experiences, organizational and institutional interests, ideology, culture, and political and strategic situations.¹⁰ Sloan further builds off this, evaluating the need for doctrine to perform on multiple levels of warfare including strategic, operational and tactical levels of war.¹¹

Robert Citino further builds off the functions of doctrine in his book *Blitzkrieg to Desert Storm: The Evolution of Operational Warfare*. Citino asserts that military doctrine is essential to

⁸ Geoffrey Sloan, "Military Doctrine, Command Philosophy and the Generation of Fighting Power: Genesis and Theory," *International Affairs*, 88, no. 2 (2012): 243.

⁹ *Ibid.*, 243-244.

¹⁰ *Ibid.*, 251.

¹¹ *Ibid.*, p.244.

warfare as it fundamentally defines the objectives of an operation.¹² Without a clear objective in mind, military commanders are essentially crashing into the enemy and hoping for the best. Elliot Cohen 's chapter "War Planning" from the *Cambridge History of WW2* also emphasizes the importance of operational planning. Cohen identifies two key aspects in the development of military doctrine. The first is addressing the requirements of the operation and preparing for its initial phases. The next step is interwar planning and how to adjust to new circumstances or obstacles that may hinder the campaign's goals.¹³ In other words, as the landscape of war is rapidly changing, military commanders must be flexible in order to adjust and adapt to ensure success. As we will see this concept of flexibility among military commanders is a key tenet of Blitzkrieg doctrine, and arguably is one of the key qualities that ensured its success.

While historians and military thinkers have reached somewhat of a consensus regarding doctrine and its functions, Blitzkrieg is the flip side of the coin. The historiographical debates regarding Blitzkrieg are as fiercely contested as any topic. The most prevalent themes, however, seem to pertain to three topics: Blitzkrieg's origins, its myths, and its impact on modern warfare. The origins debate focuses on the first evidence of the mobile style of warfare being implemented. While many have focused on the final phase of World War One, historians such as Douglas Fermer and Robert Citino point to the nineteenth century conflicts of German unification in 1866 and the invasion of France in 1870.¹⁴ The debate over the myths of Blitzkrieg also is a point of contention worth exploring. Some historians have asserted that there

¹² Citino, *Blitzkrieg to Desert Storm*, 8.

¹³ Elliot Cohen, "War Planning," in *The Cambridge History of the Second World War*, ed. John Ferris and Evan Mawdsley, Vol. I (Cambridge: Cambridge University Press, 2015), 533. <https://doi.org/10.1017/cho9781139855969.023>. Accessed February 21, 2021.

¹⁴ Citino, *Blitzkrieg to Desert Storm*, 20-21; Douglas Fermer, *Three German Invasions of France: the Summer Campaigns of 1870, 1914 and 1940* (Barnsley, South Yorkshire: Pen & Sword Military, 2013), x-xii.

was in fact no Blitzkrieg doctrine at all, citing the absence of the word in any official Wehrmacht doctrine.¹⁵ German military historian Karl-Heinz Frieser contends that the 1940 Blitzkrieg was in no way an indication of the preplanned Blitzkrieg that Hitler is credited with. Rather, factors like the changing nature of war, allied mistakes, and unauthorized German officer actions combined for a formula for success.¹⁶ Whether or not there was a definitive example of what Blitzkrieg and its success were, historians have debated its impact on modern warfare. As we will see, works such as Robert Citino's *Blitzkrieg to Airland Battle*, and a recent master's thesis by James Curry have examined the direct impact that Blitzkrieg had on American military doctrine.¹⁷

Historians have perhaps traced the origins of Blitzkrieg to the success of German operational thinking and doctrine during the nineteenth century. Gerhard Gross's article, "Development of Operational Thinking in the German Army in the World War Era," cites Germany's unique geographic position as a crucial aspect of this development. Due to Germany's central geographic position and its borders surrounded by potential enemies, German military commanders such as Field Marshall Helmuth von Moltke advocated for a highly trained aggressive fighting force. The function of this force was to quickly seize the initiative by carrying the fight to the enemy in Germany's border regions and deliver a knockout blow to the

¹⁵ George Raudzens "Blitzkrieg Ambiguities: Doubtful Usage of a Famous Word." *War & Society* 7, no. 2 (1989): 77-94. <https://doi.org/10.1179/106980489790305551>.

¹⁶ Karl- Heinz Frieser, *The Blitzkrieg Legend: The 1940 German Campaign in the West* (Annapolis, Maryland: US Naval Institute Press, 2013) 30-36.

¹⁷ Citino, *Blitzkrieg to Desert Storm*, 9; James Curry "From Blitzkrieg to Airland Battle: The United States Army, the Wehrmacht, and the German Origins of Modern American Military Doctrine" (M.A. Thesis: University of Western Australia, 2015), 1-2.

enemy via maneuverability and mass of force at decisive points.¹⁸ This force also required its commanders to exercise flexibility and independence in its actions, because as Moltke put it “no plan survives contact with the enemy.”¹⁹ Douglas Fermer’s comparative study, *Three German Invasions of France: The Summer campaigns of 1870, 1914, 1940* offers one striking nineteenth century example of Germany’s superior operational thinking. During the 1870 Prussian invasion of France, Prussian forces under Moltke displayed superior planning and execution versus the disorganized French troops. Crucially, at Sedan during early September of 1870, Prussian forces trapped the French soldiers in a series of pincer movements that resulted in the capture of almost 100,000 men.²⁰ Moltke and the Prussian forces had achieved a decisive knockout blow with minimal loss of life and effectively ended the French Empire.²¹

If the Prussian victory over France in 1870 marked early traces of Blitzkrieg doctrine success, technological advancements in the late nineteenth and early twentieth century indicated setbacks. During this time period, military campaigns were becoming larger, bloodier, and costlier than ever before. However, campaigns were frequently following a pattern of initial success of offensives that eventually became bogged down into grinding contests of attrition.²² Essentially, armies were failing to achieve knockout blows that could effectively end campaigns. Historians have cited the development of technology as a primary factor for this phenomenon, and in some ways, it seems as if technology had surpassed humans' conceptions of warfare. During the First World War, new weapons such as breech loading rifles, machine guns, and

¹⁸ Gerhard Gross, “Development of Operational Thinking in the German Army in the World War Era,” *Journal of Military and Strategic Studies*, 13, no. 4 (Summer 2011): 2.

¹⁹ Robert Citino, “Beyond Fire and Movement: Command, Control and Information in the German Blitzkrieg 1,” in *Journal of Strategic Studies*, 27, no. 2 (June 2004): 333.

²⁰ Fermer, *Three German Invasions*, 57.

²¹ *Ibid.*, 66-67.

²² Citino, *Blitzkrieg to Desert Storm*,” 14.

rapid-fire artillery made traditional notions of mobile warfare obsolete. The growing size of massive military forces also created problems for German military command, as they found it increasingly difficult to control armies effectively. According to Citino, the development of static trench warfare led back to the most important military issue, how to achieve operational mobility.²³

While Citino asserts that World War One and new technology was perhaps a setback for the development of Blitzkrieg doctrine, others have emphasized the war's role in its development. Williamson Murray contends that throughout the war the Germans proved themselves more imaginative and adaptive than the Allies in regard to tactical and operational conditions. He cites General Erich Ludendorff's abandonment of attrition warfare in the West in favor of a concentrated blow to the Russians in the East. The Germans on the Western front also retreated from their initial frontlines to more favorable defensive positions from which they could counterattack the Allies. Though the Germans did achieve victories during the final two years of the war, they did not translate into a decisive strategic victory.²⁴ The seemingly fruitless carnage of the First World War signaled a need for military powers to rethink their approaches to warfare. New developments in technology such as tanks and aircraft, the massive size of armies and campaigns, and the emergence of industrialized warfare based on economic resources redefined how victory was obtainable. In the years following, military superpowers faced the task of revamping their fighting forces.²⁵

²³ Ibid., 14-18.

²⁴ Williamson Murray "German Army Doctrine, 1918-1939, and the Post-1945 Theory of 'Blitzkrieg Strategy,'" in Carole Fink, Isabel V. Hull, and MacGregor Knox, eds., *German Nationalism and the European Response, 1890-1945* (Norman, OK, University of Oklahoma Press, 1985), 72-73.

²⁵ Cohen, "War Planning," 535-537.

An important concept to understand during this time period is the relationship between doctrine and command philosophy. Command philosophy is the process in which militaries establish hierarchy, discipline, authority, and individual responsibility.²⁶ Geoffrey Sloan identifies the two major variants of command philosophy being centralized and decentralized. Both these concepts are derived from German concepts *Befehlstaktik*, orders-based tactics, and *Auftragstaktik*, mission-based tactics. Orders-based tactics is considered a more restrictive approach as it informs the command chain why, when, and critically, how operations will be carried out. On the other hand, mission-based tactics inform command chains how and when operations will be carried out but leave the how to the initiative of the officers. The first inter-war commander of German forces, General Hans von Seeckt, largely instilled mission-based tactics while also encouraging German commanders to examine how situations were handled during previous wars. Seeckt also promoted creativity among German officers by encouraging them to study the situations they faced in the war and how effectively they responded. He then encouraged the officers to think of solutions to new problems that had yet been solved. Sloan describes Seeckt as a sort of father of mobile warfare, as he sought to create a small, but well trained and equipped mobilized fighting force that was capable of quick maneuvers and making decisions to lead to the fast annihilation of enemy forces.²⁷

Principles laid out by von Seeckt's leadership were eventually consolidated into an official written doctrine called *Die Truppenführung* in the 1930s. While some historians such as Shimon Naveh contend there is no coherent theory behind Germany's operational thinking,²⁸ *Truppenführung* appears to embody qualities that are associated with Blitzkrieg. The first major

²⁶ Sloan, "Doctrine," 246.

²⁷ Ibid., 246-247.

²⁸ Gross, "Development of Operational Thinking," 1.

points describe war as an artform, “depending upon free, creative activity, that is scientifically grounded.”²⁹ *Truppenführung* is vastly comprehensive with well over three hundred points of how officers of the Wehrmacht are to conduct war. Some of the main themes advocated are instinctive and decisive leadership, outflanking the enemy with mobility and speed, enveloping enemy forces, and implementing combined arms in cohesion with offensive maneuvers.³⁰ Interestingly enough, the phrase Blitzkrieg is not even present within *Truppenführung* and various historians contend that there was no groundbreaking innovation with the doctrine. Rather, *Truppenführung* was a return to classic German operational thinking of *Bewegungskrieg*, or war of movement. This war of movement style was embraced throughout European history by commanders such as Fredrick the Great, Napoleon, and Moltke. To the interwar leaders of the Wehrmacht, the return to the war of movement would solve the challenges of attrition warfare and once again lead to decisive victories.³¹

Another important aspect of the development of Blitzkrieg and debates regarding its initial success, is the integration of technology and the development of Combined Arms Theory. Dennis Showalter’s article “Armies, Navies, Air Forces: The Instruments of War,” examines the military developments of the Allied and Axis powers between the World Wars. The fruitless outcomes of campaigns during the First World War along with the development of new technology, such as the tank and airplane, left a pressing need for militaries to rethink how they fought. While the First World War represented a war of mass, the second represented a mass of machines. Showalter asserts that Germany, perhaps on accident, developed the best answer to

²⁹ “Truppenführung,” Ike Skelton Combined Arms Research Library | US Army Combined Arms Center, 1. Accessed March 22, 2021. <https://usacac.army.mil/organizations/cace/car/>.

³⁰ Ibid., 7, 57, 61.

³¹ Citino, “Beyond Fire and Movement,” 331.

this problem during the interwar period, creating what we know as Combined Arms Theory.³²

Combined Arms Theory essentially draws from the lessons of the First World War by integrating technological advancements such as the plane and tank and applying them to traditional German fighting methods of mobility and mass of force at the point of contention.

The three technologies that morphed together to make Combined Arms Theory possible, were the tank, the airplane, and the radio. Williamson Murray's article, "German Army Doctrine, 1918-1939," emphasizes the role that tank commanders such as Heinz Guderian and Oswald Lutz had in this development. Guderian believed that tanks were crucial to achieve breakthroughs at points of contention and advocated for the development of a separate tank force. Under General Oswald Lutz, the Wehrmacht created tank units into independent fighting forces that eventually developed into entire panzer armies. The role of these independent units was to concentrate firepower rapidly, deliver sudden blows, and exploit breaches along the enemy's front.³³ The Luftwaffe Army Support Doctrine was another key element of technology integration by the Germans. James Corum's article, "The Luftwaffe's Army Support Doctrine, 1918-1941," emphasizes the role that airplanes had in Combined Arms Theory. This Army Support Doctrine called for a spirit of cooperation between the Luftwaffe and ground forces and required pilots to be familiar with the operations of the Wehrmacht rather than act as a separate entity. The development of the Stuka dive-bomber was another example of the German emphasis of Combined Arms Theory. Corum cites the successful coordination of the Luftwaffe's Stuka

³² Dennis Showalter, "Armies, Navies, Air Forces," in *The Cambridge History of the Second World War*, ed. John Ferris and Evan Mawdsley, Vol. I (Cambridge: Cambridge University Press, 2015), 556–584. <https://doi.org/10.1017/cho9781139855969.024>.

³³ Murray, "German Army Doctrine," 75-83.

dive-bombers during the Polish, French, and Barbarossa campaigns where the Luftwaffe struck in mass to deliver decisive blows to Allied air forces still on the ground.³⁴

The final technological aspect that tied armor and airpower together and allowed cooperation was radio and communication. The only way for the Luftwaffe and Wehrmacht to act in cohesion across the levels of war, is via direct communication. Robert Citino contends that the Wehrmacht's integration of radio was the real breakthrough in interwar doctrine. He argues that the German army was the first to realize that the radio was indispensable, as it solved the problem of operational indecisiveness by providing a direct line of communication between commanders and frontline forces.³⁵ While the Luftwaffe was not able to develop radios that directly communicated with ground forces, they did use panels, smoke, flares and lights to coordinate targets. During the French campaign of 1940, Luftwaffe leaders attached officers to armored command posts who could receive information reports from the frontlines. These situation reports then were relayed to Air Corps command posts who could transform the information into attack orders within minutes.³⁶

The development of combined arms theory along with return to nineteenth century German military thinking of mobile warfare perhaps indicates the origins of Blitzkriegs success. Historians, however, have wrestled with the myths regarding its initial success. Karl-Heinz Frieser's book, *The Blitzkrieg Legend: The 1940 Campaign in the West*, argues that there was no predetermined doctrine to led to victory in France during the 1940 campaign. Instead, the Blitz was an all or nothing improvised gamble that was born out of necessity. After its initial success

³⁴ James Corum, "The Luftwaffe's Army Support Doctrine, 1918–1941," *Journal of Military History*, 59, no. 1 (Jan 1995): 56.

³⁵ Citino, "Blitzkrieg to Airland Battle," 27

³⁶ Corum, "Luftwaffe" P. 69-70

in France, the euphoria of victory convinced Hitler and German military leaders they had found a war winning strategy. When this plan was replicated again during Operation Barbarossa, its initial success eventually stalled out and the Germans were never able to take back the initiative.³⁷ Other historians have also debunked the myth that the Wehrmacht was an elite motorized fighting force. Richard Overy's chapter "A War of Engines" in his book *Why the Allies Won* also argues that Wehrmacht forces were not qualitatively and quantitatively superior to their opponents. While the Wehrmacht was considered one of the most modern armies in the world, they were not the invincible mobile force that many have come to perceive. Overy argues that in many cases, the Germans were under armed throughout the war, as modernization was only focused on a small portion of the army and a great portion of the ground forces still relied on horseback.³⁸

The myth of a highly mechanized German fighting force and the predetermined doctrine of Blitzkrieg leaves one to ask: Where did this misconception come from? Karl-Heinz Frieser argues that in part it was Western Allies own misconceptions that forged the myth.³⁹ Another Frieser article, "The War in the West, 1939-1940," notes that the legend was created after the war's conclusion by historians who molded a fictional story of the Blitzkrieg strategy.⁴⁰ Historian Roger Beaumont is also critical of Blitzkrieg's success. In an article published in the July 1986 edition of *Military Review*, Beaumont contends that the Wehrmacht only defeated second class armies and was not as proficient as scholars and military thinkers were giving them credit for.⁴¹

³⁷ Frieser, *Blitzkrieg Legend*, 412.

³⁸ Richard Overy, *Why the Allies Won* (London: Random House, 2006), 210.

³⁹ Frieser, *Blitzkrieg Legend*, 563.

⁴⁰ Karl-Heinz Frieser, "The War in the West, 1939-1940," in *The Cambridge History of the Second World War*, ed. John Ferris and Evan Mawdsley, Vol. I (Cambridge: Cambridge University Press, 2015): 287-288.

⁴¹ Roger Beaumont, "On the Wehrmacht Mystique," *Military Review*, 66 (July 1986): 45-56.

Other historians have pushed back on arguments like Beaumont's, often citing the success of the 1940 French campaign. Historian Lloyd Clark's analysis of the invasion of *France, Blitzkrieg: Myth, Reality, and Hitler's Lightning War*, examines how the fall of France was not a predetermined outcome due to superior qualitative and quantitative German forces.⁴² Clark argues that it was rather the French inability to grasp modern mobile concepts of war that led to disaster, as they heavily invested in fighting of a war of attrition by building up the Maginot Line. Clark also cites the German ability to determine the French military's weaknesses and exploit them.⁴³

In conclusion, this chapter sums up origins of Blitzkrieg and the historiographical arguments about its initial success. Regardless of the criticisms of historians such as Frieser and Beaumont of Blitzkrieg doctrine, it is undeniable that the 1940 French campaign and the initial victories of the Germans integrated traditional German fighting methods with technological advancements. While this was not a written predetermined strategy, the Wehrmacht's ability to envision and implement this new style of warfare shocked militaries who had never seen or prepared for it. Like a high-powered offense that can set the tone of an American football game, the Wehrmacht's successful invasion of France set the standard for victory throughout the war. From 1940 on, the war was characterized by mass of force, Combined Arms Theory, aggressive thrusts at the point of contention, and mass encirclements of troops. As Citino states, the rest of the war can be viewed as efforts by the Allied forces to combine their own principles with German "lighting war" to create a new synthesis.⁴⁴ In this next chapter, I will further build off

⁴² Clark, *Blitzkrieg*, 174.

⁴³ *Ibid.*

⁴⁴ Citino, "Blitzkrieg to Airland Battle," 5.

the United States desire to learn from Blitzkrieg, and what this looked like in practice during the war and immediately following the post-war years.

CHAPTER 2. THE GREAT STRUGGLE

Mechanized and Mobile Warfare During World War Two

The rapid successes of the Wehrmacht's military campaigns during 1940 and 1941 defined the standard in how the rest of the war was fought. The days of long grinding wars of stagnation and attrition were replaced with the need for mobility, speed, breakthroughs, and mass encirclements of enemy forces. In the last chapter, I demonstrated how the Blitzkrieg was not a new innovative style of war, but rather a return to nineteenth century German military doctrine integrated with new technologies like the tank, airplane, and radio. What the Wehrmacht lacked in quality and quantity, they made up for with a modern approach to warfare that Allied forces had never seen or prepared for. German tank commanders, such as Heinz Guderian, took this a step further by using principles laid out in *Truppenführung* by seizing the initiative and driving his panzers further into France. Despite orders from his superior officers, Guderian took advantage of the disorganized French response, pressed on without infantry support, and effectively cut off the French and British forces concentrated in Northern France and Belgium. The rapid success of the assault completely broke French morale. On May 15, 1940, The French prime minister, Paul Reynaud, telephoned Winston Churchill to inform him that the French were defeated.⁴⁵

In this chapter I will show how the shocking success of Blitzkrieg impacted American military doctrine during the war. I will start with the United States and other Allied nations commitment to modernize and motorize their fighting forces, while also seeking the formula for a quick decisive victory. Though Allied armies like the United States and the Red Army became better equipped for mobile warfare than their German adversaries, they never achieved the

⁴⁵ Fermer, *Three German Invasions*, 182-183.

operational superiority that the Wehrmacht demonstrated in 1940 and 1941. After establishing how the United States military adapted to fight during the Second World War, I will show how they sought to learn from the Wehrmacht after the war and into the Cold War era. Using a collection of 213 former Wehrmacht officer's reports from the war consolidated by the United States Army Historical Division, I will demonstrate the potential lessons the Wehrmacht and their Blitzkrieg principles offered. As the situation with the Soviet Union deteriorated and all out warfare became likely, these lessons became crucial to American military doctrine. Though another large scale mobilized war never materialized, the United States military continued to show an interest in learning from the Wehrmacht's actions during the war. I will prove this by examining studies and interrogations conducted by American officers. Along the way, I will continue to integrate the historiographical conversations regarding the Wehrmacht's influence on the United States military.

The shocking success of the German Blitzkrieg was immediately recognized by Allied leaders. British prime minister Winston Churchill and field marshal Bernard Montgomery both expressed their respect for the high quality of German military leadership and training. Churchill openly acknowledged that the British forces lacked the quality to face the Wehrmacht in an open engagement on land. After the disaster at Dunkirk, Montgomery stated to a subordinate that “within a month or two you are going to meet in battle a German lieutenant colonel who for the last thirty years has given all his time every day in every week in every month to learning his job, and you will not be able to take him on.”⁴⁶ In order to win this new modern war, the Allies needed a new approach. Elliot Cohen's article, “War Planning,” identifies three problems that

⁴⁶ Marvin Knoll, “The Development of German Doctrine and Command and Control and its Application to Supporting Arms, 1832-1945” (M.S. Thesis, Naval Postgraduate School, 1991), 2-3. Date accessed January 28, 2021. <https://apps.dtic.mil/dtic/tr/fulltext/u2/a242215.pdf>.

the Allied forces needed to address. First was the integration of new military technology, particularly air power and tank formations. The second was joint operations, or in other words, the way in which two or more services engaged in close and equal cooperation. Finally, was the problem of supreme command and the relationship between military planners and civilian leadership.⁴⁷ As demonstrated in the first chapter, the Wehrmacht solved these issues in the interwar and early phases of the war. The creation of elite panzer divisions separated from the regular army, along with radio technologies used for cooperation between the Wehrmacht and Luftwaffe, overcame Cohen's first two issues. Adolf Hitler as the supreme commander of all German military forces also largely eliminated internal pushback from the Armed Forces High Command (OKW.)

The Wehrmacht perhaps prepared more accordingly for modern war in the interwar period, while on the flip side, the United States and other Allied nations were forced to rapidly adapt to the situation. Though the United States recognized the potential of air power in future wars, at the start of World War Two they lacked a clear path forward how they would use it. By 1941, the United States still lacked a separate branch of the military for its air forces.⁴⁸ While the United States was an industrial giant and the first motorized society in the world, they never achieved the rapid success of mobile warfare that the Wehrmacht demonstrated in 1940 and 1941. Rather than utilizing the potential of mobile warfare, the United States military instead opted to apply mass of military firepower against the enemy's main battlefield force, and discouraged commanders from conducting risky offensive maneuvers.⁴⁹ Perhaps the American military did not fully embrace all the principles of Blitzkrieg during the war, but they did commit

⁴⁷ Cohen, "War Planning," 537.

⁴⁸ Ibid., 538

⁴⁹ Citino, *Blitzkrieg to Desert Storm*, 75-76.

to making their armed forces the most modern and mobilized in the entire world. Richard Overy points out that rather than committing to a small elite armored core like the Wehrmacht, the United States opted to create an entirely mechanized and motorized army. In 1944 they outproduced German truck production with almost 600,000 trucks compared to the Germans 88,000.⁵⁰

Not only did the American military commit to an entirely mechanized and mobilized army, their strategic approach to applying mass of firepower also integrated Combined Arms Theory. Perhaps one of the most striking examples of this was the destruction of the Panzer Lehr Division on July 25, 1944. At the height of the struggle for Normandy, American Thunderbolt fighter-bombers and Flying Fortress bombers dropped over 3,000 tons of bombs upon the already battle fatigued panzer division. The results were catastrophic and instrumental to the Allies success in Normandy, as almost half of the Panzer division was lost in the barrage, the next day Allied armor swept aside the remnants of the elite Wehrmacht force.⁵¹ In many ways the destruction of the Panzer Lehr division at Normandy, resembled the daring Luftwaffe attacks during the invasion of France and Operation Barbarossa. Using mass of firepower at a key point of contention, the American air forces effectively destroyed a renowned German Panzer division. The remaining soldiers of the division were shell shocked and disorganized like the French were in 1940, as communication lines were severed during the attack. The air corps' devastating attack in coordination with infantry and armor paved essentially paved the way for victory during the Normandy campaign.

⁵⁰ Overy, *Why the Allies Won*, 224-225.

⁵¹ *Ibid.*, 208-209.

The shocking display of firepower by the American's during the Normandy campaign was arguably influenced by Combined Arms Theory principles displayed by the Wehrmacht in 1940 and 1941. One striking example of the American military integrating modern technology like the airplane into Combined Arms Theory is the army air corps strategic development during the war. From 1940 on under General Hap Arnold, the army air corps developed a multi-purpose air force intended to conduct strategic bombing, large-scale transport, air defense, and tactical air support. Richard Overy acknowledges this in his book *Why The Allies Won*, citing the widespread understanding that aircraft was the key ingredient of the German success. In American Secretary of War Henry Stimson's own words, "Air power has decided the fate of nations; Germany with her powerful air armadas has vanquished one foe after another."⁵² Statements by American leaders like Henry Stimson indicate the Allied recognition of the success of Blitzkrieg. As the war dragged on, the United States and other Allied nations attempted to mimic the Wehrmacht's military achievements in more ways than one.

Another key technological aspect of Combined Arms Theory that the Americans embraced regarding Blitzkrieg's success was the radio. By 1941, American air forces began experimenting with a system for close-support tactics for ground forces. The key to this approach was similar to the Wehrmacht's close support with the Luftwaffe. By achieving air superiority, American air forces hoped to achieve an adjunct to mechanized ground forces to help push ground forces forward. Richard Overy indicates that initially this had mixed results, as the Americans did not have the means for Army commanders to communicate with air force commanders like the German's did. During the North Africa campaign in 1941 and 1942, the Allied system of communication between ground and air forces proved disastrous. Army unit

⁵² Ibid., 225.

requests for air support took so long to arrive that requesting it at all became almost pointless. After the conclusion of the North African campaign, the Americans decided to revamp their communication systems. As a result, the Americans created a new central air command that worked in tandem with army commanders. The mission of this new approach was to neutralize enemy air power first, attack supply and troop movements, and attack critical points on the battlefield.⁵³ These functions resemble the Wehrmacht and Luftwaffe's relationship during the early phases of the war and again emphasize the Americans desire to emulate Blitzkrieg.

Another important development to touch on for this project is the Red Army's struggle with the Wehrmacht on the Eastern front. The rapid early success of Operation Barbarossa in 1941 almost completely wiped-out Soviet tank and air forces. The numerical advantage that the Soviets had over the Wehrmacht was overcome by the shocking success of Blitzkrieg. With the country on the brink of collapse, the Soviets were forced to overhaul their approach to warfare.⁵⁴ Like the Americans, the Soviets opted to adopt principles that resembled Blitzkrieg. New Soviet mechanized forces combined two tank corps with a rifle division to create tank armies. These tank armies operated in similar fashion to the Wehrmacht's Panzer cores, combining tanks, infantry and supporting arms. The Soviets were able to out produce the Germans in terms of tank production, and by 1943 they were almost three times larger than the German forces.⁵⁵ The tank armies also adopted of a key tenant of the success of Blitzkrieg, as they were designed to punch hard at the weak points of the enemy, create penetration of enemy lines, and then finally exploit armored breakouts with sweeping pincer movements. At the battles of Stalingrad and

⁵³ Ibid., 226.

⁵⁴ Ibid., 211.

⁵⁵ Ibid.

Kursk, the Soviets displayed these principles with sweeping success.⁵⁶ One could argue that in some ways, the Soviets emulated Blitzkrieg in a more successful fashion than the Americans.

Soviet military command, like the Americans, also recognized the crucial integration of air power into this new mechanized approach to warfare. The Soviet's understanding of German success in the war runs parallel with American ideas, acknowledging the necessity of air power with close coordination with ground forces. As a result, they also adopted a Luftwaffe style approach of concentrating air power at the critical point of attack, in contrast with their decision to spread forces out across the vast Eastern front in 1941.⁵⁷ Following the standard set by coordination between the Wehrmacht and Luftwaffe, the Soviets also placed their air forces under a centralized command structure. Under the leadership of general Alexander Novikov, the Soviet air forces organized themselves after the Luftwaffe's air fleets, consolidating bombers, fighters and ground attack planes into a single attack force. Once assigned to critical points on the front, these air armies came under direct command of local commanders in order to achieve close collaboration with ground forces.⁵⁸ The development of Soviet air and tank armies modeled after the Wehrmacht's smaller elite mobile forces shows that, like the Americans, the Soviet's recognized and desired to emulate the Blitzkrieg's success.

Allied military victories on the Eastern front at Stalingrad and Kursk in 1943 and in Normandy in 1944 demonstrated that the Allies embraced select principles of Blitzkrieg and applied them on the battlefield. The American and Soviet commitment to build modern mobile forces, apply mass of firepower at the point of contention, and integrate technology like the airplane and radio to Combined Arms Theory, resembles the Wehrmacht's Blitzkrieg in the early

⁵⁶ Ibid.

⁵⁷ Ibid., 212-213.

⁵⁸ Ibid., 213.

stages of the war. Despite all this, the Allies still never achieved a swift and decisive victory to secure the end of the war like the Germans did in France in 1940. The Soviets perhaps came the closest with Operation Bagration in summer 1944, but were still unable to deliver the knockout blow. After the triumph in Normandy in the summer of 1944 and despite German forces in complete disarray, the war dragged on for almost another year. Arguably, this was because the Allies, particularly the Anglo-American coalition, did not fully grasp the principles the Wehrmacht displayed throughout the war. As stated, earlier American commanders were not encouraged to take risky maneuvers that were part of the formula for Blitzkrieg. Historians like Robert Citino have even argued that the Americans did not achieve operational superiority compared to the Wehrmacht and the Red Army.⁵⁹

Citino supports his assertion of poor operational planning and coordination by the Anglo-American coalition during the Sicily campaign and the Omaha beach landings. The invasion of Sicily, Operation Husky, was a disaster from the start. Airborne troops who were dropped in the dead of night were scattered around the island, with many drowning after falling into the sea. The overall Allied commander for the operation, Sir William Harold Alexander, put American forces under Patton in a mere support role as British Field Marshall Montgomery's forces were tasked with slugging it out with the main German force. Montgomery took a cautious and systematic approach in an operation that required dashing and speed, and after four weeks he was only halfway to his objective of the Sicilian town of Messina. The slow movement of Montgomery's forces and the unnecessary drive of Patton's forces around the island allowed the bulk of the German forces to retreat to the Italian peninsula.⁶⁰ Though the Allies were

⁵⁹ Citino, *From Blitzkrieg to Desert Storm*, 75-76.

⁶⁰ *Ibid.*, 104 .

eventually successful in securing Sicily, their operational planning and Montgomery's failure to seize the initiative squandered any chance of the Allies obtaining a decisive battlefield victory against the Germans.

Citino also cites the Operation Overlord landings as an example of poor interservice cooperation by the American forces. Operation Overlord was one of the most ambitious military campaigns of all time, simultaneously attacking five beach fronts at once and using airborne troops behind enemy lines, the Allies intended to open an entire second front on Hitler's western flank. Most of the landings went over smoothly, but at Omaha beach the 1st and 29th infantry divisions were pinned down by an entire division of German infantry. Due to the planners of the Omaha landings decision to attack at low tide, and their reliance exclusively on air support, the 1st army division was left exposed on the open killing grounds of the beach. Despite the odds stacked against them, the American forces gathered their courage and pushed inland. Though it was a significant victory, it came at a high cost, as over two thousand Americans were lost.⁶¹ While the Allies did commit to integrating new technologies like the airplane and tank into Combined Arms Theory, they were not able to obtain a swift decisive victory in Normandy. Citino points out that the Normandy campaign proved to be a drawn-out slug fest. At the French city of Caen, British forces under Field Marshall Montgomery became bogged down for almost two months. Though the Allied forces eventually broke through the German defenses around Caen and trapped remaining German forces in the Falaise pocket, it came with a high price of human life. The Falaise pocket operation was largely an operational mishap as well. Poor

⁶¹ Ibid., 105-106.

interservice cooperation between American and British-Canadian forces led to a failure to complete the encirclement, and large numbers of Germans escaped.⁶²

Even after the Allied breakout in Normandy, the war with the Germans dragged on until the Spring of 1945. The Allies successfully integrated modern technologies like the tank, plane, and radio into Combined Arms Theory, but never achieved the operational superiority that the Germans displayed in France in 1940. Anglo-American commanders seemed to lack any sort of conception or idea of how to pull off an envelopment of enemy troops. Instead, they opted to simply drive the Germans back toward the German border rather than seeking to trap and destroy them in France. The Germans even displayed flashes of their success with Blitzkrieg in the final years of the war, repelling the Allies offensive during the Market Garden campaign in September 1944, and surprising them with their counter offensive in Belgium during the Battle of the Bulge in 1944-1945. Eventually Nazi Germany collapsed under the sheer might of the Anglo-American forces in the west and the Soviets in the east. Even as the war ended, however, American military leaders recognized there was still much to learn from the Wehrmacht. Over the next fifty years, military leaders and historians alike returned to the Wehrmacht's Blitzkrieg attacks to draw lessons from the Second World War.

The American postwar desire to continue to learn from the Wehrmacht is perhaps best indicated by the United States Army Historical Division's collection of German officers' reports from 1945 to 1961. The reports are vast and comprehensive, made up of over twenty-four volumes and covering subjects from OKW command structure, tank warfare, and various Wehrmacht campaigns including France and Russia. Initially, the historians assigned to this

⁶² Ibid., 106-109.

project sought to analyze the Wehrmacht's understanding of the war between the Anglo-American coalition on the Western front. They not only wanted to understand planning and execution of operations, but also give a fuller account of German defense, casualties, and hundreds of other details regarding the Wehrmacht's operations.⁶³ As the postwar political situation with the Soviet Union deteriorated, and another global war seemed likely, the project shifted its focus to German operations against the Soviet Union. Volume fifteen, for example, is entirely dedicated to analyzing operations on the Eastern front. The lessons learned from these studies were rigorously studied by military minds and historians alike and had a direct impact on the development of American military doctrine during the Cold War.

Historians who have examined the reports tend to agree that the likelihood of a war with the Soviets led to an American desire to learn from the Wehrmacht's experiences in Russia. Robert Hutchinson's article, "The Weight of History: Wehrmacht Officers, the U.S. Army Historical Division, and U.S. Military Doctrine, 1954-1946," acknowledges the situation with the Soviets as a driving factor for the study.⁶⁴ Hutchinson indicates that German officers were willing to share this information with their former adversaries, as many of them still viewed the Soviet's and Communism as an ideological enemy. The drawback from this was that many of the reports were littered with National Socialist themes of racism and anti-Bolshevism while also canonizing the myth of a "clean" Wehrmacht.⁶⁵ Despite this bias, American military officials viewed these experiences as invaluable in crafting a war winning strategy against the Soviets.⁶⁶ James Wood's article, "Captive Historians, Captivated Audience: The German Military History

⁶³ Donald Detwiler, "Initial Stirrings," in *World War II German Military Studies: a Collection of 213 Special Reports on the Second World War Prepared by Former Officers of the Wehrmacht for the United States Army*, ed. Donald Detwiler, Vol. 1 (New York: Garland Publishing, 1979), 1-2.

⁶⁴ Hutchinson, "The Weight of History," 1321.

⁶⁵ *Ibid.*, 1322.

⁶⁶ *Ibid.*, 1346.

Program, 1945-1961,” also acknowledges the situation with the Soviets as a driving factor of the program. Wood cites the Berlin Blockade crisis in 1948-49 as a key turning point in the emphasis of the program to focus on the Wehrmacht's experiences against the Soviets. As a result, historical narratives of the war in the West were largely replaced by “how to” manuals on fighting the Red Army.⁶⁷

Although the criticisms by Hutchinson and Wood regarding the National Socialist bias within the reports are warranted, lessons of Blitzkrieg are also evident throughout the reports. Volumes four through six focus heavily on OKW command structure and consist largely of German officer's critiques of Hitler's meddling as a supreme commander and the German's commitment to mobilized warfare. General Walter Warlimont's report on the German high command describes Hitler's role in diminishing the authority of the Wehrmacht high command while also forcing onto them the “irrevocable decision” to attack Poland, Norway, France, and Russia. Statements like these and other German generals must be met with skepticism. Only one of the German officers recruited was a trained historian and their biases against Bolshevism and the Soviets impacted the reports. General Halder also specifically requested that the officers write their reports in a way that blamed the Wehrmacht shortcomings on the dead Hitler, and not the alive officers.⁶⁸ Warlimont went on to explain how the commitment to “lighting war” after 1941 hurt the OKW's command structure even further.⁶⁹ Warlimont's statements were not the only example of German commitment to mobile warfare. Lieutenant General Gustav Hoehne's

⁶⁷ James A. Wood, “Captive Historians, Captivated Audience: The German Military History Program, 1945-1961,” *The Journal of Military History* 69 no.1 (2005), 126.

⁶⁸ Wolfram Wette. *The Wehrmacht: History, Myth, Reality* (Cambridge, Mass.: Harvard University Press, 2007), 229-230.

⁶⁹ Walter Warlimont, “Comments to Introduction,” Foreign Military Study T-101 K1, in *World War II German Military Studies: a Collection of 213 Special Reports on the Second World War Prepared by Former Officers of the Wehrmacht for the United States Army*, ed. Donald Detwiler, Vol. 4 (New York: Garland Publishing, 1979), 9-11.

report, “Fast mobile and armored forces,” also emphasized the OKW’s commitment to creating a mobilized force. Hoehne explained in detail the German conceptions of this mobilized force and how it developed during the interwar period. This force not only required that the motor vehicle become an integral part of the army, but also called for new, fresh conceptions of leadership.⁷⁰

Hoehne’s report was significant to American military doctrine in that it provided details on how Blitzkrieg worked on an operational level. The report described the role of these mobile forces in delivering decisive strikes, making speedy use of their success, and relying on modern equipment, first-class training, and hand-picked personnel to win battles. Hoehne also embraced the role of the airplane in the future of warfare, and explained that for mobile warfare to work, close cooperation with the air force was absolutely required.⁷¹ The emphasis on first-class training and quick instincts of commanding officers was a key lesson of Blitzkrieg gained from reading the German military studies. Hoehne explained the necessity of leaders in mobile units to not only become masters of their equipment, but also educated in tactical situations. Commanders were required to have sufficient experience in actual war service, tactical comprehension of the situation, and a capacity for delivering positive and reliable results at the point of contention.⁷² For the Wehrmacht, it was not just the commitment to mobile warfare that ensured Blitzkrieg’s success, but also the ability of its officers to seize the initiative during battle.

Volume seven of the *World War Two German Military Studies* consisted of the OKW war diaries, and provided feedback on multiple Wehrmacht campaigns including Poland, France,

⁷⁰ Gustav Hoehne, “Fast and Mobile Armored Forces,” Foreign Military Study B-036, in *World War II German Military Studies: a Collection of 213 Special Reports on the Second World War Prepared by Former Officers of the Wehrmacht for the United States Army*, ed. Donald Detwiler, Vol. 4 (New York: Garland Publishing, 1979), 1-2.

⁷¹ *Ibid.*, p.2

⁷² *Ibid.*, p 18

and Operation Barbarossa. These reports were significant for the development of the American understanding of Blitzkrieg, as they provided direct feedback into the German perspective of the reasons for their swift decisive victories. German general Helmuth Greiner reflected on the campaigns in the report, starting with the birth of Blitzkrieg during the Polish campaign in September 1939. Greiner indicated the uncertainty of the operation among various German generals, but Hitler's determination to make war with Poland marked an important test for the Wehrmacht. Speed was the essential factor in defeating the Polish forces. Two separate attack wedges were to drive to the Vistula and the Narew rivers, while commanders were required to adjust themselves to new situations and Polish forces were to be knocked out immediately. This speedy armored thrust was supplemented with overwhelming support from the Luftwaffe designed to break the nerve of the Poles.⁷³ The operation was carried out as planned, the only surprise was the unbelievably short amount of time of the operations success in nineteen days. Greiner reflects that the Wehrmacht had passed their test, and as a result, Hitler felt they were up to the task of any order he intended to give.⁷⁴

Greiner also provided a detailed report of the background and execution of *Fall Gelb* (Case Yellow), the 1940 invasion of France. Like the Polish campaign, leaders of the OKW were skeptical of the implications of the campaign. Greiner emphasized Hitler's direct oversight of the planning, and once again the supreme commander was demanding a quick decisive campaign. Hitler was confident in the superiority of the German forces, particularly the

⁷³ Helmuth Greiner, "The Polish Campaign," Foreign Military Studies C-065c, in *World War II German Military Studies: a Collection of 213 Special Reports on the Second World War Prepared by Former Officers of the Wehrmacht for the United States Army*, ed. Donald Detwiler, Vol. 15 (New York: Garland Publishing, 1979), 12-13.

⁷⁴ *Ibid.*, 23.

Luftwaffe.⁷⁵ Like Poland, the operation unfolded with surprising success and speed. As German forces crashed into Belgium, the best of the French and British forces moved north to face them. The trap was set just as German strategists presumed. Armored forces under Heinz Guderian unexpectedly burst through the Ardennes Forest in a massed concentrated effort. Supplemented by Luftwaffe air support, Guderian caught the French totally disorganized and took advantage of the situation by driving to the English Channel. Greiner once again stressed how the swift victory filled the Germans with enthusiasm and satisfaction. The German victory was possible by the concentrated thrusts of armored and motorized forces, along with flexible leaderships and excellent support by the Luftwaffe. Consequently, the success played into Hitler's own ego and gave the German people the idea that Hitler was a great military commander.⁷⁶ The ultimate test for the German Blitzkrieg had yet to come, as Hitler's next great gamble meant an invasion of the vast Soviet Union.

Operation Barbarossa was arguably one of the most ambitious military campaigns of all time. While the Wehrmacht knocked out the French and Polish armies in quick fashion, the Soviet Union had far more ground to cover and a quantitative advantage in manpower and industry. Once again, Hitler called for a swift and decisive campaign, and believed the campaign would take no longer than four months.⁷⁷ Greiner contended that by this point the Army High Command were immersed in the success of Blitzkrieg and were convinced a swift victory was possible. Looking back, Greiner recognized that the Germans underestimated various obstacles,

⁷⁵ Helmuth Greiner, "The Campaigns in the West and North," Foreign Military Studies C-065d, in *World War II German Military Studies: a Collection of 213 Special Reports on the Second World War Prepared by Former Officers of the Wehrmacht for the United States Army*, ed. Donald Detwiler, Vol. 7 (New York: Garland Publishing, 1979), 1-3.

⁷⁶ *Ibid.*, 41-44.

⁷⁷ Helmuth Greiner, "Operation Barbarossa," in *World War II German Military Studies: a Collection of 213 Special Reports on the Second World War Prepared by Former Officers of the Wehrmacht for the United States Army*, ed. Donald Detwiler, Vol. 7 (New York: Garland Publishing, 1979), 124.

including the enormous size of Russian territory, traffic and climate conditions, and the endurance and toughness of the Russian population.⁷⁸ Despite these obstacles, Operation Barbarossa had stunning initial success. Using three concentrated thrusts in the north, center, and south of the Soviet Union, the Germans once again caught their opponents completely off guard. The Luftwaffe was crucial to initial success, wiping out almost two thousand Soviet planes in the first hours of the invasion.⁷⁹ The rapid advance into the Soviet Union, however, perhaps exposed the weaknesses of Blitzkrieg warfare. Driving hundreds of miles into Soviet territory stretched German supply lines, and as Soviet resistance hardened, German casualties piled up. As Army Group Center under Heinz Guderian became bogged down at Smolensk, Hitler made a fateful decision to divert armor to the south to speed up the invasion of Ukraine. While this move contributed to the fall of Kiev, it bought the Soviets valuable time as heavy rains bogged down the rapid advance of German forces.⁸⁰

As the Russian winter set in during December 1941, it froze not only the ground, but also the German Blitzkrieg. The Germans, overconfident after their initial success were not prepared for the conditions of winter warfare. With priority given to fuel and ammunition, troops lacked winter supplies, leading many to freeze to death.⁸¹ To make matters worse, the Soviets launched a surprise counterattack on the Germans threatening the outskirts of Moscow in the early morning of December 5, 1941.⁸² The counterattack under the command of general G.K. Zhukov was a display of the Soviet's newfound understanding of Blitzkrieg warfare. Using concentrated mobile attacks, the Soviets attacked the Germans across the front and poured

⁷⁸ Ibid., 125-126.

⁷⁹ Citino, *Blitzkrieg to Desert Storm*, 63.

⁸⁰ Ibid., 64-65.

⁸¹ Ibid., 66-67.

⁸² Ibid., 67.

armored units into gaps created by the infantry assault. Through the month of December, Wehrmacht forces were pushed back and both forces were pushed to the point of exhaustion. Despite advice from his top military advisors, Hitler issued his famous “stand-fast-order“ and commanded German soldiers to hold their positions to the death.⁸³ Hitler’s orders perhaps signified that the war in the East was determined to be a drawn-out bitter war. Despite the failure of the German Blitzkrieg, the pace for the rest of the war with the Soviets was defined by its principles. Across the vast expanse of the Soviet Union, battles were defined by rapid armor movements at points of contention, Combined Arms Theory, and mass encirclements of troops.

While reports gathered by the U.S. Army Historical Division on the invasions of France, Poland, and Russia provided insight to the initial success of Blitzkrieg, volume fifteen of the studies was entirely devoted to understanding the Eastern Theater. The emphasis on analyzing the details of the German actions in the east are an important indication of the Americans desire to learn from Blitzkrieg. As war with the Soviet Union appeared inevitable, it was crucial for the Americans to gain any sort of advantage over their next potential opponent. Volume fifteen of the German Military Studies includes a complete analysis of the Blitzkrieg campaigns and the lessons the Americans could learn from them. In an analysis of the Polish campaign written by United States Army Major Robert Kennedy, the officer sums up several of the key learning points of the Blitzkrieg campaign. Most notable are Kennedy’s assertions that the German war of movement had ended the era of static warfare marked by World War One.⁸⁴ Other lessons that Major Kennedy recognized were the efficacy of the German organization of concentrated armor and air units, the training of Wehrmacht soldiers to act with aggressive action, and in the

⁸³ Ibid., 68.

⁸⁴ Robert Kennedy, “Conclusions,” in *World War II German Military Studies: a Collection of 213 Special Reports on the Second World War Prepared by Former Officers of the Wehrmacht for the United States Army*, ed. Donald Detwiler, Vol. 15 (New York: Garland Publishers, 1979), 130.

interservice cooperation of the Luftwaffe with ground forces.⁸⁵ American military studies such as Major Kennedys indicate a clear desire to learn from the Wehrmacht and Blitzkrieg, a trend that would continue throughout the Cold War.

Volume fifteen also includes a manuscript of an interrogation of German general Franz Halder. The interview was conducted by Lieutenant Colonel Cosse Brissac, who recognized Halder as one of the masters of the German military art.⁸⁶ Brissac's interview went in depth on the strategic aims of Barbarossa, like the previously mentioned reports, Halder indicated the desire to strike fast, destroy enemy forces in encirclement battles, and maintain aerial superiority of Russian airspace.⁸⁷ Like many German generals reflecting on the operational developments on the Eastern front, Halder too criticized Hitler's meddling in strategic affairs. One of the major critiques was Hitler's decision to transfer four panzer divisions from Army Group South. This left Halder concerned for the northern and southern flanks of German forces fighting for Stalingrad, a concern that came to fruition in November 1942. Despite Halder's warnings to Hitler, the General was relieved of his post on September 24, 1942 and was never recalled back to active duty for the remainder of the war.⁸⁸ The interviews of German commanders like Franz Halder not only shaped the American understanding of the conflict with the Soviets, but also gave them crucial insight into the successes and failures of the German Blitzkrieg.

American military studies like Robert Kennedys and interrogations like Cosse Brissac's indicated a clear desire on the part of the Americans to learn from the success of Blitzkrieg

⁸⁵ Ibid., 133-135.

⁸⁶ Cosse Brissac, "Interrogation of General Halder," Foreign Military Studies B-802, in *World War II German Military Studies: a Collection of 213 Special Reports on the Second World War Prepared by Former Officers of the Wehrmacht for the United States Army*, ed. Donald Detwiler, Vol. 15 (New York: Garland Publishers, 1979), 3 .

⁸⁷ Ibid., 10.

⁸⁸ Ibid., 16-17.

campaigns. While the Army Historical Divisions studies and interviews of the Wehrmacht perhaps played into the myths of a clean Wehrmacht, the lessons learned provided valuable operational lessons that shaped how the Americans could win an all-out war with the Soviet Union in Europe.⁸⁹ While the American military embraced the integration of armor and planes into Combined Arms Theory, they still did not fully grasp the principles that made the early German Blitzkrieg successful. Arguably, the Soviet Union grasped these principles better than the Americans and British. In the World War Two German Military Studies collection, German commanders articulated the need to strike decisively at key points of contention, emphasize the use of speed, and allow officers to act with intuition and aggression in their maneuvers. These principles slowly would work their way into American military doctrine over the course of the Cold War, and eventually led to the creation of Airland Battle Doctrine during the 1980s. In the next chapter I will discuss the continued desire of the Americans to learn from Blitzkrieg, and how these lessons were implemented over the course of the Cold War.

⁸⁹ Hutchinson, "Weight of History," 1347.

CHAPTER 3. TRIAL, ERROR, AND SUCCESS

Evolution of American Military Doctrine during the Cold War and Operation Desert Storm

American military thinkers and historians alike continued to revisit lessons from the Wehrmacht as the Cold War unfolded over the next forty years. The United States Army Historical Division continued their interviews and research of former German officers until 1961, and their conclusions left a clear impact on American Military Doctrine.⁹⁰ I will demonstrate in how many ways, the United States military sought to emulate the Wehrmacht throughout Cold War conflicts and throughout the 1990s. There are several ways in which this effort is undeniable. The first I will examine is the continued studies of the Army Historical Division. Volume seventeen in particular exclusively features insights on the war in Russia, with topics ranging from defensive improvisations against Red Army offensives to protecting logistic networks over the vast space of the theater of war. Next, I will examine how the American military fought during Cold War conflicts of containment. While the Americans did not achieve decisive victory during these conflicts, they still drew lessons from the Wehrmacht and attempted to achieve maneuver warfare. After the conclusion of these indecisive conflicts, The American military redesigned itself to create a more professional highly trained force that emphasized maneuver warfare and interservice cooperation.

Finally, I will examine the development of the Air-Land Battle doctrine in the 1980s. This doctrine was put into practice via Operation Desert Storm in 1991, and Air-Land Battle is recognized as the conceptual basis of its success.⁹¹ By comparing Air-Land Battle principles with those in *Truppenführung*, I will show how the Americans desired to emulate the success of

⁹⁰ Hutchinson, "Weight of History," 1321.

⁹¹ Sloan, "Doctrine," 254.

the Wehrmacht's early Blitzkrieg campaigns. These campaigns are characterized by lightning-fast mobile strikes, inter-service coordination, intuitive leadership, and swift decisive results with minimal loss of life. During the Gulf War, the United States and their allies achieved all these principles, beating Saddam Hussein's regime in roughly one hundred days. In more ways than one Operation Desert Storm resembles the success of early Blitzkrieg campaigns, particularly the 1940 invasion of France. The NATO coalition struck with lightning speed and aggressiveness, concentrating an armored thrust at a heavily fortified opponent across seemingly impassable terrain. They also displayed effective interservice cooperation, complimenting a concentrated armor attack with a massive air offensive that crippled the enemy's supply and communication networks.⁹² Like the Germans in France during the Fall Gelb campaign, the Americans executed a daring offensive using an integration of the latest technology to decisively defeat the enemy.

In the years following World War II, the United States military anticipated that a large-scale conflict in Central Europe with the Soviet Union was inevitable. This is a trend that continued throughout the entirety of the Cold War and influenced the evolution of American military doctrine heavily. Seeking to gain any sort of advantage against the Red Army, U.S. military leaders saw the study of the strengths and weaknesses of Russian infantry as a necessity.⁹³ The best available source to draw from was the former Wehrmacht officers working with the Army Historical Division. Even though the Wehrmacht lost to the Red Army, American military thinkers still saw the Germans information as invaluable. Most likely, this is due to the similar strategic situations the United States would find themselves in if a large-scale

⁹² Richard S. Lowry, *The Gulf War Chronicles: A Military History of the First War with Iraq* (New York: Universe Star, 2008): 118-251. Retrieved March 10, 2021, from <https://read.amazon.com/?asin=B0791L8S6Z>.

⁹³ Hutchinson "Weight of History," 1334.

war in Europe erupted. Robert Hutchinson acknowledges that by 1949 the U.S. Army began to see its strategic position as similar to the Wehrmacht on the Eastern front in 1943.⁹⁴ In the event of a Soviet invasion of western Europe, the Americans assumed they would be fighting a defensive battle against an opponent that heavily outmanned and outgunned them on the continent. As a result, volume seventeen of the U.S. Army Historical Division's Wehrmacht studies shifted from understanding the success of Blitzkrieg warfare, to analyzing the details of defensive warfare against the Soviets.

By highlighting a few significant studies within volume seventeen, it is apparent the Army Historical Division sought to gain some insight on fighting a defensive war against the Red Army. A study published in 1951 by the Department of the Army supports this premise. The contribution, "Military Improvisations During the Russian Campaign," consists of an analysis by an anonymous former Wehrmacht general and focuses heavily on events from 1943-1945, specifically the German retreat from the Eastern Front into the northern plains of Germany.⁹⁵ Chapter two of the study specifically focuses on defensive measures employed by the Wehrmacht in the event of Russian offensives. These measures included tactical retreats by German soldiers in the face of imminent attacks, and reforming in the rear into stronger and more reinforced lines to face the enemy. The retreating Germans also employed demolitions along their route of retreat to cause disruption to the advancing Red Army.⁹⁶ Another point of interest in German defensive measures is the employment of fortress cities. By 1944, Wehrmacht commanders were ordered to use towns and cities as makeshift fortresses by digging

⁹⁴ Ibid., 1345.

⁹⁵ "Military Improvisations During the Russian Campaign," Foreign Military Studies NO. 20-201, in *World War II German Military Studies: a Collection of 213 Special Reports on the Second World War Prepared by Former Officers of the Wehrmacht for the United States Army*, ed. Donald Detwiler, Vol. 17 (New York, Garland Publishers, 1979), iii.

⁹⁶ Ibid., 28-29.

defensive lines and creating anti-tank positions. Soldiers were ordered to hold the towns at all costs, and the approach often ended in the encirclement of German forces. The former Wehrmacht commander was critical of this approach, however, arguing that preserving forces to fight another day was more important than defending strategically insignificant towns.⁹⁷

Another noteworthy study that shows the desire to learn from Wehrmacht defensive tactics is report NO. 20-234, "Operations of Encircled Forces: German Experiences in Russia." Published in January 1952, the report discusses tactical and logistical problems facing the operations of encircled German forces. This knowledge was gained as a result of German fortress cities and resulted in a trend of desperate last stands by German forces during the later years of the war. The report also emphasizes the role of the Luftwaffe in these scenarios by keeping encircled troops supplied, a goal that was rarely achieved. The Wehrmacht commander evaluates several scenarios where German forces were encircled and attempts to draw lessons from various breakthrough operations.⁹⁸ While the Wehrmacht failed in many of these battles of encirclements, the American military still saw the lessons as invaluable in preparing to fight off a potential Soviet invasion.

Perhaps the most significant study in volume seventeen, and one that indicates a direct connection between German and American military doctrine, is study NO. 20-233, German Defense Tactics against Russian Breakthroughs. The 1951 study again draws from a nameless former Wehrmacht officer who fought in the battles Kharkov and Belgorad.⁹⁹ The officer

⁹⁷ Ibid., 36-39.

⁹⁸ "Operations of Encircled Forces: German Experiences in Russia," in *World War II German Military Studies: a Collection of 213 Special Reports on the Second World War Prepared by Former Officers of the Wehrmacht for the United States Army*, edited by Donald Detwiler, Vol. 17 (New York: Garland Publishers, 1979), iii.

⁹⁹ "German Defense Tactics against Russian Break-Throughs," Foreign Military Studies NO. 20-233, in *World War II German Military Studies: a Collection of 213 Special Reports on the Second World War Prepared by*

provides a detailed analysis of the German method of “Active Defense“ a relatively simple but effective approach that employs counterattacks in response to Soviet offensives. The purpose of Active Defense is to cut off forward advances of Red Army forces by launching a counterattack. In order to do this, reserve forces are required to close the breach of Russian attacks. These forces must be removed from the frontlines to ensure their maneuverability and must strike with tremendous force and concentrated mass of firepower. Attempts must also be made to narrow the breach by tactically withdrawing to a shorter line and reinforcing resistance adjacent to the gap.¹⁰⁰ The description of the Wehrmacht’s active defense method left a direct impact on American military doctrine during the Cold War. In 1976, the U.S. Army adopted *FM 100-5 Extended Battle*, also known as active defense, as their official doctrine. I will cover the doctrine in more detail later on, but the similarities to the German active defense methods are clear. At its core, the doctrine calls for high mobility of reserve air and ground forces to quickly meet attacking forces, using maneuver to concentrate forces at the right time and place.¹⁰¹

Though studies from volume seventeen of the German military studies suggested the United States were preparing for an all-out defensive war in Europe, the seemingly inevitable never came. Instead, the Cold War evolved into a nuclear arms race and a series of smaller scale wars of “containment.” As it became increasingly clear that the Soviets were committed to the global spread of communism, the United States opted to prop up both democratic and non-democratic anti-communist governments around the world. Nations that were jointly occupied by Soviet and American forces, like Germany and Korea, became hotspots for Cold War

Former Officers of the Wehrmacht for the United States Army, ed. Donald Detwiler, Vol. 17 (New York: Garland Publishers, 1979), iii.

¹⁰⁰ Ibid., 3-4.

¹⁰¹ John Romjue, *From Active Defense to AirLand Battle: The Development of Army doctrine, 1973-1982* (Fort Monroe, VA: Historical Office, U.S. Army Training and Doctrine Command, 1984), 9

tensions.¹⁰² While the Americans surely thought the European front would explode at any moment, Korea was actually the opening act of the containment wars of the larger Cold War. While Korea is often referred to as a “forgotten war” it constituted an important transition and lesson for the American military. In many ways the war was a bridgehead between the conventional military doctrine of fighting decisive battles of World War Two and the United States’ post-war commitment to conducting limited wars of containment. The opening phases of the war featured highly mobile operations by the North Korean People’s Army (NKPA), United Nations forces, and the Chinese People’s Volunteers, while the second half of the war devolved into a static positional struggle of attrition.¹⁰³

The Korean War was a particular challenge for American military leaders, mainly for its nature as a limited conflict. This conflict was limited in several ways: limited geographically to the Korean Peninsula, limited in the number of resources committed to the conflict, and limited too by public opinion concerning the conflict from around the world.¹⁰⁴ The war was also unique in that it was the first time U.S. Army units served America and a broader United Nations effort, a reoccurring theme that has emerged in American military incursions.¹⁰⁵ Initially American military leaders stuck to their World War II approach of mass of firepower and destruction of the enemy's main force. This approach, however, was not effective in the limited nature of the Korean War. From the outset, most of the Army’s divisions had major equipment shortages and personnel barely reached 70 percent of their full strength. Coupled with a war weary American public, a constrained budget, and congressionally imposed personnel strength

¹⁰² John L. Gaddis, *The Cold War: A new history* (New York: Penguin Books, 2007), 40.

¹⁰³ Citino, *Blitzkrieg to Desert Storm*, 116-117..

¹⁰⁴ *Ibid.*, 118.

¹⁰⁵ Andrew Gallo, “Understanding Military Doctrinal Change During Peacetime” (PhD diss., Columbia University, 2018), 116.

ceilings, the American military entered the Korean peninsula unprepared for the conflict. As a result, the army sustained significant casualties during the initial phases of the war during the summer of 1950.¹⁰⁶

Despite its nature as limited war, there still seems to be indication that certain American military commanders sought to fight an aggressive style conflict that in some ways emulated Blitzkrieg. Douglass MacArthur's Inchon counterattack is perhaps the best example. After a series of victories by the NKPA, the Americans and their South Korean Allies were pushed back to the south eastern corner of the peninsula. Like the Wehrmacht during operation Barbarossa, the NKPA's rapid offensive success stretched their supply lines to their limits, making them vulnerable to American airpower. MacArthur, recognizing the NKPA's vulnerability and utilizing American air superiority cooked up a plan to catch the North Koreans off guard and retake Seoul. Using an amphibious assault that resembled Wehrmacht pincer movements during World War Two, American marines would swing around the Korean Peninsula and crash into the North Korean flank at Inchon.¹⁰⁷ The plan was as daring as it was risky, but in the end MacArthur's assessment of the situation and decision to strike decisively caught the North Koreans off guard. As with the German invasion of France in 1940, which confronted the British with the choice of evacuating the continent or face destruction, the very success of the American movement put the North Koreans in a similar dilemma: stay in the south and be cut off and destroyed, or retreat hastily back up the peninsula.

Even with Seoul and South Korea liberated as a result of the Inchon landings, the war on the Korean Peninsula was far from over. MacArthur planned to invade North Korea and crush

¹⁰⁶ Ibid., 116-117.

¹⁰⁷ Citino, *Blitzkrieg to Desert Storm*, 130-131.

the communist regime for good. Ignoring intelligence reports that Chinese soldiers were now deployed in North Korea, MacArthur pushed his forces further into North Korea. At the battle of the Chongchon river in late November 1950, outnumbered American forces were met by two full Chinese armies of light infantry. Despite American technological superiority, the speed and mobility of these light infantry units broke through decisive points along the front. The result was the longest retreat in U.S. military history, before American forces eventually stabilized the front roughly along the preexisting border.¹⁰⁸ The remainder of the war was largely fought over the 38th Parallel, characterized by static positional warfare that contrasted the opening phases of the war. Despite the war ending in a relatively inconclusive stalemate, the footprint of the Wehrmacht and Blitzkrieg was apparent throughout the duration of the conflict. The Inchon landings indicated U.S. military leader's commitment, when and where feasible, to interservice cooperation and aggressive flanking maneuvers. However, a growing rivalry between the American Army and Airforce perhaps limited the full potential of Combined Arms Theory. This rivalry is indicated by postwar Army studies that criticized the Air Force's failure to prevent the enemy from deploying and maintaining large and effective land forces. Not surprisingly, since it was prepared by the Army, the study ultimately concluded the United States was unprepared to defeat the Communist threat due to its reliance on the Air Force and Navy.¹⁰⁹

MacArthur's Inchon campaign is not the only evidence of the Wehrmacht's influence on the conduct of the Korean War. The Army Historical Division collected over 900 reports from Wehrmacht officers over the course of the Korean War. German doctrinal concepts such as mobile defense were translated and delivered to every army unit down to the battalion level.

¹⁰⁸ Ibid.

¹⁰⁹ Gallo, "Understanding Doctrinal Change," 123-124.

American Field Service manual FM-100-5 illustrated the American respect for the opinions of German officers. Numerous revisions were suggested in FM-100-5 including the combined arms integration and mobile defense, principles that were implemented by the U.S. Army in 1954.¹¹⁰ Wehrmacht officers also provided information and formed conceptions of how the Americans were to fight irregular guerilla warfare. One brief specific example of this can be found in volume seventeen. Study No. 20-240, "Rear Area Security In Russia: The Soviet Second Front Behind German Lines," covers in detail the struggle between the Wehrmacht and irregular Russian partisans far behind the front lines of the Eastern Front. The German officer writing the report put heavy emphasis the threat of partisans to supply lines, the need to have effective forces in the rear to combat partisans, patrols and checkpoints along key roads and highways, and the ruthlessness of mopping up partisan infected areas.¹¹¹ Based on the Wehrmacht's experience fighting partisans along the Eastern Front, the U.S. Army Historical divisions collected dozens of reports on guerilla warfare from former officers. By 1949 it had produced and distributed some twenty-one monographs regarding German experiences with partisan warfare in the East. The Army Historical Division also translated the Wehrmacht's 1944 field manual, "Fighting the Guerilla Bands." Hutchinson points out that while these reports had a direct impact on the 1951 U.S. Army publication FM-31-20 "Operations Against Guerrilla Forces," they relied heavily on German myths and biases against the Soviets.¹¹²

Despite the impact of Wehrmacht officer reports that influenced the American military during the Korean War, the United States never achieved a decisive victory resembling the

¹¹⁰ Hutchinson, "Weight of history," 1342.

¹¹¹ "The Soviet Front Behind German Lines," Foreign Military Studies No. 20-240," in *World War II German Military Studies: a Collection of 213 Special Reports on the Second World War Prepared by Former Officers of the Wehrmacht for the United States Army*, ed. Donald Detwiler, Vol. 17 (New York: Garland Publishers, 1979), 34-35.

¹¹² Hutchinson, "Weight of History," 1342.

Wehrmacht's early Blitzkrieg campaigns. Even though the Americans and their South Korean Allies did not lose the war, the bloody stalemate left a bad taste in the mouths of U.S. military commanders. The phrase "No more Koreas!" became a sort of slogan in the years following the war.¹¹³ On the operational level, the technologically superior American forces were outplayed by light Chinese infantry who struck decisively and overwhelmingly at key points of contention. Without overwhelming firepower from United Nations artillery and airpower, the U.S. forces faced being completely routed. Robert Citino contends that perhaps the key takeaway from the Korean War, was the importance of well trained and effective infantry.¹¹⁴ The emphasis of highly trained and professional infantry is a key aspect of the Wehrmacht's success during World War II, inflicting a 3-to-2 casualty ratio throughout most of the war. This disparity was largely the result of German stress on Auftragstaktik, or mission-oriented tactics. This mission-oriented approach gave senior officers considerable freedom to act on their own initiative to achieve a mission's goal, rather than following detailed specific orders.¹¹⁵ That, of course, assumes well-trained junior officers and infantry who understand both the intent and limitations of an order, and have the intrinsic motivation to carry them out. As a war with the Soviet Union appeared almost inevitable during the 1950s and 1960s, the United States could not afford more operational mishaps like what occurred during the Korean war.

While the stakes remained high between the United States and the Soviet Union into the 1960s and 1970s, an all-out conventional war between the superpowers never occurred. Instead, the United States found itself in another limited war of containment in Southeast Asia. Much like

¹¹³ Citino, *Blitzkrieg to Desert Storm*, 145.

¹¹⁴ *Ibid.*, 148-149.

¹¹⁵ Travis Dupuy, *A Genius for War: The German Army and General Staff, 1807-1945* (Garden City, NY: Military Book Club, 2002), 10. <https://read.amazon.com/?asin=B014500W80>

the Korean War the United States entered Vietnam to stop the spread of Communism. Vietnam was also an operational challenge for the U.S. military, as President Johnson's commitment to defend South Vietnam was contradicted by the initially limited deployment of manpower and resources into the conflict.¹¹⁶ The nature of warfare in Vietnam also proved a daunting challenge for U.S. Army doctrine. By now, the American army was built to fight immense battles, presumably against the Soviet Union, supported by Combined Arms firepower from fleets of tanks and aircraft. In Vietnam they found themselves fighting guerillas that required light infantry to patrol the dense jungles of Vietnam with the only reliable fire support being mortars.¹¹⁷ As a result, the war played out as a grinding war of attrition that eventually ended with the United States pulling out of the country in 1973. The jungle terrain of the country and the guerilla fighting style of the Viet Cong leveled the playing field against the technologically superior American forces.

The Vietnam war is largely remembered as a disaster for the U.S. military. U.S. Army Colonel David Hackworth recalls, "I felt we sent an army to Vietnam that was not prepared to fight the war. I felt that we did not understand the nature of the war in the military."¹¹⁸ Geoffrey Sloan also points out that on top of operational blunders of the military, the trauma of Vietnam created a crisis of confidence between the military, the public, congress, and the executive branch.¹¹⁹ While there were indisputable shortcomings during the war, there were also some critical operational developments. One major technological breakthrough was the utilization of helicopter-borne assault forces. Designed to go anywhere and hit any objective without having to

¹¹⁶ Gaddis, *Cold War*, 132-133.

¹¹⁷ Citino, *Blitzkrieg to Desert Storm*, 229.

¹¹⁸ Sloan, "Doctrine," 253.

¹¹⁹ *Ibid.*, 253.

secure flanks, helicopter assaults became crucial to offensive maneuvers.¹²⁰ One striking example of the offensive potential of helicopter assaults is Operation Pegasus during March of 1968. As U.S. Marines were trapped fighting in the city of Khe Sanh, the United States launched a daring offensive to breakthrough to the marines. Using Combined Arms Theory principles, the 1st Calvary Division launched airmobile assaults via helicopter supplemented by rockets, artillery, and aircraft. The operation had stunning success as American forces secured the perimeter around Khe Sanh and reopened supply lines to the city in record time with low amounts of casualties.¹²¹ The successful employment of helicopter-borne assaults to relieve the encircled marines at Khe Sanh was strikingly similar to the Wehrmacht's encirclement operations studied by the Army Historical Division. Relief of encircled troops via air support proved to be much more successful with the integration of the helicopter.

1973 was the year of a crucial crossroads in American military doctrine. The stalemate ending of Korea and the defeat in Vietnam resulted in the U.S. military seeking reforms. Almost immediately after the ceasefire between the Americans and the North Vietnamese in January 1973, the U.S. military established the Training and Doctrine Command (TRADOC). Initially under the command of General William De Puy, the most pressing matter addressed was how the United States could apply its tremendous modern firepower on the battlefield to its own advantage.¹²² The same year the United States ended its conscription program, instead opting to build an all-volunteer military force that was professionally trained.¹²³ The development of a smaller volunteer based and professionally trained military force is comparable to the small highly trained force General von Seeckt developed in Germany during the 1920s. However, this

¹²⁰ Ibid., 237.

¹²¹ Ibid., 253-254.

¹²² Ibid.

¹²³ Gallo, "Understanding Doctrinal Change," 142.

is not the only evidence of a fighting force influence by the Wehrmacht. Even though Du Puy was one of the leading U.S. commanders during the Vietnam war, he drew on his experiences as an officer in the European theater during World War Two. Du Puy was largely struck by the unrealistic training of U.S. Army soldiers that left them unprepared for the battlefield in comparison with the tactical excellence of the German Army.¹²⁴

The influence of the Wehrmacht and Blitzkrieg is clear on Du Puy and TRADOC. The result of their discussions recognized the importance of operational-level warfare. No longer did U.S. military planners cling to the idea that overwhelming force and firepower could grind down the enemy as they had in previous wars, they now recognized that there was an art to handling the echelons above division.¹²⁵ The recognition of war as an art is perhaps a tip of the hat to the Wehrmacht's *Truppenführung* doctrine during World War Two, with its first bullet point describing war as an art, depending on free creative activity.¹²⁶ Du Puy also drew on the success of the Israeli army during the “Six Day War” war in June 1967 and the Yom Kippur War in 1973. In both cases Israeli forces were outnumbered against an invading coalition force led by Egypt and Syria. During the “Six Day War” in 1967 Israeli Defense Forces (IDF) launched a surprise attack against Egyptian and Syrian forces. Like the *Luftwaffe* during the early Blitzkrieg campaigns of France and Operation Barbarossa, the Israeli air forces completely wrecked the Arab coalition's air forces within a few hours. At Sinai, an IDF armored assault crashed into advancing Egyptian forces from the front and flanks supported by overwhelming firepower from aircraft, the result was a disastrous rout of Egyptian forces.¹²⁷ The Yom Kippur War also impressed Du Puy as once again the IDF displayed a masterful display of modern Combined

¹²⁴ Sloan, “Doctrine,” 254.

¹²⁵ Citino, *Blitzkrieg to Desert Storm*, 255.

¹²⁶ *Truppenführung*, 130.

¹²⁷ Citino, *Blitzkrieg to Desert Storm*, 169-171.

Arms Theory and achieved results with limited casualties. Historians Geoffrey Sloan, Andrew Gallo, and Robert Citino recognize that the timing of these conflicts was crucial to U.S. doctrine in the 1970s and 1980s, as the IDF's strategic position of being outmanned and outgunned resembled what a Soviet invasion of Central Europe might look like.¹²⁸

Under Dupuy's leadership, the U.S. army underwent significant doctrinal changes. In 1976, the *FM 100-5 Extended Battle*, or "active defense" doctrine fundamentally changed the Americans tactical doctrine of static defense. Active defense instead called on U.S. commanders to move their units and rapidly apply force at key points on the battlefield. The design of this tactical doctrine intended to give U.S. army forces a mobile defense capable of winning a battle against numerically superior Warsaw Pact troops.¹²⁹ Du Puy and other TRADOC leaders believed the defensive approach of the active-defense doctrine gave the Americans the ability to fight outnumbered and win.¹³⁰ The employment of Active-Defense doctrine indicates a direct connection with the German Active-Defense doctrine on the Eastern Front during the second half of the war. It also perhaps indicates the recognition by U.S. military commanders of the similar strategic positions of the NATO allies in central Europe and the Wehrmacht during World War Two. The U.S. Department of Defense figures from the 1980s support this claim. NATO was outnumbered in almost every category: 42,500 to 13,000 in main battle tanks, 31,500 to 10,750 in artillery and mortars, 78,800 to 8,100 antitank weapons, and finally 7,240 to 2,795 tactical aircraft.¹³¹

Despite the significant developments gained by Du Puy's leadership, TRADOC did not stop their revisions to American military doctrine with the Active Defense doctrine. TRADOC

¹²⁸ Ibid., 256-257; Gallo, *Understanding Doctrinal Change*, 146; Sloan, "Doctrine," 254.

¹²⁹ Sloan, "Doctrine," 254.

¹³⁰ Gallo, "Understanding Doctrinal Change," 148.

¹³¹ Citino, *Blitzkrieg to Desert Storm*, 230.

continued their brainstorming into the 1980s, when several military thinkers found problem with the Active Defense doctrine. One major issue identified in the Active Defense Doctrine was that for it to work, it depended on the enemy achieving a breakthrough at one point in the defensive line in order for a concentrated counterattack to be launched against the enemy forces. It also over emphasized the priority of winning the first battle, an approach that could cause the army to ignore responses to situations that might be fundamentally different.¹³² As a result, a new doctrine was developed in 1982, AirLand Battle. The name emphasizes the primary purpose of the doctrine, an integration of the three-dimensional nature of modern battle, infantry, armor, and air warfare.¹³³ An important aspect of this doctrine was the integration of newer technology in American military doctrine. Like the Germans during the interwar period, the Americans desired to use new warfighting technology in innovative fashion to gain an advantage over their enemies. Andrew Gallo identifies a “big-five” of these technologies, being the Abrams main battle tank, the Bradley fighting vehicle, the Apache attack helicopter, the Black Hawk utility helicopter, and the Patriot air defense system.¹³⁴

While there is no direct mention of Blitzkrieg within AirLand Battle’s official publication, the similarities are obvious. The primary functions of the doctrine indicate a shift from traditional American doctrine, with a shift to a focus on operational focus involving the rapid movement of man and materials.¹³⁵ AirLand Battle in many ways resembles the principles laid out in the Wehrmacht's Truppenführung manual that were vital to the early German success in World War II. In the field manual describing the fundamentals of army operations, American

¹³² Gallo, “Understanding Doctrinal Change,” 163.

¹³³ Douglas W. Skinner, *Airland Battle Doctrine* (Alexandria, VA: Center for Naval Analyses, 1988), 1.

¹³⁴ Gallo, “Understanding Doctrinal Change,” 156-157.

¹³⁵ Skinner, *Airland Battle*, 1.

officers are encouraged to take initiative, use agility and maneuverability, study historical examples, and rely on close coordination with airpower for support. The manual also references missions-based tactics encouraging officers to act independently within the framework of the higher commander's intent.¹³⁶ The identical language used in AirLand Battle's doctrine and the references to missions-based tactics are clear evidence of the United States desire to emulate the success of Wehrmacht's early Blitzkrieg campaigns. The reasoning behind this dramatic change in doctrine was the Americans recognition of the similar strategic situation to the Wehrmacht in Central Europe and their admiration for Blitzkrieg's early success.

Some historians have generally agreed that AirLand Battle was an attempt to recreate and embody the success of the Wehrmacht's Blitzkrieg campaigns. A thesis written by James Curry, a masters student at the University of Western Australia, in 2015 examines how the United States attempted to emulate Blitzkrieg with the development of Airland Battle. Curry describes how in many ways, Airland Battle was a major break from traditional US military doctrine that relied on numerical superiority, firepower, and brute force.¹³⁷ A "Wehrmacht mystique" existed within the U.S. army during the late Cold War, one in which the German army of World War Two was viewed not only as a highly effective fighting force, but one worthy of emulating through American military doctrine.¹³⁸ Curry provides further evidence of this "Wehrmacht mystique" within the U.S. military by citing the numerous articles written in the 1970s and 1980s in the U.S. military's official journal, *Military Review*. There were dozens of articles written relating to

¹³⁶ Mads Brevick, "U.S. Army Field Manual 110-5," Chapter Two: Fundamentals of Army Operations. Accessed May 6, 2020. [U.S. Army Field Manual 100-5: Operations](http://www.digitalattic.org/home/war/fm1005/) <http://www.digitalattic.org/home/war/fm1005/>.

¹³⁷ Curry, "From Blitzkrieg to Airland Battle," 3.

¹³⁸ *Ibid.*, 5.

the Wehrmacht from 1965 to 1995 and no less than sixteen were published that were devoted to the Wehrmacht and its doctrine after the publication of Airland Battle in 1982.¹³⁹

Curry's analysis of the "Wehrmacht mystique" and his review of *Military Review* articles are not the only evidence of the American desire to emulate Blitzkrieg. Further evidence of the American admiration includes studies conducted by American military officers themselves. In 1991, United States Marine Corps officer, Major Marvin Knorr, wrote a thesis analyzing the development of German doctrine from 1832-1945 and its application of supporting arms. Major Knorr's tone towards the Wehrmacht and Blitzkrieg is overwhelmingly positive, citing the operational superiority of the Germans during the French campaign.¹⁴⁰ Knorr concludes that while the Wehrmacht eventually broke down against the sheer might of the Allies, the Germans displayed admirable operational success throughout the war. He attributes the German Army's effectiveness to the following: its style of command and control and its offensive spirit, its experience during the interwar period, its training and leadership, the cohesiveness between branches aided by communication, and the initiative that was built into its officer corps.¹⁴¹ Major Knorr's conclusions are a clear example of how American officers admired the operational superiority of the Wehrmacht. Citing the invasion of France as the peak of operational success during the war, we can see the admiration for Blitzkrieg tactics.

Luke O'Brien's article, "The Doctrine of Military Change: How The US Army Evolves," acknowledges the role of incubators within TRADOC (United States Army Training and Doctrine Command) and how they impacted the development of Air-Land Battle. Incubators are smaller subunits that exist outside of military bureaucracy, giving them the freedom to examine

¹³⁹ Ibid., 28.

¹⁴⁰ Knorr, "Development of German Doctrine," 7.

¹⁴¹ Ibid., 165.

future trends and problems and devise possible solutions. These incubators create networks that provide intellectual forms for military leaders, and provide a platform for debate, critiques, and improvements for military doctrine.¹⁴² An example of one of these forums is the analysis of the Wehrmacht in the *Military Review* articles mentioned by Curry. During the 1980s, these incubators relentlessly focused on developing a doctrine capable of countering the Soviets in the event of a European ground war. O'Brien also reinforces the point that American incubators desired to adopt a Blitzkrieg like doctrine, using Combined Arms Theory, maneuverability, and mass of firepower at decisive points. O'Brien also demonstrates the role these incubators played in the further development of Air-Land Battle. Citing the further studies conducted at Fort Leavenworth. These studies and their conclusions were then printed in publications such as *Infantry* or *Armor* magazine.¹⁴³ In 1981, some of these theories were put into practice with the opening of the National Training Center (NTC) in Ft. Irwin California. Designed to give U.S. forces the opportunity to prepare for the Soviet threat, the camp came with an opposition force composed of armored Calvary built to resemble the Soviet army.¹⁴⁴

Though the United States and NATO prepared relentlessly for an all-out war with the Soviet Union in Europe, the colossal struggle never materialized. By 1991, the Soviet Union essentially collapsed from within, marking an end to the decades long Cold War. The United States had prepared for over forty years for a confrontation in Europe, and in the meantime had adopted Blitzkrieg like tactics with the development of the AirLand Battle doctrine. Though the collapse of the Soviet Union meant the end of one of the most bitter rivalries in modern history,

¹⁴² Luke O'Brien, "The Doctrine of Military Change: How the U.S. Army Evolves." *War on the Rocks*. Accessed March 22, 2021. <https://warontherocks.com/2016/07/the-doctrine-of-military-change-how-the-us-army-evolves/>.

¹⁴³ Ibid.

¹⁴⁴ Citino, *Blitzkrieg to Desert Storm*, 271.

it did not ensure a lasting peace. Instead, the United States found itself intervening against the Iraqi regime of Saddam Hussein following his August 1990 decision to invade Kuwait. The conflict gave the United States military a chance to use AirLand Battle in an actual conflict instead of wargames. As a result, Operation Desert Storm unfolded as a modern-day Blitzkrieg campaign, with the United States achieving one of its most successful military campaigns in history. In the next few paragraphs, I will demonstrate how the United States operational success against Iraq embodied Blitzkrieg and led to a decisive victory resembling the Wehrmacht's invasion of France in 1940.

Historians largely agree that Operation Desert Storm contained all the elements of a successful modern Blitzkrieg. Historian Omer Bartov declared that the American victory over Saddam's forces contained all the elements of a 1991-style Blitzkrieg citing the minimal casualties, quick results, and massive destruction of the enemy that was achieved.¹⁴⁵ James Curry also agrees that the success of Operation Desert Storm is comparable to the 1940 invasion of France, citing the U.S. Army's implementation of Air-Land Battle as a display of "lightning war"¹⁴⁶ Robert Citino also alludes to Operation Desert Storm as a modern Blitzkrieg, and even declares the operation as the most successful in U.S. military history.¹⁴⁷ United States military commanders also praised the success of Operation Desert Storm and alluded to the influence of Blitzkrieg. United States Air Force General Merrill McPeak praised the execution of Combined Arms Theory, declaring "This was the first war in history in which air power was used to defeat ground forces."¹⁴⁸ These conclusions from a range of historians and military minds alike

¹⁴⁵ Curry, "From Blitzkrieg to Airland Battle," 2.

¹⁴⁶ Ibid., 152.

¹⁴⁷ Citino, *Blitzkrieg to Desert Storm*, 41.

¹⁴⁸ Charles Rivers editors, *The Gulf War: The History and Legacy of Operation Desert Shield and Operation Desert Storm* (Columbia, SC: Charles Rivers Editors, 2020).

provide a solid foundation of how the American military executed a modern-day Blitzkrieg in 1991.

The origins of the Gulf war follow much the same pattern as Hitler's decision to aggressively expand in Europe. After decades of fighting Iran, the Ba'ath regime led by Saddam Hussein in Iraq was on the brink of economic collapse. With the nationalistic regime now facing growing opposition in their own country, Saddam made the decision to invade his small neighbor to the southeast, Kuwait. Much of this decision stemmed from longstanding land disputes and Saddam's desire to secure oil.¹⁴⁹ Saddam's regime was in a peculiar position geopolitically. Remaining neutral throughout the Cold War and positioned in the strategic theater of the Middle East, Iraq spent much of the latter stages of the Cold War era battling with its neighbor Iran. Believing that the United States would not intervene directly, and that the Soviet Union was too weak to respond, Saddam thought he could take Kuwait unopposed. Using his veteran Republican Guard, Saddam's forces crossed the Iraq Kuwait border on August 2, 1991. The initial force consisted of two armored divisions supported by Special Forces using heliborne landings to secure the roads leading up to Kuwait City. On the second day three more Iraqi armored divisions poured into the country and the outnumbered Kuwait military was quickly overrun. With Saudi oilfields now within striking distance of Saddam's forces, the United States was called upon to intervene.¹⁵⁰

The crisis in the Middle East was a unique challenge for the United States military. Since the Vietnam war, the United States had largely avoided any direct and committed military interventions. Though they had developed the doctrine of AirLand Battle in the 1980s, they had

¹⁴⁹ E.R. Hooton and Tom Cooper, *Desert Storm*. Volume 1: *The Iraqi Invasion of Kuwait & Operation Desert Shield 1990-1991* (Warwick, UK: Helion and Company, 2019), 14-17.

¹⁵⁰ Citino, *Blitzkrieg to Desert Storm*, 275-276.

not demonstrated any of its principles in a live war. The potential conflict with Iraq was also significant as it gave the United States an opportunity to fight against a Soviet style military. E.R. Horton and Tom Copper's analysis of the Gulf war, *Desert Storm: The Iraqi Invasion of Kuwait and Operation Desert Shield 1991*, shows how the Iraqi army was armed with predominantly Soviet weapons. This included over 1,000 T-72 tanks, around 200 BMPs, 35 152MM 2SW Akatsiya self-propelled artillery, and Mig 25 and SU-20 fighter jets.¹⁵¹ The calls for assistance by Saudi Arabia and other Arab nations also meant the United States had a massive logistical problem should they decide to intervene. American military presence in the Middle East was relatively small at this time. However, with the Cold War winding down, the United States and its NATO allies found the flexibility needed to move forces from Central Europe into the Middle East.¹⁵²

The decision to intervene military against Saddam's regime by President Bush and other NATO leaders led to a major logistical undertaking, an area that was lacking for the Wehrmacht during World War Two. The initial goal of the U.S. forces was to protect Saudi Arabian interests and build up a massive military force in the region, hence the name Operation Desert Shield. U.S. Air Force squadrons begin arriving within the first thirty hours of the orders to deploy, and by the end of October 1991, over 500,000 personnel and roughly 3.7 million tons of supplies were moved into the region. While the buildup of forces unfolded, Revolutionary Guard forces began fortifying their positions in Kuwait. On the flip side, American theater commander General Norman Schwarzkopf began drawing battleplans. The United States intended to fight a battle of maneuver warfare that in more ways than one resembled the 1940 invasion of France.¹⁵³

¹⁵¹ Horton and Cooper, *Desert Storm*, 49-50.

¹⁵² Citino, *Blitzkrieg to Desert Storm*, 276.

¹⁵³ *Ibid.*, 278.

The battleplan called for deception and maneuverability that would catch the Iraqi forces off guard. The overall goal of the operation was not just to push back Saddam's forces, but absolutely annihilate them using encirclement maneuvers supported by close coordination with the air force.¹⁵⁴

Like the German invasion of France, the plan was largely reliant on deception of the Iraqi forces. The American forces wanted Saddam to believe the main attack was coming at his fortified positions on the Saudi-Kuwaiti border, while in reality the main attack was to come against a more lightly defended position to the West of the heavily fortified Iraqi lines. These positions were more lightly defended due to the "Southern Desert," an area of land that Iraqi military commanders assumed the U.S. forces would not dare cross. Much the same as the Germans utilized the Ardennes forest, the Americans surprised their foes by doing the unthinkable.¹⁵⁵ General Schwarzkopf referred to the maneuver as a "Hail Mary" play. While U.S. and other coalition forces in the center kept the fortified Revolutionary Guard forces in place, an armored thrust crossed the Southern Desert, quickly overrunning the lightly fortified positions to the West. Once they had broken through, they crashed into the right flank of the Revolutionary Guard forces completely by surprise.¹⁵⁶ Like the Germans during the 1940 French campaign, the Americans decision to attack at an unsuspecting point on the battlefield and their outflanking of heavily fortified Iraqi positions worked with shocking success.

The display of maneuver warfare and deception were not the only display examples of a modern Blitzkrieg. The United States military also demonstrated a superb integration of Combined Arms Theory via helicopters and airplanes. While the main armored thrust crashed

¹⁵⁴ Ibid., 280.

¹⁵⁵ Citino, *Blitzkrieg to Desert Storm*, 280; Lowry, *Gulf War Chronicles*, 1023.

¹⁵⁶ Citino, *Blitzkrieg to Desert Storm*, 280-281.

into the Iraqi forces, U.S. military forces using heliborne attacks established forward bases all along Highway 8, the main road leading back into Iraq from Kuwait. The American air force also played a crucial role similar to how the Luftwaffe acted in the invasion of France. The beginning role of the air force can be broke down into three steps: First, the destruction of strategic positions in Iraq, second was suppression of Iraqi air defense systems, finally was came the coordination of close ground support with U.S. forces in Kuwait.¹⁵⁷ The results were devastating just as the Luftwaffe's was during the invasion of France and Operation Barbarossa. Almost immediately, the U.S. air force's hindered the Iraq's ability to conduct war by knocking out key strategic bases such as the National Air Defense Center in Baghdad. American planes also destroyed Iraqi planes on the ground and within a week had essentially wiped out the Saddam's air force. With Iraqi air defenses and warplanes effectively destroyed, NATO air forces now turned their attention to the destruction of Iraqi ground forces.¹⁵⁸ The success of the NATO forces was operational air war, a term coined by the Luftwaffe in 1925, carried out to perfection.¹⁵⁹

Like the French during the opening phases of Fall Gelb, the Iraqi forces found themselves in total disarray. The stunning success and speed of the operation shocked even American military planners, as the campaign lasted only one hundred hours. By gaining superiority of the air and out maneuvering the Revolutionary Guards, U.S. forces annihilated the encircled Iraqi forces.¹⁶⁰ The climax of the battle came on February 26, as Iraqi forces retreated from Kuwait City. Along the Basra Highway leading out of the city, columns of defenseless Iraqi tanks, troop transports, and other vehicles were annihilated by U.S. air power. The spectacle of the

¹⁵⁷ Ibid., 281-282.

¹⁵⁸ Lowry, *Gulf War Chronicles*, 1023.

¹⁵⁹ Citino, *Blitzkrieg to Desert Storm*, 283.

¹⁶⁰ Ibid., 284.

dominance of airpower was rightfully named the “Highway of Death,” as thousands of Iraqi soldiers perished in the onslaught.¹⁶¹ After decades of trial and error, the United States had finally achieved a decisive victory in one bold operation. As the Germans in 1940 had succeeded in rendering France’s Maginot Line useless with maneuverability, the United States had done the same by crossing the Southern Desert and bypassing the Iraqi fortified positions. Using helicopter assaults and devastating airstrikes, the United States completely disoriented the Iraqi forces and with close coordination with ground forces, completely destroyed a heavily armed military force.

In conclusion, this chapter shows the evolution of American military doctrine throughout the Cold War and into Operation Desert Storm. This evolution was heavily influenced by the German success at Blitzkrieg during the early phases of World War Two. The United States military’s desire to learn from and emulate Blitzkrieg is supported by evidence such as the U.S. Army Historical Divisions studies, studies conducted by American military officers such as Major Knorr and General Du Puy, and the scores of articles written in *Military Review* during the 1970s and 1980s. While these desires stemmed from an admiration of the operational success of the Wehrmacht, I have also shown how the context of the Cold War influenced the evolution. Believing that a war with the Soviets was inevitable and recognizing the similar strategic position to the Wehrmacht in World War Two, the United States opted to emulate Blitzkrieg. Instead of an all-out war with the Soviets, the United States instead fought limited wars of containment on the Korean Peninsula and in Vietnam. The fruitless ending to these conflicts brought United States military leaders back to the drawing board. Under the leadership of General Du Puy and the TRADOC, the United States developed the doctrine of

¹⁶¹ Charles Rivers editors, *The Gulf War*, 32.

Air-Land Battle in the 1980s. As shown in this chapter, Air-Land Battle was almost identical to the Wehrmacht's Truppenführung doctrine used during World War Two. During the Gulf war in 1991, these Blitzkrieg maneuver warfare principles were used to achieve a decisive victory with minimal casualties. The success of Operation Desert Storm led to a breakthrough in U.S. military thinking, decisive victory is obtainable by a war of movement on the operational level.¹⁶²

¹⁶² Citino, *Blitzkrieg to Desert Storm*, 289.

CHAPTER 4. CONCLUSION

This project argues that World War II and Cold War doctrine was heavily influenced by the early success of the Wehrmacht's Blitzkrieg, particularly the invasion of France and the opening phases of Operation Barbarossa. Looking at specific developments from the 1940s all the way through the 1990s, there is significant evidence the United States military desired to emulate a successful Blitzkrieg style campaign. During World War II, the United States committed its industrial might to create a predominantly motorized fighting force. The U.S. Army Historical Division conducted interviews and studies of former Wehrmacht officers from 1945-1961, focusing heavily on the Blitzkrieg campaigns in Poland, France and particularly Russia. The development of Air-land Battle in the 1980s was essentially an English translated version of the German Truppenführung. These examples show how the 20th century American military was heavily influenced by a foreign power and a former enemy in the Germans.

The trend of foreign concepts of war influencing American military doctrine is not isolated to World War II. During World War I, American military doctrine was heavily influenced by their French allies. The French emphasized doctrine of systematic approach of finding, pinning, and destroying the enemy with overwhelming firepower. Robert Citino argues that during the last year of the war in 1918, the United States successfully employed this strategy against the war weary Imperial German forces. During the Interwar period the United States officially adopted this approach with the 1923 F.S.R (Field Service Regulation) essentially being a translated version of the French manual of 1921. This doctrine remained in place in the United States through the early phases of World War II.¹⁶³ Despite the Allied victory over Nazi Germany, the French style of attrition warfare with massive firepower as proven obsolete in

¹⁶³ Citino, *Blitzkrieg to Desert Storm*, 228.

comparison to German's maneuver style Blitzkrieg campaigns. The 1940 invasion of France resulted in a swift German victory that shocked the world, and arguably changed the nature of warfare forever.

In the first chapter I discussed the origins of the Blitzkrieg campaign and showed how the Germans developed a doctrine of mobile warfare during the interwar period. In reality, there was nothing significantly innovative about the concept of Blitzkrieg doctrine, and its success was highly exaggerated by both the Allies and the Germans. In fact, the term Blitzkrieg is absent from any official German military doctrine. Rather than developing an entirely new concept of warfare, interwar German military leaders, such as Hans von Seeckt and Heinz Guderian, integrated modern technology into the traditional nineteenth century approach of maneuver warfare. This approach emphasized maneuverability, intuitive leadership, application of force at key points of contention, and mass encirclements of enemy forces to achieve a decisive victory. The nature of static warfare and development of new technologies such as the tank, airplane, and machine guns created setbacks for maneuver warfare, as militaries on both sides struggled with how to integrate these developments. The German forces also recognized the issue of information overload and growing scope of armies and operations leading to indecisiveness on the front lines.¹⁶⁴

During the interwar period, General von Seeckt addressed these issues and formed the basis for what would become known as Blitzkrieg. Seeking to create a small professional fighting force capable of winning short decisive victories, the interwar German army developed *Truppenführung*. While there are no direct references to Blitzkrieg within the doctrine, the

¹⁶⁴ Ibid., 15-16.

principles laid out are those associated with the success of lightning war. Principles laid out within Truppenführung combined with modern Combined Arms Theory were the formula for success during the Wehrmacht's early Blitzkrieg campaigns. During the 1939 invasion of Poland, the 1940 invasion of France, and the initial invasion of the Soviet Union in 1941, the shocking speed and success of the Wehrmacht and Luftwaffe set the pace for the rest of the war. The other major warring nations, chiefly the United States and the Soviet Union, knew the path to victory lied in committing to mobilized warfare and integrated Combined Arms Theory. While the United States successfully out produced the Germans in tanks and airplanes, they did not achieve the operational success that the Germans obtained in the early phases of the war.

Almost immediately after the conclusion of World War II, another war, this one between the United States and the Soviet Union, appeared inevitable. Seeking to gain any sort of advantage over their potential adversaries, the Americans quickly employed former Wehrmacht officers in an analytical capacity. By examining the studies of the Wehrmacht conducted by the United States Army Historical Division, we can see the emphasis on learning from the Wehrmacht's early Blitzkrieg campaigns successes. As the Cold War intensified throughout the 1950s and 1960s, the American military leaders recognized the similarities between their strategic position in Central and Western Europe and the Germans on the Eastern Front from 1943-1944. This premise is demonstrated by the shift in focus of the Army Historical Divisions studies in volume seventeen, which focuses heavily on the German execution of defensive warfare against the Soviets. Concepts such as counter attacking armored offensives, breaking through envelopments, and coordination with air forces all had an impact on the American's and NATO's course of action in the event of an all-out war in Europe.

Instead of a traditional war breaking out in Central and Western Europe, the Cold War instead evolved into smaller limited wars of containment. In Korea and Vietnam, the technologically superior United States' armed forces were largely ineffective against enemy forces that relied heavily on light infantry and insurgent tactics. The results of both wars left the American military seeking major reforms. Under General William Dupuy the American military began to shift away from their traditional approach of mass of firepower against the enemy. Citing the effectiveness of the Wehrmacht during World War Two and drawing from the lessons of "Active Defense" in volume seventeen of the German military studies, Dupuy and TRACDOC created the doctrine of "Extended Battle" designed to counter a Warsaw pack armored offensive in Europe. The doctrine also emphasized the importance of Combined Arms theory, and integrated new technologies like the helicopter and fighter jets into the doctrine. Another crucial development in the post-Vietnam era was the shift to create a more highly trained professional infantry forces, comparable to the Wehrmacht's development in the inter-war era.

Eventually, Extended Battle doctrine evolved into AirLand battle during the 1980s. While there is no direct reference to the Wehrmacht or Blitzkrieg within the doctrine, the connections are clear. AirLand Battle called for interservice cooperation between ground and land forces and heavily emphasized maneuverability. Officers were also encouraged to use a mission-based tactics approach, emphasizing soldiers to know the objective of the operation and to use instincts and creativity to achieve its goals. By examining AirLand Battle, the connections to the Wehrmacht's Truppenführung are obvious. American military planners anticipated AirLand Battle would be implemented against the Soviets in the event of an all-out war in Europe. At the National Training Center (NTC) in Ft. Irwin California, the American military

prepared rigorously for a war with the Soviets using war game scenarios. AirLand Battle is not the only indication of an admiration of the Wehrmacht by American military planners.

Numerous articles written in *Military Review* during the 1980s and studies such as that by Major Marvin Knorr also show the fascination with the Wehrmacht and Blitzkrieg tactics. At the center of this fascination was the anticipated war with the Soviet Union.

The war that the United States prepared for from 1946-1990 never came to pass. The Soviet Union collapsed in 1991, and the threat of war became unlikely under new Soviet leadership. Instead, the next war the United States found itself in was with Saddam Hussein's Iraq following the invasion of Kuwait. Operation Desert Storm in 1991 was perhaps the climax of the decades of trial and error the United States experienced during the Cold War. The United States and their NATO allies executed an almost flawless offensive operation against the heavily entrenched Iraqi forces. Using aggressive maneuverability and seamless interservice cooperation between ground and air forces, the American coalition achieved in destroying the fighting ability with their enemy with rapid results and minimal loss of life. Operation Desert Storm was executed in just under one hundred days, almost mimicking the success of the Wehrmacht's early Blitzkrieg campaigns during World War II. After decades of searching for the formula for decisive battlefield victory, the United States finally achieved their own modern Blitzkrieg campaign.

Perhaps today, the United States military is at a crossroads once again. After the September 11th attacks on the World Trade Center in 2001, the United States made another incursion into the Middle East, a conflict that is still on going to this day. The insurgent style warfare and complex battlefield of the current situation has left the United States in a bit of a quagmire in the region, one that seems never ending at the moment. At the same time, the

growing power of China and a resurgent Russia also offer challenges. The rise of the digital age and the overflow of information perhaps has created the same problems that German military planners recognized during the World War I era. What is clear and what this project argues is that the American military was heavily influenced by the Wehrmacht and Blitzkrieg over the course of the Cold War era. After decades of trial and error, the United States finally grasped operational superiority by employing Wehrmacht and Blitzkrieg. With the execution of Operation Desert Storm, the quest for decisive victory was complete.

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