

**FALL GELB & THE GERMAN BLITZKRIEG OF 1940:  
OPERATIONAL ART?**

**A MONOGRAPH  
BY  
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Field Artillery**



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## Abstract

**Fall Gelb & the German Blitzkrieg of 1940: Operational Art?** by Major Rick S. Richardson, U.S. Army, 51 pages.

The objective of this study is to determine if the German "blitzkrieg" and Fall Gelb of 1940 were an expression of operational art. Despite the mythology surrounding Fall Gelb, the campaign does not constitute a major breakthrough in operational art by the Germans. Fall Gelb was not an expression of operational art. This conclusion is based upon an analysis using the approaches posed by U.S. Army and joint doctrine, Dr. James Schneider and Dr. Shimon Naveh.

The purpose of this study is to examine more closely what is meant by "operational art" and to use those contemporary insights to reexamine German military operations in France in May 1940, Fall Gelb. Fall Gelb was chosen because it is a campaign that is frequently studied and often used and abused to illustrate various points relating to military operations. The study of the Fall Gelb campaign offers a glimpse of past operations through the lens of contemporary thought. That study provides the contemporary military professional an opportunity to improve his understanding of operational art through the study of a historical campaign.

Fall Gelb must be analyzed using criteria derived from a modern understanding of operational art to objectively assess the significance of Fall Gelb. There are three distinctive approaches to operational art. One way to approach the problem is to use contemporary doctrine as a yardstick. Contemporary doctrine approaches the issue by using simple definitions and lists to describe the essential elements of operational art. Another approach is that taken by Dr. James Schneider from the U.S. Army School of Advanced Military Studies. Schneider's approach seeks to describe the phenomena associated with the practice of Operational Art. Schneider breaks down operational art into key attributes necessary for the practice of Operational Art. A third approach to the issue is that used by Dr. Shimon Naveh, an Israeli military theorist. Naveh's approach focuses on describing the cognitive process he identifies as operational art. These approaches to the subject of operational art offer three different standards by which to measure German military operations. The three approaches share common elements and can be used to produce a set of common criteria for the analysis of Fall Gelb.

German operations in 1940 reveal little insight into the elements of operational art. The Germans failed to use a unified and holistic approach in their design, execution, and sustainment of campaigns mostly due to their lack of political-strategic cognition. Hitler's overpowering influence in the operational and tactical levels of war severely limited the German military's operational vision, which is a prerequisite for operational art. Also, the German planners in the OKH and OKW failed to identify a clear sequence of tactical and operational objectives to achieve strategic goals and thus did not practice operational art. The German Officer Corps did not have a "broad and universal" theory of blitzkrieg. There was no consensus within the military as to the operational substance of blitzkrieg. The German's maneuvers lacked industrious relationships between strategic, operational, and tactical actions. The operational design was ambiguous because the planners could see no farther than the tactical success. The High Command hoped that unfolding events would guide their thought for the second phase of Fall Gelb.

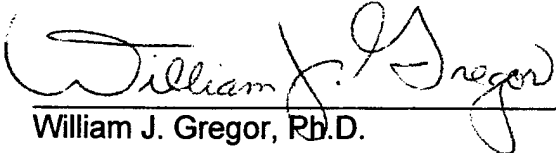
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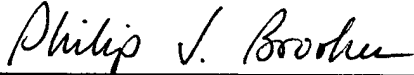
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# Chapter 1

## *Introduction*

*Warfare is the greatest affair of state, the basis of life and death, the way to survival or extinction. It must be thoroughly pondered and analyzed.*<sup>1</sup>

Sun Tzu

### **Emergence of Operational Art**

The concept of operational art arose during the late 1800s. The early military theorists Clausewitz and Jomini did not use the term. In fact, the term carried no special significance prior to the twentieth century. When it was used the term referred to the organization of supplies and marches.<sup>2</sup> The history of operational art reveals that it emerged as a consequence of changes in classical strategy that were brought about through the evolution of warfare. This evolution was the product of a series of changes to the fundamental nature of warfare in latter part of the nineteenth century. Advances in weapon lethality, transportation, communications, and the raising and organization of field armies altered the conduct of war. Those advances forced adaptation to both the enhanced military capabilities and the complexity born of the new changes.

In a paper titled *Vulcan's Anvil: The American Civil War and the Emergence of Operational Art*, Dr. Schneider further described the specific origins of operational art. Dr. Schneider explained that classical strategy had held for hundreds of years that decisive military action occurred when armies came together in a dense mass on a single point within a theater of operations. During the American Civil war that pattern of military operations changed as a new manner of warfare emerged. Technological advances allowed armies to conduct dispersed maneuvers, which in turn expanded and emptied the battlefield. The

increased lethality of modern weapons, such as the breech-loading rifle, and quick-firing artillery, caused soldiers to disperse to avoid the effects of these weapons. This dispersion created the “empty battlefield.” The dispersion of forces combined with advanced transportation and communications means propelled the emergence of large field armies that could effectively use distributed maneuver.<sup>3</sup> Because of these changes, a gap developed between tactics which tended to produce concentric maneuver in search of a battle at a decisive point and strategy which tended to define war aims divorced from tactics. That gap in classical theory represented a large intellectual void that needed to be filled. The physical changes in the conduct of war were the prerequisites for operations at a level beyond tactics, but not quite strategy, and thus the art of linking strategy to tactics was born. The U.S. Army has labeled the art of linking strategy to tactics, operational art. The following table compares classical strategy to operational art.<sup>4</sup>

Classical Strategy	Operational Art
Maneuver to contact.	Battles and engagements begin immediately at the national borders.
Armies collide in decisive battle.	Several armies fight indecisive battles.
Logistics is a consideration only in initial phases of campaign.	The only decisive battle is the last battle of the war
Vigorous pursuit after battle.	Logistics considerations impose pauses upon operations often before pursuit can be decisive.
Campaign ends.	Wars consist of several campaigns; campaigns consist of several distinct operations; operations consist of several distinct battles and maneuvers.
Generally war is also terminated.	Operational art is strategy with the added dimension of depth.
The commander sees the entire battlefield.	The commander sees very little of the many simultaneous battles occurring.



## The Issue

Historians have spilled a large amount of ink arguing the significance of the German western campaign of 1940 and the notion of warfare labeled “blitzkrieg.” The fall of France has been used and abused to illustrate various points relating to military operations. Any study of Fall Gelb, Case Yellow, must sort out the exaggerated claims from reality in order to make an objective assessment of the significance of German operations in contemporary terms. Given all of the intellectual passion associated with studies of Fall Gelb there needs to be a framework to make an objective assessment. To make an objective assessment criteria must be established that are independent of previous portrayals of the 1940 campaign. Thus, to objectively assess the importance of the “blitzkrieg,” the blitzkrieg must be analyzed using criteria derived from a modern understanding of operational art. There are three distinctive approaches to operational art. One way to approach the problem is to use contemporary doctrine as a yardstick. Contemporary doctrine approaches the issue by using simple definitions and lists to describe the essential elements of operational art. Another approach is that taken by Dr. James Schneider from the U.S. Army School of Advanced Military Studies. Schneider’s approach seeks to describe the phenomena associated with the practice of Operational Art. Schneider breaks down operational art into key attributes necessary for the practice of Operational Art. A third approach to the issue is that used by Dr. Shimon Naveh, an Israeli military theorist. Naveh’s approach focuses on describing the cognitive process he identifies as operational art. These approaches to the subject of operational art offer three different standards by which to measure German military operations. The three approaches share common elements and can be used to produce a set of common criteria for the analysis of Fall Gelb.

The understanding of operational art is important for today's military leaders because without the linkage of tactical means to strategic ends, tactical victories may fail to achieve the nation's strategic purpose. The 1993 edition of Field Manual 100-5 *Operations* warns, "without operational art, war would be a set of disconnected engagements, with relative attrition the only measure of success or failure." This means that operational art provides a holistic or integrated approach to the military planning. This holistic approach to the problem does not stem from the tactics at the lowest level as the locus of military planning. Instead, instead this approach works from the highest strategic aims, *back* to the tactical actions. The *art* is the bending and flexing of military means to effect a designed linkage from strategy to tactics.

The reason for examining the western campaign of 1940 is to illuminate how historical events can be reinterpreted. The purpose of such an examination is not just another re-look; instead the purpose is a better understanding of contemporary doctrine and theory. Such an examination also serves to dispel the many myths surrounding the Fall Gelb campaign that have arisen over time. The more people are fascinated with myths, the less they can focus on the understanding the reality of planning military operations. The contemporary significance of such an analysis of the Fall Gelb campaign can be broken into two parts. First, what is the significance of operational art? Second, what is the value of historical study through the lens of operational art?

Foremost, what is the significance of operational art? Operational art is notable because of its recent incorporation into U.S. doctrine. Operational art is also significant because the current intense doctrinal debate within the U.S. Army arises because operational art has become more significant to military operations. One reason for such debate is that

operational art is a relatively new concept for the United States Army. The 1982 version of Field Manual 100-5 introduced the operational level of war. The 1986 update to Field Manual 100-5 further focused the Army on operational art when it revised the broad divisions of war to include military strategy, operational art, and tactics. That version defined the term operational art as “the employment of military forces to attain strategic goals in a theater or theater of operations through the design, organization and conduct of campaigns<sup>5</sup> and major operations<sup>6</sup>. The current 1993 edition of Field Manual 100-5 expanded the explanation of operational art to several pages that covered the concept in much more detail than the previous editions. The 1999 draft of Field Manual 100-5 continued that trend of expanding the width and breadth of US Army doctrine concerning operational art. Operational art was a conspicuous feature of that draft. That version devoted an entire chapter of fifty-six pages to explaining a more holistic theory of operational art.

Since “operational art” was added to the US Army’s vocabulary many soldiers have struggled to understand it. An abundance of confusion continues to surround the meaning and significance of operational art. The current draft of Field Manual 100-5 remains under significant revision; however, the concepts presented in this draft reveal the ascendance of operational art in Army doctrine. The consternation surrounding the draft is evidence that the United States Army still does not know precisely what “operational art” means. However, regardless of which definition is agreed upon in the final edition of Field Manual 100-5, the elevated prominence of operational art will surely require increased study by an expanding number of soldiers.

Given the importance of operational art in U.S. Army doctrine, how can soldiers further their understanding of operational art? A soldier can improve his understanding by

testing, evaluating, and challenging the theory of operational art through historical study. A historical study synthesizes his understanding of the theory of operational art by permitting him to reexamine historical events through the lens of operational art. The soldier achieves a better understanding of the concept following historical analysis, than is possible by studying the concept alone.

Soldiers, scholar, and private citizens have some understanding of the German blitzkrieg. Scholars have debated the significance of the blitzkrieg and whether the campaign of 1940 represented a form of operational art. Many arguments have already been made to prove either viewpoint of the controversy. This study takes a fresh look at the issue by “peeling the onion back” on the events leading up to Spring 1940 to examine the truths of blitzkrieg through the lens of current and emerging operational art theory.

## Chapter 2

### *A Theory of Operational Art*

*Military theory and history serve as the chief vehicles with which to highlight and sketch the essence of operational art.<sup>7</sup>*

Dr. James J. Schneider

#### Introduction

As previously stated, to properly analyze Fall Gelb in the context of operational art, it is necessary to determine first what is meant by “operational art.” Specifically, what are the elements of military performance that distinguish operational art from strategy and tactics. If operational art can be clearly separated from strategy and tactics, then it will be possible to assess objectively the German campaign in France in 1940. Unfortunately there is no single interpretation of the concept defined as “operational art.” There are, however, three distinctive approaches to the subject. Each approach provides a different standard but all three share common elements. Thus, from examining the three approaches, it will be possible to establish specific criteria for judging Fall Gelb. The first approach and perhaps the most obvious is current U.S. Army and joint doctrine on operational art. This is an obvious starting point because U.S. Army and joint doctrine supposedly guides U.S. military planning and, by extension, should represent a mature concept of operational art. Field Manual 100-5 defines operational art and lists the specific aspects of military performance that are the essential elements of operational art in distinction to strategy and tactics. U.S joint doctrine also provides a definition of operational art and lists the essential elements of operational art in distinction to strategy and tactics. These two doctrinal documents share the same fundamental definition of operational art. The essential elements of the doctrinal definition

remain the same. The major difference is that joint doctrine has a distinct emphasis on the application of operational art as part of the joint campaign planning process. However, this difference is not significant in terms of fundamental approach. Therefore, there is no need to separate the two approaches for the purpose of examining Fall Gelb.

The second and third approaches to operational art do not come from doctrine. Instead, the latter two approaches stem from the theoretical explanations of operational art proposed by two of the foremost theorists in the academic study of operational art. These theoretical models are valid criteria because each are published by qualified academicians in the field of operational art theory. As a member of the founding faculty of the School of Advanced Military Studies at Fort Leavenworth, Dr. James J. Schneider has influenced the development of U.S. operational doctrine. The second theoretical definition proposed by Dr. Shimon Naveh is equally valid. Naveh's recent work, *In Pursuit of Military Excellence: The Evolution of Operational Theory* provided a comprehensive study of operational art. Naveh's theoretical model of operational art is studied at both the U.S. Army War College and the School of Advanced Military Studies.

### **U.S. Army Field Manual 100-5 & Operational Art**

The first of three approaches to the subject of operational art is U.S. doctrine. Even though operational art evolved in the late 1800s, the notion of operational art is a relatively new concept in the U.S. military. The adolescence of this concept is manifested in the limited understanding of operational art at all levels of the Army and the failure of current doctrine to explain sufficiently the essential elements of military performance necessary to practice operational art. The reason for this failure can be found in records of the development of doctrine since 1976. The 1976 version of Field Manual 100-5 *Operations*, was largely

focused on defending Western Europe from the former-Soviet Union. At that time, Army doctrine largely ignored operational art. The clear focus of the Army's intellectual energy was on the tactical problems presented by the Warsaw Pact.<sup>8</sup>

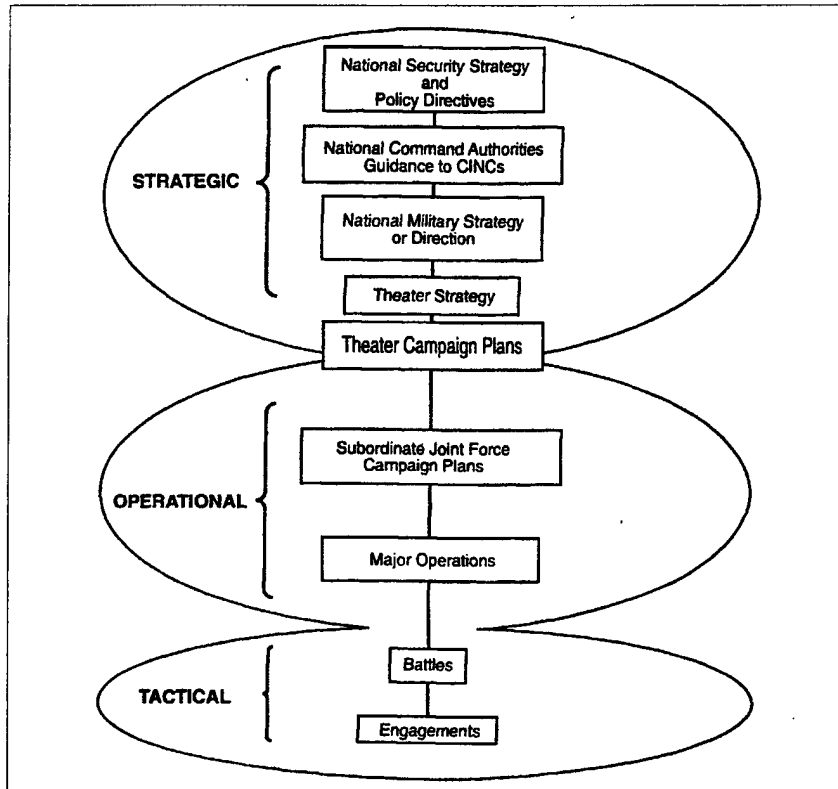
Following publication of the 1976 edition, the Army focused inward and after much reflection introduced operational art. Much like today's attempt to elevate the prominence of operational art, the 1976 Army operations doctrine was not well received. Many soldiers debated the requirement for a new doctrinal construct between strategy and tactics. The debate centered on changing the relationship between tactical battles and strategic endstates. The operational art debate was beneficial because it sparked open debate over how to apply doctrine to best defend against the Soviet threat. As the operational art debate progressed during the development of the 1982 version and the subsequent 1986 version of Field Manual 100-5, doctrine writers and field leaders accepted a paradigm shift from solely a tactical focus to addressing the relationship between tactical activities and their larger strategic objective.

The paradigm shift away from tactics was manifested in the 1986 version of Field Manual 100-5. That version explained that the "structure of modern warfare" consisted of military strategy, operational art, and tactics. It labeled this structure as the "broad divisions of activity in preparing for war."<sup>9</sup> The 1986 version of FM 100-5 was significant because, for the first time, operational art was defined in U.S. Army doctrine. Field Manual 100-5 defined operational art as "the employment of military forces to attain strategic goals in a theater of war or theater of operations, through the design, organization, and conduct of campaigns and major operations."<sup>10</sup> This new concept signified a fundamental shift in the Army's base doctrine. The doctrinal thrust of the base doctrine was slowly shifting away from a tactical

paradigm of destruction to an operational paradigm of multi-dimensional maneuver with specific linkages to strategic aims.

Dr. Richard M. Swain best summed up the evolution of U.S. Army doctrine on operational art when he said, “operational art fills a significant void in U.S. Army thought. It provides a concept to relate tactical events to strategic outcomes. It provided a framework within to think, even tentatively about large unit operations.”<sup>11</sup> To begin to understand this doctrinal concept of operational art, one must understand the mental framework doctrine provides. The current version of Field Manual 100-5<sup>12</sup>, and Field Manual 100-7, *Decisive Force: The Army in Theater Operations*<sup>13</sup> provides U.S. Army doctrine for operational art. These manuals lay out a mental framework for ordering and categorizing military operations shown in Figure 2. This framework is called the levels of war. A level of war is a conceptual framework in which to organize activities, resources, purposes, and areas of responsibility and operations in a logical structure. These levels provide a mental pegboard within this continuum in which to “hang” activities within an area of responsibility and helps commanders visualize a logical flow of operations, allocate resources, and assign tasks. Most important, each level is defined by the outcome intended—not by the level of command or the size of the unit. A common misconception is that the tactical level of war consists of Corps and lower units; operational level consists of Armies and Joint unified and sub-unified commands; and strategic is everything above that. In fact, a particular unit or rigid boundaries do not define the levels of war; instead, the *outcome or objectives to be achieved* define the levels of war.





**Figure 2. Levels of War<sup>14</sup>**

The three levels of war are strategic, operational, and tactical. The highest level of war is the strategic level. At the strategic level of war a nation or group of nations uses national interests to determine their strategic goals. Strategy involves the art and science of employing armed forces with other instruments of national power to achieve strategic goals.

Below the strategic level of war is the operational level. The operational level of war is that level at which forces are used to attain theater-strategic objectives in a theater of war and operational objectives in the theaters of operations through design, organization, and execution of campaigns and major operations. The operational level is the vital link between national and theater-strategic aims and the tactical employment of forces on the battlefield. The activities at the operational level of war ensure the logistic and administrative support of tactical forces. The activities at the operational level create conditions that place tactical forces at the proper location and time to execute operations.

The lowest level in the framework is the tactical level. At this level, battles and engagements are planned and executed to accomplish military objectives assigned to tactical forces. The sum of these individual victories produces operational results. Tactics is the art and science of employing forces to win battles and engagements.<sup>15</sup>

Given the framework provided by the levels of war, the relationship between the operational level of war and operational art must be clarified. The operational level of war is the middle space in the “mental pegboard” between the strategic and tactical levels for ordering and categorizing military operations. Operational art is the *activity* conducted at the operational level of war. At this point it is useful to understand why the word “art” is used in the term. Art is the cognitive thinking process of creating something as opposed to the idea of purely scientific or mathematical equation. In the context of military operations, operational art is the linchpin between mechanical aspects of military science and the intangible essence of military art. The analogy of a mosaic is useful to clarify this concept of “art.” Explained in the context of a mosaic, operational art takes pieces (time, space, capabilities, terrain, enemy, requirements, etc.) and arranges them in a coherent pattern that produces a strategic result, just like a mosaic. This is in contrast to classical warfare that is more like painting. In painting, the artist merely draws a strategic line to a point and puts the paint (armies) on that “decisive point”. Related to this concept of operational “art” is the notion of the “operational artist.” The term operational artist suggests one who applies creativity in taking abstract strategic goal and applies creativity to turn these abstract goals into missions and objectives for tactical action.

Field Manual 100-5 defines the concept of operational art used by the “artist” to construct such a “mosaic:”

The skillful employment of military forces to attain strategic and/or operational objectives through the design, organization, integration, and conduct of theater strategies, campaigns, major operations, and battles.<sup>16</sup>

Field Manual 100-5 expands this definition by explaining that operational art is the process of translating theater strategy and design into an operational design which links and integrates the tactical battles and engagements that, when fought and won over space and time, achieve the strategic aim. Field Manual 100-5 warns, “without operational art, war would be a set of disconnected engagements, with relative attrition the only measure of success or failure.”<sup>17</sup> In other words, the application of operational art provides that tactical engagements are directed toward a *purpose* so the tactical engagements are not inconsequential attempts to erode enemy forces.

Field Manual 100-5 identifies specific elements of military performance as the essential elements of operational art. Operational art requires visualization, anticipation, and a thorough understanding of the relationship of means to ends. This means that the operational artist must possess “broad vision” to see both “up” to the strategic goals and “down” to the tactical actions necessary to achieve these goals. In doing so, Field Manual 100-5 poses three questions for the operational artist:

- What military conditions will achieve the strategic objectives in a theater of war or theater of operations?
- What sequence of actions is most likely to produce these conditions?
- How should the commander apply military resources within established limitations to accomplish that sequence of actions?<sup>18</sup>

The answers to these questions provide the operational commander and his staff the insight into what actions to direct and what effects must be achieved.

## Operational Art in Joint U.S. Doctrine

Joint doctrine expands the operational art concepts previously stated. The Joint definition of operational art is

The employment of military forces to attain strategic and/or operational objectives through the design, organization, integration, and conduct of strategies, campaigns, major operations, and battles. Operational art translates the joint forces commander's strategy into operational design, and, ultimately, tactical action by integrating the key activities at all levels of war.<sup>19</sup>

Joint doctrine states that Joint Force Commanders employ operational art, in concert with strategic guidance and direction received from the National Command Authority or through superior military commanders, when developing campaigns and operations. The key difference between U.S. Army and Joint doctrine is the distinct joint emphasis on campaign planning at the theater-strategic and operational levels of war.

Joint doctrine for operations and planning lays out four specific military performance standards that are the essential elements of operational art. First the operational artist must possess broad vision, the ability to anticipate, and effective joint and multinational cooperation. Second, senior staff officers and subordinate commanders must practice operational art in addition to joint force commanders. Third, the operational artist must consider not only the employment of military forces but also at the arrangement of their efforts in time, space, and purpose. Joint operational art focuses in particular on the fundamental methods and issues associated with the synchronization of air, land, sea, space, and special operations forces.<sup>20</sup> Fourth, operational artists must answer the following questions:

- What **military** (or related political and social) **conditions** must be produced in the operational area to achieve the strategic goal? (Ends);

- What **sequence of actions** is most likely to produce that condition? (Ways);
- How should the **resources** of the joint force be applied to accomplish that sequence of actions? (Means);
- What is the **likely cost or risk** to the joint force in performing that sequence of actions?<sup>21</sup>

Furthermore, joint doctrine states the role of operational art during deliberate and crisis planning is to link the “tactical employment of forces to strategic objectives.” According to joint doctrine, planners use operational art to determine when, where, and for what purpose forces are employed. The application of operational art results in a campaign plan which provides the common aim and lists major tasks, objectives, and concepts to subordinates to achieve operational and strategic objectives.<sup>22</sup>

Joint and U.S. doctrine on operational art is relatively rudimentary. The fact that many field grade officers do not understand the concept of operational art shows the doctrine is still in its infancy. Also, the Army’s keystone warfighting doctrine, Field Manual 100-5, only mentions operational art on seven pages in the entire manual. The immaturity of military doctrine requires additional criteria by which to assess Fall Gelb. The academic theories of operational art will amplify the limited insights provided by doctrine and provide for a more detailed analysis of Fall Gelb.

### **Dr. Schneider’s Approach to Operational Art**

In his paper, *Theoretical Paper No. 3: The Theory of Operational Art*, Dr. Schneider stated “Operational art is the employment of military forces to attain strategic goals through the design, organization and execution of campaigns and major operations.”<sup>23</sup> Dr. Schneider characterizes operational art as “the employment of forces in deep distributed operations.

These maneuvers consist of deep battles and extended maneuvers punctuated by periods of inaction.”<sup>24</sup> The dominant characteristic of Dr. Schneider’s “modern war” is *distributive maneuver* which some call operational art. Distributed maneuver is characterized by a series of distributed battles leading to the dispersion of combat force over space and time.

Operational art is the planning, execution, and sustainment of temporally and spatially distributed maneuvers and battles, all viewed in its entirety. Dr. Schneider’s theory proposes that operational art “in its fullest expression. . . is manifested through several key attributes.”<sup>25</sup> The key attributes are distributed operation, distributed campaign, continuous logistics, instantaneous command and control, operationally durable formations, operational vision, and distributed enemy (See Appendix A).

The following attributes are appropriate to use to evaluate Fall Gelb. The distributed operation is the dominant characteristic in Dr. Schneider’s theory of operational art. Schneider characterized distributed operations as “an ensemble of deep maneuvers and distributed battles extended in space and time but unified by a common aim.”<sup>26</sup> The distributed operation is part of a distributed campaign. The distributed campaign was created through the combination various simultaneous and successive distributed operations.<sup>27</sup> The distributed campaign is the controlling characteristic of Schneider’s theory.

In addition to the distributed operation and campaign, Schneider’s concept of operational vision is an attribute relevant for judging Fall Gelb. Schneider called operational vision “a unified and holistic approach in the design, execution and sustainment of campaigns. The gift of operational vision has often been associated with mental agility, the ability to react to incoming information faster than it arrives.”<sup>28</sup> Napoleon and Ulysses S. Grant had the ability to first envision the endstate of a campaign, then to develop a concept for how to

achieve the endstate. Both Napoleon and Grant were able to impart this vision to their subordinates that produced a unified effort throughout their army.<sup>29</sup> This concept of vision is critical to linking simultaneous and sequenced operations that are distributed. Without operational vision, the battles and engagements of a campaign degenerate into independent and unprofitable ventures.

The significance of these key attributes is that the attributes will provide the substance of the second of the three approaches used in the following chapter to assess Fall Gelb in the context of operational art. Schneider's attributes add value to the doctrinal definitions already discussed. That value is the illumination of the concepts alluded to in Army and Joint doctrine. If Fall Gelb meets these criteria then Fall Gelb is an expression of operational art in the context provided by Schneider's theory.

### **Shimon Naveh's Approach to Operational Art**

Shimon Naveh's theory of operational art rounds out both U.S. doctrine and Dr. Schneider's theory. Naveh provides a theoretical perspective of the doctrinal concepts already presented. In his recently published book, *In Pursuit of Military Excellence*, Dr. Naveh considered the evolution of the operational theory of warfare. Naveh seeks to

offer a scientific interpretation of the intermediate field of military knowledge situated between strategy and tactics, better known as operational art, and to trace the evolution of operational awareness and its culmination in a full-fledged theory.<sup>30</sup>

In doing so, Naveh provides a third approach used in this monograph to assess Fall Gelb in the context of operational art. Like Schneider, Naveh sees the development of operational art arising out of a growing gap between tactics and strategy. Also similar to Schneider, Naveh's

theory states that the gap created a vacuum that forced the development of a new component of the military model to fill the void. Specifically, Naveh wrote:

Tactics, focusing entirely on the mechanical dimension of warfare, totally lacked the cognitive tools needed to merge and direct the numerous engagements toward attaining the strategic aims. On the other hand, strategy, leaning primarily on abstract definitions of aims and policies, lacked the ability to translate its intentions into mechanical terms.<sup>31</sup>

Here Naveh agrees with Schneider concerning the catalyst of the development of operational art. Naveh recognizes that changes to military means made the classical concept of “decisive battle” obsolete and that these changes created a gap between conventional tactics and strategy. Both agree that the creative-intellectual process is the linchpin between strategy and tactics. Naveh and Schneider agree the essence of operational art is the creative use of distributed operations for the purposes of strategy. Naveh’s theory has a distinct flavor, however, emphasizing the “cognitive” aspect of operational creativity.

Unlike Schneider, Naveh develops systems thinking as the essential foundation to practice operational art. Naveh argues that warfare and the military possess the characteristics of open complex systems. These characteristics are wholeness, growth, differentiation, hierarchical order, dominance, control, and competition. Furthermore, Naveh believes that, like any other system, an operation is defined by its elements, the nature of those elements and by the interactions between the elements. The creativity inherent to operational art must take on a holistic, or systems approach, while tactics is largely an analytical mechanistic approach.<sup>32</sup> Operational art manifests itself as a system because it “constitutes the entire whole or complex of warlike actions governed by an identical concept, and directed towards attainment of the same aim.”<sup>33</sup> This unifying aim provides direction, or purpose to the activities of the military system.



In his theory, Naveh sets the following criteria for identifying a concept or plan as operational art. First, the concept must reflect the cognitive tension caused by the polarization between the orientation towards the strategic aim and the accomplishment of the tactical missions.<sup>34</sup> In other words, when developing an operational concept, Naveh feels that there must be a conscious act of artistic creativity to bridge the gap between the sometimes *competing* requirements of the strategic aim and the series of tactical missions required to achieve those aims. Operational planners must understand systems theory and possess a doctrine encompassing an operational theory. Systems theory and operational doctrine are central to manifesting operational creativity and managing competing requirements. Second, the plan or concept must “be based upon industrious maneuver, expressing the dynamic interaction between the various elements within the system, as well as the relationship between the general action and the strategic aim.”<sup>35</sup> Third, the plan or concept should be synergetic. In other words, the overall operation should yield a result that is greater than the linear sum of the individual actions that make up the operation. These actions must be focused toward a unifying aim. The actions should reflect a synthesis through the aspects of combined arms to combine the various forms of warfare, and integrate the various forces and formations separated by space and time.<sup>36</sup> Additionally, an operational plan should be non-linear; meaning it should be hierarchically structured and express depth. Finally, Naveh’s criterion requires a concept or plan to be related to a broad and universal theory to be regarded as operational.<sup>37</sup>

Naveh’s operational theory is more comprehensive than doctrine or Schneider’s theory. Naveh’s study penetrates the deepest into the underlying actions that are inherent in

the manifestation of operational art. Naveh's approach to defining operational art imparts the most critical examination of the thought process used by the Germans to develop Fall Gelb.

### **Conclusion**

The preceding description of three concepts of operational art is not exhaustive. The three criteria used provide adequate criteria for analyzing the planning of Operation Fall Gelb to determine whether the planners applied operational art. U.S. Army and Joint doctrine are adequate criteria because those definitions and concepts are required knowledge for senior military officers. However, given the rudimentary nature of current U.S. Army and joint doctrine, the concepts must be expanded. The works of two prominent operational art theorists not only support the concepts presented in U.S. Army and joint doctrine; they provide the theoretical underpinnings that the doctrine should be based upon.

Overall, the three concepts see the application of operational art as "art." Specifically, U.S. doctrine, Naveh and Schneider all agree that the essence of operational art is the creative use of distributed operations for the purposes of strategy. The overall differences are that U.S. doctrine is the most basic, relying on a simple definition and amplifying statements. Schneider echoes doctrine but further defines the practice of operational art as a series of attributes that must be manifested as part of the operational design. Naveh also echoes doctrine, but stresses the mandatory act of operational cognition. Thus, now that a common understanding of the operational art concept has been established and the aspects of military performance that are the essential elements of operational art have been identified, the stage is set to examine Operation Fall Gelb and the "blitzkrieg."

## Chapter 3

### *Operation Fall Gelb*

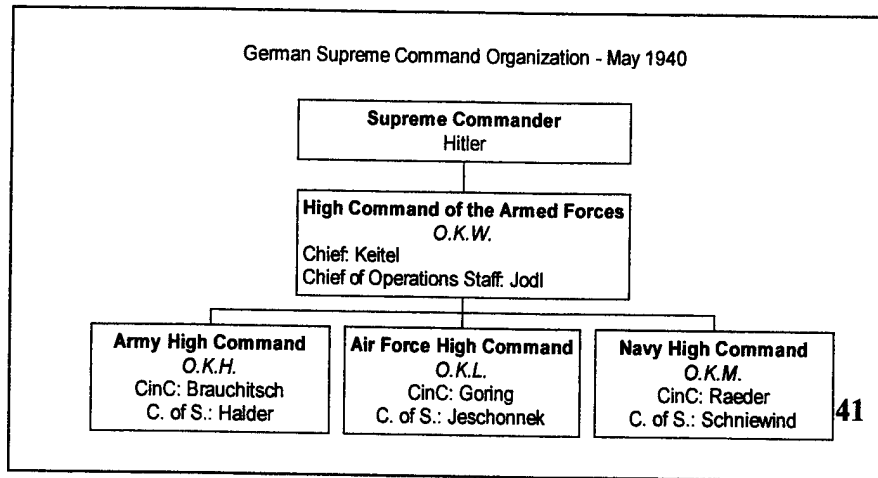
“Looking back is the surest way of looking forward.”<sup>38</sup>

J.F.C. Fuller

#### Introduction

The “blitzkrieg” is typically associated with Fall Gelb. This term must be explained because the concept is sometimes confused with operational art. The blitzkrieg was the “popular” name given to the German military actions during the 1939 invasion of Poland and subsequent offensives. There is no “official” definition of blitzkrieg; instead much of what is understood about blitzkrieg is based upon legend, myth, and journalistic license. Time magazine appears to have been the first to use the expression in September 1939. The magazine referred to German combat in Poland as “no war of occupation, but a war of quick penetration and obliteration – blitzkrieg – lightning war.”<sup>39</sup> The consensus is that blitzkrieg is tactical action using combined arms, surprise and speed to obtain an objective. These tactics were a mechanization of the “infiltration” tactics used against France in 1918. The actions in Poland and France were merely the tactical doctrine specified in Die Truppenführung (the Troop Command), which was the standard German army tactical manual. The intent of these actions was to create a situation through flanking, penetration, infiltration, and maneuver to encircle and destroy the enemy.<sup>40</sup> Blitzkrieg was a set of tactical techniques and not a model for identifying operational objectives and linking battle and objectives together in a premeditated sequence that supports attainment of a strategic aim.

## The Setting

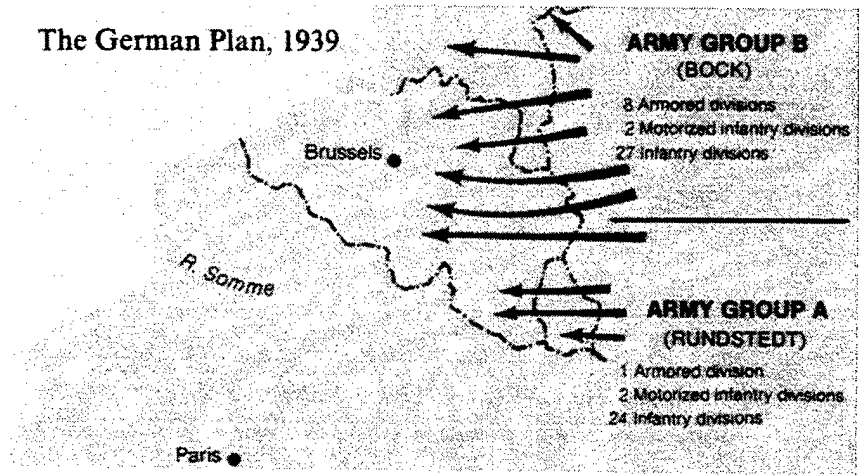


Before analyzing Fall Gelb and operational art it is necessary to first set the strategic context. Knowing the strategic context is mandatory for any study of Fall Gelb and operational art because by definition, operational art results from strategy. Prior to the German invasion west, vigorous German attacks had seized Poland and a combination of naval and ground action had seized needed resources in Norway. Even before the invasion of Poland in September 1939, German planners began to ponder how to defeat France and Great Britain. Once the Polish campaign was over there were three questions to consider. Could the war be brought to a favorable conclusion using defensive tactics, or could that object be achieved only by a victorious German offensive in the West? If such an offensive proved necessary, when could it be launched? How must the offensive be conducted to achieve the strategic aim?<sup>42</sup> Hitler himself answered these questions instead of his OKH planners. He developed the theater strategy as he implemented a new policy that greatly reduced the OKH's planning role. Hitler's decision was to attack as soon as possible to eliminate the physical threats he perceived from his western European neighbors.

Hitler's Strategic Directives	Operation Fall Gelb Directives
<p><b><u>General Strategy:</u></b>  <i>"Grossdeutschland, Lebensraum, and Weltmacht: A 'greater Germany' with sufficient 'living space' would inevitably acquire 'world power'."</i><sup>43</sup></p>	<p><b><u>Objectives:</u></b>  <i>"To defeat the largest possible elements of the French and Allied Armies and simultaneously to gain as much territory as possible in Holland, Belgium and Northern France as a basis for successful air and sea operations against Britain and as a broad protective zone of the Ruhr."</i><sup>44</sup></p>
<p><b><u>Purpose:</u></b>  The purpose is...to defeat as much as possible the French Army and of the forces of the Allies fighting on their side and at the same time win as much territory as possible in Holland, Belgium, and Northern France, to serve as a base for the successful prosecution of the air and sea war against England and as a wide protective area for the economically vital Ruhr.<sup>45</sup></p>	<p><b><u>Revised Purpose:</u></b>  All available forces will be committed with the intention of bringing to battle on north French and Belgian soil as many sections of the French army and it's allies as possible. This will create favorable conditions for the conduct of the war against England and France on land and in the air.<sup>46</sup></p>
<p><b><u>Objective:</u></b>  The objective... is to deny Holland and Belgium to the English by swiftly occupying them; to defeat, by an attack through Belgium and Luxembourg territory, the largest possible forces of the Anglo-French Army, and thereby to pave the way for the destruction of the military strength of the enemy.<sup>47</sup></p>	

Over a four-month period, the German High Command prepared four major versions of plan for the invasion of France and the west. The evolution of these plans is not significant in itself, however the examination of the planning activity is significant. The study of the entire planning process and the actions of the planners is fundamental to the assessment of the

planners application of operational art. In October 1939 the German OKH produced the initial plan, named Fall Gelb. Fall Gelb established three strategic objectives: decisively defeat the BEF, seize air and sea bases along the English Channel for later attacks against England, and seize Holland to provide a buffer for the Ruhr area.



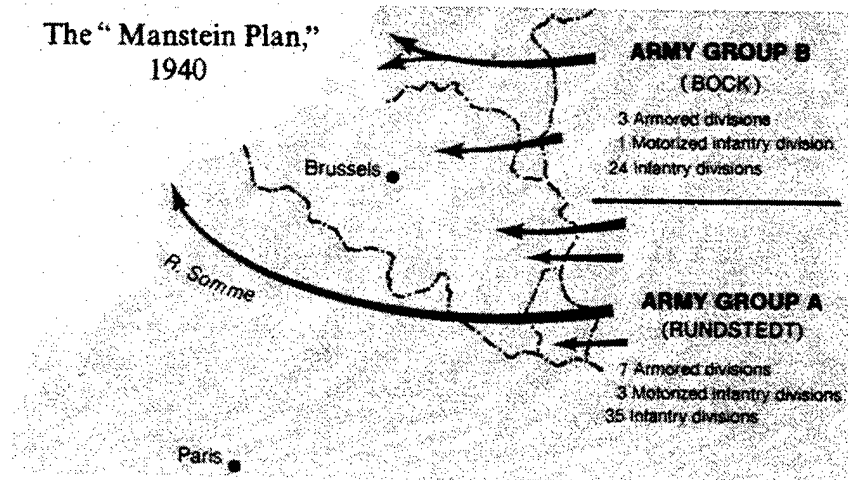
The original Fall Gelb plan divided German forces into two Army groups. Army Group B was assigned the main effort in the North into Holland. That plan was scrapped because it was viewed as too attrition oriented. It was too similar to the World War I Schlieffen plan, and the German Generals feared that the Dutch would flood the assembly areas.<sup>48</sup>

As a consequence, in late October 1939, the OKH published a second plan that moved the main attack to the south into Belgium and that largely bypassed Holland. Hitler and the OKW rejected another revision in January 1940 because the objectives were too limited and the OKW was felt that the operation would not result in a decision. General von Manstein summarized the January 1940 plan in these words,

The operational intention of both operations orders might best be expressed by saying that the Anglo-French elements we expected to meet in Belgium were to be floored by a (powerful) straight right while our (weaker) left fist covered up. The territorial objective was the channel coastline. What would follow this first punch we were not told.<sup>49</sup>

General von Rundstedt and von Manstein argued that the operation would lead to a frontal encounter between German and enemy forces in Belgium. The German attack might be able to secure the Channel Coast, however, the allied armies would still remain intact on a line from Sedan to the Somme estuary.<sup>50</sup>

Manstein and von Runstedt proposed changing the main effort from Army Group B in the north to Army Group C in the south. Army Group C was positioned against the weaker French forces in the Ardennes forest region. Numerous delays in execution due to poor weather bought Manstein and von Runstedt time to sell their recommended changes to the OKH and Hitler. In February 1940, following additional analysis in the form of wargames, OKH conferences, and debates with Hitler, General von Brauchitsch and Halder changed Fall Gelb to generally conform to the southern thrust advocated by Manstein and von Runstedt. Army Group B would attack Holland and seize western Belgium. At the same time Army Group A would attack through eastern Belgium and the Ardennes forest.<sup>51</sup> The revised plan for Fall Gelb ("Manstein's Plan") stated "All available forces will be committed with the intention of bringing to battle on north French and Belgian soil as many sections of the French army and it's allies as possible. This will create favorable conditions for the conduct of the war against England and France on land and in the air."<sup>52</sup> This campaign directive was inadequate. The operational task and purpose of that directive was merely attrition. There is no evidence in Fall Gelb of clear operational design. The concept sought only to achieve the initial tactical penetration.<sup>53</sup> This campaign directive amounted to blurred operational vision and design to achieve an equally unfocused strategic aim. The idea of a deficiency in operational vision will be expanded in the analysis contained in subsequent paragraphs.



### The Action

On May 10, 1940 the German's executed the Manstein Plan with air attacks and paratrooper drops in Holland, France, and Belgium. Army Group B attacked through the Ardennes and by the evening of May 12<sup>th</sup>, had reached the Meuse River along a line from south of Dinant down to Sedan. Due to tenacious pockets of French Resistance and the natural barrier provided by the river, the bulk of the river crossing did not occur until May 14<sup>th</sup>. Timid and uncoordinated French resistance crumbled as the bulk of the German forces crossed the river and continued to press their attack. Seven armored divisions continued west despite minor allied flank attacks. Unable to match the speed of the German moves in terms of physical movement, situational awareness and the control of forces, the French command collapsed. By May 24<sup>th</sup> Army Group B forces threatened Dunkirk, the only remaining port open to the bulk of the allied army. Hitler and the OKW worried about the German forces overwhelming success and mounting numbers of inoperable vehicles. Hitler and the OKW issued orders to stop the advance, which allowed much of the allied army to escape. On June 5<sup>th</sup>, Army Group A, B, and C attacked south to seize France. Paris was captured on June 14<sup>th</sup> and on June 17<sup>th</sup> the French leadership asked for an armistice.<sup>54</sup>



## **The Aftermath**

Following the success of the German invasion of Poland, France and the low-countries, Hitler and his Generals began to believe their own propaganda. Abandoning his hope of a channel crossing to invade England, Hitler turned his attention east. It was the job of the Russian Army to teach Hitler the lessons he had failed to learn.

## **Analysis**

To determine if Fall Gelb and the “blitzkrieg” were an expression of operational art, it is necessary to evaluate the planning decisions and operational concept as previously outlined. The definitions presented in U.S. Army and joint doctrine, Schneider, and Naveh provide the means to objectively assess the events of the campaign.

## **Doctrine**

The first approach to evaluating Fall Gelb comes from U.S. doctrine. U.S. Army and joint doctrine explain that operational art is the process of translating theater strategy and design into an operational design which links and integrates the tactical battles and engagements that, when fought and won over space and time, achieve the strategic aim. Operational vision is one of the specific elements of military performance that empowers a planner to make this translation. Simply stated, operational vision is the “broad vision” to see both “up” to the strategic goals and “down” to the tactical actions necessary. Without operational vision to adequately understand and influence the strategic ends, Hitler’s generals were unable to develop plans that linked and sequenced tactical missions to meet the strategic ends in a premeditated manner.

Hitler's strategic ends were specified in a series of directives. In 'Directive No. 6 for the Conduct of the War,' dated 9 October 1939, Hitler stated his objectives for the western front. The purpose was:

To defeat as much as possible the French Army and of the forces of the Allies fighting on their side and at the same time win as much territory as possible in Holland, Belgium, and Northern France, to serve as a base for the successful prosecution of the air and sea war against England and as a wide protective area for the economically vital Ruhr.<sup>55</sup>

A later directive No. 10, published in February 1940 expanded this directive:

The objective... is to deny Holland and Belgium to the English by swiftly occupying them; to defeat, by an attack through Belgium and Luxembourg territory, the largest possible forces of the Anglo-French Army, and thereby to pave the way for the destruction of the military strength of the enemy."<sup>56</sup>

These directives were marginally adequate as strategic concepts and inadequate as an expression of operational design. These broad sweeping directives required translation into an operational design consisting of a set of tactical missions. Unfortunately, Hitler's generals lacked the operational vision that current U.S. doctrine states is essential to apply operational art. Hitler's generals did not fully participate in a *dialogue* between the political-military powers so they did not completely understand the underlying reasoning behind the strategic ends specified in these directives. From the time Hitler became Chancellor he had slowly forced his strategic and operational planners away from the strategic level of war. The OKH Chief of Staff, General Franz Halder, believed that strict separation between the political and military establishment had proven to be a drawback since the Polish Campaign.<sup>57</sup> Halder believed the "OKH ought to have exact knowledge of the political line and of its possible variations. Otherwise no planned action on our own responsibility is possible. OKH must not be left at the mercy of the vagaries of politics, else the Army will lose confidence."<sup>58</sup> Thus,

despite Hitler's strategic goals, Hitler forced his OKH planners away from thinking about strategy and toward a greater emphasis on tactics.<sup>59</sup> In doing so, the planners lost their "broad vision" and along with it their ability to fully understand the relationship of means to ends. Hitler failed to foster operational art through his leadership style. Over time, he reached lower and lower into the levels of war and made his staff dysfunctional. Gradually Hitler took over planning at the strategic and operational level and left only tactics for his generals. A World War II cartoon depicted this trend. The cartoon's caption read "In the future, the army will be guided by my institutions." This cartoon shows Hitler wearing five hats – showing the multiple leadership roles he had assumed at the expense of his dismayed Generals.<sup>60</sup>



Field Manual 100-5 lists another element of military performance that is required for the practice of operational art. Field Manual 100-5 states that the operational artist should define what military conditions will achieve the strategic objectives in a theater of war or theater of operations. After doing so the artist should identify what sequence of actions is most likely to produce these conditions. The German planners in the OKH and OKW failed

to identify a clear sequence of tactical and operational objectives to achieve strategic goals and, thus, did not practice operational art according to current U.S. doctrine. The evidence shows that most of their cognitive energy was spent on developing a plan to penetrate the allied defenses and reach the Meuse River. German objectives after crossing the Meuse River were ambiguous.<sup>61</sup> This ambiguity was a planning weakness. There is ample proof of this ambiguity. First, General Manstein recalled that “even our own operation plan would not – as Moltke put it – extend with any certainty beyond the first encounter with the main body of the enemy – least of all if a lack of adequate forces brought the attack to a standstill in its preliminary stages.”<sup>62</sup> Second, during a planning conference, Hitler questioned Guderian on his plans for establishing a river crossing at the Meuse River near Sedan. “And then what are you going to do?” he asked. Guderian recalled that “he [Hitler] was the first person who had thought to ask me this vital question.” Later, Guderian recorded in his memoirs that “I never received any further orders as to what to do once the bridgehead over the Meuse was captured.”<sup>63</sup> Third, events during execution clearly indicated that there was no coherent operational design in the Fall Gelb plan. The plan failed to sequence tactical objectives during the latter portion of the campaign. General Guderian noted, “from now on, the panzer group received every day many mutually contradictory orders, some ordering a swing towards the east, others a continuation of the advance southward.”<sup>64</sup> Although the plan was flexible, it lacked clearly defined objectives and demonstrates that German planners were comfortable with letting tactical actions decide operational objectives. This thought process is totally opposite of the process stated in U.S. doctrine. According to U.S. doctrine the operational artist determines the strategic endstate and plans *backward* to determine a clear sequence of tactical and operational objectives that will achieve the strategic objectives.

Overall, the planning procedures of the German High Command did not mirror those set by contemporary U.S. doctrine during the planning of Fall Gelb. While planning, German commanders did not develop realistic operational victory conditions in other than vague and often grandiose terms. These terms included “total victory on the European mainland”<sup>65</sup> and “bringing to battle on north French and Belgian soil as many sections of the French army and it’s allies as possible.”<sup>66</sup> This unfocused effort did not follow the standards set by contemporary doctrine. According to Field Manual 100-5,

Operational art helps commanders understand the conditions for victory before seeking battle, thus avoiding unnecessary battles. Without operational art, war would be a set of disconnected engagements, with relative attrition the only measure of success or failure.<sup>67</sup>

In Fall Gelb, German actions resulted in unnecessary battles and disconnected engagements. In this exceptional case, however, Germany succeeded due to luck, tactical excellence, and allied error. The German’s succeeded despite their lack of effective operational design per U.S. doctrine. However, in the prolonged campaign against Russia the Germans found themselves in the trap of executing many unfocused and disconnected engagements that doomed their offensive.

## **Schneider**

Dr. Schneider’s approach to operational art shares the same fundamental elements as doctrine. However, Dr. Schneider chooses to address the essence of operational art in terms of key attributes. Dr. Schneider proposes that operational art “in it’s fullest expression. . . is manifested through several key attributes:” distributed operation, distributed campaign, continuous logistics, instantaneous command and control, operationally durable formations, operational vision, and distributed enemy.<sup>68</sup> The attributes Schneider labeled as distributed

operation, distributed campaign, and operational vision are relevant to the examination of Fall Gelb.

The first of Schneider's attributes is the distributed operation. Fall Gelb was indeed a planned distributed operation. However, this practice by itself is not sufficient to prove the Germans applied operational art. Dr. Schneider stated that "A distributed operation is a coherent system of spatially and temporally extended relational movements and distributed battles, that seek to seize, retain or deny freedom of action."<sup>69</sup> The German operational planners did plan a spatially and temporally extended battle. However, the focus of the distributed battle was on freedom of action at the tactical level. The tactical actions were not linked together as part of a clear operational design to achieve the stated strategic objective. Although the plan was flexible, the lack of clearly defined objectives demonstrates that German planners were comfortable with letting tactical actions decide operational objectives.

Second, the natural partner to the distributed operation is the distributed campaign. Fall Gelb did consist of various distributed operations. However, these operations did not amount to a distributed campaign. Dr. Schneider called distributed operations the building blocks of the distributed campaign. The distributed thrusts of the army groups and the Luftwaffe were these building blocks. Specifically, Army Group A and B conducted distributed ground operations north and south. Simultaneously the Luftwaffe attacked to "destroy or at least put out of action enemy air forces, but also primarily to hinder or prevent the enemy high command from putting its decisions into effect."<sup>70</sup> The German operational planners, however, focused their campaign plan on the Schlieffen derived tradition of battles of annihilation. The aim of their operations was tactical deep battle to encircle and annihilate their enemy without necessarily linking the action to accomplishing the overall strategic

aim.<sup>71</sup> This produced a series of distributed operations which were loosely connected in task and purpose, but did not coalesce into a true unified and distributed campaign beyond the initial objectives.

Third, the German High Command did not meet Schneider's definition of operational vision. The German High Command was unable to use a unified and holistic approach to translate strategic ends into campaign design because of Hitler's overwhelming influence at the operational level. As already stated, this was because Hitler's micro-management and overpowering leadership style forced his OKH planners away from thinking about strategy and more toward the operational and tactical level of war.<sup>72</sup> Hitler's personality caused strict separation between the political and military establishment that proved an impediment to operational planning.<sup>73</sup> Despite the limitations at the operational level, the Germans were masters at the tactical level. During Operation Fall Gelb, heavy emphasis on command and control apparatus and front-line leadership allowed the German tactical leadership to receive information, rapidly assimilate this information, and decide what to do. The effectiveness of the tactical command and control is one of the key factors which allowed the Germans to rapidly overrun the allies and achieve theater-strategic objectives despite shortcomings at the operational level.

To summarize the German performance in light of Dr. Schneider's approach to defining operational art, the German planners failed to manifest operational art "in its fullest expression" in several "key attributes." The German's planned and executed distributed operations, however these distributed operations were not designed to achieve operational or strategic objectives. The Germans were unable to effectively link their tactical actions to the strategic aims in a distributed campaign. They also failed to use a "unified and holistic

approach in their design, execution, and sustainment of campaigns” mostly due to their lack of political-strategic cognition or awareness.

## **Naveh**

The last criterion in this analysis is from the approach used by Shimon Naveh. The German planning of Fall Gelb does not meet Naveh’s criteria for the practice of operational art in four areas. The German High Command did not use a consistent holistic, or systems approach in their planning and execution of Fall Gelb. Besides a lack of systems thinking, the German planners did not meet Naveh’s second criterion either. Fall Gelb and blitzkrieg were based upon maneuver warfare. However, the German campaign plan demonstrated the lack of industrious relationships between strategic, operational, and tactical actions. Naveh’s third criterion requires a concept or plan to be related to a broad and universal theory to be regarded as operational. The German Officer Corps did not have a “broad and universal” theory of blitzkrieg. There was no consensus within the military as to the operational substance of blitzkrieg. Fourth, the German plan achieved tactical synergism, but there was a lack of designed synergy at the operational level.

First, the German High Command did not design operational concepts with a conscious act of artistic creativity to link tactical missions to achieve strategic aims. Having an understanding of systems theory and a doctrine encompassing an operational theory are central to manifesting this creativity. The German’s did not use a consistent holistic, or systems, approach in their planning and execution of Operation Fall Gelb. According to Naveh, this holistic approach is required for the practice of operational art. The basis of Naveh’s theory argues that warfare and the military possess the characteristics of open complex systems. Naveh asserts that operational experience conforms in its principles and



characteristics to the universal phenomena of systems. He states that operational thought must take a holistic or systems approach while tactics is largely an analytical mechanistic approach.<sup>74</sup> Naveh states that operational art is a system because it “constitutes the entire whole or complex of warlike actions governed by an identical concept, and directed towards attainment of the same aim.”<sup>75</sup> Based upon a review of primary source documents there is no evidence that the German High Command used a consistent holistic approach in their planning and execution of Operation Fall Gelb. The German High Command never adequately developed a realistic set of strategic aims and the military conditions necessary to achieve those aims. Because of Hitler’s overwhelming influence and visions of grandeur, the German military strategic and operational planners settled for broad sweeping military conditions which basically amounted to destroy all of the Allied armies on the continent, take as much land as possible, and prepare for a next undetermined step.<sup>76</sup>

The German planners of Fall Gelb did not meet Naveh’s second criterion either. Naveh asserted that to be operational a plan must “be based upon industrious maneuver, expressing the dynamic interaction between the various elements within the system, as well as the relationship between the general action and the strategic aim.”<sup>77</sup> This is similar to the criteria stated in U.S. doctrine. The concept must link tactical maneuvers, battles, and objectives to accomplish the strategic aims. Naveh emphasizes his systems approach here by highlighting not just a static relationship, but the dynamic interaction between tactical, operational, and strategic actions. Fall Gelb and blitzkrieg were based upon maneuver warfare. However, German maneuver lacked meaningful relationships between the strategic aim and operational and tactical actions. Manstein agreed that there was a breakdown in these relationships when he acknowledged that the operations plan developed lacked adequate

linkage to the broad goal of “total victory on the European mainland.”<sup>78</sup> The operational design was inadequate. The operational design was ambiguous because the planners could see no farther than the tactical success. While planning Fall Gelb, the German planners were unable to plan the campaign or operation completely by anticipating the different paths the operation could take. The High Command hoped that unfolding events would guide their thought for the second phase of Fall Gelb.

Naveh’s third criterion requires a concept or plan to be related to a broad and universal theory.<sup>79</sup> The German Officer Corps did not have a “broad and universal” theory of blitzkrieg. There was no consensus within the military as to the operational substance of blitzkrieg. Nor was there a conceptual framework of a written operational theory. The gradual decline of intellectual thought within the senior commanders and planners of the German military caused this intellectual void. One cause of the void was the rapid expansion of the German armed forces that suppressed “the surviving islands of operational perception that existed.”<sup>80</sup> Hitler’s promised remilitarization, the German reoccupation of German territories and their eventual conquest, and the rise of greater Germany undermined operational perception. Hitler stressed the military offensive as the only way to achieve German greatness. This siren’s song of conquest and glory attracted most of Germany’s professional officer corps. The result was a split between those officers attracted by the ideology and material improvement offered by Hitler and more traditional officers who advocated military principles based upon intellectual thought.<sup>81</sup> Furthermore, when Hitler himself began to personally assume the role of strategic/operational planner he caused further decline of operational thinking within the German military. Hitler’s military influence combined with an extremely aggressive political climate resulted in the manipulation of

tactical patterns to achieve strategic ends. In short, the “blitzkrieg” pushed “tactical excellence to the extreme limits of human performance” without a conscious expression of operational art.<sup>82</sup>

Another underlying cause of the German High Command’s lack operational theory was Motke’s dictum that

No operation plan extends with any certainty beyond the first encounter with the main body of the enemy. It is only the layman who as a campaign develops, thinks he sees the original plan being systematically fulfilled in every detail to its preconceived conclusion.<sup>83</sup>

Motlke’s legacy had a profound influence on the thinking of the General Staff, tacitly providing a reason not to link the tactical actions into a logical series to accomplish operational and strategic objectives. The end result was a military without an operational doctrine and an officer corps who had little understanding of operational theory.

The sum of these intellectual weaknesses caused an imbalance in what Naveh called the cognitive tension caused by the polarization between the orientation towards the strategic aim and the accomplishment of the tactical missions. The German’s were overly attracted to the tactical aspects of the overall war plans. This was due to Hitler’s overwhelming influence at the strategic and tactical levels, the mental models produced by the 1918 offensive tactics that seemed to succeed in World War I, and the tactical excellence that was the hallmark of German military competence. This imbalance combined with unfocused strategic aims and a fundamental lack of intellectual underpinnings caused the Germans to fail to consciously apply cognitive creativity as operational artists. Instead, German planners developed tactical operations that accomplished strategic aims because of the dramatic mismatch between them and the allies and the small area of operations. Halder’s diary and Manstein’s memoirs provide no evidence of a operational concept for bringing about the military conditions

necessary to meet the strategic objectives should France and England put up prolonged resistance. There was no long-range concept for how to deal with an undefeated England. The proposed invasion plan, Operation Sealion was never more than a rough concept until well into the invasion of France.<sup>84</sup> That oversight demonstrates that Germans devoted no cognitive effort to developing sequels<sup>85</sup> to the initial campaign.

Fourth, the German's failed to produce a synergistic<sup>86</sup> effect at the operational level. Naveh's last primary criterion is that a plan or concept should be synergetic. In other words, the overall operation should yield a result that is greater than the linear sum of the individual actions that make up the operation. The individual actions must be focused toward a unifying aim. By pursuing a unifying aim, the operational planner integrate the various forces and formations separated by space and time.<sup>87</sup> The combined aspects of blitzkrieg did produce a synergistic effect at the tactical level. In other words, the whole of the tactical accomplishment was generally greater than the sum of individual actions alone. However, at the operational level, the employment of forces was not orchestrated to build upon one another in a tactical manner. Guderian, Manstein, and Halder's accounts show that the entire planning process failed to assemble the discrete tactical missions into a "coherent and continuous occurrence." Most of the German planning effort focused on the tactics and materiel necessary for the initial push to the Meuse River.<sup>88</sup>

## Chapter 4

### *Conclusion*

*By looking on each engagement as part of a series, at least insofar as events are predictable, the commander is always on the high road to his goal.<sup>89</sup>*

Carl von Clausewitz

In his memoirs Guderian recognized the slim margin by which the Germans had succeeded. He describes his visit to the heights overlooking the Meuse River, "At this moment, I looked at the ground we had come over, the success of our attack struck me almost as a miracle."<sup>90</sup> The Germans success was not the result of the practice of operational art. Instead, the "blitzkrieg" executed during Fall Gelb was the product of luck, myth and hyper-offensive tactics. The German campaign succeeded due to the better training, tactical leadership, and coordination of the German Army relative to the Allies. Their victory was derived as much from French weakness as from German strengths. French doctrine was inadequate to defeat the rapid maneuver and encirclement doctrine the Germans used in the invasion.<sup>91</sup>

The German campaign was not the result of operational art. This aim of the campaign could be compared to the aim of water flowing from a burst dam. The water merely rushes the fastest to areas where there is the least resistance. The water rapidly flows around the high points without guidance, encircles them, and gradually erodes them away. There is no coherent plan to the water's movements that provides structure and controls the distributed flow to the ultimate goal. The objectives specified by Hitler and the High Command did not form the clear shape of a strong, obtainable operational design. Instead, Fall Gelb expressed the operational uncertainty of a concept that sees no further than the initial tactical success

and hopes that events will guide further thought as they occur. Like the water, blitzkrieg was merely the tactical expression used to achieve the Germans strategic ends. Tactical successes on the battlefield dictated the ways to achieve the campaign ends.

In the end, the blitzkrieg tactics were sufficient to overrun France. However, Hitler was unable to accomplish his stated aim to engage and defeat the strongest portion of the Allied Armies. Blitzkrieg tactics worked in this scenario given the small scale of Northern France and the easily dislocated allied armies.<sup>92</sup> Without learning their lessons, Hitler and his generals tried to apply the same tactics, again without adequate operational art, to the vast expanses of Russia against an army who did not rapidly collapse and kept fighting over the long term. And, in doing so, Hitler and his generals failed. Perhaps Karl Frieser summed up the Fall Gelb campaign best when he stated that the campaign ultimately was “an operational act of desperation to get out of an unfavorable strategic situation.”<sup>93</sup>

## Appendix A

### *Dr. Schneider's Attributes of Operational Art*

- Distributed Operation: "an ensemble of deep maneuvers and distributed battles extended in space and time but unified by a common aim. That common aim is the retention or denial of freedom of action"<sup>94</sup> The distributed operation is the dominant characteristic in Dr. Schneider's theory of operational art.
- Distributed Campaign: "characterized by the integration of several simultaneous and successive distributed operations in a campaign."<sup>95</sup> This attribute with its integral attribute, the distributed operation, is the controlling characteristics of Schneider's theory. The concept of distributed operations and campaigns is firmly rooted in U.S. Army and Joint doctrine.
- Continuous Logistics: In order for a modern industrial army to maintain a military effective presence, its logistics system must be continuous to supply and move large formations. Without continuous logistics, the movement tempos and the force density would evaporate.<sup>96</sup> U.S. and Joint doctrine support the notion that continuous logistics provides the resources to manifest the activities the operational artist designs.
- Instantaneous Command and Control: In order to conduct distributed operations as part of a distributed campaign the force must have the ability to affect instantaneous communications across the force to integrate the efforts of multiple-separate elements towards a common aim. "The operational significance of instantaneous means of communications becomes apparent when one considers the distributed nature of forces deployed in a theater of operations. Unlike classical conditions the distributed deployment of forces creates a greater variety of unexpected or unanticipated tactical and operational possibilities. As a result this variety generates greater information. Since information is the bias of decision, the operational commander is confronted with many more decisions than his classical predecessor was faced with. The operational commander thus requires an instantaneous means of communication to adjust his distributed forces in rapid counteraction to the unexpected actions of the enemy."<sup>97</sup> U.S. and Joint Doctrine address the need for the commander to direct actions to forces distributed in space and time as part of battle command. Schneider's concept of instantaneous command and control dovetails nicely into doctrine.
- Operationally Durable Formations: To execute a series of tactical missions over spatial and temporal depth, the force must be "capable of conducting

indefinitely a succession of distributed operations. The operationally durable formation is the primary engine of operational design: it is the hammer that drives the operational chisel.”<sup>98</sup>

- Operational Vision: is “a unified and holistic approach in their design, execution and sustainment of campaigns. The gift of operational vision has often been associated with mental agility, the ability to react to incoming information faster than it arrives.”<sup>99</sup> The concept Schneider describes is essentially the same as U.S. Army and Joint doctrine.
- Distributed Enemy: “The enemy must be operationally minded; he must be similarly trained, armed, equipped, structure and commanded as the friendly force. Without this “self-reflection” ... tremendous ambiguity and confusion ensues because the requisite creative medium does not exist.”<sup>100</sup> U.S. Army and Joint doctrine do not mention the requirement for a distributed enemy as a “medium” in which to practice operational art.



## Endnotes

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<sup>1</sup> Sun Tzu, *Art of War*, trans. Ralph D. Sawyer (Boulder, CO.: Westview Press, Inc., 1994), 167.

<sup>2</sup> James J. Schneider, *Theoretical Paper No. 3: The Theory of Operational Art* (Fort Leavenworth: U.S. Army Command and General Staff College, 1 March 1988), 8.

<sup>3</sup> James J. Schneider, *Vulcan's Arvil: The American Civil War and the Emergence of Operational Art* (Fort Leavenworth: U.S. Army Command and General Staff College, 16 June 1991), 6-23.

<sup>4</sup> Schneider, *Theoretical Paper No. 3: The Theory of Operational Art*, 14.

<sup>5</sup> A campaign is a series of related military operations designed to achieve strategic objectives within a given time and space. Wartime campaigns are broad in scope and usually involve the employment of large forces. Peacetime campaigns can be broad in scope but usually involve smaller forces and, many times, other U.S. Government agencies, international agencies, or United Nations Forces.

<sup>6</sup> Major operations consist of coordinated actions in a single phase of a campaign and usually decide the course of a campaign.

<sup>7</sup> Schneider, *Theoretical Paper No. 3: The Theory of Operational Art*, 1.

<sup>8</sup> Paul H. Herbert, *Deciding what has to be Done: General William E. Depuy and the 1976 Edition of Field Manual 100-5 Operations* (Fort Leavenworth: U.S. Army Command and General Staff College, 1988), 95-97.

<sup>9</sup> Department of the Army. *Field Manual 100-5: Operations* (Washington, DC: U.S. Government Printing Office, May 1986), 9-11.

<sup>10</sup> *Ibid.*, 10.

<sup>11</sup> Richard M. Swain, *Filling the Void: The Operational Art and the U.S. Army* (Fort Leavenworth: U.S. Army Command and General Staff College, undated), 44.

<sup>12</sup> Dated June 1993.

<sup>13</sup> Dated May 1995.

<sup>14</sup> Department of the Army. *Field Manual 100-7: Decisive Force: The Army in Theater of Operations* (Washington, DC: U.S. Government Printing Office, May 1995), 4-2.

<sup>15</sup> Department of the Army. *Field Manual 100-5: Operations*, 6-1 to 6-3. A battle consists of a series of related engagements; it lasts longer than an engagement, involves larger forces, and could affect the course of the campaign. Battles occur when division, corps, or army commanders fight for significant objectives. Engagements are small conflicts or skirmishes, usually between opposing maneuver forces; they are normally short in duration and fought at division and below.

<sup>16</sup> *Ibid.*, 6-2.

<sup>17</sup> *Ibid.*, 6-2.

<sup>18</sup> *Ibid.*, 6-1 to 6-3.

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<sup>19</sup> Joint Staff. *Joint Publication 3-0: Doctrine for Joint Operations* (Washington, DC: U.S. Government Printing Office, February 1995), II-2.

<sup>20</sup> Summarized from Joint Staff. *Joint Publication 3-0: Doctrine for Joint Operations*, II-1 to II-5, and III-9.

<sup>21</sup> *Ibid.*, I-3.

<sup>22</sup> Joint Staff. *Joint Publication 5-0: Doctrine for Planning Joint Operations* (Washington, DC: U.S. Government Printing Office, April 1995), I-2.

<sup>23</sup> Schneider, *Theoretical Paper No. 3: The Theory of Operational Art*, 2.

<sup>24</sup> James J. Schneider, *Vulcan's Anvil: The American Civil War and the Emergence of Operational Art*, 30.

<sup>25</sup> *Ibid.*, 38.

<sup>26</sup> *Ibid.*, 39.

<sup>27</sup> *Ibid.*, 40.

<sup>28</sup> *Ibid.*, 58.

<sup>29</sup> Epstein, Robert M., *Napoleon's Last Victory* (Lawrence: University Press of Kansas, 1995), 25.

<sup>30</sup> Shimon Naveh, *In Pursuit of Military Excellence: The Evolution of Operational Theory* (London: Frank Cass, 1997), xiii.

<sup>31</sup> *Ibid.*, 10.

<sup>32</sup> Summarized from Naveh, *In Pursuit of Military Excellence: The Evolution of Operational Theory*, 1-10. For additional information on systems theory see Ludwig v. Bertalanffy, *General Systems Theory* (New York: George Braziller Press, 1968).

<sup>33</sup> Naveh, *In Pursuit of Military Excellence: The Evolution of Operational Theory*, 9.

<sup>34</sup> *Ibid.*, 13.

<sup>35</sup> *Ibid.*, 13.

<sup>36</sup> Summarized from Naveh, *In Pursuit of Military Excellence: The Evolution of Operational Theory*, 13.

<sup>37</sup> *Ibid.*, 12-14.

<sup>38</sup> J.F.C. Fuller, Quoted in John English. *On Infantry*, (New York: Praeger, 1984), p. xx.

<sup>39</sup> Naveh, *In Pursuit of Military Excellence: The Evolution of Operational Theory*, 116.

<sup>40</sup> Matthew Cooper, *The German Army* (Chelsea: Scarborough House Publishers, 1978), 114-138.

<sup>41</sup> J.F.C. Fuller, *A Military History of the Western World: Volume III* (New York: Funk & Wagnalls Company, Inc., 1956), 378.

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- <sup>42</sup> Erich von Manstein, *Lost Victories* (Novato: Presidio, 1982), 89.
- <sup>43</sup> Cooper, *The German Army*, 122.
- <sup>44</sup> Manstein, *Lost Victories*, 97.
- <sup>45</sup> Cooper, *The German Army*, 195.
- <sup>46</sup> Ronald Lewin, *Hitler's Mistakes* (New York: William Morrow and Company, Inc., 1984), 107.
- <sup>47</sup> Cooper, *The German Army*, 195.
- <sup>48</sup> *Ibid.*, 196-198.
- <sup>49</sup> Manstein, *Lost Victories*, 98.
- <sup>50</sup> Cooper, *The German Army*, 199.
- <sup>51</sup> Summarized from Cooper, *The German Army*, 200-216 and Manstein, *Lost Victories*, 98-126.
- <sup>52</sup> Ronald Lewin, *Hitler's Mistakes* (New York: William Morrow and Company, Inc., 1984), 107.
- <sup>53</sup> Len Deighton, *Blitzkrieg* (New York: Ballantine Books, 1979), 191-276. Manstein, *Lost Victories*, 98-126. Franz Halder, *War Journal of Franz Halder: Volume II* (European Command, circa 1956), 18-55. Franz Halder, *War Journal of Franz Halder: Volume III* (European Command, circa 1956), 30-132. Franz Halder, *War Journal of Franz Halder: Volume IV* (European Command, circa 1956), 17-55.
- <sup>54</sup> Summarized from Cooper, *The German Army*, 217-258 and Fuller, *A Military History of the Western World: Volume Three*, 388-409.
- <sup>55</sup> Cooper, *The German Army*, 195.
- <sup>56</sup> *Ibid.*, 195.
- <sup>57</sup> Manstein, *Lost Victories*, 87-88.
- <sup>58</sup> Cooper, *The German Army*, 178.
- <sup>59</sup> Manstein, *Lost Victories*, 71.
- <sup>60</sup> Peter Chrisp, *Blitzkrieg!* (Hove: Wayland Publishers Ltd., 1990), 43.
- <sup>61</sup> Cooper, *The German Army*, 198-216.
- <sup>62</sup> Manstein, *Lost Victories*, 114.
- <sup>63</sup> Alistair Horne, *To Lose a Battle*, (New York: Penguin Books, 1984), 199-200.
- <sup>64</sup> Cooper, *The German Army*, 242.
- <sup>65</sup> Manstein, *Lost Victories*, 114.
- <sup>66</sup> Lewin, *Hitler's Mistake*, 107.
- <sup>67</sup> Department of the Army. *Field Manual 100-5: Operations*, 6-2.

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- <sup>68</sup> Schneider, *Vulcan's Anvil: The American Civil War and the Emergence of Operational Art*, 38.
- <sup>69</sup> *Ibid.*, 64.
- <sup>70</sup> Cooper, *The German Air Force*, 112.
- <sup>71</sup> Deighton, *Blitzkrieg*, 191-276. Manstein, *Lost Victories*, 98-126. Halder, *War Journal of Franz Halder: Volume II*, 18-55. Halder, *War Journal of Franz Halder: Volume III*, 30-132. Franz Halder, *War Journal of Franz Halder: Volume IV*, 17-55.
- <sup>72</sup> Manstein, *Lost Victories*, 71.
- <sup>73</sup> *Ibid.*, 87-88.
- <sup>74</sup> Naveh, *In Pursuit of Military Excellence: The Evolution of Operational Theory*, 3-5.
- <sup>75</sup> *Ibid.*, 9.
- <sup>76</sup> Matthew Cooper, *The German Army* (Chlsea: Scarborough House Publishers, 1978), 195.
- <sup>77</sup> Naveh, *In Pursuit of Military Excellence: The Evolution of Operational Theory*, 13.
- <sup>78</sup> Manstein, *Lost Victories*, 115.
- <sup>79</sup> Naveh, *In Pursuit of Military Excellence: The Evolution of Operational Theory*, 14.
- <sup>80</sup> *Ibid.*, xvi-xvii.
- <sup>81</sup> *Ibid.*, 110-121. Cooper, *The German Army*, 177-194.
- <sup>82</sup> Naveh, *In Pursuit of Military Excellence: The Evolution of Operational Theory*, xvii.
- <sup>83</sup> Manstein, *Lost Victories*, 100.
- <sup>84</sup> Deighton, *Blitzkrieg*, 191-276. Manstein, *Lost Victories*, 98-126. Halder, *War Journal of Franz Halder: Volume II*, 18-55. Halder, *War Journal of Franz Halder: Volume III*, 30-132. Halder, *War Journal of Franz Halder: Volume IV*, 17-55.
- <sup>85</sup> Sequels are subsequent operations based on the possible outcomes of the current operation—victory, defeat or stalemate. Sequels are an integral component of operational design in U.S. Army and Joint doctrine.
- <sup>86</sup> The action of multiple agents whose end result is greater than the sum of the individual parts. This definition stems from the biological definition, which is the action of two or more substances, organs, or organisms to achieve an effect of which each is individually incapable.
- <sup>87</sup> Summarized from Naveh, *In Pursuit of Military Excellence: The Evolution of Operational Theory*, 13.
- <sup>88</sup> Deighton, *Blitzkrieg*, 191-276. Manstein, *Lost Victories*, 98-126. Halder, *War Journal of Franz Halder: Volume II*, 18-55. Halder, *War Journal of Franz Halder: Volume III*, 30-132. Halder, *War Journal of Franz Halder: Volume IV*, 17-55.
- <sup>89</sup> Carl von Clausewitz, *On War* (Princeton: Princeton University Press, 1976), 182.

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<sup>90</sup> Heinz Guderian trans. Constantine Fitzgibbon, *Panzer Leader* (New York: E.P. Dutton & Co., 1952), 106.

<sup>91</sup> Summarized from Deighton, *Blitzkrieg*, 191-276. Horne, *To Lose a Battle*, 245-645. James S. Corum, *The Roots of Blitzkrieg* (Lawrence: The University Press of Kansas, 1992), 203-205.

<sup>92</sup> Summarized from Deighton, *Blitzkrieg*, 275-276.

<sup>93</sup> Karl-Heinz Frieser, *Blitzkrieg-Legende: Der Westfeldzug 1940* (Munich: R. Oldenbourg, 1995), 5-7.

<sup>94</sup> Schneider, *Vulcan's Anvil: The American Civil War and the Emergence of Operational Art*, 39.

<sup>95</sup> *Ibid.*, 40.

<sup>96</sup> *Ibid.*, 45-46.

<sup>97</sup> *Ibid.*, 53-54.

<sup>98</sup> *Ibid.*, 55-58.

<sup>99</sup> *Ibid.*, 58.

<sup>100</sup> *Ibid.*, 66.

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