

The Crucial Role of the Operational Artist: A Case Study of Operation Barbarossa

A Monograph

by

LTC (GS) Hagen H. Ruppelt
German Army



School of Advanced Military Studies
United States Army Command and General Staff College
Fort Leavenworth, Kansas

2017

Approved for public release; distribution is unlimited

REPORT DOCUMENTATION PAGE				Form Approved OMB No. 0704-0188	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.					
1. REPORT DATE (DD-MM-YYYY) 06-02-2017		2. REPORT TYPE Master's Thesis		3. DATES COVERED (From - To) JUN 2016 – MAY 2017	
4. TITLE AND SUBTITLE The Crucial Role of the Operational Artist: a Case Study of Operation Barbarossa				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S) LTC (GS) Hagen H. Ruppelt				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) U.S. Army Command and General Staff College ATTN: ATZL-SWD-GD Fort Leavenworth, KS 66027-2301				8. PERFORMING ORG REPORT NUMBER	
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) Advanced Operational Arts Studies Fellowship, Advanced Military Studies Program.				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION / AVAILABILITY STATEMENT Approved for Public Release; Distribution is Unlimited					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT According to current United States (US) Army doctrine, operational art is the pursuit of strategic objectives through the arrangement of tactical actions in time, space, and purpose. This monograph raises the research question why the German application and failure of operational art before and during Operation Barbarossa 1941 is still relevant for today's US doctrinal understanding of operational art. Furthermore, the analysis challenges the doctrinal notion that operational art is applicable at all levels of warfare. Operation Barbarossa helps to understand that tactical success cannot prevent strategic failure if the operational artist is not able to build the crucial cognitive bridge between tactical actions and the overall policy aim. The analysis of Operation Barbarossa reveals the crucial and unique function of operational art at the intersection of political aims and military actions. The monograph uses the methodology of a single case study presented chronologically: the planning phase (July 1940–June 1941) and the execution phase (June–December 1941). The roles and functions of the operational artist provide the three evaluation criteria for the analysis: the discourse between the policy maker and the operational artist, the military operational objectives and to what extent they support the given political objectives, and the assessment of military means. The analysis of Operation Barbarossa shows how important an open and continuous discourse between the policy maker and the operational artist is. Strategic mismanagement and over-extension as experienced by the German army in Russia always trump doctrinal innovation and tactical brilliance.					
15. SUBJECT TERMS Operation Barbarossa, operational art, operational artist, General Halder, policy maker, discourse, military means, military objectives					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT	b. ABSTRACT	c. THIS PAGE			LTC (GS) Hagen H. Ruppelt
(U)	(U)	(U)	(U)	54	19b. PHONE NUMBER (include area code)

Monograph Approval Page

Name of Candidate: LTC (GS) Hagen H. Ruppelt

Monograph Title: The Crucial Role of the Operational Artist: A Case Study of Operation Barbarossa

Approved by:

_____, Monograph Director
G. Stephen Lauer, PhD

_____, Seminar Leader
Jason J. McGuire, COL

_____, Director, School of Advanced Military Studies
James C. Markert, COL

Accepted this 25th day of May 2017 by:

_____, Director, Graduate Degree Programs
Prisco R. Hernandez, PhD

The opinions and conclusions expressed herein are those of the student author and do not necessarily represent the views of the U.S. Army Command and General Staff College or any other government agency. (References to this study should include the foregoing statement.)

Fair Use determination or copyright permission has been obtained for the inclusion of pictures, maps, graphics, and any other works incorporated into the manuscript. This author may be protected by more restrictions in their home countries, in which case further publication or sale of copyrighted images is not permissible.

Abstract

The Crucial Role of the Operational Artist: A Case Study of Operation Barbarossa, by LTC (GS) Hagen H. Ruppelt, German Army, 54 pages.

According to current United States (US) Army doctrine, operational art is the pursuit of strategic objectives through the arrangement of tactical actions in time, space, and purpose. This monograph raises the research question why the German application and failure of operational art before and during Operation Barbarossa 1941 is still relevant for today's US doctrinal understanding of operational art. Furthermore, the analysis challenges the doctrinal notion that operational art is applicable at all levels of warfare. Operation Barbarossa helps to understand that tactical success cannot prevent strategic failure if the operational artist is not able to build the crucial cognitive bridge between tactical actions and the overall policy aim. The analysis of Operation Barbarossa reveals the crucial and unique function of operational art at the intersection of political aims and military actions.

The monograph uses the methodology of a single case study presented chronologically: the planning phase (July 1940–June 1941) and the execution phase (June–December 1941). The roles and functions of the operational artist provide the three evaluation criteria for the analysis: the discourse between the policy maker and the operational artist, the military operational objectives and to what extent they support the given political objectives, and the assessment of military means. The analysis of Operation Barbarossa shows how important an open and continuous discourse between the policy maker and the operational artist is. Strategic mismanagement and over-extension as experienced by the German army in Russia always trump doctrinal innovation and tactical brilliance.

Contents

Acronyms	v
Illustrations	vi
Section I: Introduction.....	1
Section II: Analysis of the Planning Phase (July 1940-June 1941).....	8
II.1 The Discourse between the Policy Maker and the Operational Artist.....	9
II.2 Assessment of Operational Objectives.....	11
II.2.1 Hitler's Strategic Guidance	12
II.2.2 From the Marcks Plan to the Preliminary Plan of the Army.....	12
II.2.3 Unsettled Tensions in the Planning Process.....	15
II.2.4 Directive 21—a Risky Compromise	16
II.3 Suitability of Military Means in View of the Given Mission and the Enemy	19
II.3.1 German Forces	19
II.3.2 Russian Forces	20
II.3.3 Assessment of German Military Means	22
Section III: Analysis of the Execution Phase (June-December 1941).....	25
III.1 Initial German Offensives	26
III.2 Discourse between the Policy Maker and the Operational Artist	27
III.3 Impact of Policy Aims that Impeded the Operational Approach	32
III.4 Assessment of Military Means.....	35
Section IV: Consolidated Conclusions and Recommendations	44
IV.1 Conclusions.....	44
IV.2 Recommendations.....	46
Bibliography	51

Acronyms

ADP	Army Doctrine Publication
ADRP	Army Doctrine Reference Publication
AG	Army Group
DA PAM	Department of the Army Pamphlet
JP	Joint Publication
km	Kilometer
OKH	Oberkommando des Heeres (Army High Command)
OKW	Oberkommando der Wehrmacht (Armed Forces High Command)
US	United States

Illustrations

1	The Marcks Plan (5 August 1940).....	13
2	The Preliminary Plan of the Army (5 December 1940).....	14
3	The final plan for Operation Barbarossa (30 March 1941).....	17
4	Situation of AG South (5 December 1941).....	40
5	Situation of AG Center (5 December 1941)	42
6	Situation of AG North (5 December 1941).....	43

Section I: Introduction

Over time, various theories of war and military combat experience in a variety of conflicts have shaped and influenced today's US Army doctrinal understanding of operational art. Army Doctrine Publication (ADP) 3-0, *Operations* defines operational art as “the pursuit of strategic objectives, in whole or in part, through the arrangement of tactical actions in time, space, and purpose.”¹

World War II provides many valuable examples of how military leaders on both sides tried to arrange military means to achieve military objectives that were supposed to support political aims within the context of a specific conflict. The German way of warfare enabled the Wehrmacht in World War II to achieve lightning military success in Poland (1939) and in France (1940). The analysis of the planning and execution phase of Operation Barbarossa (1940–1941) reveals the dynamic interdependencies and tensions between overarching political aims and the purposeful arrangements of military means in the face of the enemy. Furthermore, it allows the analysis of the outcome of tactical actions and the continuous need for the adaption of policy aims. Following this understanding, today's definition of operational art provides a lens to examine why the initial German tactical and operational success in the East did not translate into strategic victory.

This monograph raises the research question whether and why the German application and failure of operational art before and during Operation Barbarossa 1941 is still relevant for today's US doctrinal understanding of operational art.

Operation Barbarossa helps one to understand that tactical success cannot prevent strategic failure if the responsible military leader, the operational artist, is not able to exercise operational art as the crucial bridge between tactical actions and the overall policy aim. The

¹ Army Doctrine Publication (ADP) 3-0, *Operations* (Washington, DC: Government Printing Office, 2016), 4.

analysis of the planning and the execution phases of Operation Barbarossa is therefore relevant because it reveals the crucial function of the operational artist at the intersection of political aims and military actions and thereby calls for a new emphasis within today's doctrinal understanding of operational art.

The detailed Army Doctrine Reference Publication (ADRP) 3-0, *Operations* declares that “operational art is applicable at all levels of warfare.”² This tenet is arbitrary and distracts from the most important function of operational art. To disconnect operational art from the ongoing and dynamic discourse between the policy maker and the operational artist risks undocking tactical actions from their purpose: the political aim.³ *Operations* should therefore put more emphasis on the crucial role of operational art for the dynamic discourse and the mutual interdependencies between policy aims and operational ways and means.

This monograph uses the methodology of a single case study, Operation Barbarossa, presented chronologically. Based on the current US doctrinal understanding of operational art, the role and functions of the operational artist provide the evaluation criteria for the analysis. The planning phase (July 1940–June 1941) and the execution phase (June 1941–December 1941) of Operation Barbarossa are evaluated through these lenses. The selection of these specific timeframes focuses the analysis on important aspects of the campaign. Furthermore, the analysis of patterns that developed simultaneously as well as a changing scale, from the political down to the military operational focus and vice versa, allows for multiple perspectives and enhances the study.⁴ Based on the findings, current US doctrinal understanding of operational art will be compared and contrasted to the limitations and specific characteristics of German operational art

² Army Doctrine Reference Publication (ADRP) 3-0, *Operations* (Washington, DC: Government Printing Office, 2016), 2-1.

³ G. Stephen Lauer, “The Tao of Doctrine: Contesting an Art of Operations,” *Joint Force Quarterly*, no. 82 (3rd Quarter 2016): 122.

⁴ John Lewis Gaddis, *The Landscape of History* (New York: Oxford University Press, 2002), 22-26.

before and during Operation Barbarossa. The crucial role and function of the operational artist will subsequently challenge the current definition of US Army doctrine.

Derived from the doctrinal understanding of operational art, a model of the operational artist, which defines its characteristics, roles, and functions, forms the basis for the analysis of Operation Barbarossa. The operational artist directly interacts with the policy maker(s) to negotiate for the necessary military means. Within the defined policy aims for a specific theater of operations, the operational artist has the authority and responsibility to decide and order the ways in which the military means are employed. He or she defines the mission, the placement, and the rules of engagement to the tactical means. The emergent strategy and its adaption over time is a result of the continuous discourse between the policy maker and the operational artist and of the outcome of tactical engagements with the enemy.⁵

Derived from that model, the following three criteria guide the analysis of Operation Barbarossa. The discourse between the policy maker and the operational artist over military means establishes the first criterion. The analysis focuses on the characteristics of the discourse such as level of interaction over time and degree of mutual influence. The second criterion examines the chosen military operational objectives and to which extent they nest with and support the given political objectives. The third criterion covers the assessment of military means with regard to friendly objectives and to the enemy.

To provide facts, assessments, context, and background information about Operation Barbarossa, this monograph draws on limited primary sources and a variety of secondary sources from German and English-speaking authors. This allows for a broader judgment and enhances multiple perspectives.

Primary sources in the form of war diaries offer first-hand information and insights about the planning and the execution phase of Barbarossa. The war diary of Hitler's army aide, Major

⁵ Lauer, "The Tao of Doctrine," 120-122.

Gerhardt Engel, provides on the one hand the perspective and the motivations of the policy maker.⁶ On the other hand, the diary entries of General Franz Halder, Chief of the German Army General Staff, allows for an insight into the assessments and impressions of the operational artist for Operation Barbarossa. From his notes one gains some understanding of Halder's thoughts, the problems he confronted daily, and the concurrent decisions required of him within the political-military framework at that time.⁷ Furthermore, *The War Diary 1939-1945* of the commander of Army Group (AG) Center, General Fedor von Bock, offers the tactical perspective of the planning process and the execution of the campaign to the East.⁸

A variety of secondary sources makes it possible to put the primary sources into context and to shape the analysis from multiple perspectives. Within the range of German literature, Klaus Reinhardt's *Moscow—The Turning Point* provides detailed research and analysis. He argues that the failure of the German offensive against the Soviet Union in the winter 1941/1942 initiated the final German defeat in the East.⁹ Christian Hartmann's most recent book *Operation Barbarossa: Nazi Germany's War in the East, 1941-1945* helps to understand the second and third order effects of German war crimes and the violent occupation policy.¹⁰ Furthermore, Hartmann's book *Halder: Generalstabschef Hitlers 1938-1942* supports the necessary comprehension to retrace the role of the key operational artist and his changing relationship to the policy maker over time.¹¹

⁶ Gerhard Engel, *Heeresadjutant bei Hitler 1938-1943. Aufzeichnungen des Major Engels*, ed. Hildegard von Kotze (Stuttgart: Deutsche Verlagsanstalt, 1974).

⁷ Franz Halder, *The Halder War Diary, 1939-1942*, ed. Charles Burdick and Hans-Adolf Jacobsen (Novato, CA: Presidio Pr, 1988).

⁸ Fedor von Bock, *Generalfeldmarschal Fedor von Bock: The War Diary 1939-1945*, ed. Klaus Gebert, trans. David Johnston (Atglen, PA: Schiffer Military History, 1996).

⁹ Klaus Reinhardt, *Moscow-The Turning Point: the Failure of Hitler's Strategy in the Winter of 1941-42*, English ed. (Oxford: Bloomsbury Academic, 1992).

¹⁰ Christian Hartmann, *Operation Barbarossa: Nazi Germany's War in the East, 1941-1945* (Oxford, UK: Oxford University Press, 2013).

¹¹ Christian Hartmann, *Halder: Generalstabschef Hitlers 1938-1942* (Paderborn: Ferdinand

Many Anglophone authors focused their writings less on critical, scholarly history but more on the practical evaluation of military experience gained during the conflict. For example, the Department of the US Army's historical study *The German Campaign in Russia – Planning and Operations 1940-1942* represents a very detailed account of events but focuses rather on the German perspective.¹² To balance that aspect, David M. Glantz and Jonathan M. House's revised and expanded 2015 edition of *When Titans Clashed* brings the Soviet perspective to the discussion by incorporating material that emerged from Russian archives after the end of the Cold War.¹³ David Stahel's books *Operation Typhoon* and *Operation Barbarossa and Germany's Defeat in the East* highlight internal German planning and execution problems and offer explanations for the fact that despite success on the battlefield the intended German strategic victory failed.¹⁴

Some German primary sources and American literature from the 1950s onward must be assessed critically with regard to validity and credibility. In some cases, German generals used the opportunity after the war to report their personal views and experiences to a very receptive US audience. German generals tried to convince Americans that they had fought a "clean" war in the East and that Adolf Hitler was solely responsible for the outcome of the war.¹⁵

Besides others, Robert M. Citino, Shimon Naveh, Gerhard P. Groß, Lawrence Freedman, Martin Van Crefeld, and Azar Gat expand on the relationship of policy, strategy, and operational art and hereby contribute to the analysis at hand. The comparison and contrasting of Operation

Schöningh, 1991).

¹² Department of the Army Pamphlet (DA PAM) 20-261a, *The German Campaign in Russia Planning and Operations (1940-1942)* (Washington, DC: Government Printing Office, 1955).

¹³ David M. Glantz and Jonathan M. House, *When Titans Clashed: How the Red Army Stopped Hitler*, 2nd ed. (Lawrence: University Press of Kansas, 2015).

¹⁴ David Stahel, *Operation Typhoon: Hitler's March On Moscow, October 1941* (New York: Cambridge University Press, 2013); David Stahel, *Operation Barbarossa and Germany's Defeat in the East* (New York: Cambridge University Press, 2009).

¹⁵ Ronald Smelser and Edward J. Davies II, *The Myth of the Eastern Front: The Nazi-Soviet War in American Popular Culture* (New York: Cambridge University Press, 2008), 57.

Barbarossa as a case study with the current US doctrinal understanding of operational art has received less emphasis—that is where this monograph intends to add value to the discussion.

The monograph consists of four parts. Section I outlines the guiding question and introduces the model of the operational artist as a lens that provides the criteria for the analysis. Furthermore, it delineates the scope of the primary and secondary sources and frames the historical context of Operation Barbarossa as starting point for the analysis. Section II and III apply the defined lenses to examine the planning phase (July 1940–June 1941) and the first execution phase (June–December 1941) of Operation Barbarossa. Section IV summarizes the main conclusions and derives recommendations for today’s doctrinal understanding of operational art.

The historical context in which planning and execution of Operation Barbarossa occurred creates the necessary understanding of specific actions and decisions of individuals at that time and allows an accurate and valid application of the chosen lenses for the analysis.¹⁶ As early as 1924, when Hitler spent time in jail for leading an abortive coup against the Weimarer Republic of Germany, he wrote *Mein Kampf*, which reveals ideological convictions that he later put forward again as political aims in the East. He declared that in terms of world power, economic wealth, and racial supremacy Germany’s destiny lay in the East.¹⁷

Hitler’s overarching policy goals for the eastern theater of operations were motivated by economic, ideological, and political considerations. First, he wanted Germany to become economically self-sufficient to enable the German Reich to win a long war against the Anglo-Saxon powers such as Great Britain and the United States of America. Therefore, he desired to rapidly seize and utilize Russian deposits of raw materials for the autarky of the German Reich.

¹⁶ Gaddis, *Landscape of History*, 97.

¹⁷ Oscar Pinkus, *The War Aims and Strategies of Adolf Hitler* (Jefferson: McFarland & Company Publishers, 2005), 14; Adolf Hitler, *Mein Kampf*, trans. Ralph Manheim (Boston: Houghton Mifflin Company, 1971), 665-667.

Germany could not afford to conduct an economic war of attrition with its limited available industrial potential. Second, based on the Nazi ideology, Hitler strove for the annihilation of the inferior Bolshevik, Slavic, and Jewish races to gain and secure living space for the Pan-German Empire. Third, the geo-political situation of Germany made it clear that Hitler had to avoid a two-front war at all costs. Consequently, for the achievement of hegemony in Europe, the Soviet Union had to be overpowered in a quick and decisive manner.¹⁸

The official German policy towards Russia did not yet reveal Hitler's real intentions. On the brink of the German invasion of Poland in 1939, the Molotov-Ribbentrop Pact that promised friendship and mutual nonaggression publicly redefined the competitive German-Russian relationship. However, secretly it intended to divide Eastern Europe into spheres of influence. At least for a certain period of time, both sides were freed of their immediate worries about a two-front conflict.¹⁹

In the years 1939-1940, Germany recorded surprising tactical and operational success that became famous as lightning war or *Blitzkrieg*.²⁰ The strategic defeat of France and the Low Countries (Holland, Belgium and Luxembourg) dramatically increased Hitler's domestic popular support. Besides his peak in popularity, his political position and authority were beyond challenge. Germany's stunning military success shattered the international community's belief in a political solution with a peaceful outcome.²¹ Furthermore, the successful, quick, and decisive campaign against France encouraged an arrogant certainty within the German political and

¹⁸ Reinhardt, *Moscow-The Turning Point*, 3-5.

¹⁹ Glantz and House, *When Titans Clashed*, 14.

²⁰ The victory over France in 1940 was later often described by the term 'Blitzkrieg'. The effects resulted of the doctrinal impetus of combining armor, mechanization (and motorization), mobile artillery, and close air support coupled with a command philosophy that desired to disrupt and disorient an adversary's decision-making capabilities and destroy the enemy's will to fight. Michael Geyer, "Germany Strategy in the Age of Machine Warfare, 1914-1945," in *Makers of Modern Strategy: From Machiavelli to the Nuclear Age*, ed. Peter Paret (Princeton, NJ: Princeton University Press, 1986), 585.

²¹ Craig W. H. Luther, *Barbarossa Unleashed: the German Blitzkrieg through Central Russia to the Gates of Moscow June-December 1941* (Atglen, PA: Schiffer Publishing, Ltd., 2014), 32; Pinkus, *War Aims and Strategies of Hitler*, 117.

military leadership to be invincible and superior to other nations and their armies. Hitler and the German General Staff started considering the concept of Blitzkrieg-warfare as universal remedy to all upcoming military conflicts.²²

The developments in Russia further enhanced the German perception of superiority. From 1937 on, the Soviet army underwent challenging times. Stalin feared military treason and was suspicious of the army as an institution that might limit his power. Therefore, he started a purge that led to the arrest and disappearance of about fifty to sixty percent of the military officer corps. The purge decimated an entire generation of military commanders and government administrators. Especially in the years 1940-1941, that development further enhanced the arrogant and dangerous underestimation of the combat readiness of Russian forces by German military planners.²³

The German success in France contrasted sharply with the negative Soviet experience of large-scale operations in Finland in 1940. That alarmed the Russian leadership and led to a reform of the Soviet Armed Forces' structure and their internal command and control system. Despite these and other precautions, the Soviet leadership and its army were not yet ready for war against Germany in June 1941. Stalin and his diplomats sought to maintain peace with the German rival until the last minute. Still in June 1941, according to their agreements, Russia continuously delivered raw materials across the German border. That did not prevent the attitude of the German leadership that one could extract more resources by occupying Russia.²⁴

Section II: Analysis of the Planning Phase (July 1940-June 1941)

In July 1940, directly after the victory in France, Hitler ordered the German Army High Command (Oberkommando des Heeres-OKH) to start planning for a military assault against

²² Luther, *Barbarossa Unleashed*, 32.

²³ Glantz and House, *When Titans Clashed*, 9.

²⁴ Ibid., 27.

Russia. General Franz Halder, Chief of General Staff of the OKH, held the responsibility to initiate and develop the German operational planning effort in the East.²⁵

As the responsible planner for Barbarossa, General Halder did not sufficiently fulfill the crucial function as operational artist, which led to an unspecific operational approach that contained unsolved tensions and foreseeable crisis. This is mainly because the policy maker, Hitler, and the operational artist, Halder, did not have a continuous and open discourse over military means, and both pursued divergent agendas concerning operational objectives. As result, the chosen operational approach did not provide sufficient focus, rigor, and military means with regard to the assigned missions and to an underestimated, opposing Red Army.

II.1 The Discourse between the Policy Maker and the Operational Artist

Between July 1940 and June 1941, the discourse between the policy maker and the operational artist was not a continuous process and never enhanced an open-minded exchange over the necessary military means for the invasion of Russia. This is mainly the result of Hitler's ongoing indecisiveness, an increasing level of mutual distrust that led to a deteriorating personal relationship, and decreasing interaction between Hitler and Halder.

Based on Hitler's ideological mindset, military conflict with Russia was inevitable. However, from summer 1940 to spring 1941, Hitler considered the military invasion only as one possible option besides others. Over several months, it was in fact unclear inside the OKH and to the designated AG commanders if Hitler would really start a war with the Soviet Union. On the occasion of the ordered redistribution of his headquarters to the East on August 31, 1940, General von Bock, the designated commander of AG Center, wrote in his diary that this move was "probably nothing more than to act as a scarecrow against any sort of Russian ambition."²⁶

²⁵ Gerhard P. Groß, *Mythos und Wirklichkeit: Geschichte des operativen Denkens im deutschen Heer von Moltke d.Ä. bis Heusinger* (Paderborn: Ferdinand Schöningh GmbH, 2012), 255.

²⁶ Bock, *War Diary*, 189.

As early as fall of 1940, the invasion of Great Britain no longer appeared to be a real prospect. The failure of the German Airforce in the Battle of Britain made the Russian adventure more likely.²⁷ On December 18, 1940, Directive 21 initiated the detailed planning process for an assault on Russia. On that occasion, Hitler's army aide, Major Engel, noted in his diary that the OKH was not sure about Hitler's real intent. The OKH asked him to verify if Hitler "actually wants a passage at arms or rather bluffs."²⁸ The diary entries reflect Hitler's erratic strategic considerations concerning Russia and represent the level of uncertainty in which the German army undertook their initial planning efforts for Barbarossa.

During the planning phase, the interactions between Halder and Hitler were two-fold. Direct information briefings about the planning effort for the invasion of Russia were held only on rare occasions. In late 1940 and early 1941, other theaters of war such as Great Britain and the conflict in the Balkans demanded Hitler's attention. Of course, Hitler also indirectly interacted with Halder and influenced the planning efforts via the army commander in chief, General von Brauchitsch. Consequently, Halder had to deal with two principals.

Halder directly served von Brauchitsch within the OKH. Mutual respect and trust characterized their relationship. Daily contact and interactions allowed them to resolve occurring differences in a professional fashion.²⁹ However, Halder's role as Chief of General Staff of the OKH was different from that of his predecessors. Hitler's personality did not allow open discussion and dialogue. Hitler did not appreciate open criticism. He was convinced that the generals were not able to think strategically. Based on his unconditional authority, he made the decisions and used subordinates to execute his will. Hitler's dislike and distrust of generals and of

²⁷ Bob Carruthers and John Erickson, *The Russian Front 1941-1945* (New York: Sterling Publishing, 1999), 5.

²⁸ Engel, *Heeresadjutant bei Hitler*, 92; for the original Directive 21 (Weisung Nr. 21 Fall Barbarossa), see Walther Hubatsch, ed., *Hitlers Weisungen für die Kriegsführung 1939-1945: Dokumente des Oberkommandos der Wehrmacht*, 2nd ed. (Koblenz: Bernhard & Graefe Verlag, 1983), 84-88.

²⁹ Halder, *Halder War Diary*, 1-3; Samuel W. Mitcham, *Hitler's Field Marshals and Their Battles* (London: Leo Cooper Ltd, 1988), 66-69.

the General Staff did not allow Halder to continue the traditional role of the German General Staff. Traditionally, the Chief of Staff of the OKH exercised extensive autonomy and responsibility with regard to operational questions. Quite the opposite, Hitler increasingly disregarded Halder's opinion, authority and military advice in operational questions.³⁰

On the other hand, Halder did not believe in the military and operational abilities of Hitler. He distrusted him and perceived his increasing influence as interference in his traditional domain. As a result, Halder adopted a new approach in dealing with Hitler over time. He realized that by arguing with Hitler, he would not be able to achieve his personal goals and put his operational vision into effect. Instead of enhancing an open and continuous discourse over military means, Halder more and more prevented direct interaction and conflict with Hitler. Rather, he worked patiently to create an operational plan that matched his own conviction without disobeying direct orders from Hitler.³¹

II.2 Assessment of Operational Objectives

Hitler and Halder did not agree on one coherent strategic focus of the campaign and therefore pursued deviating agendas concerning operational objectives. Both were convinced that the annihilation of the Red Army near the Russian border was important to throw the Soviet regime off balance. Hitler considered the conquest of the economic potential of the Soviet Union in the North and the South of Russia as the key to victory, while Halder perceived the seizure of the command and control hub, Moscow, as vital. In the end, the operational approach for Barbarossa reflected a risky compromise because it contained military operational objectives that did not nest with the intended policy aims in the East.³²

³⁰ Geoffrey P. Megargee, *Inside Hitler's High Command* (Lawrence: University Press of Kansas, 2000), 130-135.

³¹ Ibid.

³² Geyer, "Germany Strategy in the Age of Machine Warfare," 588.

II.2.1 Hitler's Strategic Guidance

On July 31, 1940, Hitler gave his initial guidance concerning the planning for an assault on Russia. Motivated by political considerations about Russia's role and its impact on future British political behavior, Hitler announced that Russia's destruction should start in spring 1941. He identified the object of Barbarossa as the destruction of Russian manpower. Furthermore, he gave guidance about his envisioned quick and decisive campaign that he estimated should not last more than five months. Based on his ideological, economic, and political considerations, Hitler focused his attention on the industrial and agricultural heart of the Soviet Union such as the Ukraine, the armaments industrial centers Leningrad and Moscow, the industrial complex in the Donets Basin, and the oil sources in the Caucasus. He directed one thrust in the South to Kiev and to Odessa at the Black Sea, simultaneously another thrust to the Baltic States and to Moscow in the North, and finally a linkup of the northern and southern prongs. Subsequently, Hitler envisioned a limited drive on the Baku oil fields at the Caspian Sea.³³

Although Hitler's guidance sounded determined, he still sought a political solution to handle the German-Russian relations. However, as a backup, he initiated the planning efforts to bring a military option to the equation. Still on October 24, 1940, Halder noted in his diary that the upcoming visit of Molotov, the Russian foreign minister, would probably lead to a political solution because Russia would join the one-month old Tripartite Pact between Germany, Japan, and Italy.³⁴

II.2.2 From the Marcks Plan to the Preliminary Plan of the Army

On August 1, 1940, Halder and the temporarily assigned General Marcks discussed the initial plan inside the OKH. Halder assumed the importance of Moscow as the Russian political

³³ Pinkus, *War Aims and Strategies of Hitler*, 169-175; Halder, *Halder War Diary*, 244-245; DA PAM 20-261a, 5-6.

³⁴ The Tripartite Pact was an agreement between Germany, Japan and Italy signed on September 27, 1940. Halder, *Halder War Diary*, 268-269.

center and command and control hub. Accordingly, he ordered Marcks to develop an operational approach with two large formations, of which one was to drive on Kiev and the other one on Moscow.

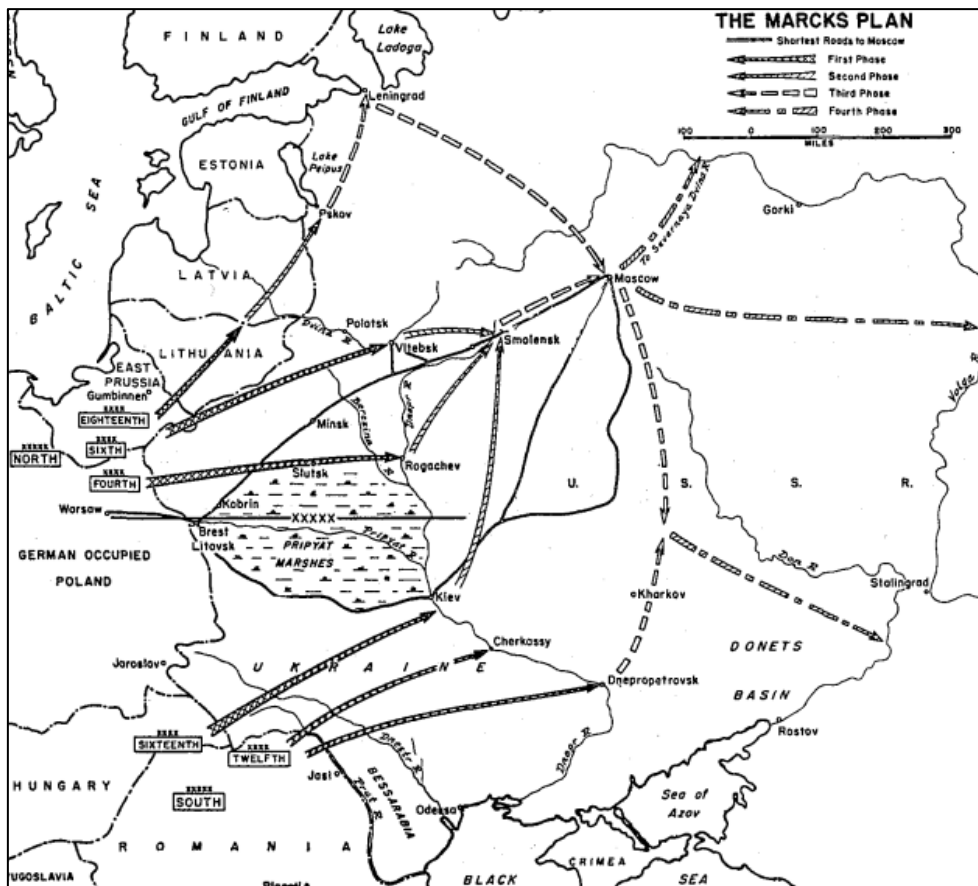


Figure 1: The Marcks Plan (5 August 1940). Department of the Army Pamphlet (DA PAM) 20-261a, *The German Campaign in Russia Planning and Operations (1940-1942)* (Washington, DC: Government Printing Office, 1955), 5.

Deviating from the political guidance, the Marcks Plan (Figure 1) clearly stated Moscow as principal objective of the operation. Halder assumed that its capture would lead to the disintegration of Soviet resistance. According to Hitler's guidance, the plan also aimed at the defeat of the Russian armed forces and the seizure of the food and raw-material producing areas of the Ukraine and the Donets Basin as well as the armament-production centers around Moscow and Leningrad.³⁵

³⁵ DA PAM 20-261a, 6.

Between August and December 1940, the planners of OKH's Operations Division started a strategic survey based on the Marcks Plan. The main findings of this survey revealed challenging aspects and limiting factors such as manpower, space, time, operational environment, and intelligence about the Red Army.

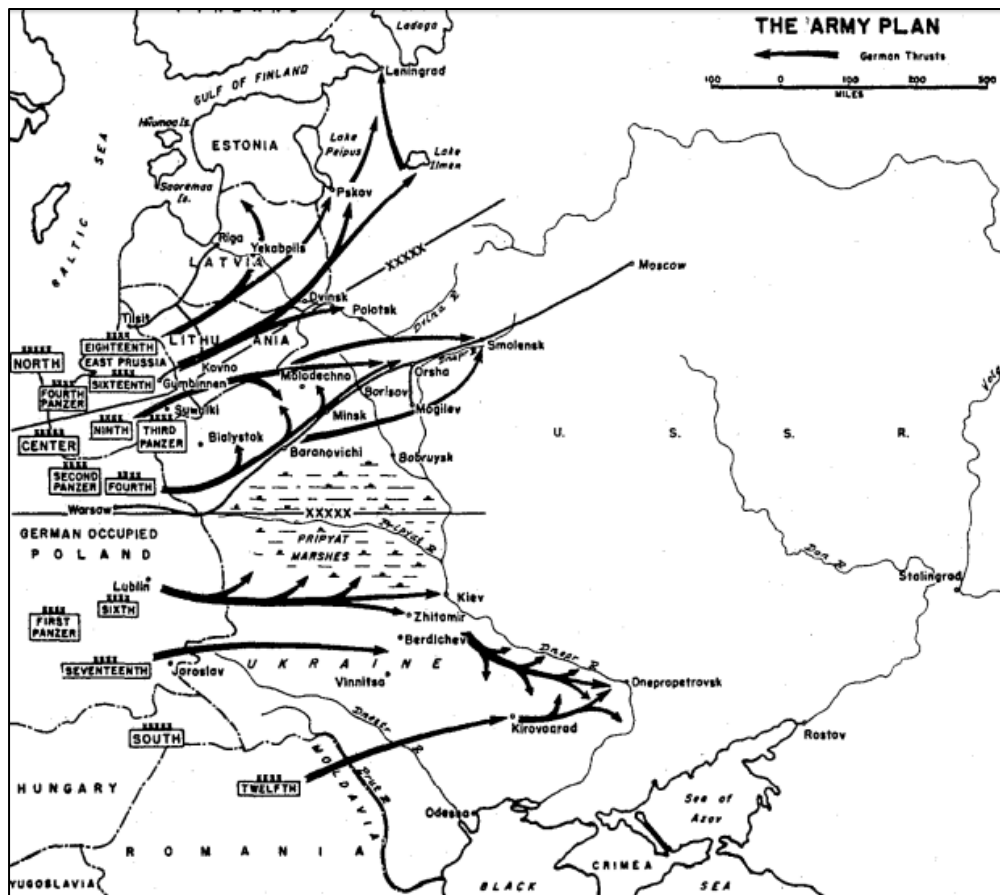


Figure 2: The Preliminary Plan of the Army (5 December 1940). Department of the Army Pamphlet (DA PAM) 20-261a, *The German Campaign in Russia Planning and Operations (1940-1942)* (Washington, DC: Government Printing Office, 1955), 17.

The survey led to minor adaptations of the Marcks Plan that further developed into the Army's Preliminary Plan (Figure 2). However, Halder's operational focus on Moscow remained unchanged.³⁶ In early December 1940, the results of an OKH's war game of the plan revealed additional critical challenges with regard to force ratio, distances, supply, maintenance, and time

³⁶ DA PAM 20-261a, 17.

requirements. At that point, Halder as the operational artist, failed to adapt the plan and to articulate the apparent risks of the overall approach. Instead of confronting the policy maker with the findings, Halder remained silent and the apparent problems went unsolved. Wishful thinking and the belief in the overwhelming effects of another lightning campaign dominated the mindset of the operational planners.³⁷

Due to the planning autonomy of the OKH, both operational approaches, Hitler's 'North & South' and Halder's 'Moscow' could largely develop independently. Until December 1940, these two schools of thought coexisted more or less separately because Hitler and Halder did not have an open discourse about this fundamental question.

II.2.3 Unsettled Tensions in the Planning Process

On December 5, 1940, Brauchitsch and Halder presented the Preliminary Plan of the Army (Figure 2) to Hitler. Halder argued that three army groups (AGs) were to launch the offensive. AG North was to attack from East Prussia towards Leningrad, AG Center via Minsk to Smolensk, and AG South to Kiev.

Hitler was still convinced that Germany could only cope with the Anglo-Saxon powers in the struggle for world supremacy if the Soviet economic centers and raw materials were seized by a coup-style assault. Hitler agreed with Halder's plan in general and emphasized that the destruction of the Russian forces near the border was of utmost importance. However, Hitler underlined his clear will and intent to strike with two strong prongs in the North and in the South. Hence, he ordered that AG Center should be designed strong enough to support AG North. Additionally, he directed the increase of the combat strength of AG South in order to destroy the Russian armies west of the Dnepr River. Hitler did not agree with Halder's assessment of the capture of Moscow as the decisive operation. Hitler clearly stated that Moscow would not be of

³⁷ Megargee, *Inside Hitler's High Command*, 124.

great importance. Rather, he assumed that the Russian army would be thrown off balance if the German attack hit the Russians hard enough to break down their lines of communication.³⁸

Both views could not have been more contradictory. Halder considered the northern and southern AGs as flank protection for the main thrust to Moscow. On the contrary, Hitler wanted to assign vital missions to the southern and northern AGs. Although the critical issue of differing viewpoints concerning the main effort was addressed, the policy maker and the operational artist left the issue unsettled at that point.³⁹

After the overall approval of the Army's Plan by Hitler, the OKH continuously conducted exercises and war games that revealed a series of new challenges with regard to combat ratio, limited economic capacities, and overextended lines of supply. Although Halder and Hitler became aware of these results, both failed again to adapt the operational plan or to make changes in the overall military strategy. This is further important evidence for the failure of operational art as the "cognitive approach by commanders and staffs supported by their skill, knowledge, experience, creativity, and judgment."⁴⁰ Halder's decisions and mindset reflected his lack of understanding of operational art as the important linking function, "to overcome ambiguity and intricacies of a complex, ever changing, and uncertain operational environment" and to "integrate ends, ways, and means, while accounting for risk."⁴¹ Instead of risk mitigation, Halder decided to discount the apparent risk and to believe in his flawed assumptions.

II.2.4 Directive 21—a Risky Compromise

On December 17, 1940, General Jodl, head of the Operations Division of the Armed Forces High Command (Oberkommando der Wehrmacht – OKW), drafted Directive 21 for

³⁸ Halder, *Halder War Diary*, 293-294, 297-298; DA PAM 20-261a, 17.

³⁹ Megargee, *Inside Hitler's High Command*, 131.

⁴⁰ ADRP 3-0, 2-1.

⁴¹ ADRP 3-0, 4-1.

Operation Barbarossa. Without further revision and confirmation by the OKH, Hitler made some basic changes with regard to the mission of AGs North and Center and signed the order.

Once again, Hitler clearly assigned first priority to the seizure of Leningrad. Moscow was of minor priority and therefore would only be attacked after a successful advance on both flanks.⁴²



Figure 3: The final plan for Operation Barbarossa (30 March 1941). Department of the Army Pamphlet (DA PAM) 20-261a, *The German Campaign in Russia Planning and Operations (1940-1942)* (Washington, DC: Government Printing Office, 1955), 36.

The changes in Directive 21 were not synchronized with the OKH's plans and not in line with Halder's initial operational focus on Moscow. In his diary, Halder noted on January 28, 1941, that for Operation Barbarossa the "purpose is not clear."⁴³

⁴² DA PAM 20-261a, 22-25; Hubatsch, *Hitlers Weisungen für die Kriegsführung*, 84-88.

⁴³ Halder, *Halder War Diary*, 314.

However, confident in his own judgment, Halder carried on pursuing his own operational ideas as if he and Hitler were in full agreement. The detailed planning effort as well as the Army's Operations Order (Figure 3) did not fully account for Hitler's guidance and intentions. Halder expected that his concept would become relevant anyway soon after the start of Operation Barbarossa.⁴⁴

Up to the beginning of the operation in June 1941, the divergent agendas of the policy maker and the operational artist remained desynchronized and the tensions unsolved. From time to time, the unsolved topic was addressed but without any impact on the operational plan.⁴⁵

Halder's rationale for his operational approach only focused on his personal belief in a short war that would enforce a break-down of the Soviet Union through the seizure of Moscow. If this scenario failed, not only all operational objectives in the East would be unachievable, but also all of Hitler's strategic-economic objectives would fail. The conquest of the economic potential of the Soviet-Union was Hitler's declared decisive operation in the East.⁴⁶ Consequently, the chosen operational objectives did not coherently support the given political objectives in the East. In this regard, Halder as the operational artist failed to pursue "strategic objectives [...] through the arrangement of tactical actions in time, space, and purpose."⁴⁷ Admittedly, Hitler as the policy maker dictated objectives and lines of operation. He directly interfered with the sphere of the operational artist by changing details of the operational approach and thus further hampered Halder's abilities to apply operational art.

⁴⁴ Megargee, *Inside Hitler's High Command*, 132.

⁴⁵ DA PAM 20-261a, 30-31; Halder, *Halder War Diary*, 337.

⁴⁶ Current US doctrine defines *decisive operation* as follows: "The decisive operation is the operation that directly accomplishes the mission. It determines the outcome of a major operation, battle, or engagement. The decisive operation is the focal point around which commanders design an entire operation." ADRP 3-0, 4-6.

⁴⁷ ADP 3-0, 4.

II.3 Suitability of Military Means in View of the Given Mission and the Enemy

Already during the early planning phase of Operation Barbarossa in fall of 1940, the OKH's assessment revealed that the German offensive forces would not have the advantage of numerical superiority against the Red Army. The OKH only planned with 145 German divisions, including nineteen armored divisions, for the fight against assumed 170 Soviet divisions plus ample reinforcements estimated to be stationed in western Russia. This planning factor supported Halder's early conviction that the only method of compensating for this deficiency was to define one clear main effort and to mass forces at one crucial point.⁴⁸

However, the implementation of Directive 21 through the deployment of military forces for Operation Barbarossa reflected unsolved tensions. Limited military forces and insufficient reserves failed to provide the necessary military power and rigor to accomplish ambitious missions and to annihilate an underestimated, opposing Red Army.

II.3.1 German Forces

On the eve of the invasion, on June 21, 1941, the final German order of battle showed that the initial planning assumptions had not fundamentally changed over time. Consequently, the set of military means for the invasion remained nearly unchanged. The total force available for the offensive operation consisted of 148 divisions, including nineteen armored. In detail, AG North under Field Marshal von Leeb assembled thirty divisions composed of three armored, three motorized infantry, twenty-one infantry, and three security divisions. Field Marshal von Bock, who commanded AG Center, had fifty-one divisions available, including nine armored, seven motorized infantry, thirty-one infantry, one cavalry, and three security divisions. The total strength of AG South under the command of Field Marshal von Rundstedt was forty-three German and fourteen Romanian divisions (five armored, three motorized infantry, twenty-six

⁴⁸ DA PAM 20-261a, 14-15.

infantry, six mountain/light infantry, and three security divisions). Additionally, Halder's plan foresaw a total of twenty-four divisions as reserves under OKH's centralized command and control (two armored, one motorized infantry, and twenty-one infantry divisions).⁴⁹ This assignment of divisions to the respective AGs once again reflected Halder's influence. AG Center, with the mission to destroy the bulk of Russian forces east of the border through large encirclements on its thrust via Minsk toward Smolensk, was assigned the preponderance of military ground forces including nine armored divisions subdivided into Second and Third Panzer Groups.⁵⁰

With 2,770 aircraft, the German air force (Luftwaffe) provided sixty-five percent of its first-line strength to support Operation Barbarossa. Heavily degraded by the Battle of Britain and with a limited supply rate by German industries, the Luftwaffe was suitable to serve as a tactical air in support of a short-term ground offensive. Limited bomber ranges did not allow for conducting a deep and sustained air campaign.⁵¹

II.3.2 Russian Forces

During a conference on December 5, 1940, Hitler clarified his flawed assessment of a poorly trained and inferior Red Army. He elaborated that the Russian army lacked good leadership and that material and troops were of substandard quality.⁵²

At a conference with Hitler on February 3, 1941, Halder estimated that a total of 155 Russian divisions, consisting of one hundred infantry, twenty-five cavalry, and thirty mechanized divisions, would oppose the German invasion. He further argued that the German army's high

⁴⁹ DA PAM 20-261a, 38-40.

⁵⁰ For the General Order of Battle of Opposing Forces in June 1941 see Glantz and House, *When Titans Clashed*, 35.

⁵¹ Ibid., 42-43.

⁵² Halder, *Halder War Diary*, 297-298.

quality specifically in the armored forces and artillery would largely compensate for the numerical Russian superiority.

Between mid-1940 and the eve of the invasion into Russia, the German Military Intelligence Department East had to adjust the number of Russian divisions from initially 155 divisions to a total of 207 divisions and forty motor brigades on April 4, 1941. Halder admitted that the strength of the European Russian army must be higher than estimated originally. His diary entry on June 21, 1941, with an estimation of 221 Russian divisions, reads like a confession of the German underestimation of the Red Army. In spite of this insight, Halder neither adapted the plan nor argued for additional military means for the campaign.⁵³

Furthermore, Halder assumed that the massed Russian forces near the border would not be able to withdraw into the depth of the Russian mainland because they would have to defend the industrial sites and raw materials in the Baltic States and in the Ukraine. The observation that the Russians were building fortifications in the southern and northern sectors further enhanced this assumed enemy's most likely course of action.⁵⁴

In fact, the Red Army struggled in 1940/1941 with a variety of problems such as Stalin's purges that had produced a severe shortage of trained commanders and staff officers. However, in April 1941, Stalin ordered a series of precautionary measures to mobilize the Red Army and the armament industry. The existing structure and dislocation of the Russian mechanized units would not allow to concentrate them physically and to employ them in mass formations for potential counteroffensives. The Russian Defense Plan 41 (DP-41) called for 171 divisions to be arrayed in three defensive echelons along the border. Even more important than these forces was another separate group of five field armies that formed a second strategic echelon east of the Dnepr River. In June 1941, this reserve front was not yet fully committed and established. Nevertheless, the

⁵³ Reinhardt, *Moscow-The Turning Point*, 12-13; Halder, *Halder War Diary*, 350.

⁵⁴ DA PAM 20-261a, 30.

typical echeloning of forces in great depth had overcharged the German intelligence prior to June 1941. Furthermore, based on Stalin's assessment of Hitler's intent to strike into the economic hub of the Ukraine, the Russian first echelon forces were arrayed far forward and mainly concentrated in the Southwest.⁵⁵

Despite the sheer numbers of about ten thousand Russian aircraft, the world's largest air force suffered from obsolescent equipment, limited industrial supply, difficult command and control structures, and lack of experienced leadership. Consequently, the Russian air force would only pose a limited immediate threat to the German invaders.⁵⁶

II.3.3 Assessment of German Military Means

Based on the guidance of Directive 21, the Army's Operation Order (February 3, 1941) specified the missions and objectives for the respective subordinate German Armies and Panzer Groups in detail.

The primary mission for all three AGs was to destroy the "bulk of the Russian Army stationed in western Russia by a series of daring operations spearheaded by armored thrusts."⁵⁷ The purpose of the initial phase was to prevent an organized withdrawal of intact units into the vastness of interior Russia.

AG North was tasked to cut off and annihilate the Russian forces in the Baltic area, establish itself in the vicinity of Lake Ilmen, and subsequently capture the city of Leningrad. AG Center received the mission to encircle and destroy all Russian forces between the border and Minsk, and afterwards move on Smolensk. The intent was to conduct subsequent double envelopments with strong forces massed on both flanks. Hitler's intent, expressed in Directive 21, that AG Center would directly support AG North to annihilate Russian Forces in the Baltic area

⁵⁵ Glantz and House, *When Titans Clashed*, 37-45.

⁵⁶ Ibid., 42 -43.

⁵⁷ DA PAM 20-261a, , 22; for the original Directive 21 (Weisung Nr. 21 Fall Barbarossa), see Hubatsch, *Hitlers Weisungen für die Kriegsführung*, 84-88.

was not directly implemented in the Army Operation Order. Following Halder's own intent and his focus on Moscow, he treated that option as a contingency that would need further approval during the operation.

During a conference with the AG and army commanders on March 30, 1941, Hitler approved a change in AG South's conduct of operation. Instead of the initially ordered double envelopment, AG South was to strengthen its left with the intent to thrust quickly with mobile forces to Kiev, and successively cut off and destroy all enemy forces still in the western Ukraine. German-Romanian forces in the south would fix the Red Army along the Romanian border in order to prevent an organized Russian withdrawal across the Dnepr River.⁵⁸

The military means assigned to the AGs to accomplish given missions reflect the predominant German underestimation of the challenging operational environment and a flawed assessment of the enemy's capabilities.

Influenced and driven by the Nazi racial ideology, the German military leadership did not realize that the German mechanized forces would face completely different conditions in Russia than in prior campaigns with regard to weather, terrain, and distances. Based on the mindset of victorious 'Blitzkrieg'-operations in Poland and France, the German planners showed professional arrogance. They neglected the challenges that related to operations over vast distances such as sequential double envelopments over terrain sections of each three to five hundred kilometers (km). The plan for Operation Barbarossa simply discounted for a potential failure of a quick and decisive victory. Halder neglected to develop branches and sequels that would account for changing weather and terrain conditions. Therefore, the operational environment with its vast distances (Warsaw-Moscow 1200 km) challenged the German doctrinal impetus of maneuver warfare.⁵⁹

⁵⁸ DA PAM 20-261a, 26-35.

⁵⁹ Shimon Naveh, *In Pursuit of Military Excellence* (New York: Frank Cass Publishers, 2004), 126.

Halder and his planners simply neglected the existing early warnings about critical planning assumptions. The German infantry lacked the necessary motorization to keep up with the armored spearheads during encirclement operations. Logistical capabilities were not designed to support a mobile operation on such a scale over weeks or even months. Furthermore, the chosen operational approach reflected the risky compromise between Hitler's intended two-prong approach and Halder's central focus on Moscow. The approach created a 1000 km front line along which the German forces would be dispersed into three operations that could hardly support each other. It was opposite to the doctrinal impetus of massing forces to achieve overwhelming combat power and deep penetration that proved to be so successful in France in 1940. In this regard, the plan lacked a clear point of main effort.⁶⁰

Additionally, a dispersed approach would hamper the operational element of tempo and transition, which were cornerstones of the German way of maneuver warfare.⁶¹ With the available German military means and based on logistical assessments, deep penetrations, and effective encirclements could only be conducted on a limited scale and over a limited duration. The intended application of the principles of mass, economy of force, and movement would not compensate for the lack of sufficient forces.

Another important factor of the distribution of forces was the small number of decentralized reserve divisions directly assigned to the AGs. The twenty-four reserve divisions under OKH's centralized command accounted for Hitler's desire to exercise a closer control over the course of operations. Given the huge distances and the dimension of the Eastern theater of operation, the total reserves were too small to provide the ability to become effective in a timely manner.⁶²

⁶⁰ Groß, *Mythos und Wirklichkeit*, 229.

⁶¹ Robert M. Citino, *The German Way of War* (Lawrence: University Press of Kansas, 2005), 270.

⁶² DA PAM 20-261a, 41.

To make things worse, Hitler and his planners at the OKH underestimated the Russian forces' capabilities and capacities. The assumptions that Russian forces would not trade space for time, would not use their vast territory to exhaust the German offensive, would not be able to mobilize a second and third strategic reserve echelon of forces, and would not be able to reallocate their industrial bases further to the East were based on a flawed assessment of the Red Army and were the result of poor German intelligence.⁶³

Overall, Hitler's political intent, to conduct a quick and decisive operation against the Red Army in order to throw the Russian leadership off balance within a few months, was not fully reflected in the Army's Operational Plan. The German military means were not suitable with regard to their assigned missions and objectives as well as in the face of an underestimated Red Army.

Section III: Analysis of the Execution Phase (June-December 1941)

On June 21, 1941, the OKW released the code word *Dortmund* that initiated the execution of the military invasion of Russia. Subsequently, on June 22, the first units of Operation Barbarossa crossed the border to the East.

The analysis of the execution phase between June and December 1941 reveals that the initial tactical success of the German thrusts into the Soviet Union did not translate into the intended quick and decisive victory, but led to the culmination of the offensive at the gates of Moscow. Three points of failure mainly caused that strategic turning point in the campaign. First, the intensifying discourse between Hitler and Halder revived the inherent tensions of the operational approach and led to a leadership crisis with catastrophic impact on the campaign. Second, ideologically motivated policy aims inspired Russian resilience that contradicted the intended operational approach of a quick and decisive campaign. Third, the German military

⁶³ DA PAM 20-261a, 14-17.

means proved to be insufficient to achieve ambitious German objectives facing inexhaustible Russian reserves and resistance.

III.1 Initial German Offensives

From the German perspective, the outcome of the first two weeks of Operation Barbarossa appeared to be very successful. By the end of June, the thrusts of AG Center captured twenty Soviet divisions with 290,000 prisoners and 2,500 tanks in the Minsk pocket.⁶⁴

There is no doubt that the German offensive achieved an overwhelming effect of surprise from the strategic level down to the tactical level. Stalin had continuously disregarded early warnings of an upcoming German invasion.⁶⁵ Therefore, the Soviet front line units did not receive any warnings of the impending invasion. On the contrary, the defensive lines were unprepared and the invasion induced chaos within the Red Army's command and control system.⁶⁶ On June 22, 1941, General Halder noted in his diary that "the enemy was taken by surprise is evident from the facts that troops were caught in their quarters, that planes on the airfields were covered up."⁶⁷

The shocking effects of the German invasion that provided multiple dilemmas to the Red Army and to the Soviet leaders had a risky side effect on the German side.⁶⁸ Both, Hitler and Halder declared that Operation Barbarossa was victorious after only a fortnight into the campaign.⁶⁹ The initial low resistance of Soviet troops further confirmed the German flawed

⁶⁴ Hartmann, *Operation Barbarossa*, 27; DA PAM 20-261a, 44; David M. Glantz, *Barbarossa: Hitler's Invasion of Russia 1941* (Charleston: Tempus Publishing Group, 2001), 55-56; Groß, *Mythos und Wirklichkeit*, 232-233.

⁶⁵ The motivation for Stalin's attempts to appease Nazi Germany until the last moment is further elaborated in Pinkus, *War Aims and Strategies of Hitler*, 177-184; Hartmann, *Operation Barbarossa*, 47; and John Lukacs, *June 1941: Hitler and Stalin* (New Haven, CT: Yale University Press, 2006), 57-72.

⁶⁶ Stahel, *Operation Barbarossa and Germany's Defeat in the East*, 153-156.

⁶⁷ Halder, *Halder War Diary*, 410-411.

⁶⁸ Robert M. Citino, *Blitzkrieg to Desert Storm: The Evolution of Operational Warfare* (Lawrence: University of Kansas Press, 2004), 62-63.

⁶⁹ On July 3, 1941, Halder noted, "the Russian campaign has been won in the space of two

planning assumptions. Already during this early phase of the operation, Hitler considered diverting troops from AG Center to the North and the South based on the initial tactical success and in accordance to his unchanged, original strategic vision.⁷⁰

III.2 Discourse between the Policy Maker and the Operational Artist

Until mid-December 1941, the professional and personal relationship between Hitler and Halder further deteriorated over the divergent focus of the campaign. However, in comparison to the planning phase, the discourse between the policy maker and the operational artist increased in quantity and quality. The direct and indirect interactions between Hitler and Halder became more and more frequent because the strategic focus and Hitler's attention shifted from other theaters of war to the ongoing campaign in the East. The early tactical success initially concealed the unsolved tensions about the operational focus as described in section II.

Two major issues increasingly led to conflict between Hitler and Halder. First, Halder was a strong advocate of the leadership principle of mission command (*Auftragstaktik*). Hitler's direct interference in tactical questions contradicted the traditional core of the German command philosophy. *Auftragstaktik* was designed to empower subordinates to fulfill a given task by providing only mission and intent, but no detailed directives how to accomplish it. Preconditions for a successful application were an above-average acceptance of risk, a trusted relationship that allowed decentralized responsibility, and an appropriate education of the subordinates.⁷¹

weeks." Halder, *Halder War Diary*, 446; Hitler expressed his opinion on the same subject on July 4, 1941 and said, "for all practical purposes the enemy has lost this campaign." Quoted in DA PAM 20-261a, 45.

⁷⁰ Hartmann, *Operation Barbarossa*, 47; DA PAM 20-261a, 45.

⁷¹ Karl-Heinz Frieser, *Blitzkrieg-Legende: Der Westfeldzug 1940* (Muenchen, Germany: Oldenbourg Verlag, 2012), 421; Groß, *Mythos und Wirklichkeit*, 225; Bruce Condell and David T. Zabecki, *On the German Art of War: Truppenfuehrung; German Army Manual for Unit Command in World War II* (Mechanicsburg: Stackpole Books, 2009), 23-24; Joerg Muth, *Command Culture: Officer Education in the US Army and the German Armed Forces, 1941-1940, and the Consequences for World War II* (Denton: University of North Texas Press, 2011), 183.

Halder was convinced that the AG commanders had the better assessment of the situation on the ground and therefore should be allowed to execute the operation within the given mission and intent. On August 11, 1941, Halder noted in his diary that the “tendency to tinker with details [...] naturally harbors a great danger. We are ignorant of the conditions under which action must be taken.”⁷² Instead of confronting Hitler, Halder more and more pursued a new approach. He hoped that the “operations become so fluid that his [Hitler’s] tactical thinking cannot keep step with the developments.”⁷³

Second, the controversy over operational objectives led to repeated outbreaks of tensions and contradiction between Halder and Hitler and finally to the leadership crisis in July/August 1941. Against Halder’s repeated recommendation to mass the offensive on Moscow, Hitler returned to his initial intent. His focus stayed unchanged on the seizure of Leningrad in the North and on the Donets Basin in the South. With Directive 33 (July 7, 1941) and the supplement to Directive 33 (July 23, 1941) he ordered that AG Center would redirect Second Panzer Group to support AG South to eliminate Russian forces in their flank. Furthermore, Third Panzer Group would support AG North to protect its flank for the seizure of Leningrad.⁷⁴

Halder and the commander of AG Center, General von Bock, saw in that decision a risky diversion of armored forces and feared the loss of momentum of the campaign. Halder’s diary entry of July 26, 1941, well reflected his worries about the impact of the latest decisions. He stated that the new plan implied a strategy shift from the operational to the tactical level. Halder warned that overly focusing on tactical engagements would “feed all [...] strength into a front expanding in width at the sacrifice of depth and end up in position warfare.”⁷⁵ On July 25, 1941,

⁷² Halder, *Halder War Diary*, 506.

⁷³ *Ibid.*, 498.

⁷⁴ DA PAM 20-261a, 46-57; For the original Directive 33 (Weisung Nr. 33 Fortführung des Krieges im Osten) and its supplement, see Hubatsch, *Hitlers Weisungen für die Kriegsführung*, 140-144.

⁷⁵ Halder, *Halder War Diary*, 485.

General von Bock, commander AG Center, also rejected the idea to “encircle the Russians tactically [...] rather than with strategic movements.”⁷⁶

With Directive 34 (July 30, 1941) and its supplement (August 12, 1941), Hitler adapted the initial far-reaching to short-range military objectives such as flank protection and the annihilation of specified Russian units. Those directives reflected Hitler’s hesitancy and changing ambitions over time.⁷⁷

On August 18, 1941, in response to Hitler’s unsteadiness, Halder submitted a memorandum that represented the OKH’s perspective on the upcoming operational necessities. All AG commanders supported the content of the submitted convictions. In the memorandum, Halder mentioned a variety of aspects such as weather, time, combat efficiency of armored forces, and the importance of the effects of massing forces. He recommended shifting the focus back on the primary target: Moscow.⁷⁸

Hitler was convinced that he had not only a better understanding for strategic issues but also that he was the predetermined operational military genius. He disregarded Halder’s military advice and overruled the operational artist. On August 20, 1941, Hitler once again missed the opportunity to conduct an offensive to Moscow and to destroy the bulk of Russian forces that were located west of Moscow.⁷⁹ Hitler’s ability to decide against the recommendations of his advisors and his field commanders demonstrated the extent to which he by now dominated the operational realm.⁸⁰ On that occasion, Hitler’s army aide, Major Engel, noted in his diary that,

⁷⁶ Bock, *War Diary*, 262.

⁷⁷ DA PAM 20-261a, 60-61; For the original Directive 34 (Weisung Nr. 34) and its supplement, see Hubatsch, *Hitlers Weisungen für die Kriegsführung*, 145-149.

⁷⁸ DA PAM 20-261a, 63-64.

⁷⁹ Citino, *The German Way of War*, 302-303; DA PAM 20-261a, 59, 69-70.

⁸⁰ Hartmann, *Operation Barbarossa*, 50; DA PAM 20-261a, 69-70.

after the discourse with Hitler, both von Brauchitsch and Halder resigned and gave in. Engels characterized that day as a “black day for the German Army.”⁸¹

Over time, however, Hitler increasingly bypassed the operational artist and got directly into contact with the commanders of the respective AGs. Hitler’s direct discourse with the field commanders partially influenced his assessment of military objectives. At the end of August 1941, Hitler realized that German troops had encircled Leningrad. Furthermore, he anticipated the destruction of the Russian forces in front of AG South. Based on those conditions, Hitler followed the recommendation of Halder and the AG commanders. On September 6, 1941, he approved Directive 35 and ordered the final thrust on Moscow: Operation Typhoon.⁸²

Nowadays, most historians agree that Halder’s envisioned rapid seizure of Moscow as the command and control hub would not necessarily have led to the breakdown of the Soviet system. The main arguments for this position are the timely relocation of large parts of the Soviet industrial and political apparatus to the East and hence out of range of the German invaders. In a survey as of October 2, 1941, General Thomas, Chief OKW Economic Office, assessed that both the seizure of Leningrad and Moscow would not lead to Russian defeat because the German offensive did not affect the military and economic potential of the Soviet Union decisively. Nevertheless, Halder and Hitler continuously disregarded such warnings because they did not fit their worldviews and intentions.⁸³

Overall, the leadership crisis in July and August of 1941 showed the limitations of an open discourse between the policy maker and the operational artist. Ideological and political implications motivated Hitler’s strategic approach, which he tried to implement by interfering in tactical decisions. Additionally, the German school of thought that emphasized a maneuver and

⁸¹ Engel, *Heeresadjutant bei Hitler*, 110.

⁸² Hartmann, *Operation Barbarossa*, 51.

⁸³ Reinhardt, *Moscow-The Turning Point*, 99-101; Stahel, *Operation Typhoon*, 304; Bryan I. Fugate, *Operation Barbarossa: Strategy and Tactics on the Eastern Front, 1941* (Novato, CA: Presidio Press, 1984), 310-315; DA PAM 20-261a, 78-80; Megargee, *Inside Hitler’s High Command*, 140-141.

battle-centric approach to strategic thinking shaped Halder's attitude. He overly focused his attention on purely operational questions without tying back to the overall strategy. Based on this setting, a fruitful and constructive discourse was doomed to failure.⁸⁴

In the first days of December 1941, only three months after Hitler finally approved AG Center's Operation Typhoon, the intended final and decisive German thrust got stuck within eyeshot of Moscow. On December 5, the initiative passed to the Soviet forces. The Red Army executed a coordinated counter-offensive and forced the German AGs to withdraw under pressure along the whole front line.⁸⁵ Against the repeated warnings and requests of his AG commanders and against the military advice of General Halder, Hitler forbade a broad operational disengagement of German forces with the so-called *Haltebefehl* (order to hold current positions). Based on his distrust of his generals and his lack of operational understanding, Hitler compelled his subordinate commanders to defend the front "down to the last man."⁸⁶ This decision led to the second leadership crisis between Hitler and the OKH.

Subsequently, on December 19, 1941, Hitler relieved General von Brauchitsch and took over the position as Commander of the OKH. That step led to the consolidation of institutional powers of the policy maker and the operational planner. Hitler almost neutralized Halder's position as Chief of the Army General Staff. Megargee argues that after Hitler's take-over the General Staff ceased to have the prominent voice in strategic issues such as replacements, organization, and weapons procurement. The discourse became a one-way street where only Hitler gave explicit orders in great details. Over time, that development determined the behavior and the position of Halder.

⁸⁴ Reinhard Stumpf, *Die Wehrmacht-Elite: Rang- und Herkunftsstruktur der Deutschen Generale und Admirale 1933-1945* (Boppard am Rhein: Boldt, 1982), 303-308; Hew Strachan, *The Direction of War: Contemporary Strategy in Historic Perspective* (New York: Cambridge University Press, 2013), 37-39.

⁸⁵ Glantz and House, *When Titans Clashed*, 102-111; Luther, *Barbarossa Unleashed*, 647-650.

⁸⁶ Reinhardt, *Moscow -The Turning Point*, 306.

Traditionally, the function of the Chief of the Army General Staff was to assure the operational logic and that the operational approach would not be overextended by overly ambitious political aims. In the end, Halder no longer fulfilled this function, but converted his role to an unconditional obeying of Hitler's orders. This opening gap in the functional and personal relationship made the discourse between the policy maker and the operational artist dysfunctional. The operational artist could no longer arrange and shape the operation. Halder joined the team of willing subsidiaries.⁸⁷

III.3 Impact of Policy Aims that Impeded the Operational Approach

The conflict between Halder and Hitler about changing operational objectives is only one aspect that reveals points of failure based on an incoherent strategy. Furthermore, the overarching ideological policy aim impeded the intended quick and decisive victory and contradicted the chosen operational approach because it increased the resistance of the Soviet leadership, forces and populace.

Already on March 30, 1941, during his speech to the leadership of the Wehrmacht, Hitler proclaimed a war of ideologies and declared the inevitable conflict with the Soviet Union as war of annihilation. He expressed his clear intent to eradicate the Bolshevik, Slavic, and Jewish races.⁸⁸ Prior to the invasion, Hitler approved and released specific orders such as the "Commissar Order" that declared that Soviet political officers were not prisoners of war and should therefore be shot out of hand.

These types of orders changed the military operation into a war of ethnic annihilation aimed at the non-German inhabitants of the western Soviet Union. The German occupation policy

⁸⁷ Megargee, *Inside Hitler's High Command*, 139-141; Groß, *Mythos und Wirklichkeit*, 256-257; James Steiner, *Hitler's Wehrmacht: German Armed Forces in Support of the Führer* (Jefferson, NC: McFarland, 2008), 90-93.

⁸⁸ Walter Görlitz, *Kleine Geschichte Des Deutschen Generalstabes*, 2nd ed. (Berlin: Haude & Spenerische Verlagsbuchhandlung, 1977), 387; Stephen G. Fritz, *Ostkrieg: Hitler's War of Extermination in the East* (Lexington: University Press of Kentucky, 2011), 66-67.

deliberately intended to alienate the Russian populace.⁸⁹ Instead of encouraging the local population to welcome the liberators from Stalinism, the German troops engaged in atrocities and special security units committed genocidal crimes in the rear areas.⁹⁰

Over the first weeks of Operation Barbarossa, German units repeatedly captured large amounts of Russian soldiers in huge encirclement operations. General von Bock's war diary entry on October 20, 1941, illustrates the fate that faced most of these prisoners of war. He wrote that "tens of thousands of Russian prisoners of war [...] are dead-tired and half-starved [...]. Many have fallen dead or collapsed from exhaustion on the road."⁹¹

The brutal German quest for liberating living space in the East awakened an unconditional determination to counter the German invasion in the Soviet leadership, the Red Army, and the Russian populace. The Soviet leadership used the German occupation policies to enhance and facilitate their own propaganda efforts. Stalin officially declared the war against the invaders as a war of survival, promised ultimate victory, and asked the Russian people to join the fight. From the first days of the conflict, the Soviets acknowledged and planned for a long and costly struggle. Accordingly, Stalin ordered the timely full mobilization of the Russian war industry.⁹²

⁸⁹ Glantz and House, *When Titans Clashed*, 65-69; Fritz, *Ostkrieg*, 68-70; John Burt, *Barbarossa: Germany's Assault on the Soviet Union 1941-1942* (Bakersfield: Strategy&Tactics Press, 2016), 18; Hartmann, *Operation Barbarossa*, 2-3.

[illegible]

⁹¹ Bock, *War Diary*, 337.

⁹² Stahel, *Operation Typhoon*, 137-139; Hartmann, *Operation Barbarossa*, 117-121.

Within the Red Army, the soldiers' fear of being taken prisoner increased their will to fight and strengthened their resistance and tenacity. The intended break down of Russian units and of the Red Army as a whole failed. On the contrary, the Red Army was increasingly more willing to accept casualties on a large scale. However, not just the Russian fighting spirit had a decisive effect on the Red Army's conduct of battle. More importantly, the Red Army started consciously trading space for time, mobilized fresh reserves from the eastern territories in a timely manner, drafted reservists and new soldiers from the population, and concluded the necessary internal reforms.⁹³

In reaction to the treatment by the German invaders and based on its fears, the Russian populace within the occupied territories started resisting and showed an increasing willingness to sacrifice. The more the German forces advanced to the East the more vulnerable became their overextended lines of communication to attacks by partisans. The AG commanders had to divert additional forces from the front line to increase their rear area security.⁹⁴

Thus, the ideological aims and the declared war of ethnic annihilation prevented and contradicted the operational approach that Halder chose to achieve a short and decisive campaign.⁹⁵ The implied long-term perspective of Hitler's ideological aims conflicted with the intended quick defeat of the Red Army and the subsequent expected breakdown of the Soviet system. Neither the envisioned removal of the Bolshevik ideological center of Leningrad, nor the planned seizure of industrial sites and raw material deposits in the Ukraine would help to resolve the apparent contradiction of strategic and operational aims.

Although Germany could not stand a long lasting conflict because of its limited potential of raw materials and industrial production, Hitler and his operational planners disregarded the

⁹³ Reinhardt, *Moscow -The Turning Point*, 102-105; Stahel, *Operation Typhoon*, 39-40.

⁹⁴ Fritz, *Ostkrieg*, 149; Reinhardt, *Moscow-The Turning Point*, 171-172; Alfred W. Turney, *Disaster at Moscow: von Bock's Campaigns, 1941-1942* (Albuquerque: University of New Mexico Press, 1970), 71-73.

⁹⁵ Fugate, *Operation Barbarossa*, 305.

necessity of a timely full mobilization. The intention to end the war in the East either with a single decisive maneuver battle or with a battle of annihilation failed.⁹⁶

III.4 Assessment of Military Means

German military means proved to be insufficient to cope with a challenging operational environment and with an increasingly resistant Red Army with inexhaustible reserves. This was mainly because of an insufficient number of German reserve units, limitations in personal replacements and logistical supply, and the German infantry's inability to overcome the challenges of high tempo, vast distances, and lack of motorization.

Based on the assumption that the defeat of the Soviet Union would last only a few months, Halder failed to urge Hitler to mobilize the armament industry or increase the production for the German Army in July 1940. With the first units crossing the line of departure of Operation Barbarossa, the majority of the German military leadership was still convinced that superiority in leadership and operational experience would compensate for a potential numerical disadvantage.⁹⁷

The lack of strategic reserve units became apparent near the end of August 1941. Already twenty-one out of twenty-four divisions, constituting the OKH reserves at the beginning of the campaign, reached the front to reinforce the struggling AGs.⁹⁸ The impact of an insufficient number of reserves became evident with the diary entry of General von Bock on July 31, 1941. He stated that he had “almost no reserves left to meet the enemy massing forces and the constant

⁹⁶ Hartmann, *Operation Barbarossa*, 50; Stahel, *Operation Typhoon*, 299-300.

⁹⁷ Horst Boog et al., *Das Deutsche Reich und der Zweite Weltkrieg*, 2nd ed., vol. 4, *Der Angriff auf die Sowjetunion* (Stuttgart: Deutsche Verlagsanstalt, 1983), 169, 189.

⁹⁸ DA PAM 20-261a, 71-73.

counterattacks.”⁹⁹ Only two weeks later, he assessed that “material and human strength will probably no longer be sufficient.”¹⁰⁰

This leads to other important and limiting aspects. On August 31, 1941, the German army units were short of personnel replacements. 217,000 replacements could not fully compensate about 409,000 losses.¹⁰¹ In addition to the casualties, the Red Army’s increasing resistance caused a huge German deficit of motor vehicles that could not be replaced on short-notice. On August 28, Halder noted in his diary that the divisions along the front line were short of around fifty percent of their motor vehicles. The number of combat ready tanks in the armored formations alternated between eighty-three and twenty-four percent. Furthermore, the AGs were short of spare parts as well as of petroleum, oil and lubricants.¹⁰²

Although Halder recognized these deficits, he was not willing to give up his ambitious objective: Moscow. With this attitude, he was in line with the German military contemporary school of thought. As so many before and around him, Halder believed in quick and decisive battlefield victories. Therefore, the German General Staff did not account for a deep understanding of logistical constraints or for the necessity of a deep logistics net. Traditionally, logistics had to follow and to enable maneuver warfare. The emphasis for the operational planner was on the maneuver elements and not on logistical issues. That explains the negligence that cost Halder and the German Army dearly.¹⁰³

Historian Van Creveld argues persuasively that a major factor in the loss of German offensive initiative in Russia during late autumn of 1941 was the failure of the German army’s supply system. Not enough of the captured Russian railway net could be adapted to the standard

⁹⁹ Bock, *War Diary*, 269.

¹⁰⁰ *Ibid.*, 281.

¹⁰¹ DA PAM 20-261a, 71-72; Burt, *Barbarossa*, 47.

¹⁰² Halder, *Halder War Diary*, 519; DA PAM 20-261a, 70-73.

¹⁰³ Citino, *The German Way of War*, XIV-XV, 269-270, 297-298.

European track width in good time to supply fast-moving assault columns, and there were not enough motorized supply and support vehicles in working order to bridge the gap.¹⁰⁴ Halder and the OKH failed to anticipate those logistical constraints that directly translated into limitations of operational reach.¹⁰⁵ Halder was not willing to draw the right conclusions from the dialogue with his subordinate commanders. He missed the opportunity to anticipate the inherent risk.¹⁰⁶ Instead of risk mitigation, Halder gambled and stubbornly focused on Moscow.

Aside from logistical challenges, the German infantry divisions were not equipped to keep up with the tempo of armored formations over huge distances. During the first months of Operation Barbarossa, there were multiple occasions in which armored thrusts achieved huge encirclements of Soviet units by operating in double envelopments. During these operations, the armored formations quickly outdistanced the marching infantry divisions. Gaps opened in the German rear area and the armored formations could not close the seam of the encirclements. Consequently, a significant number of Russian units managed to escape and to reorganize their defensive positions in the depth of the Russian space.¹⁰⁷

Based on the lack of motorization, Hartmann compares the German infantry of fall 1941 to the Napoleonic army because it mainly marched and fought on foot or by horse and cart, with rifles and artillery. Halder arranged an army that was able to produce local superiority that swung battles through rapid raids independent of the infantry's marching speed. But sequential envelopments over large terrain sections soon exhausted the potential of the German infantry. The

¹⁰⁴ Martin Van Crefeld, *Supplying War: Logistics from Wallenstein to Patton* (New York: Cambridge University Press, 1986), 163-169.

¹⁰⁵ Current US doctrine defines operational reach as follows: "Operational reach reflects the ability to achieve success through a well-conceived operational approach. Operational reach is a tether; it is a function of intelligence, protection, sustainment, endurance, and relative combat power. The limit of a unit's operational reach is its culminating point." ADRP 3-0, 2-9.

¹⁰⁶ Current US doctrine defines risk as follows: "Risk is the probability and severity of loss linked to hazards.[...] Understanding risk requires assessments coupled with boldness and imagination. Successful commanders assess and mitigate risk continuously throughout the operations process." ADRP 3-0, 2-10.

¹⁰⁷ Burt, *Barbarossa*, 38; DA PAM 20-261a, 47; Stahel, *Operation Typhoon*, 25-36.

time that the infantry needed to keep up with the armored formations equaled a loss of momentum and offered the Soviet forces the opportunity to reorganize in depth.¹⁰⁸

When Hitler decided to launch the final thrust on Moscow, the German offensive had lost over six weeks because of the leadership crisis in July/August 1941. That delay caused changes in the operational environment. At the end of September 1941, there was a permanent flow of new Russian divisions and the Red Army did not show any signs of disintegration. Nevertheless, General von Bock launched the offensive of AG Center on September 30, 1941.¹⁰⁹

Shortly after the reinforced AG Center initiated the offensive with seventy-eight divisions, it began to rain and until early November 1941, the muddy roads hampered major offensive operations. Halder had underestimated the impact of the challenging operational environment on the German offensive.¹¹⁰

Although he increasingly recognized that the German prospects and the numerical relation of German to Soviet troops deteriorated, he continuously sought to seize Moscow. He relied on the German 'Blitzkrieg' experience and still believed in the equation that tactical success based on speed, mobility, firepower, and the concentration of forces would overcome the numerical superiority of the Red Army. He discounted that the great distances, the challenging operational environment, and the enemy's resistance would inflict an enormous toll on the armored and motorized divisions, cutting mobility and reducing firepower.¹¹¹

Furthermore, Halder continuously underestimated the rising numbers of Soviet units and the inexhaustible reserves that were mobilized to defend Russia. Furthermore, the *Lend-Lease Act* turned out to become particularly important for the Soviets in late 1941 because it made

¹⁰⁸ Hartmann, *Operation Barbarossa*, 26.

¹⁰⁹ Citino, *Blitzkrieg to Desert Storm*, 65-66; DA PAM 20-261a, 79; Stahel, *Operation Typhoon*, 299.

¹¹⁰ Citino, *The German Way of War*, 297; Hartmann, *Operation Barbarossa*, 51; Hartmann, *Halder*, 288.

¹¹¹ Stahel, *Operation Typhoon*, 25.

additional British-supplied tanks and aircraft possible. At a time when Soviet industry was in disarray, even small quantities of aid took on far greater significance. British-supplied tanks made up thirty to forty percent of the entire heavy and medium tank strength of Soviet forces before Moscow at the beginning of December 1941.¹¹²

Already on August 11, 1941, Halder admitted to his war diary that he had “underestimated the Russian colossus.”¹¹³ During the final thrust on Moscow, the Russian resistance and the increase in Russian counter-attacks slowly degraded AG Center’s combat power.

On December 1, 1941, General von Bock sent a telex to the OKH, which reads like a cry for help in the light of a desperate situation. Von Bock reported that his forces conducted “a frontal attack” and that AG Center lacked “the strength for large-scale encirclement movements.”¹¹⁴ He assessed that the “notion that the enemy in front of the army group had ‘collapsed’ was a fantasy.”¹¹⁵ In his report, von Bock clearly pointed out that his forces would soon be exhausted and reach the point of culmination.¹¹⁶ As clearly as a military subordinate could possibly express, he wrote that the attack appeared to be “without sense or purpose.”¹¹⁷

¹¹² Proposed in late 1940, the Lend-Lease Act was the principal means for providing U.S. military aid to foreign nations during World War II. By allowing the transfer of supplies without compensation to Britain, China, the Soviet Union and other countries, the act permitted the United States to support its war interests without being overextended in battle. Alexander Hill, “Did Russia Really Go It Alone? How Lend-Lease Helped the Soviets Defeat the Germans,” *Historynet*, July 12, 2008, accessed November 21, 2016, <http://www.historynet.com/did-russia-really-go-it-alone-how-lend-lease-helped-the-soviets-defeat-the-germans.htm>; Hartmann, *Operation Barbarossa*, 112-113, 168; Stahel, *Operation Typhoon*, 24.

¹¹³ Halder, *Halder War Diary*, 506.

¹¹⁴ Bock, *War Diary*, 375.

¹¹⁵ *Ibid.*

¹¹⁶ The current US doctrine defines culmination as follows: “The culminating point is a point at which a force no longer has the capability to continue its form of operations.[...] While conducting offensive tasks, the culminating point occurs when the force cannot continue the attack and must assume a defensive posture or execute an operational pause.” ADRP 3-0, 2-9.

¹¹⁷ Bock, *War Diary*, 376.

Despite the apparent impasse, Halder for his part desperately believed in the opportunity to “bring the enemy to his knees by applying the last ounce of strength.”¹¹⁸ The huge discrepancy between Halder’s expectations and the real developments along the frontline soon generated disastrous effects on all the AGs.¹¹⁹

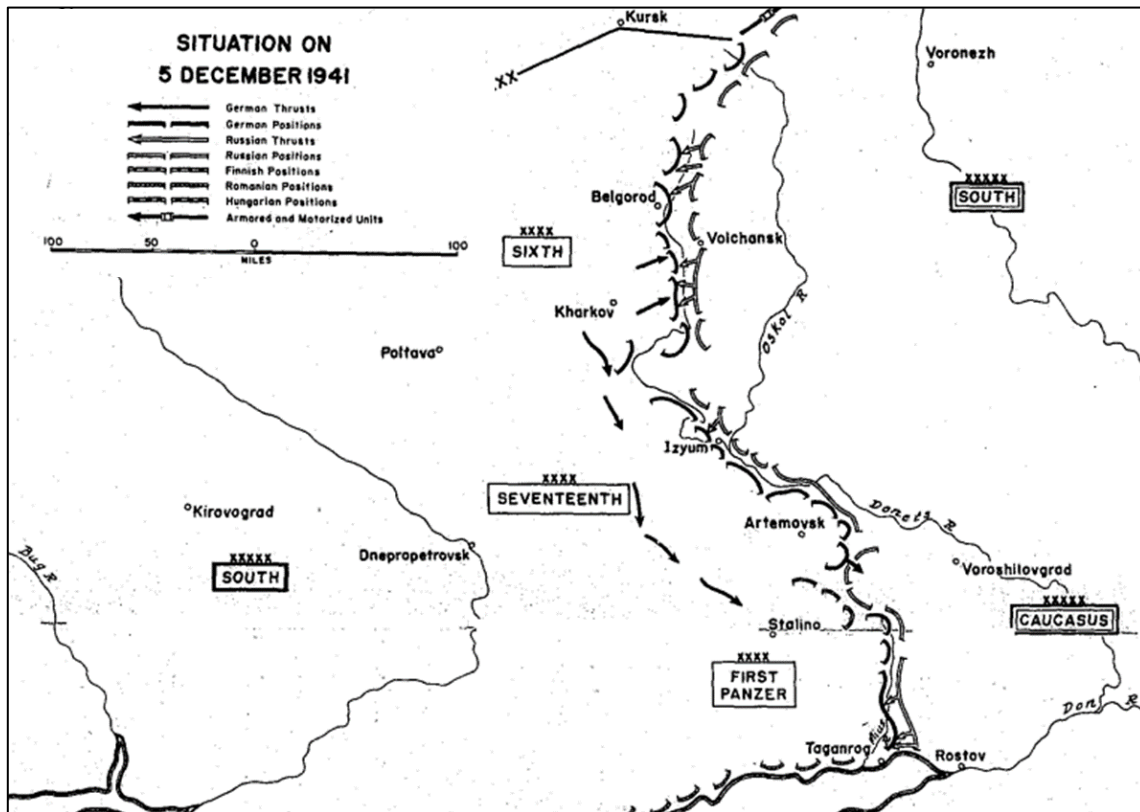


Figure 4: Situation of AG South (5 December 1941). Department of the Army Pamphlet (DA PAM) 20-261a, *The German Campaign in Russia Planning and Operations (1940-1942)* (Washington, DC: Government Printing Office, 1955), 87.

AG South could barely seize the objective Rostov, but its resources were too exhausted to hold against the upcoming Russian counter-offensive. The situation around Rostov and the Russian disposition of forces required the withdrawal of the First Panzer Army. Hitler became

¹¹⁸ Halder, *Halder War Diary*, 575.

¹¹⁹ Groß, *Mythos und Wirklichkeit*, 237-238.

aware of this withdrawal and on November 30, 1941, he ordered not to retreat. Instead, he insisted on an unconditional defense. Halder noted in his war diary that the commander of AG South, General von Rundstedt, should be trusted because he had the complete picture. He was convinced that the army group commanders should be given “a free hand, and they will handle their end of the job.”¹²⁰ Von Rundstedt objected to the given order and offered his resignation. On December 1, 1941, Hitler replaced von Rundstedt with General von Reichenau.¹²¹ Hitler did not understand the necessity of tactical withdrawal with the aim to regain the initiative.

¹²⁰ Halder, *Halder War Diary*, 571.

¹²¹ DA PAM 20-261a, 86.

Furthermore, the sequence of those events shows how Hitler overruled the institution of the OKH and thereby made the operational artist, Halder, obsolete.

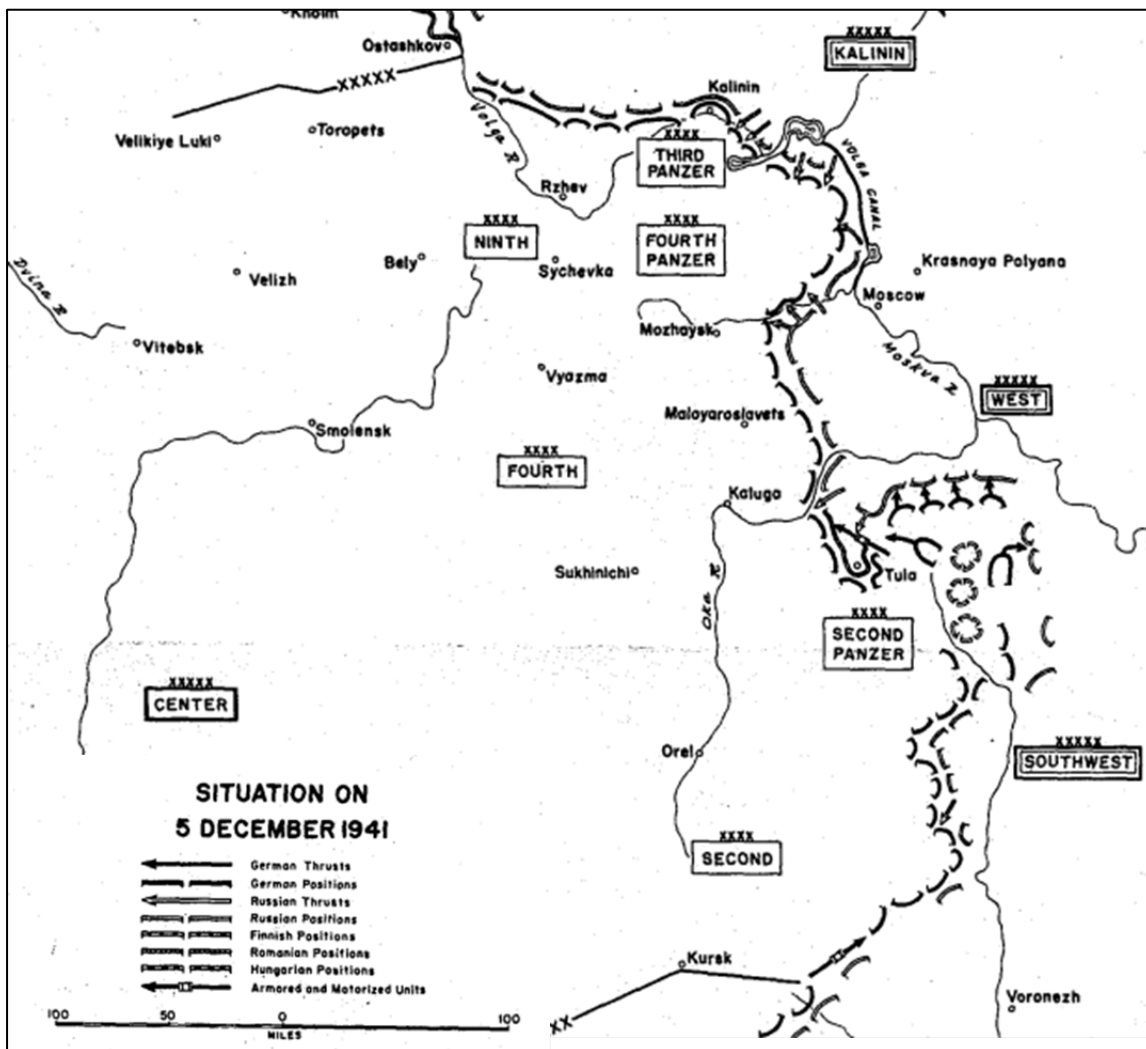


Figure 5: Situation of AG Center (5 December 1941). Department of the Army Pamphlet (DA PAM) 20-261a, *The German Campaign in Russia Planning and Operations (1940-1942)* (Washington, DC: Government Printing Office, 1955), 87.

On December 5, 1941, the Russian forces west of Moscow received another fourteen fresh reserve divisions and launched their counter offensive against the weakened AG Center. The Soviet counteroffensive struck the German army in a stalled offensive. Over the next weeks,

AG Center had to fight a costly withdrawal under pressure over a distance of up to 300 km to the West.¹²²

In the North, the decision of the commander AG North, General von Leeb, to halt outside of Leningrad to besiege the city, left his formations holding a long front line that made heavy manpower demands and tied down too great a proportion of the AG's strength. The Russian defense of Leningrad and the increasing pressure north of Lake Ilmen by Russian divisions finally forced the German withdrawal in the North. Twenty-eight German divisions fought on a six hundred km-long front against seventy-five Soviet divisions.¹²³

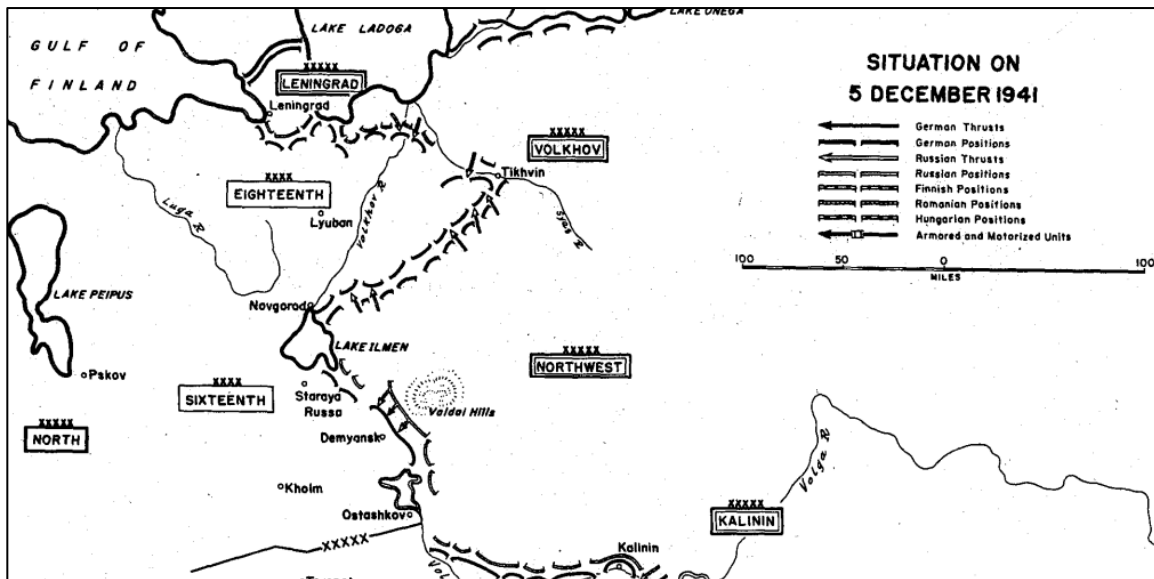


Figure 6: Situation of AG North (5 December 1941). Department of the Army Pamphlet (DA PAM) 20-261a, *The German Campaign in Russia Planning and Operations (1940-1942)* (Washington, DC: Government Printing Office, 1955), 87.

The operational artist, Halder, failed to fight for additional military means including sufficient reserves in the very beginning of the campaign. Furthermore, he did not act and plan

¹²² Citino, *Blitzkrieg to Desert Storm*, 68; Hartmann, *Operation Barbarossa*, 53.

¹²³ Hartmann, *Halder*, 296-298; Robert Kirchubel, *Operation Barbarossa 1941 (2): Army Group North (Campaign)* (New York: Osprey Publishing, 2005), 86-87; Werner Haupt, *Army Group North: the Wehrmacht in Russia, 1941-1945* (Atglen, PA: Schiffer Publishing, Ltd., 1997), 114-116.

according to the warnings of Moltke the elder, who once wrote, “a mistake in the original assembly of the army can scarcely be rectified in the entire course of the campaign.”¹²⁴

Furthermore, Halder had missed the opportunity to recognize that the final thrust on Moscow had failed. The underestimation of the constant increase in Russian combat power combined with the lack of understanding for the exhaustion of the German units led to total miscalculation inside the OKH. Pushed by Hitler’s expectations and motivated by his own ambition to prove the success of his understanding of operational art, Halder lacked adaptability. He could not build the crucial cognitive bridge between tactical actions and their overall purpose: the political aim. Overall, Halder had arranged insufficient military means facing an increasingly resistant Red Army and a very challenging operational environment.

Section IV: Consolidated Conclusions and Recommendations

IV.1 Conclusions

The analysis of the planning and the execution phase of Operation Barbarossa reveals points of failure that are directly linked to the important role and the crucial function of the key operational artist, General Halder. First, a dysfunctional discourse between the policy maker and the operational artist did not enable General Halder to negotiate for the necessary military means and to exercise the full authority to decide the ways in which the military means were employed. Furthermore, the context of Hitler’s rigid and authoritarian leadership style did not allow for an ongoing constructive discourse.

Second, static political objectives that did not incorporate the outcome of the ongoing campaign impeded an operational approach that aimed at a short-term victory. The execution of an ideological war of annihilation prevented the intended quick and decisive victory over the Red Army and a subsequent breakdown of the Soviet system. The divergent strategic focus on the

¹²⁴ Helmuth von Moltke, *Moltke On the Art of War: Selected Writings*, ed. Daniel J. Hughes, trans. Daniel J. Hughes and Harry Bell (Novato, CA: Presidio Press, 1993), 45.

operational objectives Leningrad, Moscow, and the Donets Basin during the planning phase did not allow developing an operational approach with a clear main effort. The inherent tensions of Directive 21 reemerged during the execution phase of Barbarossa when the Russian resistance thwarted German expectations of a quick victory. A crucial loss of time and momentum were the consequences of the leadership crisis between Hitler and the OKH in July/August 1941.

Operation Barbarossa revealed that a coherent strategy should indispensably consist of feasible operational objectives that support the overall policy aims in the conflict.

Third, overall insufficient military means with regard to overambitious friendly objectives and to an increasingly resistant Red Army led to the culmination of the German offensive and subsequently to the failure of the campaign. Halder as the operational artist did not follow the advice of Clausewitz, who warned in *On War* about the “culminating point of the attack.”¹²⁵ His analysis revealed that without maintaining a combination of “superior strength [...] both physical and moral [...] the scale turns and the reaction follows with a force that is usually much stronger than that of the original attack.”¹²⁶ Halder failed to accept that the initial German combat power, combined with insufficient reserve units, would gradually diminish up to a critical point. Additionally, logistic limitations and a challenging operational environment made it difficult to sustain the mobility of German forces. In spite of the reports of his subordinate AG commanders, Halder did not anticipate the German culmination point.¹²⁷ His attempts to adapt the overall plan only focused on Moscow. Halder never tried to think through options of failure and consequently never initiated further planning of branches or sequels. Instead, he allowed that German forces were continuously drawn into the depth of the Russian theater. Surrounded by the

¹²⁵ Carl von Clausewitz, *On War*, ed. and transl. Michael Howard and Peter Paret (Princeton, NJ: Princeton University Press, 1989), 528.

¹²⁶ Ibid.

¹²⁷ The current US doctrine defines culmination as follows: “The culminating point is a point at which a force no longer has the capability to continue its form of operations.[...] While conducting offensive tasks, the culminating point occurs when the force cannot continue the attack and must assume a defensive posture or execute an operational pause.” ADRP 3-0, 2-9.

dangerous aura of invincibility and guided by a constant underestimation of the Red Army, Halder's attempts to rearrange the German AGs did not compensate for the initial planning deficiency. Technocratic arrogance ignored potential obstacles instead of considering them.¹²⁸

According to Lauer's model of the operational artist that provided the lenses for the analysis of Operation Barbarossa, the operational artist has the authority and responsibility to decide and order the ways in which the military means are employed within the limitations given by the defined policy aims for a specific theater of operations.¹²⁹ In the planning and the execution phases, Halder was never fully able to define the mission or the specific placement of means. Hitler's overwhelming interference into the realm of operational art increasingly diminished Halder's role and functions as operational artist.

Overall, the planning and execution phases of Operation Barbarossa show how important an open and continuous discourse between the policy maker and the operational artist is. Critical thinking inheres in operational art. Strategic mismanagement and over-extension as experienced by the German army in Russia always trumps doctrinal innovation and tactical brilliance. Thus, Operation Barbarossa revealed that tactical success cannot prevent strategic failure if the operational artist cannot exercise operational art as the crucial bridge between tactical actions and the overall policy aim.

IV.2 Recommendations

The specific historical context that shaped General Halder's actions as operational artist does not allow translating the findings of the analysis of Operation Barbarossa from 1941 to today in their entirety. However, the analysis of Operation Barbarossa through the chosen lenses

¹²⁸ Dennis E. Showalter, "Prussian-German Operational Art, 1740-1943," in *The Evolution of Operational Art. From Napoleon to the Present*, ed. John Andreas Olsen and Martin Van Crefeld (New York: Oxford University Press, 2011), 55-56; Rudolf Steiger, *Armour Tactics in the Second World War: Panzer Army Campaigns of 1939-41 in German War Diaries*, trans. Martin Fry (New York: Berg, 1991), 129-130; Geyer, "Germany Strategy in the Age of Machine Warfare," 587-588.

¹²⁹ Lauer, "The Tao of Doctrine," 122.

is still relevant for today's understanding of operational art because it reveals the crucial function of the operational artist at the intersection of political aims and military actions and hereby calls for a new doctrinal emphasis.

US Army Doctrine Reference Publication 3-0 *Operations* declares that part of operational art is the “cognitive approach [...] to develop strategies, campaigns, and operations to organize and employ military forces by integrating ends, ways, and means.”¹³⁰ This definition implies the necessity to bridge the gap between political aims and tactical actions. The link that operational art is supposed to establish enhances the emergence of a coherent strategy that provides logic and purpose for all subsequent tactical actions.¹³¹ Furthermore, the cognitive bridge indicates that the military leader must realize the strategic context and its implications on the planning and the execution of the operation. If the operational artist is not able or willing to build this cognitive bridge, tactical actions lose their meaning and do not compensate strategic mistakes. Thus, operational art demands a more proactive role by military leaders in the context of conflict to address the strategic context and to seek dialogue with the political decision maker.

Today's western democracies have decided to follow the primacy of politics when it comes to the employment of military force. However, that does not mean that the interaction between the policy maker and the operational artist is a one-way street. Unfortunately, US Joint Publication 5-0 *Joint Operation Planning* implies that operational planning occurs only after the political decision makers have completed their overall strategy including end states and objectives. Instead of expecting a coherent strategic guidance from the policy maker, operational art rather advocates an open and reciprocal civil-military discourse.¹³²

¹³⁰ ADRP 3-0, 2-1.

¹³¹ The term ‘emergence’ refers to the appearance of a characteristic or function not previously observed within the system or structure. Everett Carl Dolman, *Pure Strategy: Power and Principle in the Space and Information Age* (New York: Routledge, 2005), 115. The important linkage function of operational art is further discussed in Naveh, *In Pursuit of Military Excellence*, 134-135.

¹³² Joint Publication (JP) 5-0, *Joint Operation Planning*, (Washington, DC: Government Printing Office, 2011), II-19, III-19 - III-20. Matthew C. Gaetke, “Certainty is Illusion: The Myth of Strategic

In his important theory *On War*, Clausewitz derived a dynamic and interdependent relationship of policy and warfare. He underlined that, on one hand, the desired political end state as the original motive of war has a crucial role as the determining factor for the conduct of war. On the other hand, Clausewitz revealed that military and political objectives are mutually interdependent and must continuously be adapted during ongoing conflicts. Clausewitz was convinced that the political leadership should take care not to ask the impossible, and closely collaborate with the senior military commanders in developing an overall policy.¹³³ Thus, the proposed active and open discourse between the policy maker and the operational artist follows Clausewitz's understanding of dynamic interdependencies of policy and warfare.

Following Clausewitz's ideas, Strachan likewise encourages an open and reciprocal dialogue between policymakers and operational artists. He argues that only this kind of discourse enables the emergence of a coherent strategy and its necessary continuous refinement with regard to policy aims, strategic and operational objectives, and the arrangement of military means over time. Furthermore, Gaetke supports this view and argues that strategic guidance emerges at the end of the civil-military conversation, informed by planning efforts, rather than reflecting a completed strategy at the beginning of a military campaign. According to Kelly and Brennan, a "two-way conversation between strategy and tactics is fundamental to the successful prosecution of any war."¹³⁴ Furthermore, they underline that only "operational art [...] ensures that tactical actions contribute to the attainment of the purpose of a war."¹³⁵

Guidance," Monograph, School of Advanced Military Studies (Ft. Leavenworth, KS: US Army Command and General Staff College, 2015) 9-10.

¹³³ Clausewitz, *On War*, 81, 86-89, 605-607; Azar Gat, *The History of Military Thought: from the Enlightenment to the Cold War* (New York: Oxford University Press, 2001), 217; Peter, Paret, "Clausewitz," in *Makers of Modern Strategy: from Machiavelli to the Nuclear Age*, ed. Peter Paret, (Princeton, NJ: Princeton University Press, 1986), 200.

¹³⁴ Justin Kelly and Michael J. Brennan, "The Leavenworth Heresy and the Perversion of Operational Art," *Joint Force Quarterly*, no. 56 (1st Quarter 2010): 110.

¹³⁵ *Ibid.*, 116.

Instead of a rigid understanding of one-way strategic guidance, US doctrine should put more emphasis on the continuous dialogue and thereby change the attitude and expectations concerning the role of the operational artist from a receptive to a pro-active one.¹³⁶

This understanding of a pro-active role of the operational artist is further supported by the ideas of Mintzberg and Freedman, who argue that a continuous civil-military dialogue enhances mutual learning and enables strategy adaption and formation that “walks on two feet, one deliberate, the other emergent.”¹³⁷ Betts agrees and underlines that policy, strategy, and operations should therefore be conceived as “an organic interrelationship.”¹³⁸ Furthermore, by providing the best military advice, the operational artist increases the political decision maker’s understanding of the limitations of military means and enables the creation of a coherent strategic approach with nesting aims and objectives.

The US doctrinal declaration of ADRP 3-0 that operational art is applicable at all levels of warfare (tactical, operational, strategic) does not sufficiently reflect the specific role of the operational artist. Operational art does not apply to every formation, but in the context of conflict, the operational artist shapes an emergent strategy at the juncture of policy and military action. Establishing the cognitive link between political aims and tactical actions and enhancing an open and reciprocal discourse with the policy maker are his or her two most important functions that are currently not emphasized strongly enough in US Joint and Army doctrine. In fact, “the pursuit of strategic objectives through the arrangement of tactical actions in time, space, and purpose”¹³⁹ does not reflect the core function of operational art. This kind of *tactical art* or *art of operations*

¹³⁶ Hew Strachan, “A Clausewitz for Every Season,” *American Interest*, no.2 (2007): 33, accessed December 1, 2016, <http://www.the-american-interest.com/2007/07/01/a-clausewitz-for-every-season/>; Gaetke, “The Myth of Strategic Guidance,” 46.

¹³⁷ Lawrence Freedman, *Strategy* (New York: Oxford University Press, 2013), 555; Henry Mintzberg, *The Rise and Fall of Strategic Planning* (New York: The Free Press, 1994), 24-25.

¹³⁸ Richard K. Betts, “Is Strategy an Illusion?,” *International Security* 25, no. 2 (Fall 2000): 39, accessed November 22, 2016, <http://www.jstor.org/stable/2626752>.

¹³⁹ ADRP 3-0, 2-1.

should truly happen at all echelons of military planning. However, the term *operational art* should be reserved to its unique function as cognitive link at the intersection and the discourse between the policy maker and the operational artist.

The analysis of Operation Barbarossa as a historical case study helps to develop a better understanding of operational art today. Future studies might focus on the limitations and opportunities of the operational artist in exercising his or her crucial role at the seam between politics and tactics in current and future conflicts. Furthermore, one might analyze to what extent the current US Joint and Army doctrine needs to be adapted and harmonized to reflect the existing reality of emergent strategies as a result of the ongoing civil-military discourse.

- Betts, Richard K. "Is Strategy an Illusion?." *International Security* 25, no. 2 (Fall 2000): 5-50. Accessed November 22, 2016. <http://www.jstor.org/stable/2626752>.
- Boog, Horst, Jürgen Förster, Joachim Hoffmann, Ernst Klink, Rolf-Dieter Müller, and Gerd R. Ueberschär. *Das Deutsche Reich und der Zweite Weltkrieg*. 2nd ed. Vol. 4, *Der Angriff auf die Sowjetunion*. Stuttgart: Deutsche Verlagsanstalt, 1983.
- Burt, John. *Barbarossa: Germany's Assault on the Soviet Union 1941-1942*. Bakersfield: Strategy&Tactics Press, 2016.
- Carruthers, Bob, and Erickson, John. *The Russian Front 1941 - 1945*. New York: Sterling Publishing, 1999.
- Citino, Robert M. *The German Way of War: From the Thirty Year's War to the Third Reich*. Lawrence: University of Kansas Press, 2005.
- . *Blitzkrieg to Desert Storm: The Evolution of Operational Warfare*. Lawrence: University of Kansas Press, 2004.
- Condel, Bruce and Zabecki, David T. *On the German Art of War: Truppenfuehrung; German Army Manual for Unit Command in World War II*. Mechanicsburg: Stackpole Books, 2009.
- Cooper, Matthew. *The German Army 1933-1945*. Chelsea: Scarborough House, 1978.
- Dolman, Everet Carl. *Pure Strategy: Power and Principle in the Space and Information Age*. New York: Routledge, 2005.
- Fowler, Will. *Barbarossa: The First 7 Days*. Havertown: Casematte, 2004.
- Freedman, Lawrence. *Strategy*. New York: Oxford University Press, 2013.
- Frieser, Karl-Heinz. *Blitzkrieg-Legende: Der Westfeldzug 1940*. Muenchen, Germany: Oldenbourg Verlag, 2012.
- Fritz, Stephen G. *Ostkrieg: Hitler's War of Extermination in the East*. Lexington: University Press of Kentucky, 2011.
- Fugate, Bryan I. *Operation Barbarossa: Strategy and Tactics on the Eastern Front, 1941*. Novato, CA: Presidio Press, 1984.
- Gaddis, John Lewis. *The Landscape of History*. New York: Oxford University Press, 2002.
- Gat, Azar. *The History of Military Thought: from the Enlightenment to the Cold War*. New York: Oxford University Press, 2001.
- Geyer, Michael. "Germany Strategy in the Age of Machine Warfare, 1914-1945." In *Makers of Modern Strategy: From Machiavelli to the Nuclear Age*. Edited by Peter Paret, 527-597. Princeton, NJ: Princeton University Press, 1986.
- Glantz, David M. *Barbarossa Derailed: The Battle for Smolensk, 10 July-10 September 1941. Volume 1: The German Advance, the Encirclement Battle, and the First and Second Soviet Counteroffensives, 10 July – 24 August 1941*. Solihull, UK: Helion and Company, 2010.
- . *Barbarossa Derailed: The Battle for Smolensk, 10 July-10 September 1941. Volume 2: The German Advance on the Flanks and the Third Soviet Counteroffensive, 25 August – 10 September 1941*, Solihull, UK: Helion and Company, 2012.

- _____. *Barbarossa Derailed: The Battle for Smolensk, 10 July-10 September 1941. Volume 3: The Documentary Companion. Tables, Orders and Reports prepared by participating Red Army forces*, Solihull, UK: Helion and Company, 2014.
- _____. *Barbarossa: Hitler's Invasion of Russia 1941*. Charleston: Tempus Publishing Group, 2001.
- Glantz, David M., and Jonathan M. House. *When Titans Clashed: How the Red Army Stopped Hitler*. 2nd ed. Lawrence: University Press of Kansas, 2015.
- Görlitz, Walter. *Kleine Geschichte Des Deutschen Generalstabes*. 2nd ed. Berlin: Haude & Spenersche Verlagsbuchhandlung, 1977.
- Groß, Gerhard P. *Mythos und Wirklichkeit: Geschichte des operativen Denkens im deutschen Heer von Moltke d.Ä. bis Heusinger*. Paderborn: Ferdinand Schöningh GmbH, 2012.
- Hartmann, Christian. *Halder: Generalstabschef Hitlers 1938-1942*. Paderborn: Ferdinand Schöningh, 1991.
- _____. *Operation Barbarossa: Nazi Germany's War in the East, 1941-1945*. Oxford, UK: Oxford University Press, 2013.
- Haupt, Werner. *Army Group Center: the Wehrmacht in Russia, 1941-1945*. Atglen, PA: Schiffer Publishing, Ltd., 1997.
- _____. *Army Group North: the Wehrmacht in Russia, 1941-1945*. Atglen, PA: Schiffer Publishing, Ltd., 1997.
- _____. *Army Group South: the Wehrmacht in Russia, 1941-1945*. Atglen, PA: Schiffer Publishing, Ltd., 1998.
- Hill, Alexander. "Did Russia Really Go It Alone? How Lend-Lease Helped the Soviets Defeat the Germans." *Historynet*, July 12, 2008. Accessed November 21, 2016. <http://www.historynet.com/did-russia-really-go-it-alone-how-lend-lease-helped-the-soviets-defeat-the-germans.htm>.
- Jacobsen, Hans-Adolf, and Smith, Arthur L. *World War II, Policy and Strategy: Selected Documents with Commentary*. Santa Barbara, CA: ABC-CLIO, 1979.
- Kelly, Justin and Brennan, Michael J. "The Leavenworth Heresy and the Perversion of Operational Art." *Joint Force Quarterly*, no. 56 (1st Quarter 2010): 109-116.
- Kirchubel, Robert. *Operation Barbarossa 1941 (1): Army Group South (Campaign)*. New York: Osprey Publishing, 2003.
- _____. *Operation Barbarossa 1941 (2): Army Group North (Campaign)*. New York: Osprey Publishing, 2005.
- Lauer, G. Stephen. "The Tao of Doctrine: Contesting an Art of Operations." *Joint Force Quarterly*, no. 82 (3rd Quarter 2016): 118-124.
- Leach, Barry A. *German Strategy Against Russia, 1939-1941*. Oxford: Oxford University Press, 1973.
- Liddell Hart, B.H. *The German Generals Talk*. New York: William Morrow and Company, 1979.
- Lukacs, John. *June 1941: Hitler and Stalin*. New Haven, CT: Yale University Press, 2006.
- Luther, Craig W. H. *Barbarossa Unleashed: the German Blitzkrieg through Central Russia to the Gates of Moscow June-December 1941*. Atglen, PA: Schiffer Publishing, Ltd., 2014.

- Mawdsley, Evan. *Thunder in the East: The Nazi-Soviet War 1941-1945*. New York: Oxford University Press, 2005.
- Megargee, Geoffrey P. *Inside Hitler's High Command*. Lawrence: University Press of Kansas, 2000.
- Mintzberg, Henry. *The Rise and Fall of Strategic Planning*. New York: The Free Press, 1994.
- Mitcham, Samuel W., Jr. *Hitler's Field Marshals and Their Battles*. London: Leo Cooper Ltd, 1988.
- Müller, Klaus-Jürgen. "The Brutalisation of Warfare, Nazi Crimes and the Wehrmacht." In *Barbarossa: The Axis and the Allies*. Edited by John Erickson and David Dilks, 229-237, Edinburgh, UK: Edinburgh University Press, 1994.
- Müller-Hillebrand, Burkhard. *Der Zweifrontenkrieg: Das Heer vom Beginn des Feldzuges gegen die Sowjetunion bis zum Kriegsende*. Frankfurt/Main: Verlag Mittler & Sohn, 1969.
- Muth, Joerg. *Command Culture: Officer Education in the U.S. Army and the German Armed Forces, 1941-1940, and the Consequences for World War II*. Denton: University of North Texas Press, 2011.
- Naveh, Shimon. *In Pursuit of Military Excellence*. New York: Frank Cass Publishers, 2004.
- Paret, Peter. "Clausewitz." In *Makers of Modern Strategy: from Machiavelli to the Nuclear Age*. Edited by Peter Paret, 186 -216. Princeton, NJ: Princeton University Press, 1986.
- Parker, Geoffrey. *Illustrated History: Warfare*. New York: Cambridge University Press, 1995.
- Pinkus, Oscar. *The War Aims and Strategies of Adolf Hitler*. Jefferson: McFarland & Company Publishers, 2005.
- Reinhardt, Klaus. *Moscow--the Turning Point: the Failure of Hitler's Strategy in the Winter of 1941-42*. English ed. Oxford: Bloomsbury Academic, 1992.
- Showalter, Dennis E. "Prussian-German Operational Art, 1740-1943." In *The Evolution of Operational Art. From Napoleon to the Present*. Edited by John Andreas Olsen and Martin Van Crefeld, 35-63. New York: Oxford University Press, 2011.
- Simpson, Emile. *War from the Ground Up*. New York: Oxford University Press, 2013.
- Smelser, Ronald, and Edward J. Davies II. *The Myth of the Eastern Front: the Nazi-Soviet War in American Popular Culture*. New York: Cambridge University Press, 2008.
- Stahel, David. *Operation Barbarossa and Germany's Defeat in the East*. New York: Cambridge University Press, 2009.
- . *Operation Typhoon: Hitler's March On Moscow, October 1941*. New York: Cambridge University Press, 2013.
- Steiger, Rudolf. *Armour Tactics in the Second World War: Panzer Army Campaigns of 1939-41 in German War Diaries*. Translated by Martin Fry. New York: Berg, 1991.
- Steiner, James. *Hitler's Wehrmacht: German Armed Forces in Support of the Führer*. Jefferson, NC: McFarland, 2008.
- Strachan, Hew. "A Clausewitz for Every Season." *American Interest*, no.2 (2007): 29-35. Accessed December 1, 2016, <http://www.the-american-interest.com/2007/07/01/a-clausewitz-for-every-season/>.

- _____. *The Direction of War: Contemporary Strategy in Historic Perspective*. New York: Cambridge University Press, 2013.
- Stumpf, Reinhard. *Die Wehrmacht-Elite: Rang- und Herkunftsstruktur der Deutschen Generale und Admirale 1933-1945*. Boppard am Rhein: H. Boldt, 1982.
- Tooze, Adam. *The Wages of Destruction*. New York: Penguin Group, 2006.
- Turney, Alfred W. *Disaster at Moscow: von Bock's Campaigns, 1941-1942*. Albuquerque: University of New Mexico Press, 1970.
- Van Crefeld, Martin. *Supplying War: Logistics from Wallenstein to Patton*. New York: Cambridge University Press, 1986.
- Van Creveld, Martin and John A. Olsen. *The Evolution of Operational Art: From Napoleon to the Present*. New York: Oxford University Press, 2011.
- Warlimont, Walter. *Inside Hitler's Headquarters, 1939-45*. Novato, CA: Presidio Pr, 1964.
- Ziemke, Earl F. *Stalingrad to Berlin: The German Defeat in the East*. Washington DC: Center of Military History, 2002.

Monographs / Scholarly Studies

- Bongi, David J. "Operational Logic and Identifying Soviet Centers of Gravity during Operation Barbarossa, 1941.", Monograph, School of Advanced Military Studies, Ft. Leavenworth, KS: US Army Command and General Staff College, 1994.
- Carnicky, Richard W. "The Impact of Political-Military Relations on the Use of German Military Power during Operation Barbarossa." MMAS Thesis, Ft. Leavenworth, KS: US Army Command and General Staff College, 1996.
- Gaetke, Matthew C. "Certainty is Illusion: The Myth of Strategic Guidance." Monograph, School of Advanced Military Studies. Ft. Leavenworth, KS: US Army Command and General Staff College, 2015.
- Jordan, Stephen T. "Operational Art: Practical Utility or Defunct Doctrinal Concept." Monograph, School of Advanced Military Studies, Ft. Leavenworth, KS: US Army Command and General Staff College, 1991.
- Wedemeyer, Austin C., "The Strategy of Barbarossa." Strategy Essay. Maxwell Air Force Base: AL: US Air Force Air War College, 1983.