

"Who Has the Puck?"

Strategic Initiative in Modern, Conventional War

Sean M. Judge Major, USAF



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Historians and other military analysts often use the term ?strategic initiative.? Most assume a common understanding of this term, but the concept has been neither carefully defined nor examined in depth. This thesis contributes to the elimination of that gap by answering the question: What factors lead to shifts in strategic initiative during the conduct of modern, conventional war? The Russo?German War of 1941?45 and the Pacific War of 1941?45 provide the historical evidence for this study. Both conflicts progressed through three distinct phases in which the Axis combatant first seized the strategic initiative which then fell into dispute, and eventually shifted to control of the Allied combatant. Four factors contributing to strategic initiative have been examined for each phase of each war: resources quality of intelligence, strategic acumen, and operational and tactical methods. These elements of military effectiveness reflect each nation?s war-making capacity, knowledge, wisdom, and technique. The relative advantages each side enjoyed in each category are compared to determine which factors more significantly influenced shifts in strategic initiative and how each component acted upon the others. The heart of the study focuses on the transition into, conduct during, and the transition from the second phase of each war where the actual shifts in initiative occurred. Strategic acumen led the hierarchy of factors that influence strategic initiative in war. The side that better matched its goals with its capabilities took advantage of opportunities, and planned more realistically reaped the largest rewards. Good intelligence proved to be a key enabler to the clear judgments that are the hallmark of strategic acumen and placed second in the hierarchy. Resources, followed by operational and tactical methods, placed third and fourth respectively. Nevertheless, each of these components influenced the possession of and shifts in strategic initiative. Intelligence resources, and operational and tactical methods all contributed to strategic acumen as well, either restraining or constraining a combatant?s abilities. In summary, this study reveals that a four-fold hierarchy of superior wisdom, knowledge, capacity and technique drives shifts in strategic initiative in modern, conventional war.

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Abstract

Historians and other military analysts often use the term "strategic initiative." Most assume a common understanding of this term, but the concept has been neither carefully defined nor examined in depth. This thesis contributes to the elimination of that gap by answering the question: What factors lead to shifts in strategic initiative during the conduct of modern, conventional war? The Russo–German War of 1941–45 and the Pacific War of 1941–45 provide the historical evidence for this study.

Both conflicts progressed through three distinct phases in which the Axis combatant first seized the strategic initiative, which then fell into dispute, and eventually shifted to control of the Allied combatant. Four factors contributing to strategic initiative have been examined for each phase of each war: resources, quality of intelligence, strategic acumen, and operational and tactical methods. These elements of military effectiveness reflect each nation's war-making capacity, knowledge, wisdom, and technique. The relative advantages each side enjoyed in each category are compared to determine which factors more significantly influenced shifts in strategic initiative and how each component acted upon the others.

The heart of the study focuses on the transition into, conduct during, and the transition from the second phase of each war, where the actual shifts in initiative occurred. Strategic acumen led the hierarchy of factors that influence strategic initiative in war. The side that better matched its goals with its capabilities, took advantage of opportunities, and planned more realistically reaped the largest rewards. Good intelligence proved to be a key enabler to the clear judgments that are the hallmark of strategic acumen and placed second in the hierarchy. Resources, followed by operational and tactical methods, placed third and fourth respectively. Nevertheless, each of these components influenced the possession of and shifts in strategic initiative. Intelligence, resources, and operational and tactical methods all contributed to strategic acumen as well, either restraining or constraining a combatant's abilities. In summary, this study reveals that a four-fold hierarchy of superior wisdom, knowledge, capacity, and technique drives shifts in strategic initiative in modern, conventional war.

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Sean M. Judge, It Col, USAF

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Chapter 1

Introduction

Initiative is a cardinal tenet of the military art. A perusal of most works of military history is likely to yield numerous references to initiative in many different contexts. Commanders at all levels, from the tactical, through the operational, to the strategic, are expected to exercise initiative. Those who fail to do so often suffer defeat or miss fleeting opportunities and must endure the recriminations of historians.

Accounts of seizing the tactical or operational initiative abound. At the strategic level of war, however, initiative receives only transitory mention. Authors and military professionals often assume a common understanding of strategic initiative, including which combatant has it and why. There is neither a clear definition of the concept, nor any significant analysis of the elements that contribute to it. This thesis contributes to the elimination of that gap by answering the question—what factors lead to significant shifts in strategic initiative during the conduct of modern, conventional war?

Analysis of current US military doctrine confirms the conceptual void, yielding no definition but revealing the assumption of common understanding. Joint Publication (JP) 5-0, *Joint Operation Planning*, refers to potential "forfeiture of strategic or operational initiative" while discussing operational pauses, but one can find no definition of strategic initiative in that work.¹ A review of the JP 1-02, *Department of Defense Dictionary of Military and Associated Terms*, confirms the omission.² Air Force doctrine mimics the pattern, using "strategic initiative" in a figure depicting the "modern view of conflict" but failing to define the term.³ Army doctrine dutifully defines individual and operational initiative, focusing a good deal of attention on both, but makes no mention of initiative in the strategic arena.⁴ The concept does not appear in either Navy or Marine Corps doctrinal publications. Thus, one must ask, "What *is* strategic initiative?"

Framing Strategic Initiative

In hockey, the best way to determine initiative is to ask, "Who has the puck?" The side controlling the puck possesses the general ability to initiate action. The side with possession wields *greater*, though not total, influence over the tempo and style of play, the location of the main effort, and the likelihood of scoring a goal. One important and commonly misunderstood point is that this ability does not necessarily imply constant offensive action. It is possible for a team with the puck to play defensively, simply denying the other team the opportunity to score. Hockey is certainly an imperfect analogy to war, but it illustrates several fundamentals of the concept of initiative.

To distinguish between strategic initiative and initiative in general, one can expand on the US Army's definition of operational initiative—"setting or dictating the terms of action throughout the battle or operation." We must, however, distinguish between operational and strategic. The US armed forces currently define the operational level of war as the level "at which campaigns and major operations are planned, conducted, and sustained to achieve strategic objectives within theaters or other operational areas." By contrast, the strategic level of war is that "at which a nation, often as a member of a group of nations, determines national or multinational (alliance or coalition) strategic security objectives and guidance, and develops and uses national resources to achieve these objectives." Further, "activities at this level establish national or multinational military objectives; sequence initiatives; define limits and assess risk for the use of military and other instruments of national power; develop global plans or theater war plans to achieve those objectives; and provide military forces and other capabilities in accordance with strategic plans."8

Colin Gray more succinctly defines strategy as "the use that is made of force and the threat of force for the ends of policy" and sees operations and tactics as "the instruments of military strategy." Clearly, political, economic, and military actions affect strategic initiative. Drawing upon the similarities of these various formulations and keeping the focus on the military sphere, strategic initiative in war may be defined as the ability to influence the course of the conflict by waging those battles,

operations, and campaigns most suited to the accomplishment of one's own political ends, while avoiding those detrimental to the same. Here, it is important to note that the side with strategic initiative either may choose, or be compelled, to cede operational and/or tactical initiative at times during the conflict. The concepts are not mutually dependent.

Because these concepts are not mutually dependent, the inherent differences between the strategic and operational levels of war require illumination. Strategy encapsulates time, force, space, and consequences on a higher order than operations, which are generally confined to a shorter period, a smaller force, fewer participants, more limited geographic areas, and lower stakes. Complexity increases exponentially in the transition from operations to strategy, requiring internal tradeoffs and delicate judgment on the part of the strategist. Carl von Clausewitz wrote, ". . . it is only in the highest realms of strategy that intellectual complications and extreme diversity of factors and relationships occur." ¹⁰ Edward Luttwak also emphasized the complexity of strategy, compounded by paradoxical logic, when he wrote, "It is only in the realm of strategy, which encompasses the conduct and consequences of human relations in the context of actual or possible armed conflict, that we have learned to accept paradoxical propositions as valid."11 This complexity means good strategy is often making the least bad choice, or in Luttwak's words, ". . . mere adequacy [in strategy] is enough to prevail."12

The importance of strategy makes a grasp of the underlying precepts of strategic initiative imperative. A country, alliance, or coalition containing the best tactical and operational commanders and methods carries no assurance of ultimate victory in war. The combatants still struggle over where, when, and why certain campaigns and battles are waged or not waged. Operational or tactical success in the wrong fight may or may not be beneficial to victory in the war. It is more advantageous to fight the correct battle adequately than the wrong battle brilliantly. The German army in World War II illustrates the point. The *Wehrmacht* was among the most potent tactical and operational forces in the Second World War, yet Germany eventually lost strategic initiative on all fronts and with it the entire war.¹³

Understanding how to seize, hold, and retain strategic initiative is critical to the effective conduct of war.

Historical Examples in Modern, Conventional War

Two episodes provide excellent opportunities for investigating the factors that underlie strategic initiative in modern, conventional war. The first is the Russo–German War of 1941–45. This long and bloody conflict pitted massive armies and air forces against each other on a scale not seen before or since. It transitioned through three phases: the first in which Germany held the initiative; a period during which both combatants contested initiative; and a final period of Soviet initiative that closed out the war. Thus, three questions suggest themselves: Why were the Germans able to seize strategic initiative in the beginning? What caused initiative to be disputed in the intervening period? Why were the Soviets able to gain the strategic initiative and keep it? The transitions between each phase afford the most productive places to examine shifts in strategic initiative; but to put the transitions in context, the entire war must be examined.

The second example, the Pacific War of 1941–45, took place during the same period; but it differed substantially in character, being a maritime rather than a continental contest. This conflict also transitioned through three distinct phases: Japan seized the initiative; the initiative then hung in dispute; and, finally, the United States gained and held it until ultimate victory. The questions structuring the Russo–German War must also be examined here. Once again, the transitions between each phase provide the key vantage points from which to analyze those factors influencing the shift of strategic initiative in the war, but they must be put in the context of the entire war.

These two historical examples are followed by a comparative analysis of the findings of each. The similarities and differences between the two cases will provide a basis for conclusions concerning shifts in strategic initiative in large-scale conventional wars of the mid-twentieth century.

Evidence for the study comes from numerous and diverse sources. Works on the Russo–German War vary widely in scope,

quality, and often political or personal agenda. This study seeks to forge an accurate picture of the war by sampling the full variety. Postwar German memoirs such as Heinz Guderian's Panzer Leader, Erich von Manstein's Lost Victories, and Wilhelm Keitel's The Memoirs of Field-Marshal Keitel: Chief of the German High Command, 1938-1945, will be balanced against those of their former foes including Georgi Zhukov's Marshal Zhukov's Greatest Battles, Sergei Shtemenko's The Soviet General Staff at War: 1941-1945, and Vasily Chuikov's The Battle for Stalingrad. Many of the extensive historical investigations of the war such as John Erickson's two-volume account, Stalin's War with Germany, Albert Seaton's authoritative The Russo-German War, 1941-1945, and Alan Clark's highly readable and informative Barbarossa: The Russo-German Conflict, 1941-1945, will help fill voids and illuminate errors or omission by the participants. More recent works, including Robert Citino's Death of the Wehrmacht: The German Campaigns of 1942, Chris Bellamy's Absolute War: Soviet Russia in the Second World War, and David Glantz's numerous studies, which enjoy the benefit of greater, though not total, access to Russian archives, will be used to complete the picture.

Historiography on the Pacific War differs slightly, weighted by plentiful accounts from the American perspective but limited coverage of the Japanese side. Primary American accounts including Samuel Griffith's The Battle for Guadalcanal, James Forrestal's The Forrestal Diaries, and William Halsey's Admiral Halsey's Story will be studied. Works such as Mitsuo Fuchida's Midway: The Battle that Doomed Japan, Masuo Kato's The Lost War: A Japanese Reporter's Inside Story, and Saburo Ienaga's The Pacific War: World War II and the Japanese, 1931–1945 should provide some balance from the Japanese point of view. Once again, extensive historical examinations including accounts such as Harry Gailey's The War in the Pacific: From Pearl Harbor to Tokyo Bay, James Dunnigan's Victory at Sea: World War II in the Pacific, and Dan Van der Vat's The Pacific Campaign: World War II, the U.S.-Japanese Naval War, 1941-1945 will round out the investigation's evidence.

Underlying Precepts of Strategic Initiative

Strategic initiative deals with the capacity to exert influence. One's influence derives from a number of different factors depending on the context of the situation in question. War, our context for strategic initiative, pits two or more intelligent opponents against each other in an arena of deadly competition. Effectively analyzing strategic initiative requires determination of those elements that aid or hamper the combatants' ability to seize, retain, dispute, or exploit it.

Given the complexities of war, the number of possible factors is potentially infinite, but four stand out as particularly salient: resources, quality of intelligence, strategic acumen, and tactical/operational methods. ¹⁴ These factors correspond to four general determinants of military effectiveness: capacity, knowledge, wisdom, and technique. ¹⁵ Though these elements relate to one another in many ways, they can be sufficiently disaggregated to permit discrete analysis. These capabilities are compared and contrasted for each combatant in each phase of the war.

It is important to note, however, that the most significant influence of each element was exerted near each phase's transition points where shifts in initiative actually occurred. Summary questions for each analysis include the following: What was the relative significance of each of the four factors? How did they operate in concert with one another? and How did they combine to result in seizure, retention, loss, and exercise of initiative?

The resource element consists of the "capital" for waging war, or the tools required to fight and win. The analysis of resources considers manpower, materiel, and technology. Quantity, however, is not the only consideration. Quality of both men and equipment is compared. Technological advantage could be a significant factor in the equation.

Good intelligence implies matching one's perception of the total situation with reality. Quality of intelligence has two components. The first is collection and analysis, which encompasses the ability to discern the foe's entire war-making capacity and to understand the environment in which one will operate. The second component is counterintelligence and security, which attempts to deny the enemy an accurate understanding of the situation. Both areas contribute to overall intel-

ligence effectiveness, and play an important role in strategic initiative.

Strategic acumen is a broad concept with many ingredients. Fundamentally, it represents the wisdom to shape plans that will work in an environment plagued by uncertainty and friction. Those endowed with such acumen recognize the correlation between the means they possess, the goals they hope to achieve, and the course of action required to achieve them. They also sense and act upon opportunities. Those gifted in strategic thought weigh the feasibility and payoffs of different courses of action against the risks they incur. Clausewitz hinted at this when he wrote, "A prince or general can best demonstrate his genius by managing a campaign exactly to suit his objectives and his resources, doing neither too much nor too little." ¹⁶

The first subcomponent of strategic acumen is strategic planning. How effectively did the combatant match its objectives with its capabilities given the context of the existing situation? The Allied landings in North Africa in late 1942 are a good example of matching objectives with capabilities. Pres. Franklin Roosevelt, with the backing of the British, forced an invasion that his own military chiefs of staff opposed in order to get American forces into the fight against Germany quickly, even if they were capable of achieving only modest military objectives.¹⁷

The second aspect of strategic acumen is the capacity to achieve surprise. Surprise allows one to accomplish the mission before the enemy can react, or in Luttwak's words, ". . . within the limits of time and space of the surprise actually achieved, the conduct of war becomes mere administration, as simple in its total reality as each one of its elements seems to be simple in theory."18 The Russian military theorist Aleksandr Nezmanov described strategic surprise as an action "against which there are no means whatsoever for sufficient counteraction in a short period of time," and, "the initiative would be transferred to the enemy."19 Surprise has a close relationship with intelligence, but differs slightly in that the focus here is on the ability to conceive of and to execute deception operations, which are frequently the handmaidens of surprise. Though not always required for strategic acumen, effective deception and surprise may yield extraordinary results. The invasion of North Africa serves as a good example once again, as it achieved strategic surprise against

Germany and Italy, even if only for a short time.²⁰ Once again, capabilities in these two components may vary widely within one nation or coalition, and each has the potential to play a significant role in determining strategic initiative.

The final factor for analyzing the two examples is the comparison of operational and tactical methods. Eric Larrabee notes, "Strategy includes the working out of its consequences."²¹ These consequences include the sting of battle, where superior operational and tactical methods reveal themselves in success on the battlefield, where the bullets fly. Although superior performance at the tactical and operational levels is not a guarantee of victory, these factors can contribute noticeably to strategic initiative.

War involves a competitive interaction between two or more combatants. Therefore, our examples will pit the performance and capabilities of the combatants against one another to determine *relative* advantages and disadvantages in each category. For example, in the Russo–German War the strategic acumen of Hitler and the German high command was important only as it related to that of Stalin and the *Stavka*. The relative superiority or inferiority of one side over the other in each area will determine the contribution that element makes to gaining, holding, losing, or exploiting strategic initiative.

The above will not, however, be considered in isolation. These four components form a construct of military effectiveness, in which each relates to and potentially influences, some or all of the others. The examination of each case must consider how these factors related to one another to influence strategic initiative. Did one factor dominate the others? Did marginal advantages in multiple areas accumulate to deliver strategic initiative into the hands of one side or the other? Was superiority in one or more areas negated by disadvantages in the other factors? Examining the cases from various perspectives should reveal the interplay among elements and between opponents.

The monumental struggle between Stalin's Soviet Union and Hitler's Nazi Germany from 1941 until 1945 offers excellent evidence for the dissection of strategic initiative. It was a long war with discernible shifts in control of the puck. Nazi Germany clearly seized the initiative and held it during the opening stages of the war. Opinions over who held the initiative after the battle for Moscow vary. However, following either Stalingrad or Kursk,

it was clear the Soviets were in control, and they maintained the strategic initiative on Germany's eastern front until the total collapse of Hitler's regime. Determining the two transition points between phases may prove to be among the most revealing aspects of the study, allowing for a contrast between distinct contexts of strategic initiative during the fighting. The conflict illuminates many important considerations for strategic initiative in a long, land-centric, modern, conventional war.

Notes

(All notes appear in shortened form. For full details, see the appropriate entry in the bibliography.)

- 1. Joint Publication (JP) 5-0, Joint Operation Planning, IV-32.
- 2. JP 1-02, Department of Defense Military and Associated Terms.
- 3. Air Force Doctrine Document 2-1, Air Warfare, 6.
- 4. Field Manual 1-02, Operational Terms and Graphics, 1-100.
- 5. Ibid.
- 6. JP 1-02, 394.
- 7. Ibid., 516.
- 8. Ibid.
- 9. Gray, Modern Strategy, 17, 20.
- 10. Clausewitz, *On War*, 178. While Clausewitz's definition of strategy as "the use of the engagement for the purpose of the war" more closely resembles the modern concept of operations, his reference to the "highest realms of strategy" corresponds to the next level and its increased complexity.
- 11. Luttwak, Strategy: The Logic of War and Peace. The italics are Luttwak's.
 - 12. Ibid., 258.
 - 13. Lonsdale, Nature of War in the Information Age, 80.
- 14. Tse-Tung, On the Protracted War. Though derived independently of Mao, these four categories loosely correspond to those mentioned in his dissection of initiative and superiority. Resources (p. 88): war is a "contest in ability between the commanders of the opposing armies in their struggle for superiority and initiative on the basis of material conditions like military forces and financial resources." Intelligence (pp. 88–89): "Sun Wu Tzu's maxim 'know your enemy and know yourself, and you can fight a hundred battles without disaster,' is still a scientific truth But whatever the war conditions and activities, it is possible to know the general aspects and the essential points." Strategic Acumen (p. 89): "It is possible for a commander to reduce errors and to give generally correct directions by various means of reconnaissance and intelligent inference and judgment. A generally correct direction will enable us to win more victories and transform our inferiority into superiority." Operational and Tactical flexibility (p. 97): "Flexibility is a quality which enables a commander to adopt timely and appropriate mea-

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sures, after he has, on the basis of the objective situation, weighed the chances and appraised the conditions \dots in other words, flexibility is the quality that gives one skill in manoever [sic]."

- 15. Dr. Harold Winton first conceived of this thematic connection and brought it to the author's attention. A brief conversation followed, but the value of this insightful observation was immediately apparent.
 - 16. Clausewitz, On War, 177.
 - 17. Larrabee, Commander in Chief, 133-39.
 - 18. Luttwak, Strategy, 4.
 - 19. Fugate and Dvoretsky, Thunder on the Dnepr, 20.
 - 20. Larrabee, Commander in Chief, 133.
 - 21. Ibid., 6.

Chapter 2

The Russo-German War, 1941-45

Operation Barbarossa, the German invasion of the Soviet Union on 22 June 1941, unleashed a war of far-reaching strategic consequences. By November 1941, the Germans were knocking on the door of Moscow, leaving massive carnage from their string of military victories in the western regions of Russia. Throughout that summer, the Wehrmacht clearly held the strategic initiative, dictating the course of the invasion while the Soviets struggled to recover from the initial onslaught. As winter approached, however, the picture began to change. The Russians mounted stiff resistance west of Moscow and stopped the Germans short of the capital. The halt of the German advance in 1941 marks the end of the first phase of the war. Why were the Germans able to seize strategic initiative and then to hold it during this period? Comparing the Germans and Soviets using the elements of resources, quality of intelligence, strategic acumen, and operational and tactical methods will help answer this question.

A clear understanding of the belligerents' high command structures is a necessary precursor. The German high command enjoyed a celebrated history prior to World War II. Geoffrey Megargee wrote, "In the German army, especially in the General Staff, officers were a functional elite. The system selected them based on demonstrated abilities, which it then further refined: a balance of intellectual prowess and strength of personality. They learned to plan carefully, issue clear orders, delegate authority, and use initiative."

The Germans created, what amounted to, two general staffs in the Second World War, the *Oberkommando der Wehrmacht* (OKW) or the armed forces high command, and the *Oberkommando des Heeres* (OKH) or the army high command. "The establishment of a centralized armed forces command, if it had any real power, would have brought an unprecedented level of coordination to the German military. The reality was, however, little more than a continuation of old patterns of rivalry among top-level command organizations," Megargee said of OKW.³ Hitler's decision to

grant exclusive control of Barbarossa to the OKH instead of the hierarchically superior OKW magnified this rivalry.⁴

In addition, Hitler consolidated his dominance over the armed forces by personally taking charge of the OKW and strengthening its centralized control following the Blomberg–Fritsch scandal in 1938.⁵ As supreme commander, Hitler practiced a rigid style of command known as the *Führerprinzip*, which held everyone "duty-bound to obey every order he received from his superior commander." In sum, the German high command had a historically proven record of accomplishment; but the fragmented command relationships and Hitler's demand for blind obedience introduced friction and rigidity, both of which became increasingly apparent as the war progressed.

In Russia, the German chain of command was structurally straightforward. The chain flowed from OKH, through the three geographically delineated army group commanders, to their respective army commanders. The army commanders, in turn, directed corps commanders who directed the division commanders, and so on down the line.⁸

The Soviet Union's high command differed noticeably from the Germans. Communism's inherent fear of the "internal enemy" directly affected the high command structure over the army of three million because of the potential threat that army represented. The chain of command during the war flowed from the Committee for the Defense of the State (GOKO), consisting of Stalin and his senior political and military lieutenants, through the *Stavka*, essentially a general headquarters closely monitored by four senior political commissars. And, as the 1937 purges revealed, Lavrenti Beria's notorious state security organization, the NKVD [People's Commissariat for Internal Affairs], stood ever ready to intervene in military affairs and enforce Stalin's political will. 11

The structure was purposefully designed to exercise centralized command of the armed forces at the highest political levels. This it did, but it also stifled initiative. The poor showing of the Red Army in the 1939–40 war with Finland caused a reevaluation of and some modifications to this structure, including an emphasis on better discipline within the army and a decrease in the authority of the political commissars. ¹² Interestingly, and in contrast to Hitler, Stalin eventually loosened

his grip over the army as the war progressed. According to John Erickson, "Out of its subordination, the army marched into equality with the [Communist] Party."¹³

In May 1941, the Soviets had five "military districts" along their western front from north to south: Leningrad, Baltic, Western, Kiev, and Odessa. 14 They made a significant adjustment in July 1941, establishing "three major commands over the northwestern, western, and southwestern 'directions,'" but this structure "failed to produce any of the necessary coordination or cohesion." This orientation closely resembled the German geographical army groups and was as close as the Soviets came to the German organization, but it did not last. By the winter of 1941–42, the Soviets established more numerous, smaller fronts; and the *Stavka* directed control through its immediate subordinate general staff, to the commanders of arms, then to the defense commissariat, and down to the front commanders. 16

"The *Stavka* system worked with an increasing efficiency as the war progressed. To coordinate or even execute major operations, *Stavka* 'representatives' went to specified fronts," Erickson noted. This practice represented an ingenious solution to Stalin's problem of balancing control with allowing military initiative to high-ranking officers. On the one hand, the permanent position of these officers in *Stavka* kept them close to Stalin. On the other, his most experienced and capable commanders, such as Marshal Georgi Zhukov, were able to plan and then personally coordinate and direct the most important operations. This structure obviated the need for a Soviet equivalent of Germany's geographical army group commands.

Phase 1: 22 June 1941-5 December 1941

When they opened the war, the Germans were operating at their peak strength and efficiency. Hitler unleashed three army groups: north, center, and south against Leningrad, Moscow, and the Ukraine respectively. Despite evidence of the impending invasion, the move caught the Soviets unprepared. The Germans made rapid advances in the north and in the center, while progress in the south lagged. The campaign aimed to achieve victory before the onset of winter, but this proved overly

optimistic. Despite the rapid German advance and its capture of hundreds of thousands of prisoners of war (POW), the Russians kept an army in the field and survived into the winter months. The Red Army blunted the final *Wehrmacht* drive on Moscow as winter developed and countered with an attack of its own on 5 December 1941. The commencement of this attack closed out the opening phase of the war.

Resources

The Germans concentrated a formidable array of troops for Barbarossa (see figure 1), but struggled to maintain their strength with each passing month. They launched the invasion with roughly 3.2 million men, including the troops of their allies. 18 Facing them in the newly acquired western reaches of the Soviet Union were 2.9 million Soviet troops, though the full establishment of the Soviet armed forces was significantly higher. 19 As the invasion progressed, however, the Wehrmacht was unable to replace its operational losses, receiving only a fraction of the necessary replacements by 2 August 1941.20 The deficit remained a problem throughout the initial period of the war with a shortage of 126,000 men by 16 October 1941.²¹ The Soviets suffered enormous casualties in this period and, despite prewar mobilization preparations, found themselves with only 2.2 million men directly facing the Germans at the beginning of November 1941.22 These numbers did not bode well for the Soviets.

The Germans initially enjoyed a clear advantage in manpower. They employed more troops on the active front and, despite their mounting casualties, inflicted so much damage on the Soviet army that they maintained a positive force ratio. The relatively primitive nature of Soviet recruits, poor discipline, and uneven quality among military units further complicated the Red Army's problem.²³ Yet the Soviets had prepared mobilization plans that allowed them to put one million new recruits under arms by the end of July, thereby keeping an army in the field and laying the foundation for future success.²⁴ Nevertheless, while the manpower margin may have been thin at times, it favored the Germans.

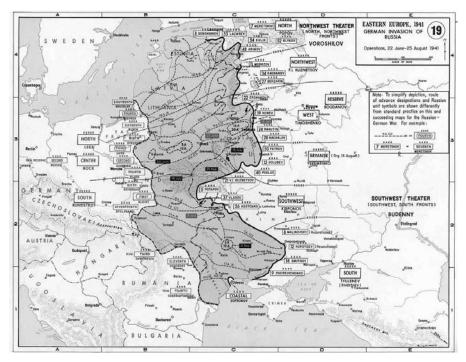


Figure 1. Operation Barbarossa (See all figures online to enhance resolution. http://www.dean.usma.edu/departments/history/web03/atlases/ww2%20europe/ww2%20europe%20%20maps/ww2%20map19.jpg, accessed 16 April 2008).

In material terms, the German economy was not geared for a long war.²⁵ The *Wehrmacht* did, however, enter the operation with 3,330 tanks;²⁶ and the Luftwaffe committed 2,770 modern aircraft to the campaign.²⁷ The Soviets countered these with significantly greater numbers including 14,200 tanks and 9,200 aircraft in the western theater.²⁸ But only 27 percent of these tanks were in full working order, the rest being under "heavy" or "medium" repair.²⁹ Nevertheless, the Soviets had been preparing for a long war with their successive "five-year plans" of the 1930s; and their industrial output was growing.³⁰ The Soviet artillery force was both numerous and "the best equipped and most professional arm" of the Red Army.³¹

In terms of pure numbers, the material balance substantially favored the Soviet Union at the opening of the war. The quality of the equipment, as will be seen, played a significant role. Other factors influencing the material element manifested themselves as the campaign progressed. German stocks dwindled due to supply difficulties as the army drove east. The need to convert Soviet railways to the German gauge limited rail support, resulting in depleted ammunition supplies.³² Panzer Gen Erhard Raus confirmed the debilitating effects of limited supply stating, "The losses attributable to technical failure continued to far outweigh combat losses [in July 1941]."³³ Meanwhile, the Soviets had to contend with German successes that overran industry and forced armament factories to evacuate to the east, interrupting production.³⁴

Although the numbers of weapons favored the Red Army, the quality of weapons favored the Germans. The Luftwaffe's technology was generally superior to the Soviet air force's (VVS), with 80 percent of Russian aircraft considered outmoded.³⁵ Among that remaining 20 percent, however, was the II'yushin II-2 "Shturmovik," which proved a nasty surprise to the Germans and was "probably the best close air support aircraft of the Second World War."36 The newer and larger Soviet tanks, including the KV-1 and especially the T-34, were superior to the German tanks and would remain so until much later in the war; but they were available only in limited numbers in 1941.³⁷ Field Marshal Wilhelm Keitel confirmed the sustained superiority of Soviet armor noting "the Russian tank forces had a qualitative lead over us which we never could and never did catch up."38 The Germans had a large technological edge in radios, recognizing their "indispensable" role in modern, mobile warfare.³⁹ This edge in wireless technology paid dividends across the full spectrum of military air and ground operations.

Despite several Soviet strengths, the overall edge in technology at this stage fell to the *Wehrmacht*. The Soviets enjoyed a marked superiority on the ground, and German battlefield commanders acknowledged this superiority. Gen Heinz Guderian credited the T-34 with inflicting grievous losses on the 4th Panzer Division near Mzensk in October 1941, thereby blunting his rapid advance on Tula, to the south of Moscow. ⁴⁰ But this advantage was offset by the combined German ascendancy in the air and in radios. The synergy of these two technologies on the battlefield offset the Soviet advantage in armor and artillery.

Germany maintained superiority in resources writ large at the beginning of Operation Barbarossa. The Germans had a small to moderate edge in manpower and larger edge in technology. The Soviets enjoyed massive amounts of equipment, but much of it was of inferior quality. Soviet Gen Sergie Shtemenko accurately noted, "Organizationally and technically all the Soviet Armed Forces were being brought into line with the demands of modern war," but the key word was "being." Barbarossa had caught them in transition. "In the short-term struggle that Hitler planned, Germany had clear qualitative and even quantitative advantages over the Soviet Union," was the overall verdict for resources in 1941. Deciding how best to employ these advantages required good intelligence.

Quality of Intelligence

During the prelude to the invasion, both nations struggled to gain a clear picture of the war-making potential and intentions of the other. German intelligence collection and analysis prior to the invasion were mixed. The Germans had good knowledge of the dispositions of Soviet forces in the border areas, but they underestimated Russian reserve capabilities.⁴³ They also knew about the topography in Soviet-occupied eastern Poland but did not have the same grasp for European Russia.44 Before hostilities began, they grossly underestimated several aspects of Soviet production capability, particularly in aircraft.⁴⁵ Compounding this underestimation was Hitler's racial paradigm, which considered the Soviet state a creation of the supposedly inferior "international Jew."46 Hitler's assumption of German racial superiority led him to tell Field Marshal Gerd von Rundstedt, on the eve of Barbarossa, "You have only to kick in the door [of Russia] and the whole rotten structure will come crashing down."47

Soviet intelligence was excellent in many respects, but Stalin himself undermined its effectiveness. "Probably at no earlier time in history has a major belligerent in a soon-to-start war ever had more complete intelligence about the strength of an opponent and the disposition and capabilities of his forces as did the USSR in early 1941," Bryan Fugate notes.⁴⁸ Fearful of a Western conspiracy to involve him in a war he wished assiduously to avoid, Stalin wasted this advantage, and obdurately refused to act.⁴⁹ His paranoia cost the Soviets dearly.

The Germans enjoyed a slight advantage in intelligence collection and analysis at the beginning of the war. Though they "catastrophically underestimated" the Soviet Union's war-making capacity at the opening of hostilities, they did make use of the good intelligence generated immediately before the war.⁵⁰ The underestimation, however, would hurt them in the later stages of the conflict. The Soviets, given Stalin's paranoia, were left with virtually nothing of strategic intelligence value for employment after the supposedly 'surprise' attack in June. The fruits of the Soviet's strategic intelligence were plucked from their hands by the leader and left to rot.

Maintaining an accurate grasp of the situation proved difficult for both adversaries during the first phase of the war. German intelligence was mixed, with some excellent aspects and some notable weaknesses. Much like the prewar intelligence, the Germans were consistently able to identify those Soviet units in the first echelon of battle but struggled in tracking the Soviets at the operational and strategic echelons.⁵¹ The Germans held an advantage in communication intelligence early in the war and continued to improve this area as more radio direction-finding equipment arrived at the front.⁵² Despite this advantage, Gen Franz Halder's 3 July 1941 estimate that Soviet reserves had been depleted proved glaringly inaccurate.⁵³ The Soviets struggled as well, caught off balance by the invasion. Their intelligence and reconnaissance procedures were uneven and only marginally effective, forcing them to operate in the blind when dispersing their units.⁵⁴

Despite its intelligence imperfections, the *Wehrmacht* proved more adept than the Red Army at piecing the information picture together and garnering a realistic appraisal of the situation during the first phase of the conflict. Soviet limitations wreaked havoc on the Red Army's ability to stop the Germans during the opening moves of the invasion. ⁵⁵ Soviet Gen Konstantin Rokossovsky stated it best: "I was greatly handicapped by the absence of information concerning the situation at the front." ⁵⁶ The first six months of the war illustrated that groping along in darkness during a mobile, modern war can be disastrous.

Counterintelligence was also mixed. The Germans were able to keep the Soviets in the dark about their movements and intentions as much from Soviet failure as from direct German design. The rapid offensive and corresponding Soviet confusion congealed to mask the Russians' vision. The Soviets were atrocious at communications discipline in the opening stages of the war, revealing much to the German army.⁵⁷ On the plus side, the German overestimates of Soviet rifle division strengths and underestimates of their mechanized corps strengths at the beginning of the war reflect some Soviet success regarding operational security.⁵⁸

Thus, the Germans held the edge in counterintelligence and operational security, if only by default. The Soviets were often unaware of the course of operations and were typically unable to cover their own moves and blind the Germans.

The overall advantage in intelligence goes to Germany for the opening phase of the war. Strategically, the Soviets had both better collection and assessment, but Stalin wasted these efforts in a misguided attempt to avoid provoking the Germans. Throughout the first few months of the campaign, the Germans were better able to assess the current situation and act properly. Particularly in the opening months, this near total breakdown for the Soviets allowed the Germans to sustain their operational security, while the Soviets garnered only mixed results in their own attempts, but as this phase closed, the gap began to narrow. On 4 December 1941, the eve of the Soviet counteroffensive around Moscow, German intelligence failed to detect the presence of Soviet reserves and anticipated no possibility of attack by the Red Army.⁵⁹ Meanwhile, in late November 1941, the Soviets accurately assessed the Germans' exhaustion and overextension, as well as their lack of reserves. 60

Strategic Acumen

Despite some notable deficiencies, the Germans proved to be better strategists than the Soviets in the opening campaign. Hitler believed Barbarossa would secure Germany in the east, force Britain out of the war, allow Germany to slow armament production, and keep the United States out of the war.⁶¹ The plan aimed Army Groups North, Center, and South, at the main targets of Leningrad, Moscow, and the Ukraine, respectively.⁶² Guderian, at least in hindsight, found great flaws in Germany's planning, faulting the invasion for consisting of three different army groups pursuing three diverging military objectives.⁶³

Field Marshal Erich von Manstein found another strategic failure in Hitler's inability to convince the Soviet Union's disaffected minorities to help in the war. Here, Hitler's racial predilections again undermined the war effort and represented a significant missed opportunity. Robert Citino found an inherent weakness in Germany's operational focus at the expense of strategy: "Exactly how operational victories—even decisive ones—would actually lead to surrender of their enemies received very little consideration." Exacerbating all these concerns, Hitler and his General Staff repeatedly disagreed over and vacillated among the three military objectives of Leningrad, Moscow, and the Ukraine.

The Soviets were apparently caught in a transition between strategies or in a state of confusion. Prior to the invasion, Red Army forces were positioned too far forward, vulnerable to known Wehrmacht operational capabilities. 67 Bryan Fugate favors the first interpretation, stating that Marshals Zhukov and Semvon Timoshenko were intentionally switching from an offensive posture to a defense in depth, and had done all they could in the short time between January and June 1941.68 Konstantin Pleshakov argues the second interpretation and blames the confusion on Stalin's misguided directions, which forced Timoshenko and Zhukov to be unprepared for either an offensive or a defensive war.⁶⁹ Zhukov later faulted Stalin for ordering early counterattacks that were well beyond the Red Army's capabilities. 70 Stalin did, however, have the foresight to plan for a long war when he ordered the evacuation of as much war industry as possible to the east, beginning 24 June 1941.71

The Soviets and Germans were equally inept at strategic planning. Both sides failed to develop or implement a fully effective strategic plan. The Germans, too operationally focused, had competing military objectives that caused debilitating vacillation during execution, and missed the opportunity to exploit disaffected Soviet minorities. The Soviets, caught between plans or, confused by Stalin's management, were not ready for either offense or defense in their deployment. They were also unrealistic about their own capabilities at the outset of war. The Germans came close to success despite their mistakes, but these mistakes would return to haunt them later in the war. The Soviets made

costly errors initially, but they also made several positive decisions that would pay off in later phases of the conflict.

The Germans executed a successful deception operation and launched an effective surprise attack to open the war. There is no significant debate among historians that Germany reigned supreme during the opening moves of the war. The Germans masked their preparations in the east under the guise of rehearsing for Operation *Seelöwe* against Great Britain, out of range of the Royal Air Force. Aided by Stalin's refusal to believe his own intelligence, the Germans struck a devastating blow. By means of comparison, Soviet attempts at *maskirovka*, which includes both active and passive measures designed to deceive and surprise the enemy, were limited in scope and effectiveness.

The German surprise attack achieved astounding results in the opening months of the invasion. The war progressed much like an exercise for the *Wehrmacht*, while the Soviets proved incapable of reacting. On the first day alone, the *Luftwaffe* destroyed 1,200 Soviet airplanes, most of them on the ground in neatly parked rows. During the first week of the war, 24 different Soviet mechanized corps formations lost over 90 percent of their strength. Within three weeks, the Red Army had lost 28 infantry divisions, with the remainder down to 50 percent strength, representing 600,000 men out of their original 2.9 million. This was strategic surprise indeed!

Operational and Tactical Methods

At this point in the war, the Germans were the class of the league in tactical and operational technique. Citino is unambiguous concerning German operational and tactical prowess: "Much of the rest of the war (1941–1945), in fact, can be seen as an attempt by the Allies (Great Britain, the Soviet Union, and the United States) to assimilate the new German methods."⁷⁷ Halder praised the initiative inculcated into German commanders, allowing for independent leadership and the now-famous employment of *Auftragstaktik*, or loose mission command, which he deemed essential in the vast expanses of Russia.⁷⁸

The Soviets did not enjoy this kind of trust. Stalin's purges of the armed forces in the late 1930s paralyzed any latent spirit of initiative that might have flowed from Marshal Mikhail Tukhachevskii's concept of "deep battle."⁷⁹ Gen Erhard Raus found the lower echelons of Soviet command in 1941 "inflexible and indecisive."⁸⁰ Soviet shortcomings in wireless communications exacerbated the situation, hampering effective command and control.⁸¹ In the open countryside of western Russia, the Red Army was at a significant disadvantage against expert tacticians.

German success demonstrated this point; the war's first 12 days produced a 15-to-one loss ratio in Germany's favor. Be Col Hans von Luck noted the achievement of air superiority by the *Luftwaffe* from the beginning of the campaign. The Red Army did not, however, just roll over. Encircled Soviet units fought bitterly, refusing to surrender as had Germany's previous foes. The Red Army also attempted several large armored counterattacks "unlike anything in France," an ominous sign for the future. Despite these efforts, the *Wehrmacht* reigned supreme operationally and tactically in the first phase of the conflict.

Summary

The scales tipped in varying degrees in favor of Germany in resources, intelligence quality, strategic acumen, and operational and tactical methods in the summer and fall of 1941. The Germans had concentrated significant amounts of men and materiel, with certain critical advantages in technology, for the invasion. Despite Hitler's sociopolitical blindness, they developed a fairly accurate intelligence picture. Although their strategic planning left much to be desired, they almost won the war in six months. They planned and executed a devastating surprise attack. Tactically and operationally, the Germans were unmatched.

The Germans attacked and seized strategic initiative on 22 June 1941. They were able to hold greater influence over the course of the war until December 1941 because of their advantages in all four elements. They sustained resource superiority throughout this period; they held advantages in intelligence; their short-term strategic focus worked for the first five months; and they fought brilliantly at the lower levels of war. Soviet resistance was fierce but could not wrest the initiative from the Germans. As the war dragged on, however, the nature of ad-

vantages in each of these categories began to shift. Those shifts accumulated, and the balance of advantage swayed. When it did, the conflict entered its second phase; and the implications for strategic initiative loomed large.

Phase 2: 5 December 1941-1 Feb 1943

The Soviets mounted several operations in late 1941 and the spring of 1942, including a 5 December 1941 counterattack from Moscow and the battles at Kharkov and in the Crimea (see figure 2). They attempted and very nearly succeeded to wrest the strategic initiative from the Germans. The amazing recovery of the Red Army before Moscow in 1941 dealt the German army its first significant defeat and signified to Shtemenko a "fundamentally new turn" in the war.⁸⁶

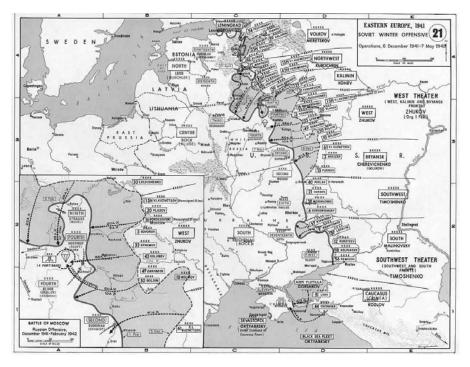


Figure 2. Soviet Moscow Counteroffensive (http://www.dean.usma.edu/departments/history/web03/atlases/ww2%20europe/ww2%20europe%20%20 maps/ww2%20map21.jpg, accessed 16 April 2008).

The Soviets attempted to follow up with a general offensive, but the Germans were able to stabilize a "relatively ordered defensive front" by early January 1942.⁸⁷ The Soviets then attempted attacks in the Crimea and around Kharkov, to no avail. The Germans countered with Operation *Blau* in July 1942, with two thrusts in the south toward the Caucasus and Stalingrad (see figure 3). This action forced the Soviets to fight the battle in the south but helped them to turn the tide with Operation Uranus and the subsequent destruction of the German Sixth Army in January 1943, which represented the end of the disputed initiative phase.

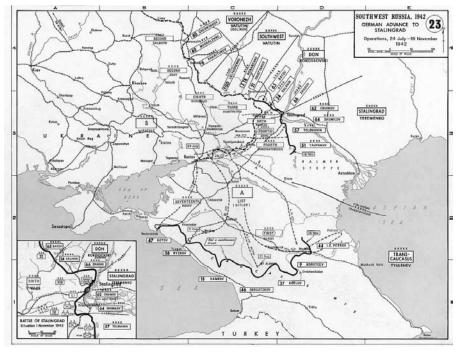


Figure 3. Operation *Blau* (http://www.dean.usma.edu/departments/history/web03/atlases/ww2%20europe/ww2%20europe%20%20maps/ww2%20 map23.jpg, accessed 16 April 2008).

The struggle for strategic initiative ebbed and flowed during this phase. Mostly because of definitional confusion, historians and participants disagree over which side held the strategic initiative and when. The Red Army first began to contest German possession of the strategic initiative with its Moscow counterattack and subsequent general offensive in December 1941. They succeeded in gaining *operational* initiative in these attacks, but the limited results of the general offensive prevented their seizure of *strategic* initiative. The situation in the spring of 1942 found both sides vying for the initiative. The Soviet operations at Kharkov and in the Crimea were disasters after which "the [operational] initiative fell firmly into German hands." The Germans used that initiative to dictate the course of the war with Operation *Blau* and the resulting battle at Stalingrad in the south of the Soviet Union. Figure 4 shows the Soviets countered this move with Operations Mars and Uranus, designed to seize the strategic initiative in the fall and winter of 1942–43.90

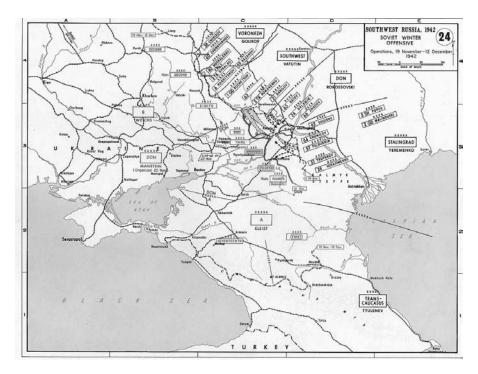


Figure 4. Operation Uranus (http://www.dean.usma.edu/departments/history/web03/atlases/ww2%20europe/ww2%20europe%20%20maps/ww2%20map24.jpg, accessed 16 April 2008).

The former German and Soviet commanders dispute who held strategic initiative after the Soviet victory at Stalingrad, but from February 1943 on it was, in retrospect, clearly in the Red Army's possession. William Shirer was correct in his judgment that after Stalingrad "the initiative had passed from Hitler's hands, never to return." We must now investigate why this shift came about.

Resources

From late 1941 to early 1943, the struggle for resource superiority intensified. In manpower, the two antagonists moved in decidedly different directions. Heavy German losses in the campaign worsened in the winter months, resulting in a restructuring of divisional organization from nine infantry battalions to seven, and beginning a struggle for manpower on Germany's eastern front "that was never to end." Soviet efforts to mobilize and transfer troops from the Far East told a different story. On 1 November 1941, the Red Army fielded 2.2 million men in the western districts and Ukraine; by early December, that number rose to four million. This transfer began in the closing weeks of the first phase. By May 1942, there were 3.5 million Axis soldiers (1 million of which were not Germans) facing 5.5 million Soviets.

This disparity steadily widened as the war progressed. As early as the battle for Moscow in 1941, the Soviets were able to concentrate a two-to-one manpower superiority at the decisive point. The Kharkov offensive of 1942 pitted 640,000 Red Army soldiers against 500,000 Germans. The Germans were forced to start their strategic offensive, Operation *Blau*, with most units below strength. This problem worsened, and Manstein's attempt to relieve the encircled army at Stalingrad was undermined by "an acute shortage of reserves." The balance in manpower had clearly shifted to the Soviet Union.

The battle in materiel was more closely run as the Germans lost an enormous amount of armor. By March 1942, their 16 panzer divisions reported a total strength of only 140 tanks, while by late November 1941, 327,000 out of an original 500,000 transport vehicles were damaged or destroyed; and over 207,000 horses were lost. 99 The Germans were also losing the aircraft

production battle: in 1942, they manufactured only 15,409 planes for use on three fronts; the Soviet Union produced 25,240 aircraft for one front. The Germans, however, concentrated 2,750 combat aircraft for their 1942 efforts in Russia. Russia.

Supply problems proved a particular challenge for the *Wehrmacht* as the war dragged on, especially in the winter months. The troops were short of heavy clothing, and tanks were stranded due to frozen motor oil.¹⁰² The Soviet Union, on the other hand, was closer to its support base and enjoyed better, though not perfect, railway and supply support, especially as winter approached.¹⁰³ While the counterattack around Moscow raged, the Russians were at last getting "really good equipment in substantial quantities."¹⁰⁴ Furthermore, Allied aid from the United States and Great Britain helped fill the production gap that Soviet industry developed in 1942 as a result of Stalin's 1941 industry evacuation order.¹⁰⁵ However, the Red Army had suffered enormous losses in artillery in 1941, which they were unable to replace fully in early 1942.¹⁰⁶

The Soviets edged out Germany in materiel in this phase of the war. Supply and weather problems early in this phase conspired to limit *Luftwaffe* participation to 500 aircraft against 1,000 Soviet machines in the battle of Moscow. ¹⁰⁷ Despite the previously noted production figures, the comparative dearth of German aircraft on such a wide front forced the *Wehrmacht* to concentrate virtually all their aircraft at each battle in 1942, limiting operations to a single offensive at a time. ¹⁰⁸ During the battle of Stalingrad, the Soviets solidified their numerical superiority employing 1,500 planes against the Germans' 1,200. ¹⁰⁹ Citino highlighted the material trends of 1942 when he noted, "On the verge of its great confrontation with a revived and rapidly mechanizing Red Army, the *Wehrmacht* was in the process of reequipping its reconnaissance battalions with bicycles." ¹¹⁰

The technological picture was also changing. The *Wehrmacht* enjoyed significant technical superiority in several areas at the beginning of the war, but 1942 was a new year. The Soviets had and maintained armored superiority well into the war, including throughout this phase of the conflict. But they also started making gains in areas that had previously favored the Germans, such as aircraft and wireless communication. The *Luftwaffe* had destroyed a huge number of enemy aircraft in 1941;

but these were mostly older, obsolescent planes. The aircraft entering the fray on the Soviet side in late 1941 and throughout 1942 slowly eroded the technical superiority previously held by the Germans.¹¹¹ One seemingly obscure, but critical, area in which the Allies helped the Soviets close the technology gap was in the supply of high-octane fuel, which significantly improved the performance of Russian aircraft.¹¹²

Although the Germans in this phase still clung to a slight overall technological edge, it was eroding. Over Stalingrad, when the Soviets achieved numerical superiority, 60 percent of their aircraft were newer, more capable models. The closing technological gap, along with superior numbers, also allowed the Soviet air force to wrest control of the air over the Leningrad-Bryansk fronts during this phase. These various indicators revealed a significant shift.

The Soviet Union tipped the overall balance in resources during the second phase of the war. The Red Army achieved a significant advantage in manpower that would widen as the war progressed. The material ratio favored the Soviets, but to a lesser extent than the advantage they enjoyed in manning. On the technical front, the Germans still enjoyed an overall advantage, but the Soviets had closed the gap in aircraft capabilities and maintained their lead in tank design. The Soviets' cumulative advantages in manpower and materiel exceeded the narrow German lead in technology, shifting the resource element in Russia's favor.

Quality of Intelligence

Relative intelligence capabilities were also changing. The Germans still struggled strategically and began to pay the price for their earlier underestimation of the Soviet Union's warmaking capacity. They failed to appreciate Soviet capabilities and the size of the reserves available during the Moscow counteroffensive in late 1941 and early 1942. Hitler also continued to ignore his own intelligence, underestimating Soviet manufacturing capability and refusing to believe accurate production figures of 600–700 tanks per month. Finally, the Wehrmacht greatly underestimated the material support available to the Soviets on the eve of Operation Blau. They estimated

the Soviets had 6,600 aircraft, 6,000 tanks, and 7,800 various sized artillery pieces when the true numbers were 21,681, 24,446, and 33,111 respectively.¹¹⁷

Russian strategic intelligence remained uneven. The Soviet General Staff had a very clear understanding of German capabilities and intent before Moscow in 1941, and an accurate assessment of Japanese intentions to the east; it acted effectively on these appreciations. Nevertheless, in 1942 the Soviets overestimated German capabilities and misread German intentions, fearing a two-pronged advance with the major effort directed at Moscow. 119

After a disastrous failure in June 1941, mostly because of Stalin's personal failures, the Soviets rebounded nicely in strategic intelligence during this phase. They still had much work to do and made some poor analyses, but overall their performance exceeded that of the Germans. The Wehrmacht continued to struggle, performing about as well as in 1941, which was not very impressive. This put them at a relative disadvantage because of the marked gains made by the Russians. Alan Clark observed these poor strategic intelligence efforts began to have a significant effect on the Germans when their "complete ascendancy" on the battlefield started to erode and "ignorance of their opponent's real strength and intentions was to bring them close to a disaster."120 Even Joseph Goebbels, the Nazi propaganda minister, belatedly realized the significance of the errors in his 9 April 1943 diary entry: "Canaris also claims that our counterespionage predicted Russia's war potential correctly, especially heavy tank production for the Bolshevik Army. Unfortunately, the necessary conclusions were not drawn from this report."121 Such shortcomings persisted throughout the war.

The Soviets also closed the gap in security and counterintel-ligence. Both sides practiced security measures that clouded the enemy's judgment, with varying effectiveness. German security provided a false sense of superiority for the Russians near Kharkov, with the aforementioned deleterious results. The Soviets successfully used "disjointed" security methods and the extremely tight form of "sequential planning" to maintain secrecy prior to Operation Uranus at Stalingrad. These efforts allowed them to surreptitiously ferry 160,000 men, 10,000 horses, 430 tanks, 6,000 guns, and 14,000 other vehicles across the Volga River in preparation for their counterattack.

The area of security proves a draw between the Germans and the Soviets at this stage of the war. German capabilities matched those they enjoyed at the beginning of the invasion. The Soviets showed steady and remarkable improvement in this area, and would continue to build upon it in the future. Each side enjoyed successes and failures in their intelligence security endeavors.

Thus, the Soviets edged out German efforts in the intelligence arena for phase two, but it was a very narrow advantage. The German ability to discern a clear picture of the current situation declined due to better Russian security. The Soviets showed significant improvement. This razor-thin Soviet advantage in intelligence capacity does, however, represent a marked shift from the opening phase of the war.

Strategic Acumen

As the initiative was disputed between the two sides, the relative quality of strategic planning oscillated. The Soviets surprised the Germans with a counterpunch in December 1941 but pressed the attack beyond its means. 125 Their ill-conceived operations in the Crimea and around Kharkov in the spring both suffered defeats. In the summer of 1942, the Germans aimed once again to decide the war in Russia. 126 But familiar problems arose in the German strategic plan. Hitler's view of strategic success in Russia focused on the conquest of territory for economic advantage, while his generals equated success with the destruction of the Red Army. 127 The disagreement strained planning efforts, but the predictable result was implementation of Hitler's concept of a southern offensive to capture vital economic areas that would cripple the Soviet war economy and aid Germany's. 128 The Germans, however, had not learned from the previous year and again attempted to seize diverging objectives, the Caucasus and Stalingrad. 129

Stalin's designs were also ill founded. In early 1942, Stalin stated, "I foresee the conduct of local offensive operations along a number of axes to fortify the success of the winter campaign . . . to seize the strategic initiative and to disrupt German preparations for a new summer offensive." Additionally, Stalin had pressed for a general offensive against the Germans at the

very beginning of the second phase, following the success of the Moscow counteroffensive. ¹³¹ Both plans fared poorly.

One of the keys to successful strategic planning is remaining within one's capabilities. Both commands failed to do this at different times in 1942. After the counterattack at Moscow, Stalin's opportunistic grab for strategic initiative, against his advisers' counsel, pressured the Germans; but it fell well short of its intended goal due to inadequate resources. 132 The Soviets also failed in Operation Mars against Army Group Center, an overreach that occurred while the victorious attack at Stalingrad was unfolding. 133 The German decision to strike south was not a bad option for 1942, but the diverging aims of the two efforts and the dearth of German mobile formations conspired to overextend the offensives and leave them vulnerable to Soviet counterattack.¹³⁴ The plan was simply beyond German capabilities. Zhukov did not miss this opportunity. Recognizing the weaknesses of the Italian and Romanian armies guarding the Germans' flanks, he developed a plan to break through these vulnerable areas, then encircle and destroy the German forces. 135 Both the Germans and Soviets blundered in the area of strategic planning, but the conception and execution of Operation Uranus mitigated other Soviet errors, giving them an edge in this period of the war.

There were multiple examples of strategic surprise and deception during the disputed phase of the war. The opening date of this phase coincided with the launch of the successful Soviet counterattack around Moscow, which caught the Germans unaware. Seven months later, the *Wehrmacht* attempted another war-winning surprise offensive with Operation *Blau* against the south, masking it with a large-scale deception plan designed to focus Red Army attention on Moscow. Not to be outdone, the Soviets responded with Operation Uranus against Army Group South around Stalingrad, once again shocking the Germans. The Germans were unable to counter the Soviet encirclement of their Sixth Army. The *maskirovka* operation conducted by the Soviets at Stalingrad was their first large-scale, successful deception operation; and it taught them valuable lessons for the future. 139

Thus, the Soviets had the overall advantage in strategic surprise during this period of the war. Both Red Army surprises

caught the Germans off guard and yielded significant strategic benefits. While the Germans surprised the Russians with *Blau*, the surprise was not nearly as great nor as strategically consequential as Moscow and Operation Uranus.

Overall, the Soviets demonstrated more accomplished strategic acumen than the Germans in this phase of the fight. Strategic planning favored the Red Army marginally, but the Soviet edge in achieving surprise tilted the scale decidedly in their favor. Given the earlier relative advantage the Germans had over the Soviets, the slowly maturing strategic capability of Stalin and the *Stavka* represented a significant shift in overall advantage.

Operational and Tactical Methods

The Soviets were also becoming tactically and operationally more proficient. Throughout the winter of 1941–42, the German forces were exhausted, depleted, and unprepared for the weather. 140 The return of spring and summer rejuvenated the Wehrmacht and made it "perhaps the finest pure fighting machine in the world, however weak it might have been in terms of strategy, resources, and manpower."141 Yet things were changing, and Hitler's increasing interference strangled the Auftragstaktik that had served the Germans so well. 142 The Germans also limited the depth of their offensive strokes in order to keep tanks and infantry in close coordination with each other, and to avoid the large, but porous, encirclements of enemy forces. 143 Finally, the struggle in Stalingrad forced the Germans to engage in a style of fighting that negated all their previous advantages of training and tactical orientation. 144 The Soviet troops in the winter period were more numerous than the Germans, but were much less experienced than the Soviet soldiers in the prewar Red Army. 145 However, Stalin, in contrast to Hitler, was learning from his mistakes and giving his officers slightly more freedom of action.¹⁴⁶ The Soviets also reorganized their armored formations, creating tank corps of nearly 8,000 men and 170 tanks in May 1942.147 The VVS also reorganized, creating mobile air armies of 1,000 planes each, with the expectation of fielding 14 such formations. 148 During the street fighting in Stalingrad, the Red Army proved determined, skillful, and innovative. 149

The Germans remained operationally superior to the Soviets in this period of the war as the Red Army's setbacks at Kharkov in Operation Mars and in the Crimea attest. "With the exception of Stalingrad, the Soviet command never managed to coordinate *strength* and *speed* when hitting a decisive spot," Manstein observed. Daily Soviet casualty rates for the Stalingrad battle from July 1942 through February 1943 averaged just a third to a half the rates experienced in the Ukraine in 1941 and Kharkov in May 1942. Once again, though still at a disadvantage, the Soviets had significantly reduced a gap between themselves and the Germans.

Tactical superiority in this phase is debatable. The Germans, on aggregate, maintained an advantage; but the Soviets were superior in the urban fighting of Stalingrad and showed noticeable improvement in the steppes around the city. Soviet Gen Vasily Chuikov, commander of the Soviet 62nd Army at Stalingrad, recognized the "polished, coordinated action" that constituted German combined arms tactics. These tactics contributed materially to German success in the Crimea, at Kharkov, and before Stalingrad. But in the city itself, the Germans were unable to use their armor and air assets to full effect; and Russian tactics proved superior. Outside Stalingrad, German commanders noted the improved tactics of Soviet forces in open battle, when the latter rapidly exploited success and flexibly shifted their main efforts as the situation demanded.

Summary

The advantage held in each of the four elements shifted significantly in the second phase of the war. Germany retained an edge in operational and tactical methods. But the Soviets had narrowed the gap. Resources, intelligence, and strategic acumen swung to the advantage of the Soviet Union, which grabbed a slight advantage in the first two and a moderate advantage in the third.

The Soviet victory at Stalingrad wrested the *strategic* initiative from the Germans for the duration of the war. Phase two of the conflict began as a close-run struggle for that initiative, but the Germans were able to retain it until the debacle at Stalingrad. The Germans had largely dictated the course of the war until this loss; but after January 1943, the Soviets were run-

ning the show. In broad outline, the war followed their intentions until its completion in May 1945. They needed no additional motivation to march on to victory.

Phase 3: 1 February 1943-9 May 1945

The third and final phase of the war consisted of seemingly irreversible Red Army advances. Following Stalingrad, Manstein blunted the Soviet advance in the south at Kharkov and stabilized the line of contact. Both sides paused until the Germans attempted to regain the strategic initiative at the battle of Kursk in July 1943. The Soviets were well prepared for this strike; they absorbed the blow and successfully counterattacked.

Kursk proved to be the last major German offensive on the eastern front. The Soviets soon began rapid and repeated attacks all along the front. They delivered a massive blow with Operation Bagration in June 1944, which virtually destroyed Germany's Army Group Center in Belorussia (see figure 5). Thereafter, they never looked back, advancing toward the Balkans in the south and trapping Army Group North in the Courland Peninsula. They finished the war with steady advances in eastern and central Europe in the winter and spring of 1945. The Soviet flag, raised over the Reichstag Building in Berlin on 1 May 1945, symbolically ended the war. Though sporadic fighting continued for a few more days, Hitler was dead and the Third Reich conquered.

Historians and former German and Soviet commanders differ over which side possessed the strategic initiative following the battle of Stalingrad. Shirer's judgment that it passed into Soviet hands for the duration of the war is correct. Manstein spoke of the Germans regaining the initiative in late February 1943, allowing him to conduct his famous counterattack at Kharkov that stabilized the southern front. Even Zhukov seemed to agree when he termed Kursk, not Stalingrad, as the "final assumption of initiative." However, Manstein's offensive at Kharkov only temporarily limited the depth of Soviet post-Stalingrad exploitation. Thus, its effect was operational, not strategic. Moreover, the German attack at Kursk resulted not from their possession of strategic initiative, but from a conscious decision by the Soviet high command to cede *operational* initiative temporarily in order

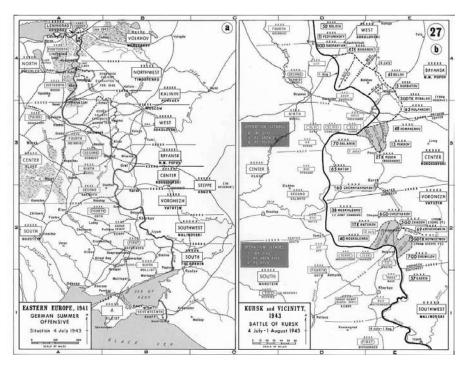


Figure 5. Operation Citadel (http://www.dean.usma.edu/departments/history/web03/atlases/ww2%20europe/ww2%20europe%20%20maps/ww2%20map 27.jpg, accessed 16 April 2008).

to set the stage for significant strategic gains. The Soviets were fully aware of German intentions; and a defensive engagement at Kursk was, after some debate, the battle they chose to fight. Thus, they had the strategic initiative all along.

After Kursk, even Guderian admitted that the Soviets held the strategic initiative for the duration of the war. ¹⁵⁷ Alexander Werth went even further when he wrote Kursk ushered in the era of "victory salutes" and "the Russian command knew that by winning the Battle of Kursk Russia had, in effect won the war." ¹⁵⁸ Yet they had to win at Kursk to retain the strategic initiative and had to work to keep it until final victory. Once again, relative advantages in resources, intelligence, strategic acumen, quality of intelligence, and operational and tactical methods explain why they were able to do so.

Resources

As the war marched toward its conclusion, the Soviet resource superiority became increasingly evident. Albert Seaton stated that by 1943 the armies were going in different directions as the *Wehrmacht* steadily degenerated and the Red Army and VVS steadily grew and improved. On 1 April 1943, 2,732,000 Germans faced 5,792,000 Soviets, and by late 1944, the disparity was even more pronounced with 1,790,000 Germans standing against 6,400,000 Soviets. The manpower shortage forced the Germans to use Russian POWs as support troops in their rear areas.

The Soviets enjoyed a clear superiority in manpower for the last phase of the war. Manstein lamented the diminished strength of his divisions and the growing frontage that each was responsible for covering in 1943. The force ratio at the battle of Kursk was 2.7 to 1, when 2,226,000 Soviets battled 900,000 Germans. Operation Bagration pitted 2.4 million Red Army troops against 1.2 million from the Wehrmacht. During the approach to Berlin, the Soviets did experience some manning problems; but they were not sufficiently serious to degrade combat effectiveness.

The overall material situation told a similar tale. Bellamy noted that the Russians in 1943 had vast quantities of materiel of excellent quality, while the Germans had superb machines such as the Tiger and Panther tanks in limited numbers. 167 Tank and artillery figures for 1 April 1943 confirmed the disparity, with 1,336 German machines facing 6,000 Soviet tanks and 6,360 German guns against 20,000 Soviet guns. 168 By August 1944 German industry produced tanks and other armored fighting vehicles at a rate that would have been impressive earlier in the war, but the German output was never able overtake the Soviet lead. 169 The VVS also expanded significantly with 10,000 front-line aircraft in 1943, 13,500 in 1944, and 15,500 in January 1945 while the Luftwaffe's inventory steadily diminished.¹⁷⁰ The continuing arrival of Allied assistance in Russia made matters even worse for the Germans, especially in transportation resources where 17,000 jeeps and 90,000 trucks played a key role in Soviet operations at Kursk. 171

This tremendous Soviet material advantage was manifest in every major battle; Kursk in 1943 pitted 1,800 German armored vehicles and 10,000 artillery pieces against 4,800 machines and 33,000 artillery pieces for the Soviets. In the air, 2,000 German planes flew against 2,900 Soviet aircraft. In Bagration a year later, the Soviets employed 36,400 artillery pieces, 5,200 tanks, and 5,300 airplanes against 9,500, 900, and 1,350, respectively for the Germans. The material disparity between combatants was vastly greater in this phase than it had been in either of the first two phases.

The shift in technology was also dramatic. The Germans made excellent gains in armored technology during this last stage of the war. The Panzer IVG was the most common German tank in use in 1943, equaling the T-34 variant at that time, while the Tiger tanks entered service with a marked superiority over Soviet designs. 175 The excellent German Panther tank also entered service beginning in 1943; and, once it overcame its teething troubles, became arguably the best tank in the war. 176 The Soviets did not remain idle, but improved in technical areas where the Germans previously reigned supreme. Soviet aircraft such as the Lavochkin La-5FN matched the performance of the German Focke-Wulf and Messerschmitt fighters. 177 More significantly, Russian wireless technology improved dramatically and contributed notably to the VVS success against the Luftwaffe. 178 Finally, the Soviet artillery became increasingly mechanized as the war continued. 179

Overall, the Germans maintained a very slim technological edge. The Soviets managed to narrow, if not close, the gaps in the air and in wireless technology. But the Germans finally began producing tanks that could stand up to Soviet designs and at times dominate the battlefield. Nevertheless, the German advantage in this area was the slimmest it had been during the entire course of the war.

The total resource picture favored the Soviets. They were greatly superior in both manpower and materiel throughout this phase. The Russians were nearly equal to the Germans in the third area, technology. Given a clear superiority in the other two, the Soviets dominated the resource element and held this advantage until the end of the war.

Quality of Intelligence

The Soviets also improved in intelligence, while the German information-gathering and analytical capability continued to decline. German strategic intelligence still suffered at the hands of Hitler, who refused to believe realistic assessments of Soviet capabilities until the very end, considering such estimates "completely idiotic" and disparaging those who produced them. ¹⁸⁰ Meanwhile, the Soviets improved their collection abilities and produced increasingly accurate estimates. ¹⁸¹

These disparities were also manifest in combat. The Soviets were generally able to discern German strategic aims and combat capabilities during this final phase of the war. Before Kursk, the Soviets correctly predicted German objectives for the summer of 1943 and knew where and when the Germans were going to attack. The "Lucy" spy network based in Switzerland relayed the German intentions, routes of attack, order of battle, and even a three-day window during which the attack would begin. This strategic assessment directly "contributed to Soviet strategic success in the summer–fall campaign [of 1943]." The Soviets maintained this strategic intelligence advantage throughout 1944 and 1945.

Perception of reality nearer to the battlefield shifted as well. As the war continued, the deteriorating military situation inhibited the Germans' ability to maintain an accurate picture. During 1944, German capabilities began to decline in human and signals intelligence, and aerial reconnaissance. The Soviets, by contrast, improved in their signals intelligence in 1943, setting up "electronic warfare" units using lend–lease radios from the western Allies. Before Bagration, the Soviet intelligence agencies combined comprehensive information from aerial reconnaissance and photography with partisan observation and signals intelligence to form a clear picture of what lay ahead. 187

The Soviet perception of reality was noticeably more accurate than that of the Germans. The Germans were occasionally able to anticipate Soviet operations, such as that around Kharkov and Belgorod after the battle of Kursk; but the Soviets were more consistently correct. Excellent intelligence enabled the VVS to launch preemptive air strikes against the *Luftwaffe* and destroy 500 planes before the battle of Kursk. General Ro-

kossovsky utilized good intelligence to shell the German assault troops during their assembly on the morning of their scheduled attack. This Soviet advantage continued through the end of the war, with the Red Army detecting Hitler's abortive Lake Balaton offensive in Hungary two weeks before its scheduled start in March 1945.

The Soviets also made great gains in counterintelligence and operational security. While the Germans proved unable to shield their preparations around Kursk, the Russians advanced their skills in masking their formations and intentions. 192 Soviet air superiority and improved radio discipline countered previous German strengths in aerial reconnaissance and signals intelligence. 193 Over the course of the war, 150,000 Soviets agents deployed along the 2,400-mile front were able "to neutralize the majority of more than 40,000 German agents deployed against them."194 These Soviet security methods made it increasingly difficult for the Germans to obtain an accurate picture of the Russian rear areas. 195 In sum, in the many instances when Soviet tactical or operational surprise was achieved, it resulted from Soviet security more often than from German intelligence failure. 196 The Germans, on the other hand, were no longer enjoying the same kinds of success.

The Soviets surged ahead of the Germans in the element of intelligence for the final portion of the conflict. Their perception of reality was much more acute, and they were moderately better in security and counterintelligence. These advantages produced a significant overall advantage on the intelligence front and represented a significant shift from the second phase.

Strategic Acumen

Strategic acumen followed the trend of the second phase as the Soviets continued to improve and the Germans steadily declined. Following Stalingrad, Field Marshal Erich von Manstein wanted Germany to assume the strategic defensive and wage a mobile war against the Red Army's coming advances. ¹⁹⁷ Other German commanders, including Guderian and Walther Model, agreed and opposed the attack at Kursk in July 1943. ¹⁹⁸ Yet the Germans, despite Hitler's hesitation, pressed ahead with the aims of shortening the front, restoring German prestige, and

buttressing shaky allies in Europe.¹⁹⁹ The Soviets faced their own challenges after Stalingrad. As he had done after Moscow, Stalin forced the Red Army to reach for more, with terrible results suffered during Manstein's March 1943 counterattack at Kharkov.²⁰⁰ Following that setback, Stalin was more receptive to his General Staff's advice and acceded to Marshal Zhukov's request to let the Germans strike first at Kursk.²⁰¹ The German defeat at Kursk was largely the product of a correct estimate of the strength of the Soviets' defense and an incorrect estimate of the strength of the offense by the Germans.

The Soviets also improved their relative advantage in strategic planning. The German's did not match objectives with capabilities, particularly at Kursk. General von Mellenthin emphasized this fact claiming Kursk "had little to gain and probably a great deal to lose" and that "the German Army threw away all its advantages in mobile tactics, and met the Russians on ground of their own choosing." The Soviets learned the lesson of Kharkov and conducted their later operations with detailed planning and realistic goals. The gradual maturation of the *Stavka's* strategic planning, coupled with the steady deterioration of OKW/OKH's grasp of reality, contributed significantly to the ultimate Soviet victory.

Significant shifts occurred in strategic surprise as well. Here, the Germans utterly failed. The attack at Kursk and the much smaller offensive near Lake Balaton in Hungary achieved no surprise whatsoever. The Soviets, however, were quite successful. The best example was Operation Bagration in June 1944 (see figure 6). Here, Soviet *maskirovka* operations caused the Germans to divert 24 of Germany's 30 panzer divisions to the south, away from Army Group Center, the true target of the attack.²⁰⁴ The operation resulted in the destruction of 30 *Wehrmacht* divisions and the death or capture of between 300,000 and 350,000 German soldiers.²⁰⁵ The Soviets worked diligently for the remainder of the war to achieve strategic surprise despite the shortening front and the geographical convergence upon obvious military objectives.²⁰⁶

The gulf between Soviet and German strategic acumen during this third phase gave the Soviets an astounding advantage in the closing years of the war. To achieve their ends, the Soviets consistently prepared and executed plans that matched

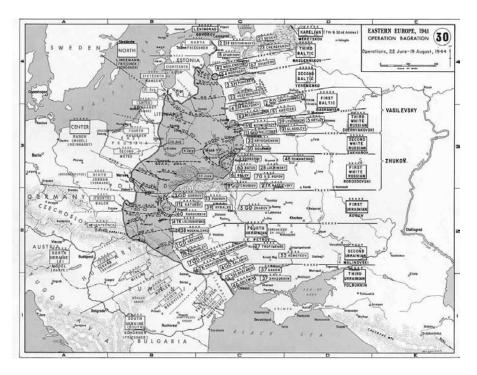


Figure 6. Operation Bagration (http://www.dean.usma.edu/departments/history/web03/atlases/ww2%20europe/ww2%20europe%20%20maps/ww2%20map30.jpg, accessed 16 April 2008).

their resources and capabilities; while the Germans did not. Soviet deception and surprise outshone German efforts and kept the *Wehrmacht* off balance for the duration of the war.

Operational and Tactical Methods

The Soviets continued to improve in operational and tactical methods. The Germans still proved capable but became increasingly predictable. Manstein's maneuvers in the south following Stalingrad were simply brilliant and demonstrated "unassailable superiority" over the enemy at that time. However, German methods at Kursk and later merely repeated the same techniques employed at the beginning of the war. When it could mass, "the *Luftwaffe* performed its tactical role almost flawlessly throughout the war, even under the most difficult

circumstances."²⁰⁹ Yet *Luftwaffe* resources steadily diminished; and, as early as the summer of 1943, it proved unable to engage the VVS in its rear areas or to stem Soviet air support for its massive ground operations.²¹⁰

Similarly, the German army was deteriorating. By the end of 1943, German infantry divisions were "reduced by casualties to below the size of regiments; their training and performance, superior though it might have been to that of their Red Army counterparts, were hardly to be compared with that of the German infantry of 1941 and 1942."²¹¹ Meanwhile, the Soviets steadily improved on the ground. By 1943, "Soviet doctrine, organization, and expectations were much closer to battlefield reality than were those of the senior German leadership."²¹² Beginning with Kursk, the VVS showed remarkable improvement by using larger formations, which proved both easier to protect and more effective in attack.²¹³

The comparison of operational and tactical methods in this stage of the war generates contentious debate among historians. Citino argues that even as victory became a foregone conclusion, the Allies struggled with German tactical and operational superiority based on "a more talented officer corps, more effective methods of command and control, and a better grasp of maneuver on the operational level."²¹⁴ David Glantz countered, "If the Red Army experienced its primary, secondary, and university education at the hands of the *Wehrmacht* 1941, 1942, and 1943, it conducted war at the graduate level in level 1944 and 1945."²¹⁵ But even Glantz stopped short of declaring the Red Army superior to the *Wehrmacht*. He faulted the Soviets for a lack of flexibility and initiative at and below the corps level and for continually conducting costly frontal assaults, problems he noted persisted until the end of the war.²¹⁶

Those who actively dispute German superiority find their best evidence from the middle of 1944 through 1945. John Erickson posited that in May 1943, Soviet evaluations of their troops' superiority in quality and quantity, as well as the increased experience of Soviet command were essentially "right, if a little over-sanguine." Albert Seaton characterized the Wehrmacht in 1944 as "a poorly equipped and obsolete army with little air and artillery support, crippled for a lack of vehicles and motor fuel" engaged against "powerful enemies." 218

Shtemenko confidently asserted that, by November 1944, the Soviets were not only numerically superior to the enemy, but had "surpassed him in fighting skill and equipment." General von Mellenthin also credited Soviet mechanized operations beginning in 1944 as "a highly mobile and keenly edged tool, handled by daring and capable commanders. When considering the entire phase, we must conclude neither side enjoyed an overall edge in operational and tactical methods.

Summary

The Soviets retained the strategic initiative throughout the final phase of the war, although the Germans attempted to wrest the initiative back at Kursk. During this period, the Soviets held a large advantage in resources, a moderate advantage in intelligence, and a significant edge in strategic acumen, while tactical and operational methods were a draw. The Soviet advantages worked together to keep strategic initiative in Russian hands until the war's conclusion.

Analysis

Several questions arise from this examination. Why did strategic initiative pass from clear German control to being in dispute in December 1941? Why did it then pass decidedly into Soviet hands in February 1943? Finally, how did the four elements of resources, quality of intelligence, strategic acumen, and operational and tactical methods work together? Is there a hierarchy among the elements? If so, what is it?

The easy answer to the first two questions is that the Germans lost great battles at Moscow and Stalingrad. However, both sides won and lost many great battles throughout the course of the war. The four elements analyzed transcend individual battles. The relative advantage(s) each side enjoyed in these elements over the course of an *entire* phase has been established. The comparison of these factors near the end of one phase and the beginning of the next, where initiative shifted, may now prove to be even more revealing.

The transition between phase one and phase two in December 1941 marked the transition from clear German initiative to a time of

disputed initiative. The Germans went from a period of modest resource advantage to a period of slight resource inferiority. The infusion of new manpower into the Red Army and the transfer of Siberian troops to the front in December 1941 began this trend, which was compounded by a lack of German reserves. In material terms, the Germans became inferior. Mounting losses and unpreparedness for winter made this problem acute. German technology still surpassed the Soviets, but the gap narrowed.

The Germans enjoyed a large advantage in intelligence at the beginning of the first phase; but the Soviets enjoyed a thin advantage at the very end of the phase. The battle for Moscow highlighted this swing when the Germans totally underestimated the situation, while the Soviets pieced together a relatively accurate picture of reality. At Moscow, there was no doubt this Soviet advantage contributed to the Red Army's ability to dispute initiative.

Strategic acumen also shifted from a large German advantage in the beginning of the first phase to a moderate Soviet edge at the beginning of the second. December 1941 encapsulated the trend. The initial Soviet counterattack before Moscow was well conceived, but went on to overstep its bounds. Had Stalin not insisted on a general offensive, the Soviets may have been better prepared to vie more effectively for initiative in the spring of 1942. The strategic surprise the Soviets achieved before Moscow also contributed to the shift in strategic initiative.

Operational and tactical methods remained a German advantage in both phases. Yet in December 1941, the lack of winter preparation and exhaustion severely degraded German performance. The Soviet performance was uneven, between the highly experienced Siberian troops and the inexperienced conscripts rushed to the front. Despite a decent performance outside Moscow, it seems German steadfastness in operational and tactical methods may have been critical in containing the shift in strategic initiative. Instead of *seizing* the strategic initiative, the Soviets proved merely able to *dispute* it.

The second transition at Stalingrad demands similar examination. The trend in resources continued as the balance shifted from a small Soviet advantage to a large one. Dramatic change occurred in both manpower and materiel, giving the Soviets a significant advantage in each. The Soviets also closed the gap in technology, leaving the Germans with only a slight advan-

tage. The Soviet manpower and material advantage significantly influenced the outcome of the Stalingrad campaign.

Intelligence proved critical during this transition. Improved Soviet security enabled the concealed buildup of forces to counterattack in the south. The Germans recognized the Sixth Army's exposure to this kind of strike but did not believe the Soviets had the resources to take advantage of the *Wehrmacht's* overextension. The ensuing Soviet victory at Stalingrad in January 1943 resulted in large part from this Russian intelligence superiority.

The Soviets earned their biggest advantage in any single element in the area of strategic acumen during the last phase of the war. The battle of Stalingrad, with its effective plan and its execution of deception and surprise, ended the second phase of the war and ushered in the third.

The Soviets continued to close the gap in operational and tactical methods between phases two and three, but the Germans maintained a very slim overall edge at the transition point. Nevertheless, Soviet operational methods in the execution of Uranus proved sufficiently effective to realize their strategic aims. Furthermore, their tactical expertise in street fighting exceeded that of the Germans. The Red Army's performance in these areas won the battle and shifted the strategic initiative to the Soviets. Following Stalingrad, the Soviets never relinquished it.

Analyzing the interplay of the four elements during these transition points and over the course of the war reveals some important considerations. German and Soviet advantages in the first and third phase, respectively, were ubiquitous and granted those nations supremacy in strategic initiative for that phase. Yet the transition to, experience during, and transition from the *second* phase is most informative in understanding how the initiative *shifted* in this conflict.

The Soviets accumulated small advantages in resources and in intelligence, and a greater edge in strategic acumen at Moscow in December 1941. They closely contested initiative with these advantages. However, the Germans maintained a moderate operational and tactical method superiority that allowed them not to *lose* the initiative. Thus, strategic acumen appears to have been the critical element at Moscow, the first transition point, where the Soviets successfully *disputed* strategic initiative. Additionally, the Soviets held superiority in all three cat-

egories throughout the second phase, but the Germans retained the strategic initiative until February 1943 because of their operational and tactical edge.

From a different angle, one can also see the importance of the first three elements in gaining strategic initiative. The Soviets rectified significant deficiencies in all three elements and challenged the overwhelming German initiative less than six months into the war. This was no small achievement given Citino's previously noted evaluation of the Germans as "the class of the league" operationally and tactically at that time.

Delving deeper, the advantage in intelligence for the Soviets was thin during the second phase. The advantages in resources and strategic acumen were moderate. The tightness of the contest for initiative during this phase indicates that Soviet advantages in resources, intelligence, and strategic acumen came close to overcoming the German tactical and operational advantages.

The shift to the final phase demonstrates that operational and tactical prowess was not enough. The Soviets gained some minor tactical superiority but were still limited in their operational methods. At Stalingrad, however, their more pronounced advantages in resources, intelligence, and strategic acumen allowed them to *seize* the strategic initiative. German skill at the lower levels of war, though it did not match its abilities at the beginning of the conflict, was still formidable. Nevertheless, it was unable to overcome the other Soviet advantages and hold initiative at Stalingrad or wrest it back at Kursk.

Overall, the Germans used a multitude of advantages to seize initiative at the beginning of the war. They were barely able to keep from losing the strategic initiative in the disputed phase, during which their operational and tactical superiority proved critical. The Soviets were able to challenge the German hold on initiative through cumulative advantages in resources, intelligence, and especially strategic acumen. They were then able to expand these advantages and utilize those same three elements to wrest control of initiative from the Germans and hold it until the end of the war.

The relationships among factors are more subtle and open to interpretation. The Soviets steadily increased their resource advantage between the first and second transition points. They also greatly improved their intelligence capabilities for an advantage vis-à-vis their German foe. A combatant has a certain

amount of direct control over both these elements. The Soviets fully mobilized to increase their war-making *capacity* in resources and redoubled their efforts to collect, synthesize, and protect information, thereby increasing their *knowledge*.

Stalin and the *Stavka* utilized these advantages to full effect. The Soviets used better *wisdom* in the direction of their war effort during both these transitions and throughout the final phase of the war. Better war-making capacity and improved knowledge supported their efforts and, combined with strategic acumen, proved critical at both transition points.

In turn, these advantages trickled down to the lower levels of war, particularly the operational level, though not necessarily the tactical. The Soviets remained at a disadvantage operationally and tactically at both transition points. Nevertheless, their performance improved and was significantly effective to allow them to dispute and then seize the initiative from the Germans. Wisdom in force employment allowed steady improvement in operational and tactical execution, or war-making *technique*.

This analysis shows a clear hierarchy for each element as it relates to strategic initiative in the Russo-German War of 1941-45. Strategic acumen, or wisdom, was the most important element. The side that better matched plans and capabilities, and exploited opportunities enjoyed a marked advantage in the competition for strategic initiative. Intelligence was the second most important element because it enabled wisdom in execution and thereby improved operational performance. Next in line were resources, obviously critical to war. Resource superiority for the Soviets played a key role at both transition points. The resource element also contributed indirectly by increasingly enhancing Soviet capabilities and steadily diminishing German operational flexibility. Operational and tactical methods placed fourth, although the first transition point and the entire second phase illustrate how a significant advantage in this element may greatly influence possession of the strategic initiative. This rank order of elements refutes many postwar German accounts, which lay the blame for failure almost solely on the overwhelming mass of the Red Army. The hierarchy of elements determining shifts in strategic initiative during the Russo-German War of 1941-45 included strategic acumen, followed by quality of intelligence, resources, and finally operational and tactical methods.

Drawing far-reaching conclusions from one example of modern conventional war is a risky undertaking. Another analysis is required to determine if there are any consistent findings of predictive and planning value. The Pacific War of 1941–45 between Japan and the United States provides another appropriate case for studying strategic initiative in a modern conventional war.

Notes

- 1. Stolfi, Hitler's Panzers East, x.
- 2. Megargee, Inside Hitler's High Command, 5.
- 3. Ibid., 61.
- 4. Bellamy, Absolute War, 127.
- 5. Megargee, *Inside Hitler's High Command*, 61. In 1938, Gen Werner von Blomberg was forced to resign as minister of defense because of the lower-class roots of his wife. Hitler then refused to accept the appointment of Gen Werner von Fritsch, army commander in chief, to Blomberg's vacated post. Fritsch was falsely accused of homosexual activities and disgraced. Hitler seized the opportunity to appoint himself chief of the *Oberkommando der Wehrmacht*.
 - 6. Ibid., 167.
 - 7. Clark, Barbarossa, 11-13.
 - 8. Ibid.
 - 9. Ibid., 32.
 - 10. Ibid.
- 11. Ibid., Narodnyy Komissariat Vnutrennikh Del (NKVD)/People's Commissariat for Internal Affairs.
 - 12. Erickson, Soviet High Command, 555-57.
 - 13. Ibid., 667.
 - 14. Clark, Barbarossa, 40.
 - 15. Erickson, Soviet High Command, 626.
 - 16. Ibid., 659.
 - 17. Ibid., 667.
 - 18. Erickson, Road to Stalingrad, 98.
- 19. Bartov, *Hitler's Army*, 14–15. Bartov's estimate of German forces is slightly higher than Erickson's: 3.6 million.
- 20. Glantz and House, *When Titans Clashed*, 74. By 2 August 1941, losses were 179,500 while replacements amounted to only 47,000.
 - 21. Bellamy, Absolute War, 275.
 - 22. Ibid., 278-79.
 - 23. Seaton, Russo-German War, 89.
 - 24. Clark. Barbarossa, 43.
 - 25. Bartov, Hitler's Army, 14.

- 26. Bellamy, Absolute War, 169.
- 27. Boyne, Clash of Wings, 143.
- 28. Pleshakov, Stalin's Folly, 62.
- 29. Seaton, Russo-German War, 93.
- 30. Shtemenko, Soviet General Staff at War, 27.
- 31. Bellamy, Absolute War, 176.
- 32. Halder, Burdick, and Jacobsen, Halder War Diary, 494.
- 33. Raus and Newton, Panzer Operations, 72.
- 34. Bellamy, Absolute War, 18.
- 35. Pleshakov, Stalin's Folly, 64.
- 36. Muller, German Air War in Russia, 42–43.
- 37. Citino, Death of the Wehrmacht, 41.
- 38. Keitel and Görlitz, Memoirs of Field-Marshal Keitel, 124.
- 39. Citino, Blitzkrieg to Desert Storm, 27.
- 40. Guderian, Panzer Leader, 233.
- 41. Shtemenko, Soviet General Staff at War, 27.
- 42. Glantz and House, When Titans Clashed, 36.
- 43. Bellamy, Absolute War, 151.
- 44. Liddell Hart, German Generals Talk, 179.
- 45. Overy, Air War, 49.
- 46. Hitler, Mein Kampf, 660-61.
- 47. Keegan, Second World War, 174.
- 48. Fugate and Dvoretsky, Thunder on the Dnepr, 59-60.
- 49. Erickson and Dilks, eds., *Barbarossa: The Axis and the Allies*, 126. Stepan A. Mikoyan "Chapter 6: Barbarossa and the Soviet Leadership." Stalin's almost pathological distrust of the West in general, and Great Britain in particular, led him to disregard their repeated warnings of the impending attack. He further discredited any sources that seemed to validate those warnings. He feared being induced into a proxy war for the benefit of the Western powers.
 - 50. Bellamy, Absolute War, 161.
 - 51. Ibid., 175.
 - 52. Glantz, Soviet Military Deception, 28–29.
 - 53. Halder, Burdick, and Jacobsen, Halder War Diary, 446.
 - 54. Glantz, Role of Intelligence, 32.
 - 55. Ibid.
 - 56. Rokossovsky, A Soldier's Duty, 20.
 - 57. Adair, Hitler's Greatest Defeat, 56.
 - 58. Glantz, Role of Intelligence, 15.
 - 59. Bellamy, Absolute War, 324.
 - 60. Nagorski, Greatest Battle, 243.
 - 61. Stolfi, Hitler's Panzers East, 37.
 - 62. Bellamy, Absolute War, 168.
 - 63. Guderian, Panzer Leader, 142.
 - 64. Manstein, Lost Victories, 175.
 - 65. Citino, Death of the Wehrmacht, 33.
 - 66. Nagorski, Greatest Battle, 103.
 - 67. Bellamy, Absolute War, 144.

- 68. Fugate and Dvoretsky, Thunder on the Dnepr, 133.
- 69. Pleshakov, Stalin's Folly, 67.
- 70. Zhukov and Salisbury, Marshal Zhukov's Greatest Battles, 66-67.
- 71. Bellamy, Absolute War, 220.
- 72. Ibid., 143.
- 73. Glantz, Soviet Military Deception, 3.
- 74. Glantz and House, When Titans Clashed, 49.
- 75. Ibid., 51.
- 76. Pleshakov, Stalin's Folly, 9.
- 77. Citino, Blitzkrieg to Desert Storm, 5.
- 78. Halder, Burdick, and Jacobsen, Halder War Diary, 403.
- 79. Simpkin and Erickson, *Deep Battle*, 51. Simpkin notes that Tukh-achevskii and his "elite colleagues from the Tsarist army" considered *Auftrag-staktik* essential to deep battle, but refrained from emphasizing the point because of the nature of Soviet communism and its belief in centralized control.
 - 80. Raus and Newton, Panzer Operations, 7.
 - 81. Glantz and House, When Titans Clashed, 193.
 - 82. Stolfi, Hitler's Panzers East, 154-55.
 - 83. Luck, Panzer Commander, 66.
 - 84. Bellamy, Absolute War, 193.
 - 85. Ibid., 205.
 - 86. Shtemenko, Soviet General Staff, 31.
 - 87. Keitel and Görlitz, Memoirs of Field-Marshal Keitel, 168.
 - 88. Glantz, Kharkov 1942, 21.
 - 89. Glantz, Role of Intelligence, 45.
 - 90. Glantz, Zhukov's Greatest Defeat, 2.
 - 91. Shirer, Rise and Fall of the Third Reich, 933.
 - 92. Keitel and Görlitz, Memoirs of Field-Marshal Keitel, 168-69.
 - 93. Bellamy, Absolute War, 278-79.
 - 94. Glantz, Kharkov 1942, 246.
 - 95. Glantz and House, When Titans Clashed, 87.
 - 96. Citino, Death of the Wehrmacht, 94.
 - 97. Ibid., 152.
 - 98. Zhukov and Salisbury, Marshal Zhukov's Greatest Battles, 183.
 - 99. Erickson and Dilks, eds., Barbarossa, 217. Chapter by Reinhardt.
 - 100. Boyne, Clash of Wings, 161.
 - 101. Ibid., 151.
 - 102. Luck, Panzer Commander, 79.
 - 103. Seaton, Russo-German War, 199.
 - 104. Bellamy, Absolute War, 331.
 - 105. Ibid., 440.
 - 106. Glantz, Kharkov 1942, 104.
 - 107. Overy, Air War, 50.
 - 108. Citino, Death of the Wehrmacht, 157–58.
 - 109. Boyne, Clash of Wings, 153.
 - 110. Citino, Death of the Wehrmacht, 153.
 - 111. Overy, Air War, 54-55.

- 112. Bellamy, Absolute War, 444.
- 113. Boyne, Clash of Wings, 153.
- 114. Overy, Air War, 55.
- 115. Bellamy, Absolute War, 324.
- 116. Liddell Hart, German Generals Talk, 195.
- 117. Citino, Death of the Wehrmacht, 153.
- 118. Nagorski, Greatest Battle, 243.
- 119. Bellamy, Absolute War, 449.
- 120. Clark, Barbarossa, 151.
- 121. Goebbels and Lochner, Goebbels Diaries, 319.
- 122. Glantz, Role of Intelligence, 46.
- 123. Ibid., 36.
- 124. Bellamy, Absolute War, 531.
- 125. Zhukov and Salisbury, Marshal Zhukov's Greatest Battles, 93.
- 126. Halder, Burdick, and Jacobsen, Halder War Diary, 612.
- 127. Warlimont, Inside Hitler's Headquarters, 248.
- 128. Bellamy, Absolute War, 447.
- 129. Mellenthin, Panzer Battles, 93.
- 130. Bellamy, Absolute War, 450.
- 131. Nagorski, Greatest Battle, 266.
- 132. Zhukov and Salisbury, Marshal Zhukov's Greatest Battles, 93.
- 133. Bellamy, Absolute War, 543.
- 134. Citino, Death of the Wehrmacht, 181.
- 135. Bellamy, Absolute War, 527.
- 136. Citino, Blitzkrieg to Desert Storm, 67.
- 137. Glantz, Role of Intelligence, 42.
- 138. Glantz and House, When Titans Clashed, 132-33.
- 139. Adair, Hitler's Greatest Defeat, 57-58.
- 140. Bellamy, Absolute War, 317.
- 141. Citino, Blitzkrieg to Desert Storm, 85.
- 142. Ibid., 90.
- 143. Ibid., 158-59.
- 144. Bellamy, Absolute War, 515.
- 145. Glantz, Kharkov 1942, 103.
- 146. Citino, Blitzkrieg to Desert Storm, 91.
- 147. Glantz and House, Battle of Kursk, 9.
- 148. Boyne, Clash of Wings, 155.
- 149. Chuikov, Battle for Stalingrad, 160.
- 150. Manstein. Lost Victories, 440.
- 151. Bellamy, Absolute War, 457.
- 152. Chuikov, Battle for Stalingrad, 40.
- 153. Bellamy, Absolute War, 515.
- 154. Mellenthin, Panzer Battles, 237.
- 155. Manstein, Lost Victories, 431.
- 156. Zhukov and Salisbury, Marshal Zhukov's Greatest Battles, 203.
- 157. Guderian. Panzer Leader. 312.
- 158. Werth, Russia at War, 685.

- 159. Seaton, Russo-German War, 352.
- 160. Glantz and House, When Titans Clashed, 151.
- 161. Bellamy, Absolute War, 635.
- 162. Keitel and Görlitz, Memoirs of Field-Marshal Keitel, 170.
- 163. Manstein, Lost Victories, 473.
- 164. Glantz and House, When Titans Clashed, 165.
- 165. Bellamy, Absolute War, 613.
- 166. Shtemenko, Soviet General Staff at War, 310.
- 167. Bellamy, Absolute War, 565.
- 168. Glantz and House, When Titans Clashed, 151.
- 169. Clark, Barbarossa, 396.
- 170. Overy, Air War, 57.
- 171. Glantz and House, Battle of Kursk, 37.
- 172. Glantz and House, When Titans Clashed, 165.
- 173. Boyne, Clash of Wings, 162.
- 174. Bellamy, Absolute War, 613.
- 175. Glantz and House, Battle of Kursk, 17–18.
- 176. Ibid., 19.
- 177. Ibid., 39.
- 178. Boyne, Clash of Wings, 164.
- 179. Zhukov and Salisbury, Marshal Zhukov's Greatest Battles, 217.
- 180. Guderian, Panzer Leader, 387.
- 181. Glantz, Role of Intelligence, 91.
- 182. Bellamy, Absolute War, 562.
- 183. Ibid., 570-71.
- 184. Glantz, Role of Intelligence, 91.
- 185. Glantz, Soviet Military Deception, 470.
- 186. Bellamy, Absolute War, 571.
- 187. Glantz, Role of Intelligence, 157-60.
- 188. Bellamy, Absolute War, 591.
- 189. Ibid., 570.
- 190. Rokossovsky, Soldier's Duty, 195.
- 191. Glantz, Role of Intelligence, 178.
- 192. Shtemenko, Soviet General Staff at War, 152.
- 193. Adair, Hitler's Greatest Defeat, 63.
- 194. Bellamy, Absolute War, 30.
- 195. Glantz, Soviet Military Deception, 291.
- 196. Glantz, Role of Intelligence, 137.
- 197. Manstein. Lost Victories, 443.
- 198. Guderian, Panzer Leader, 306.
- 199. Bellamy, Absolute War, 563.
- 200. Erickson, Road to Berlin, 44.
- 201. Glantz and House, Battle of Kursk, 29-30.
- 202. Mellenthin, Panzer Battles, 264.
- 203. Glantz and House, Battle of Kursk, 265-66.
- 204. Bellamy, Absolute War, 612.
- 205. Adair, Hitler's Greatest Defeat, 171.

- 206. Glantz, Soviet Military Deception, 555.
- 207. Clark, Barbarossa, 306.
- 208. Ibid., 329-30.
- 209. Boyne, Clash of Wings, 165.
- 210. Overy, Air War, 57.
- 211. Seaton, Russo-German War, 458.
- 212. Glantz and House, Battle of Kursk, 269.
- 213. Bellamy, Absolute War, 581.
- 214. Citino, Blitzkrieg to Desert Storm, 6.
- 215. Glantz, Colossus Reborn, 122.
- 216. Ibid., 122-24.
- 217. Erickson, Road to Berlin, 85.
- 218. Seaton, Russo-German War, 526.
- 219. Shtemenko, Soviet General Staff at War, 300.
- 220. Mellenthin, Panzer Battles, 361.

Chapter 3

The Pacific War, 1941-45

The epic conflict between Japan and the United States from 1941 until 1945 provides a source of evidence for dissection of strategic initiative in a maritime theater. Japan seized initiative at the outbreak of hostilities and ran unhindered during the war's opening months. After the June 1942 Battle of Midway, which checked the Japanese advance in the Central Pacific, the United States was able to dispute initiative. With the ensuing campaigns at Guadalcanal, from August 1942 until February 1943, and New Guinea, from July 1942 until January 1943, the United States and its allies wrested strategic initiative from Japan. From early 1943 on, the United States determined the pace and the direction of the war. As with Germany and Russia, the transition points between phases will probably offer the greatest illumination about the underlying causes of shifts in strategic initiative.

Phase 1 Overview: 7 December 1941-4 June 1942

The Japanese war aims included attaining primacy in their chosen sphere of influence in Asia, defeating the western nations (including eventually Russia), subduing China and incorporating it into their empire, and creating Japan's Asian "Co-Prosperity Sphere." Japanese adventurism in China and Manchuria during the late 1930s and early 1940s seriously complicated relations with the United States, which cut off oil supplies to Japan in 1941. Obtaining unfettered access to critical resources, and oil in particular, became paramount concerns for the ensuing Japanese strategy. The Japanese army had always favored a move against Russia. However, the drubbing Soviet forces inflicted on the Japanese in the Nomonahan campaign in 1939, the collapse of France and the Netherlands at the hands of Germany in 1940, and the oil crisis of 1941 forced a

reevaluation, out of which came a focus on the South Pacific.⁴ This focus inexorably led to war with the United States.

The Pacific war possessed its own, particular character. Geography dictated an expansive maritime war. The Pacific reaches also meant that, unlike the Russo-German War, "the numbers of troops actually engaged in fighting on either side at any moment were relatively small, but the length of the supply lines for both sides was unprecedented." These geographic factors combined with the increased capabilities of airpower to shape the war's character in another way. In the words of historian James Wood, "From beginning to end, fighting in the Pacific had been as much or more a struggle for the skies as the seas, and indeed the latter was quite dependent on the former."6 One aspect the war shared with the Russo-German War was an overtone of racism, from both belligerents. John Dower opined "stereotyped and often blatantly racist thinking contributed to poor military intelligence and planning, atrocious behavior, and the adoption of exterminationist policies."⁷

The belligerents approached and fought the war with significantly different high command organizations. The Japanese government was, in essence, military. Emperor Hirohito was the nominal head and chief executive of a government that included coequal legislative, judicial, army, and navy branches; but he rarely interfered in daily policy.⁸

In October 1941, the army refused to countenance with-drawal from China to assure peace with America and exercised its right, granted in 1936, to dissolve any cabinet not to its liking. On 18 October 1941, Gen Hideki Tojo assumed the post of prime minister (PM) with a new cabinet, effectively securing army control over the government. It is one of the great ironies of World War II that the Imperial Japanese Army, purveyor of a 'northern' strategy directed at Russia, assumed control of the government and persuaded a reluctant Imperial Japanese Navy to implement its long-desired 'southern' strategy against the United States for resources. In

The Imperial General Headquarters (IGHQ) with which Japan went to war was a house divided, albeit with an edge for the army given its control of the government. The IGHQ, first established in 1937, included the Ministers of War and Navy and the chiefs of staff for both services; it met twice weekly on the Imperial grounds. 12

On matters of grand strategy, the IGHQ met with the government at liaison conferences, which included the PM and other cabinet officials, and received a stamp of approval from the emperor. ¹³ The IGHQ was not a joint command but an organization where the army and navy attempted to secure each other's cooperation and coordination in operations. ¹⁴ Adm Isoroku Yamamoto, the commander of Japan's Combined Fleet and conceptualizer of the Pearl Harbor attack, personified the army-navy rivalry by often voicing open disdain for the army in his casual conversations. ¹⁵ The animosity was mutual and did not bode well for interservice relations during the conduct of the war.

The US high command operated quite differently due to a much more pronounced degree of civilian control over the services. At first glance, the structure appears similar to that in place today, with the president as the commander in chief, exercising control over the Army and Navy respectively through his appointed secretaries for each branch. But, the chiefs of staff for each branch enjoyed more direct command over fielded forces than their modern counterparts have enjoyed since the National Security Act of 1947 and, especially since, the Goldwater-Nichols Act of 1986.

Although interservice strains were at times very pronounced, the American Joint Chiefs of Staff proved more mutually cooperative than their Japanese counterparts. The command structure for the United States in the Pacific, established in the spring of 1942, placed Gen Douglas MacArthur in command of the Southwest Pacific Area and Adm Chester Nimitz in command of the remainder of the Pacific, with each answering to his respective service chief in Washington. The boundaries between their areas shifted on occasion. This divided command was an imperfect solution. Secretary of the Navy James Forrestal, though reluctant to enter the fray, lamented the problems it caused. Despite these undeniable tensions, the services were ultimately able to cooperate sufficiently well to prosecute the war effectively.

Phase 1 Operations: 7 December 1941-4 June 1942

The commencement of hostilities on 7 December 1941 was not accidental. Masuo Kato wrote, "Japan's decision to attack [finalized in November 1941] . . . was essentially a now or never decision. It was almost wholly an Army decision, and it represented the Army's best judgment as to the precise time at which the greatest opportunity for success might be expected." Following the devastating attack on Pearl Harbor, Japanese forces ran up a rapid and continuous string of victories (see figure 7). The islands of Guam and Wake fell to Japan within two weeks of Pearl Harbor. The surrender of Singapore on 15 February 1942, which represented the end of the Malayan campaign, was arguably "the greatest military defeat in all British history" and produced the humiliating capitulation of 138,708 Allied service personnel. Similarly, the 9 April 1942 surrender of 12,000 soldiers and 64,000 Filipino troops on Bataan represented what one historian called "the finale of the greatest military defeat ever inflicted on the United States in the field." The advance in the

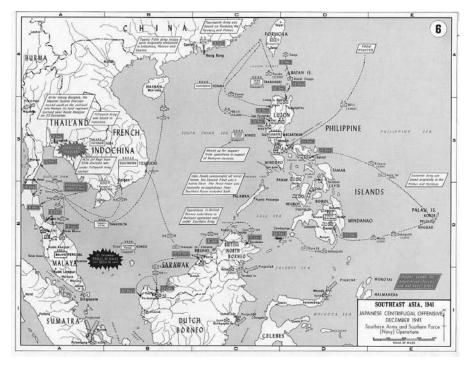


Figure 7. Japanese Southern Offensive, December 1941–January 1942 (http://www.dean.usma.edu/departments/history/web03/atlases/ww2%20pacific/ww2%20pacific%20%20maps/ww2%20asia%20map %2006.jpg, accessed 16 April 2008).

south continued into Borneo and Java; and by mid-April 1942, Japan had secured its "Greater East Asia Co-Prosperity Sphere." Japanese advances continued unabated until 8 May 1942 when their first significant check at the Battle of the Coral Sea resulted in a temporary abandonment of their effort to occupy Port Moresby, New Guinea. This first phase ended with the Battle of Midway on 4 June 1942.

Resources

The Japanese began the war with a large army. In 1941, Japan had 51 divisions, many in China or Manchuria, outside the scope of this study. Yet when considering manpower, one must remember the geography of the Pacific meant the ability to get forces into the fight proved paramount and generally resulted in smaller engagements than in the European theater. Paper strength was often misleading and Japan initiated portions of its early offensive from a position of numerical inferiority.

On 8 December 1941, General MacArthur commanded 130,000 troops in the Philippines Islands, of which about 35,000 were US regulars or highly trained Filipino Scouts, while the rest were of uneven quality.²⁵ The Japanese employed half that strength in their invasion and conquest of the archipelago.²⁶ The Malayan campaign was similar, with 55,000 Japanese defeating nearly 140,000 commonwealth-soldiers.²⁷ In terms of pilots, Japan began the war with approximately 6,000 superbly trained flyers in both services, which was just enough to cover their immediate needs but not enough for a long war.²⁸ The United States boasted 3,500 regular and 6,000 reservist pilots in the Navy alone, all well trained, and employed a training system more suited to a war of attrition.²⁹

The United States and the Allies enjoyed a slight edge in manpower numbers during the first phase of the war. Nevertheless, the Japanese pressed forward confidently and successfully. Their pilot strength proved adequate for their immediate plans, and the unflinching discipline of their soldiers made up for some of the numerical deficit. Other aspects of their resource base also assisted in their conquests.

The material competition in the Pacific centered primarily on warships and airplanes. Japan started out strong in each. Both

nations began naval preparations for war in the late 1930s, with the United States implementing the Vinson naval expansion program and the Japanese the *Marusan* program.³⁰ In 1941, Admirals Husband Kimmel and William Halsey knew the Japanese navy was superior to the US Navy in nearly every category of fighting ship.³¹ Most importantly, the Japanese bested the Americans in aircraft carriers, 10 to three.³² The naval situation worsened for the Allies as the first phase progressed because losses inflicted on their navies exceeded those of the Japanese.³³

The tally of airplanes in the Pacific theater also favored Japan. Japanese aircraft numbered 2,140 to the Allies' 1,780.³⁴ Here again, the paper strength does not tell the full story. Gen Lewis Brereton, who took charge of the US Far East Air Force in the Philippines on the eve of war in 1941, lamented the dearth of air resources that prohibited adequate security for both the United States and its forward bases.³⁵ There simply were not enough to go around.

The twin advantages in naval and air superiority gave Japan a significant edge in materiel during the first phase of the war. The ensuing combat operations in the winter and spring of 1942 actually increased the Japanese advantage with disproportionate damage inflicted on the United States and its allies. One aspect of the material struggle that did not bode well for the Japanese was evident from the beginning but would not manifest itself until later in the conflict. Japan had a propensity to overlook logistics, often expecting thousands of their troops to acquire local sustenance to maintain combat efficiency. Haruko and Theodore Cook wrote, "It was in this logistics war that Japan's war machine was exposed for the hollow shell it was." The brevity of the first phase, however, failed to expose this Achilles heel.

The technological battle raged in the air, on land, and on and below the sea. Initially, Japanese airplanes, particularly their Zero fighter, proved superior to Allied aircraft. John Keegan wrote, "The Zero had established itself as the finest embarked fighter in any navy; the Kate and Val torpedo- and dive-bombers, though slower than their American counterparts, carried heavy loads over long ranges." In fact, the Zero had remarkable range for a single-engine aircraft, flying 1,000–

1,200 miles on one tank of gas, a feat well beyond the capabilities of America's planes.³⁹ Eric Bergerud highlighted a significant Japanese advantage when he noted that smaller Japanese aircraft averaged a 250–350 mile combat radius to the Americans' 150–250 mile ring.⁴⁰ The one advantage the United States did enjoy in the air came in the form of B-17 heavy bombers, which greatly impressed the leading Japanese ace Saburo Sakai but were initially available in only limited numbers.⁴¹

The Japanese army's technology lagged behind the West in general, but not necessarily behind the forces they faced during their initial onslaught. The Japanese army began the war, and remained throughout, an infantry army that relied on horses, remained weak in armored technology and countermeasures, and relied on obsolescent small arms and artillery.⁴²

On the sea, Japan successfully designed its ships to counter expected US quantitative superiority through individual qualitative superiority in firepower and speed.⁴³ The Japanese also led the way in optical equipment required for night fighting.⁴⁴ The United States did enjoy an advantage in radar technology but struggled in its attempts to employ radar effectively.⁴⁵ Under the sea, Japan had a weapon that proved critical the first two phases of the war. The oxygen-fueled Japanese 'Long Lance' torpedo combined a powerful warhead with exceptional range and speed, as well as being virtually undetectable deriving from its lack of a wake.⁴⁶ By comparison, American torpedoes performed miserably, often failing to hit their target or to detonate because of "multiple hidden mechanical flaws."⁴⁷ This torpedo disparity had serious ramifications during the first two phases of the conflict.

The technological edge at the beginning of the war clearly fell to Japan, which generally enjoyed superior aircraft, superior warships, and unmatched torpedoes. America did have an edge in heavy bombers, in land force technology in general, and in radar; but these capabilities were not yet available in sufficiently large numbers.

Despite its propensity to underestimate the importance of logistical support, Japan still outperformed the Allies. The Japanese effectively employed their combat forces with enough support to achieve their aims. The United States and its allies fought with what they had where they had it. They were, with some minor exceptions, unable to reinforce or resupply their garrisons.

Thus, Japan held the overall resource advantage in the first phase. Despite a slight disadvantage in manpower, Japan's substantial superiority in materiel and in technology carried the day.

Quality of Intelligence

There was keen intelligence competition throughout the opening phase. Initially, both sides underestimated the other's war-making potential and capabilities. The Japanese, seemingly drawing conclusions from Germany's successes against the west, performed a "shoddy analysis" of US war potential and denigrated the abilities of British Commonwealth forces. ⁴⁸ In turn, racial views colored the American thinking and estimate of the situation: "Before December 1941 the Americans had dismissed the [Japanese] carrier force as an inferior imitation of its own." ⁴⁹ Not all military men were so blinded. Most of Japan's high-ranking naval officers, Admiral Yamamoto in particular, were able "to make an accurate evaluation of the fleet capabilities of the United States." ⁵⁰

During the initial phase, Japanese intelligence was respectable. Those planning the Pearl Harbor operation received highly accurate reports from spies in Hawaii. An effective espionage program also supported the invasion of the Philippines. Japanese signals intelligence, while it could not pinpoint US operations and ship locations, was able to keep tabs on general American naval activities such as the departure of a fleet that seemed headed for the Battle of the Coral Sea in May 1942. US signals intelligence was excellent. Unknown to the Japanese, the Americans were deciphering their secure codes even before the war. Winston Groom referred to this breakthrough, known as "Magic," as "one of the greatest success stories of World War II."

Nevertheless, the Pearl Harbor attack succeeded because of American intelligence failures and too much American focus on the Philippines. Following Pearl Harbor, intelligence garnered from Magic often told Admiral Nimitz "what to expect and where to expect it." In the field, things were spotty for the Americans. For example, the Far East Air Force (FEAF) commander bemoaned the inadequate intelligence he had on Japanese airfields on nearby Formosa. The succeeding the

Collection and analysis of intelligence favored the Japanese slightly in this stage of the war. Japan generally assembled a more accurate picture of the situation closer to the front. American racial attitudes hampered their appreciation in the short term. The American breakthrough with Magic was monumental, but its real contribution was not until Coral Sea and after.

Both combatants paid close attention to security and counter-intelligence. Japan guarded the Pearl Harbor operation closely. The fleet maintained strict radio security; the strike force itself maintained radio silence, and orders relating to the attack were typically delivered via courier. The obvious success of the strike indicates effective security measures. On the other hand, the US ability to read their codes as well as FEAF's recognition of trial flights between Formosa and the Philippines represent significant Japanese security failures. The obvious success of the strike indicates effective security failures.

Similarly, US efforts at security were mixed. Safeguarding Magic was a problem that persisted throughout the war: "A continuous headache for Allied codebreakers was the problem of safeguarding the intelligence they obtained through cryptanalysis—above all, safeguarding the fact that the Japanese codes were being read." They did this successfully. The Americans failed, however, to deny the Japanese valuable photographs of target locations, such as Clark Field in the Philippines, much to the delight of Sakai and his pilot friends. In April 1942, American radio emissions also gave Admiral Yamamoto an imperfect warning that something was afoot, resulting in heightened alert around Japan at the time of the Doolittle Raid. Nevertheless, the raid caught Japan unprepared.

Thus, the area of intelligence security was even. Both sides were able to protect their most vital secrets and operations and shield them effectively enough from enemy view. Yet both sides also suffered some smaller setbacks at lower levels that could have altered the course of the war at the margins.

During the opening of the war, the Japanese thus edged out the United States in intelligence. The Japanese had a better feel for the actual situation near the battlefield and they provided enough security to protect their initial moves. The United States understood the long-term situation better than Japan, but displayed weaknesses in the near-term fight. Roberta Wohlstetter summed up the American intelligence failure at Pearl Harbor perfectly: "If our intelligence system and all our other channels of information failed to produce an accurate image of Japanese intentions and capabilities, it was not for want of relevant materials. Never before have we had so complete an intelligence picture of the enemy." 63

However, there was a huge gap between American understanding of Japanese capabilities and their grasp of Japanese intentions. The intelligence failure at Pearl Harbor was complete and resulted in the destruction or damage to all eight US battleships present plus three destroyers crippled, three cruisers damaged, 188 planes destroyed and 159 damaged, to Japanese losses of 29 airplanes, five midget submarines, and one large submarine. Thus, the Americans did start the conflict with an incredible intelligence breakthrough in the form of Magic, but most of its fruit ripened in phases two and three.

Strategic Acumen

The rapid, successful execution of Japan's strategy in the opening phase of the war totally neutralized American strategic plans. Japan's strategy for the entire war consisted of three stages: a rapid conquest of the resource-rich south, "consolidation and strengthening of the perimeter thus gained," and then holding the gains and repelling Allied incursions until the enemy tired of war. ⁶⁵ Japan's vision for the first stage corresponds closely with what actually transpired, which included three stages that ended with the occupation of Thailand, Malaya, the Philippines, Borneo, Java, and stabilization in Burma. ⁶⁶ Japan estimated that it would require five months to achieve these aims. ⁶⁷ It took four. Admiral Yamamoto recognized the threat the US Navy posed to the flank of this advance and overcame Navy General Staff resistance to the Pearl Harbor attack. ⁶⁸

America based its prewar strategy for the Pacific on War Plan Orange, but it had been significantly altered. The original conception assumed that the Philippines could not resist Japanese pressure, and envisioned an immediate naval offensive to recapture the islands.⁶⁹ At General MacArthur's insistence in 1941, the plan was changed to reinforce and hold the Philippines based on the assumption that war would not occur until 1942, and the Navy would be able to keep sea lanes to the is-

lands open.⁷⁰ Historian Dan Van der Vat termed this conception a "delusion"; and in the wake of the Pearl Harbor attack, the United States proved unable to implement it.⁷¹

While the Japanese proceeded generally according to plan, they did miss two critical strategic opportunities. First, Adm Chuichi Nagumo retired the strike force quickly from the Pearl Harbor raid, thereby forgoing a chance to destroy critical fuel supplies and installations on Oahu and force the US Navy to withdraw to California. Japan also missed a significant opportunity by failing to wage unrestricted submarine warfare against very vulnerable and limited Allied shipping throughout the Pacific theater. The US Navy was not similarly negligent. Within six hours of the Pearl Harbor attack, it had declared its intention to wage unrestricted submarine warfare against the Empire of Japan. Although seizure of this opportunity yielded few immediate results, the payoff in later stages of the war was enormous.

The accuracy of each nation's planning is self-evident. Japan clearly got it generally right, while the United States and its allies failed. In their rapid conquest, the Japanese proved prescient. As one historian recently noted, "Proof that the calculations of risk on which the proposed operations were based were correct and that the right moment to strike had been chosen lay, of course, in the achievements of the Japanese military in the first months of the war." Though Japan missed two critical opportunities and the United States seized the only one presented, the edge remained with Japan.

Surprise played a central role in this phase and the Japanese consistently achieved surprise. Though aware that war was in the offing, the Allies were unable to respond effectively to Japan's opening moves. The Japanese used deception well, assisted by American intelligence failures. In late November and early December 1941, the Japanese created false radio traffic that duped the US Navy into estimating the location of Japanese carriers as Japan's Inland Sea, rather than their actual location en route to Hawaii. The Japanese surprises, however, did not stop there. Hours later, they caught American air forces in the Philippines unaware and, with "the most accurate bombing I [Saburo Sakai] ever witnessed," halved the FEAF in one devastating attack. The United States did achieve one notable surprise in the opening phase—with the Doolittle

bombing raid on Japan in April 1942. Although Yamamoto knew something was in the works and the damage inflicted was inconsequential, this early strike on the Japanese home islands had major strategic consequences.⁷⁸

Despite the shock of the Doolittle Raid, Japan was superior in conceiving and executing deception and surprise. The victories at Pearl Harbor and the Philippines achieved immediate results that enabled strategic gain in the Pacific theater and left the United States almost paralyzed. The strategic gain from the Doolittle Raid, while significant, was more subtle.

Thus, in the initial stage, Japanese strategic acumen eclipsed that of the United States and its allies. Their strategic planning was sound, and the execution of surprise in their opening drives was unmatched. For the most part, American plans were empty and infeasible. US achievement of surprise over Tokyo should not be underestimated, but its impact surfaced in the later stages of the war.

Operational and Tactical Methods

Operationally, the Japanese and Americans existed in separate leagues at the start of the war. According to historian Harry Gailey, "The Japanese conducted their complex operations in the East Indies with overwhelming superiority in ships, men, and planes, and proceeded with calm efficiency . . . making sure that their operations did not outstrip the available air cover."⁷⁹ Mitsuo Fuchida, lead pilot on the Pearl Harbor raid, recounted how other Japanese operations unfolded with rapid precision at Guam, in the Marianas, and at Makin and Tarawa with slightly slower, but still satisfactory, progress in the Philippines.80 In contrast, the operations of the Americans in the Philippines were lethargic and ineffective. Insufficient staffing and inexperience plagued FEAF headquarters.81 When the day of battle arrived, it proved unequal to the task. Incredibly, their commanders, MacArthur included, failed to authorize preemptive attacks on Japanese airfields in Formosa until it was too late; and the Japanese caught and destroyed dozens of aircraft on the ground.82 Japanese tactics also contributed to their operational success.

In 1941 and early 1942, the Japanese army was a fearsome weapon. Hiroyuki Agawa captured the spirit when he wrote, "Few armies can be compared with the Japanese army in placing emphasis on 'spirit' at the expense of scientific know-how, mechanization, and modernization."83 The Malayan campaign indicated their land capabilities when they overcame two-to-one odds through "flexibility and dynamism."84 Other evaluations were not as charitable. Gailey wrote, "Such training produced an army of tough, fatalistic troops who could be almost invincible in the attack. Yet these same troops lacked individual initiative and, although tenacious in the defense, had a tendency to unnecessarily choose death rather than retreat."85 But this contrasts again with MacArthur's failure in the Philippines and the strategic implications of that loss. 86 A number of problems beset MacArthur's forces. The Philippine Division, a combined unit of 22.532 men consisting of US regulars and Filipino Scouts, was the best-trained and most capable force, but its units were scattered; it rarely functioned as a unified division.⁸⁷ The remainder of the Philippine Army exhibited language and training difficulties, inferior tactical knowledge, and poor discipline. 88 Japanese army tactics bested those of America and the Allies.

The Japanese navy was also well prepared at the beginning of the war. Adm Jisaburo Ozawa argued that the navy emphasized efficiency and mental strength to compensate for a perceived lack of mechanical strength vis-à-vis the United States.89 One historian noted that by December 1941, "the synergy of excellent ships, superbly trained crews, aggressive leadership, and integrated use of air power enabled the Imperial Navy to outthink, outmaneuver, and outfight the Allied naval contingents decisively despite their desperate resistance."90 Outfight them they did. At the Battle of the Java Sea, a portent of future naval clashes, despite relative parity of forces, the Japanese sank three Allied cruisers and four destroyers in a significant victory. 91 The Japanese navy believed deeply in the decisive sea battle. Historian Richard Overy noted, "The Japanese admirals were obsessed with the traditional rules of sea warfare, the pursuit of a great fleet engagement like the one they had won against the Russian navy in the Straits of Tsushima 37 years before, when Yamamoto was a young midshipman."92

The US Navy operated timidly in the immediate aftermath of Pearl Harbor, even abandoning Wake Island. ⁹³ By May 1942, things began to change. At the Battle of the Coral Sea, the gulf between US- and Japanese-carrier tactics was marginal, with slightly superior Japanese tactical performance overshadowed by strategic consequences that favored the Americans. ⁹⁴ Under the sea, the opening moves of the American submarine campaign suffered from inexperienced commanders, limited tactical intelligence, and faulty torpedoes. ⁹⁵ Thus, in the area of naval operations and tactics, as on land, Japan bested the United States.

Things followed a similar pattern in the air. Sakai flatly stated, "I am firmly convinced that in those early days of the war the individual skill of our pilots was definitely superior" to the Allied pilots. 96 While Bergerud credits Japan with having "a strong cadre of elite pilots at the beginning of the war," he does not admit the total superiority claimed by Sakai.⁹⁷ Combat results attest to Japanese skills and favor Sakai's assessment. The bombing success of Japanese carrier aircraft in the Indian Ocean, which achieved a 90 percent hit rate in attacks against the HMS Dorsetshire and HMS Cornwall, demonstrated excellent tactical and technical proficiency.98 General Brereton marveled at the accuracy of Japanese bombers in the 8 December 1941 attack on Clark Field. 99 On that day, which Brereton called "one of the blackest days in US military history," the Japanese destroyed half of FEAF's aircraft and set the stage for victory in the Philippines. 100 But, by April 1942, even Sakai admitted that things were not always going Japan's way in the air, and he marveled at Allied pilots' aggressiveness in combat. 101

Operational and tactical methods clearly favored Japan. Their initial operations were nearly flawless. Their determination and efficiency on land was unmatched. Their dominance at sea went unchallenged. Their control of and prowess in the air enabled the army and navy to achieve their respective goals and provided the foundation on which they anchored their strategic gains.

Summary

During the opening phase of the war, the balance in all four elements favored Japan. The Japanese accumulated adequate manpower with a material advantage, and exploited several key technological advantages. They assembled a better intelligence picture than the United States. Their strategic planning and execution of deception and surprise confounded the United States and its allies. Finally, their conduct at the operational and tactical levels of war on land, sea, and in the air dominated the various battlefields.

Unfortunately, for Japan, the war did not end in June 1942. As it progressed into spring of that year, the balance in each category began to shift. Through May and into June, Japan possessed the strategic initiative and directed the course of the war. Try as it might, the United States could not seize strategic initiative or even challenge Japan's hold on it. That was about to change, as shifts in balance among the elements provided an opportunity for America to assert its power and "Remember Pearl Harbor!"

Phase 2: 4 June 1942-8 February 1943

Following the Doolittle Raid on Japan, Yamamoto and the Imperial Navy redoubled their efforts to destroy the remainder of the US Pacific Fleet, specifically its aircraft carriers. The resounding American victory in the resulting Battle of Midway shocked the Japanese, emboldened the Americans, and changed the course of the war. The aftermath of Midway found the Japanese army attempting to expand its control in the south with a campaign centered on Papua, New Guinea and the conquest of Port Moresby. The United States recognized the threat to Australia that this advance, coupled with Japanese gains in the southern Solomon Islands, embodied. To parry the move and begin the long march back in the Pacific, the United States launched its first counteroffensive of the war with an invasion of a then obscure island named Guadalcanal in the Solomon Islands chain. This move produced an epic six-month struggle for control of the island that put the strategic initiative clearly in dispute. While the fight for Guadalcanal raged, the Allies also repelled the Japanese advance on Port Moresby and began pushing the Japanese army off the northern coast of New Guinea. The final withdrawal of Japanese troops from Guadalcanal on 8 February 1943 marked an end to that campaign and concluded the second phase of the war.

Possession of strategic initiative was uncertain throughout this phase. Japanese leaders were well aware that 1942 would be criti-

cal.¹⁰² Japan forced the Battle of Midway (see figure 8). and clearly held the initiative until its devastating defeat in that battle on 4 June 1942. After Midway, "In the view of the Imperial Army, however, strategic initiative still rested with Japan," and they tried to exercise that initiative by seizing Port Moresby via an overland campaign in New Guinea.¹⁰³ But the Americans realized the opportunity that Midway afforded them to counter Japanese moves in the South Pacific. On 7 August 1942, they moved against Guadalcanal and the Solomon Islands to counter the threat posed to Australia. The effects were immediate: "In early August American marines landed on Guadalcanal, seizing the almost completed airfield there. For the Japanese high command, the focus of the entire war shifted from China to the Pacific."¹⁰⁴ The rebuff at Port Moresby and the costly defeat at Guadalcanal forced Japan to cede strategic initiative to the Americans (see figure 9).

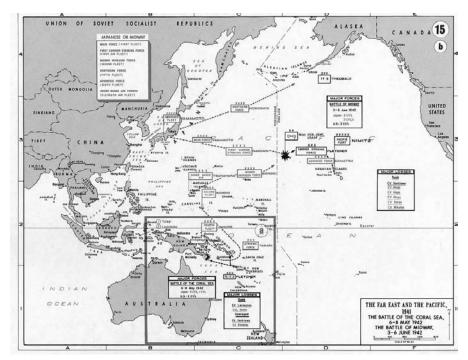


Figure 8. Battles of Coral Sea and Midway (http://www.dean.usma.edu/departments/history/web03/atlases/ww2%20pacific/ww2%20pacific%20%20maps/ww2%20asia%20map%2015.jpg, accessed 16 April 2008).

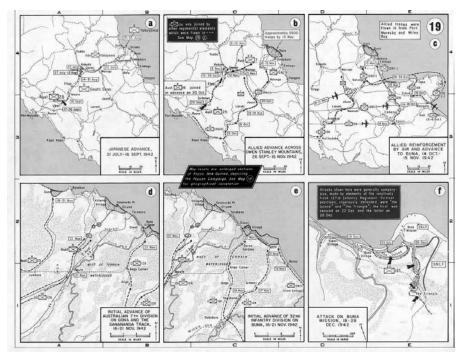


Figure 9. Papuan Campaign 1942 (http://www.dean.usma.edu/departments/history/web03/atlases/ww2%20pacific/ww2%20pacific%20%20maps/ww2%20asia%20map%2019.jpg accessed 16 April 2008).

On 31 December 1942, Admiral Halsey, who clearly understood the significance of those fateful events in mid and late 1942, relayed to a correspondent, "We now had the initiative, that the Japs would keep on retreating, and that the end of 1943 would see us in Tokyo." His prognosis proved overly optimistic, but his assessment of initiative was accurate. James Wood wrote that this "dramatic reversal took place even before the balance of power had tipped in favor of the Allies," making further investigation of this phase crucial to our understanding of strategic initiative. ¹⁰⁶

Resources

The arrival of war brought about increased urgency in resource competition. In terms of manpower, the United States demonstrated a remarkable swing. Though "Germany First" encapsulated the philosophy of the Allied grand strategy in World War II, by the middle of 1942 there were nearly 400,000 American soldiers in the Pacific theater while only 60,000 faced the European enemies. ¹⁰⁷ Despite this build up, ground combat often occurred between numerically even forces. The Americans landed on Guadalcanal with numerical superiority and sustained it through most of September 1942 (see figure 10). ¹⁰⁸ But by October 1942, the numbers were even at approximately 22,000–23,000 each; and by December, both sides had grown to approximately 30,000 each. ¹⁰⁹ Japanese aviation manning, however, began to suffer. The Japanese pilot training system failed to meet the growing demands of the war. ¹¹⁰ The pilot shortage rapidly manifested itself after the Battle of the Coral Sea, which brought the first significant naval air losses of the war, and worsened steadily as the war progressed. ¹¹¹ The United States did not similarly suffer.

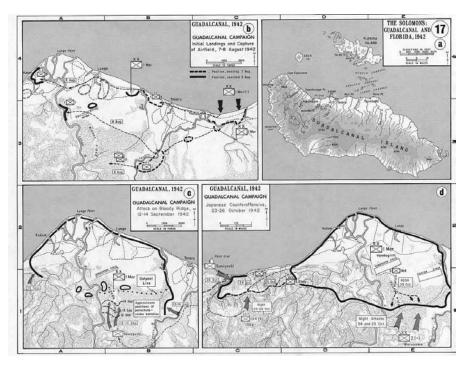


Figure 10. Guadalcanal 1942 (http://www.dean.usma.edu/departments/history/web03/atlases/ww2%20pacific/ww2%20pacific%20%20maps/ww2%20asia%20map%2017.jpg, accessed 16 April 2008).

During the second phase, the United States gained a manpower advantage. American forces expanded exponentially at the beginning of the war. Despite the declared priority to Europe, the majority of those numbers made their way to the Pacific.

Japan still possessed a vast array of aircraft and ships as phase two commenced, but things were beginning to change. Van der Vat wrote, "The Imperial Navy in the spring of 1942 was markedly superior in numbers and more often than not in quality of individual ships to the US Pacific Fleet: ten carriers (six large), ten battleships, thirty-five cruisers, and 110 destroyers against four, four, twenty-four and ninety respectively, with about forty-four oceangoing submarines each." Even after the disaster at Midway, in which four large Japanese aircraft carriers were sunk, Japan still held an edge in carriers; and its surface fleet remained almost untouched. US ship production, however, began to hit its stride in 1942. They made up some of the losses sustained in the first phase of the war, allowing the United States to maintain a fleet capable of challenging Japan throughout this period.

Japan also began to suffer in the air. It struggled to produce enough aircraft to sustain its war efforts. As early as April 1942, before Coral Sea, the strain was already showing, with "the vast majority of units" lacking reserve planes and operating below normal strength. 115 The contrast between aircraft production of the two belligerents in 1942 is revealing, with Japan producing 8,861 aircraft to the American output of 49,445.116 Although many of America's aircraft were bound for Europe, the huge disparity in production allowed the United States to support both theaters. Meanwhile, Japan suffered staggering losses of 2,817 aircraft between 1 April 1942 and 1 April 1943. 117 Poor logistics sapped the strength of both sides. American shipping strained to meet pervasive demands often meaning extended shortages for Pacific forces. 118 By late 1942, Japan experienced serious logistical difficulties when a shortage of fuel threatened to hamper naval operations in the New Guinea-Solomon Islands area. 119 Worse still, by December 1942, Japan struggled to support its troops on Guadalcanal, many of whom began to starve. 120

Nevertheless, Japan maintained a slight material edge. The Japanese navy started and remained superior in numbers, but US production kept a navy in the fight and began to close the numerical gap. In the air, the two nations maintained a balance of forces that remained relatively even until mid-1943. 121 They were, however, moving in different directions, as US industrial might outstripped that of Japan and the Japanese suffered dramatic losses in the war. Logistics challenged each, and forces from both sides suffered shortages. The American invasion of Guadalcanal was plagued by supply problems early in the campaign because "although considerable attention and practice had crafted a doctrine of amphibious assault, little searching thought and no realistic practice had been afforded in conducting a sizable landing from crude bases 6,000 miles from the United States." 122 This early supply strain nearly cost the Americans the battle; but incidents of Japanese starvation on Guadalcanal reveal significant Japanese failures that dwarfed US shortcomings.

Only modest technological advances took place in the second phase. Japanese aircraft, as an aggregate, remained superior to American planes. 123 Yet several weaknesses of the Japanese planes, including a lack of armored protection for vital areas and a lack of self-sealing fuel tanks, became evident in the skies over the South Pacific. 124 The United States still enjoyed an edge with radar, which allowed for better air defense and interception. 125 On the ground, US Marines still fought with some older weaponry, such as the Springfield M1903 bolt-action rifle, but other units received the updated M-1 Garand rifle. 126 Under the sea, the United States began equipping its submarines with the new SJ radar that allowed for deeper penetration into dangerous bodies of water around Tokyo and Formosa, but problems with US torpedoes persisted. 127

Technologically, although Japan stagnated, the Japanese still possessed a slight edge. The United States was rapidly closing the gap and would soon surge ahead; but in late 1942, the Japanese used their advantage to good effect.

Japan held on to a narrow advantage in the overall resource picture. The slight disadvantage in manpower, especially pilots, was offset by small margins of materiel and technological superiority. There was, however, a clear trend of American resurgence in all three areas.

Quality of Intelligence

The disparity in intelligence during phase two was significant. US collection efforts improved dramatically, while Japanese endeavors declined. Japan continued to use radio intercepts to determine US fleet activities, and the Japanese did make some inroads in breaking low-grade American ciphers. 128 Prior to Midway, radio intercepts indicated to Japanese admirals that the United States may have had knowledge of their plans, but the concern did not produce any alteration of their designs. 129 In contrast, US code breaking and radio intercept efforts were simply superb. Japanese radio traffic from the Battle of the Coral Sea enabled American codebreakers to increase the accuracy of their decryption efforts significantly. 130 At Midway, analysts predicted the scale and timing of Yamamoto's attack, allowing Nimitz to counter his every move. 131 The pattern continued throughout the many naval engagements around Guadalcanal, allowing Admiral Halsey's intelligence division to "make an amazingly accurate estimate of enemy strength and capabilities" in the period before the naval Battle of Guadalcanal in November 1942. 132

The Americans also exploited the Australian coastwatcher network in the Solomon Islands. This network provided crucial intelligence to the Allies on the eve of the August invasion of Guadalcanal and throughout the entire six-month campaign. 133 Nimitz's emphasis on intelligence led to the creation of the Intelligence Center, Pacific Ocean Area (ICPOA) in May 1942, with a charter to combine multiple sources of information into a holistic, generally accurate portrayal of the situation. 134 Meanwhile, the Japanese consistently struggled to obtain information on Allied strength, IGHQ believed the initial landings in the Solomon Islands constituted a small effort by limited forces. 135 They repeatedly underestimated American strength on Guadalcanal, resulting in overly optimistic estimates of victory by ground commanders dispatched to deal with the supposed nuisance. 136 Only too late did the Japanese realize the Americans were committed to the Solomon Islands in great strength.

The Americans noticeably bested Japanese information collection and assessment capabilities. They pieced together a much more accurate assessment of the conditions and their enemy for nearly every battle and in nearly every category. Japanese performance was uneven and had declined noticeably from the opening phase of the war.

The United States also improved in security and counterintelligence. Fuchida wrote that, by the time of Midway, "The prewar Japanese intelligence net in Hawaii, which contributed so effectively to the success of the Pearl Harbor attack, was of course no longer operative." 137 Japanese attempts to make up for this loss, including reconnaissance flights over Pearl Harbor, were stymied by American countermeasures. 138 The American's took extra precautions where they could, such as by communicating between Hawaii and Midway via underwater telegraph cable not susceptible to interception. 139 On the other side, Japanese communications security was weak and, "Sometimes it seemed as if they didn't care."140 They only varied their encryption codes every six months.¹⁴¹ Fuchida summed it up best when he wrote, "Viewed from the Japanese side, this success of the enemy's intelligence translates itself into a failure on our own part-a failure to take adequate precautions for guarding the secrecy of our plans."142

US security and counterintelligence methods were clearly superior to those of Japan. They were both more thorough and more effective. The Japanese efforts seem lackadaisical and half-hearted by comparison and did little to inhibit US collection and analysis during this phase.

From June 1942 until February 1943, intelligence overwhelmingly favored the United States. American forces usually had a better appreciation of the existing situation than their Japanese foe. They used their intelligence advantage wisely and reaped corresponding benefits.

Strategic Acumen

A perceptible shift also occurred in the arena of strategic acumen. After completing their initial conquests at a lower cost than expected, the Japanese succumbed to the temptation to grasp for more. In the spring of 1942, IGHQ identified four additional objectives including the seizure of Port Moresby, the invasion of Midway, the capture of the Aleutians, and an advance towards the New Caledonia-Fiji-Samoa island groups to

cut off Australia. 143 The decision to continue the advance was fateful. Wood wrote, "This decision to continue what were referred to as "Outer Perimeter" operations was a major strategic blunder, for it was on that perimeter that mistakes would be made that would lead later to the rapid and total defeat of Japan." 144 Wood expanded his analysis: "Midway, New Guinea, and Guadalcanal were the wrong battles fought at the wrong places at the wrong times." 145 Fuchida later lamented that "more imagination than regard for reality" went into Japanese planning, and he faulted Japanese leaders for unrealistic war gaming and heavy-handed interference in those games. 146 In short, Japan overestimated its own capabilities, while underestimating those of the United States.

The Americans performed markedly better, with more realistic plans. In spring 1942, US strategy in the Pacific entailed holding a defensible line from Hawaii to Australasia and pushing northwest when the opportunity presented.¹⁴⁷ Intelligence garnered in the period before Midway presented Nimitz with an excellent opportunity to ambush the Japanese fleet. He seized the moment, focused his forces to defeat the invading force, and won a signal victory. 148 That victory presented another opportunity, that of an advance in the Solomon Islands against Guadalcanal. Again, Admirals Ernest King and Nimitz seized the chance and launched Operation Watchtower, intended to eliminate the Japanese bases at Tulagi and Guadalcanal; relieve pressure on New Guinea; and begin the march to the northwest toward Rabaul, New Britain. 149 Not all American leaders agreed with the decision. General MacArthur and Adm Robert Ghormley felt the move risky and premature; but the operation proceeded with the support of King, Nimitz, and Pres. Franklin D. Roosevelt. 150 Meanwhile, MacArthur waged war in and around New Guinea to check Japanese advances there. 151

The Americans conducted strategic planning on a higher plane than did their Japanese counterparts. Guadalcanal was admittedly a close-run contest, but it ended in victory. American commanders differed over the viability of the invasion and there was a hint of desperation in the air. The stakes and the risks were very high. In October 1942, President Roosevelt weighed in, an indication of the importance of the battle and the difficulties of the contest, to stress the need to hold, supply,

and win on Guadalcanal. 152 In the end, the Americans matched means with ends, seized strategic opportunities, and conducted effective risk analyses to ensure they obtained the most possible gain for the risks ventured. 153 The Japanese did not. The Japanese engaged in wishful planning and pushed out beyond their means. They started this second phase with a poor strategic plan. In Wood's words, "The great irony of the Pacific War is that the virtually flawless execution of Japan's initial strategic plans resulted within less than a year not in victory but in a series of significant defeats that left the strategic initiative in the hands of the enemy."154 As the phase progressed, the Japanese compounded their problems by remaining committed to a poor strategic plan. They refused to "pull back from an arena in which they operated at an increasing disadvantage," and instead, "redoubled their efforts to maintain and reinforce their air strength in the Solomons."155 As a result, they bled themselves white fighting the war on the United States' terms.

There was also a large disparity in the execution of deception and surprise. Japan worked assiduously to achieve surprise in the Midway operation, but American intelligence foiled the effort. Instead, the US Navy baited the Japanese through a skillful deception and misinformation campaign that indicated the American carriers were operating in the southwest Pacific. 156 When Admiral Nagumo and his staff learned US carriers were only two hundred miles away and poised to strike, "it struck them like a bolt from the blue."157 The ensuing battle destroyed four of Japan's best aircraft carriers. The United States again achieved surprise with its landings at Tulagi and Guadalcanal in August 1942. The Japanese responded lethargically. Van der Vat wrote, "For many weeks the reaction at IGHQ in Tokyo to the American effort in the Solomons was one of paralyzed amazement that the Americans were already staking so much on so little. By the time the junta woke up to the need to stop wasting manpower by reinforcing in penny-packets, the Americans were too well dug in to shift."158 Thus, the Japanese were again caught flat-footed.

The advantage of strategic acumen was thus totally reversed in this phase. American strategic planning was clearly superior, and the United States dominated in the execution of deception and surprise.

Operational and Tactical Methods

Japanese proficiency on land now met its match. The pattern of fighting on Guadalcanal crystallized early in the campaign. The first large-scale encounter between the Marines and Japanese troops in late August 1942 resulted in the death of 800 Japanese soldiers, with the loss of 43 Marines killed and 56 wounded. This disparity was not accidental. Throughout 1942, "the actions ashore present a persistent pattern of Japanese failure." Samuel B. Griffith argued that: "The almost total lack of imagination, the hidebound intellectual inflexibility, which characterized alike the High Commands of the Japanese Army and Navy, and which—with notably rare exceptions—filtered down to the senior officers of both services, was to cost Japan dearly to the very end of the Pacific War." ¹⁶¹

American troops clearly performed better than their foe. Winston Groom said American "tenacity" and "superior infantry tactics" contributed significantly to the victory at Guadalcanal. The simultaneous landings at Guadalcanal, Tulagi, and Gavutu-Tanambogo also validated the Marines' development of amphibious operations and tactics. The Japanese lost 23,000 soldiers in action or through starvation and disease to total US losses of 1,600 killed on Guadalcanal. The Papuan campaign was more costly for the Allied soldiers, with 4,842 Australian and American dead to 12,000 Japanese killed. Nevertheless, in both cases, Japanese operational and tactical methods on land were inferior.

The balance in naval operational and tactical method varied depending upon the character of the combat in question. The Japanese excelled at surface warfare, particularly at night. The Battle of Savo Island in the seas adjacent to Guadalcanal on the night of 8–9 August 1942 was a clear Japanese victory and reflected a disparity in combat capabilities that haunted the US Navy for the duration of the Solomons campaign. ¹⁶⁶ The Japanese, however, won only a tactical victory that evening because their focus on decisive fleet engagements overshadowed the more important concern of destroying the Allied transports supporting the invasion. ¹⁶⁷ Despite its generally inferior performance in surface warfare, the US Navy prevailed in the naval Battle of Guadalcanal in mid-November 1942, which ended the Japanese naval threat to Henderson Field, and set

the conditions for the ultimate destruction or evacuation of Japanese land forces on Guadalcanal. 168

Japanese proficiency in carrier warfare did not match their prowess in surface warfare. Their operations at Midway displayed some faults that persisted in other battles later in the war, including a complex plan that overly dispersed their forces. 169 As already noted, that battle produced a major victory for the United States. Bergerud extrapolated carrier capabilities even further, "In my opinion the Americans won all the carrier battles of World War II. Every carrier battle was precipitated because one side was supporting an invasion or supply convoy and the other side tried to stop it. Because the U.S.-protected convoys achieved their objectives—and the Japanese failed in theirs—strategically the USN [US Navy] came out on top."170 Over the course of the Guadalcanal campaign, the Allies lost 2 carriers and 24 other large warships totaling 126,000 tons, while Japan lost 24 ships including two battleships and six submarines, for 135,000 tons.¹⁷¹ The Japanese may have been tactically superior at times, but the United States achieved all its operational objectives, and Japan did not.

The air war also dramatically transformed. Japan still possessed expert pilots at this stage, but that was beginning to change. Japanese tactics in the air lacked teamwork, with pilots typically operating as individuals when battle commenced. 172 Japanese airpower, like its naval counterpart, focused too much on targeting enemy weapon systems such as ships and aircraft and "did almost nothing to prevent the build up of Allied forces in New Guinea during the early months of war." Nor did they target transports during the Solomons campaign. 173 In contrast, the Americans worked as a team and developed tactics specifically designed to counter Japan's fighter superiority. 174 Their adaptability and superior tactics paid off over Guadalcanal with a three-to-one air-to-air kill ratio over the Japanese. 175 Numbers again tell the tale. Total combat losses amounted to 264 American aircraft against 446 Japanese aircraft over Guadalcanal, with the Americans losing 420 aviators but the Japanese losing two to four times as many. 176 American airpower began to flex its muscle and Japan could ill afford the ensuing high attrition.

Thus, the United States performed better across the board in operational and tactical methods. American ground tactics and

operations devastated a Japanese force that was used to fighting less disciplined opponents. Naval tactics and operations did not manifest the same disparity, but US carrier operations were certainly superior and its surface capabilities proved adequate to the task. In the air, the belligerents each reached a turning point. The Japanese began to decline steadily, while the United States began to show signs of air dominance critical to the future course of the war. Samuel Griffith, a Marine veteran of Guadalcanal, wrote, "the Emperor's invincible army had absorbed a series of beatings," "his 'sea eagles' had been unable to establish air superiority over Guadalcanal," and "his navy could not effectively support the army operations. . . . "177 Such statements are testaments to American efficiency at the lower levels of war in this critical period.

Summary

Significant shifts occurred in all four elements during this phase. American forces narrowed the gap in resources through increases in manpower, materiel, and a slight enhancement of their technology. Allied forces dominated in the intelligence arena and exercised superior strategic acumen to achieve favorable results just six months after the outbreak of war. Operationally and tactically, the United States became a force to be reckoned with, while Japanese abilities began to deteriorate at the cutting edge.

The United States was now in the driver's seat. Following Guadalcanal, America had undisputed strategic initiative. Yet there were over two more years of fighting left, with some unexpected twists. But the four components of strategic initiative remained as important as ever while the United States stormed across the Pacific and up the New Guinea coast.

Phase 3: 9 February 1943–2 September 1945

The last phase of the war consisted of a series of American advances in the South- and Central-Pacific theaters that approached the very gates of Japan before the two atomic attacks were made and Japan surrendered. Following Guadalcanal, MacArthur and

Nimitz completed the isolation of strong Japanese garrisons at Rabaul and Kavieng with Operation Cartwheel in the South Pacific (see figure 11). The United States then began a two-pronged offensive with the southern route commanded by MacArthur and the Central Pacific route by Nimitz. The southern offensive proceeded from the Solomon Islands through the Palaus and on to the Philippines. Meanwhile, Nimitz began his drive in the Gilbert Islands and proceeded through the Marshall Islands; and on to the Mariana Islands. As American forces got closer to Japan, America's options narrowed, resulting in the bloody battles at Iwo Jima and Okinawa in 1945. Planning for the invasion of Japan was in full swing when the atomic bombs were dropped on Hiroshima and Nagasaki in August 1945. The ensuing Japanese surrender averted a bloodbath for both combatants.

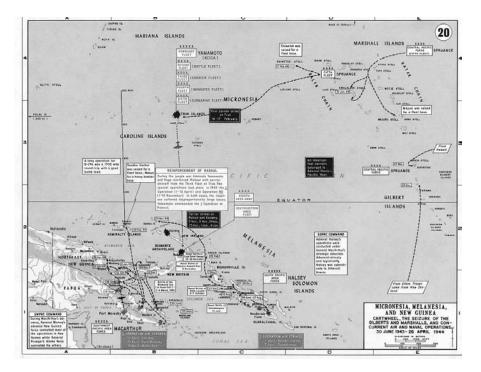


Figure 11. Operation Cartwheel and the seizure of the Gilbert and Marshall Islands (http://www.dean.usma.edu/departments/history/web03/atlases/ww2%20pacific/ww2%20pacific%20%20maps/ww2%20asia%20map%2020.jpg, accessed 16 April 2008).

After the battle of Guadalcanal, the United States clearly held the strategic initiative. Japanese Adm Matome Ugaki understood the situation when, on 31 December 1942, he recorded in his diary, "The year 1942 is going to pass tonight. How brilliant was the first stage operations up to April! And what miserable setbacks since Midway in June! The invasions of Hawaii, Fiji, Samoa, and New Caledonia, liberation of India and destruction of the British Far Eastern Fleet have all scattered like dreams. Meanwhile, not to speak of capturing Port Moresby, but the recovery of Guadalcanal itself turned out to be impossible."178 Historians have since noted, "On land and sea, under the sea, and over it, Allied forces held the strategic initiative, and this gave them the tactical advantage around almost the entire arc of the Japanese 'defensive perimeter.' They were soon able to concentrate their forces and strike with overwhelming, largely unanswerable strength, wherever and whenever they chose."179 The Japanese attempted to respond with successive plans to regain the initiative, but they were never able to stem the tide. From 1943 on, all Pacific roads led directly or indirectly to the Japanese home islands.

Resources

The demands of total war stretched Japanese human resources to the limit. By war's end, Japanese military recruiters reached the bottom of the barrel and previously protected segments of the population lost their exemptions. Japan, like its ally Germany, relied on forced labor, in this case Korean, to sustain its war efforts at home. Nevertheless, Japan fielded nearly eight million men in September 1945, with over half of them stationed in Japan. 182

Japanese pilot resources steadily diminished. The 1944 campaigns around Rabaul and the Marshall Islands decimated the pilot ranks. Pilot training standards rapidly declined. The 1941–42 requirement for 700 flight hours dwindled to 275 in 1944 and finally to 90 in 1945. Although its manpower pool was not limitless and it was fighting a two-theater war, the United States did not suffer these same strains. Pilot training hours for American pilots increased as the war went on, rising from 305 hours in 1941–42 to 525 hours in 1945.

States Sixth Army mustered 175,000 men for its 1944 invasion of Leyte in the Philippines, approaching the numbers employed in Normandy earlier that year. ¹⁸⁶ On 1 April 1945, 154,000 "battle-hardened" Americans invaded Okinawa in another impressive demonstration of US capabilities. ¹⁸⁷

In the last phase of the war, the United States finally fielded forces that corresponded to its population base. Although Japan still possessed formidable numbers, with the initiative in hand, the American commanders concentrated when and where they chose.

The material struggle proved even more advantageous to the Americans. The Japanese Navy steadily deteriorated. Overy noted that, "In 1943 Japanese shipyards supplied only three more aircraft carriers, and four in 1944; the United States navy [sic] in those two years procured another ninety." 188 The Imperial Navy started the war with 110 destroyers and added 14 more by July 1943, but had lost 35 and others were undergoing repair. 189 The US Navy, meanwhile, expanded significantly. At the end of 1944, it boasted 89 carriers, 23 battleships, 62 cruisers, 371 destroyers, 378 destroyer escorts, and 238 submarines. 190 The gulf in aircraft production was also enormous. From 1941 through 1944, Japan produced 58,822 planes to 261,826 for the United States. 191 The US Army benefited from American industrial might as well, becoming "the most modern army in the world," and the most motorized of all the combatants. 192 Nevertheless, both sides struggled to supply adequate transport vessels. The Japanese merchant shipping started the war with 6.4 million tons. But, by January 1945, only 2.4 million tons remained; and 7.4 million tons were sunk. 193 The United States fared better, but shipping was always at a premium; and, well into 1943, it limited American advances. 194

From early 1943 to Victory over Japan (V-J) Day, the United States retained material dominance. Whether on land, sea, or air, Japan was itself in a position of distinct inferiority. US industrial might flooded the battlefield with effective weapons, while Japanese industry struggled simply to reconstitute war losses. Logistics challenged both combatants; but the United States responded more effectively, while Japanese forces became acutely aware of their supply deficiencies.

The United States took the lead in technology during this phase. Japan made its biggest technological exertions in air-

craft, to little avail. While the Japanese "could produce designs of high quality, they lacked the technical means to turn them into large numbers of battlefront weapons that could compete on equal terms with the enemy." ¹⁹⁵ Saburo Sakai lamented that 10 different upgrades to the Zero fighter still failed to match American aircraft advances. ¹⁹⁶ Japanese aircraft still maintained their superior range over American fighters. ¹⁹⁷

The Unites States made great technological strides in several areas. The Americans improved their torpedoes by correcting the mechanical flaws by October 1943 and by using a more powerful explosive beginning in February 1943. Fighters such as the F4U Corsair and the F6F Hellcat outclassed their Japanese opponents in the air. 199 The speed, altitude, range, and payload of the B-29 bomber made it a technological marvel in 1944. But the most glaring example of US technological superiority was the atomic bomb. Japan had no response.

The United States dominated every aspect of resources in the last phase of the war. In terms of manpower, Japan maintained strong numbers throughout the Pacific theater, but the Americans picked and chose when and where to fight. They concentrated the forces necessary and got them to the fight, no matter the distance. They matured a strong pilot training program that towered over Japanese efforts. American industrial might produced warships, planes, and vehicles at an amazing rate, thereby making its forces the best equipped in the entire war. While Japanese technology plodded ahead slowly or stagnated, the Americans forged ahead in leaps and bounds. Their technological gains usually made it to the battlefield in sufficient time and numbers to make a difference while Japanese improvements did not. The development and employment of the atomic bomb ended the technological competition with an exclamation point.

Quality of Intelligence

American intelligence continued to improve. The ICPOA established by Nimitz in 1942 became a joint organization in the autumn of 1943 and evolved into a very effective intelligence agency. ²⁰² But American intelligence was not perfect. Japanese defenders on Saipan numbered 32,000, twice the American intelligence estimate. ²⁰³ Successful code breaking continued to pay dividends.

Intercepts of the Japanese "water transport codes" revealed the positions of Japanese merchant ships, allowing US submariners to focus their efforts at the most opportune times and places. ²⁰⁴ Cryptographers continually warned of Japanese naval moves, even predicting the death ride of the battleship *Yamato* during the battle of Okinawa in April 1945. ²⁰⁵ Japanese commanders generally undervalued intelligence. As a result, "the Japanese intelligence effort was small, of indifferent quality, and over reliant on espionage. Its signal work was of high standard but limited in scale and scope; the maximum intelligence was extracted from open sources, such as enemy publications and broadcasting." ²⁰⁶

American attention to detail and Japanese neglect ceded the intelligence advantage to the United States. There is no doubt that "good intelligence sources, combined with highly effective intelligence methods—for fusion analysis, tailored operational support, and rapid dissemination—made Allied admirals far better informed and knowledgeable than their Japanese counterparts."²⁰⁷

Japanese efforts at security and counterintelligence were mixed. The Japanese did have some success, as the Saipan example demonstrated. The execution of "special attack" missions, or *Kamikazes*, also benefited from good security. The Americans had no inkling of this capability when it was first employed near the Philippines.²⁰⁸ However, the general American success in garnering intelligence indicates a corresponding failure on the part of Japan to implement effective security measures. As during the second phase, cryptological failures were more evident. American security efforts generally fared better than Japanese attempts. Although Pacific geography often limited American offensive options, the Marshall Islands was the only example in the war in which Japanese intelligence got word to one of its garrisons in sufficient time for it to prepare for the impending attack.²⁰⁹

Thus, the United States maintained a clear intelligence edge. Its collection, analysis, and dissemination exceeded Japanese capabilities. Similarly, its counterintelligence and security measures provided enough of a veil to keep the Japanese guessing.

Strategic Acumen

Following Guadalcanal, the Japanese and Americans faced different strategic challenges. Japan wanted to hold what it possessed, while the United States sought to make inroads into those possessions and eventually attack Japan directly. The Japanese developed a series of plans designed to defeat the American forces and either regain the initiative, even if only operationally, or at least establish a strategic equilibrium. Their "I-Go" plan to seize air superiority over the New Guinea and Solomon Islands areas in April 1943 failed. Their "A-Go" plan sought a decisive carrier action in the Marianas in 1944 using 90 percent of Japan's remaining sea power, but it also failed. The "Sho-1" plan for defense of the Philippines very nearly succeeded in its aims of destroying the US invasion force, but it too ultimately failed. Japan's biggest mistake, however, was the failure to adequately protect its merchant shipping, which exposed a critical vulnerability.

Meanwhile, the United States had to decide where and why to fight. The birth of the "island hopping" concept occurred in the South Pacific when the Joint Chiefs of Staff prudently decided to bypass Rabaul, leaving 100,000 Japanese troops isolated and impotent. By using MacArthur's and Nimitz's concentric advances to keep the Japanese defenses off balance, the Americans turned the vice of divided command into a virtue. The overwhelming preponderance of US resources allowed this strategy to succeed, despite vehement debate over priorities between the two theater commanders and their respective service chiefs. In the spring of 1944, while the US Navy prepared to strike the Mariana Islands with the "largest fleet in the world," MacArthur got ready to attack the Philippines with five divisions and two air forces. 215

Nimitz marched across the Central Pacific, seizing the Marianas, which enabled strategic bombing of Japan, and then continued west and north to prepare for the invasion of the Japanese home islands (see figure 12).²¹⁶ MacArthur liberated the Philippines, effectively cutting Japan's sea lines of communication to its resources in the south. Thus, the United States realized its strategic goals, while Japan proved unable to stabilize an ever-deteriorating situation.

The United States bested Japan in strategic planning during the last phase of the war. The two-pronged advance kept the Japanese guessing,²¹⁷ but the American march across the Pacific was not flawless. The bloody invasion of Peleliu obtained

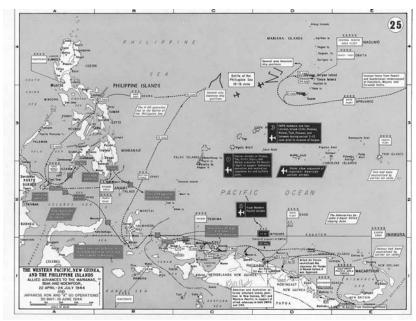


Figure 12. Marianas, South Pacific, and Philippine Islands (http://www.dean.usma.edu/departments/history/web03/atlases/ww2%20pacific/ww2%20pacific%20%20maps/ww2%20asia%20map%2025.jpg, accessed 16 April 2008).

few positive results and played into the Japanese strategy of inflicting heavy losses on the United States.²¹⁸ The liberation of the Philippines also sparks historical debate. Dan Van der Vat faulted both the Americans and Japanese for undue focus on the Philippines.²¹⁹ The bloody struggle for control of the archipelago lasted over eight months; but the Americans realized their aims. The Japanese, in contrast, failed in every one of their major efforts to achieve strategic stability.

Surprise played less of role during this phase than it had previously. Effective American intelligence hampered Japanese deception efforts. The Japanese did achieve one notable deception during the Battle of Leyte Gulf in October 1944 by luring Admiral Halsey and his fleet to the north with a decoy force and opening up America's Leyte invasion fleet to possible destruction (see figure 13). The Americans, in turn, faced the same difficulties with geography that the Soviets faced as they ap-

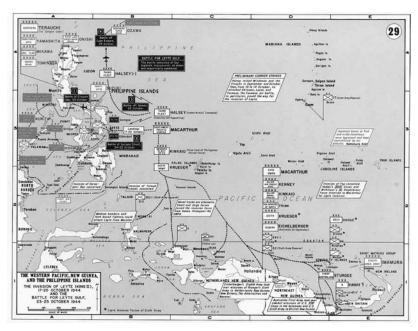


Figure 13. The Philippines and Battle of Leyte Gulf (http://www.dean.usma.edu/departments/history/web03/atlases/ww2%20pacific/ww2%20pacific%20%20maps/ww2%20asia%20map%2029.jpg, accessed 16 April 2008).

proached Germany. The closer they got to their ultimate objective, the more obvious their strategic choices became. Surprise thus had to focus on timing. Here, the United States had some consequential successes. The Japanese expected an invasion of the Philippines in late 1944, but they could not determine where the invasion would fall nor the exact launch time until three days before it commenced.²²¹ The same pattern followed in other locations such as Iwo Jima and Okinawa.

Neither side achieved any war-changing surprises during the final phase. The Americans enjoyed a very slight edge, if only because the surprises they achieved were more consequential. The Japanese could have gained useful strategic benefits from their deception at Leyte Gulf, but they missed the opportunity to destroy the invasion transports.

Thus, American strategic acumen bettered that of the Japanese. Ultimately, despite the imperfections of divided command

and several questionable operations, the United States realized all of its goals. The Japanese continued to overreach their capabilities and suffered setbacks as a result. They also missed a key opportunity for strategic gain in the Philippines.

Operational and Tactical Methods

As the war progressed, the Japanese suffered horrendous losses in land combat, but they did alter their tactics from those used in the Solomons and New Guinea. Japanese soldiers learned to sell their lives dearly. Rather than conducting wasteful frontal assaults, the Japanese learned to dig in and make the Americans come to them. At Iwo Jima, Japan lost nearly 20,000 soldiers killed and nearly 200 captured but inflicted 25,000 casualties on the Marines, including 6,000 killed, for a total casualty ratio of 1:1.25 in Japan's favor. Japanese commanders on Okinawa in April 1945 "skillfully utilized terrain to inflict maximum casualties" that totaled 49,451 men, of which 12,520 were dead or missing, although 110,000 of their own soldiers died.

The United States also adjusted its tactics. After the bloody fight on Tarawa atoll, the Navy and Marines implemented key changes to their amphibious doctrine, including the increased use of tracked amphibious vehicles, longer pre-invasion bombardments, and more effective small-unit tactics. 224 Successive invasions were certainly bloody, but the United States generally came off better than Japan. At Saipan in 1944, the Japanese lost 23,811 killed and 1,780 captured to US losses of 3,426 dead and 13,099 wounded.²²⁵ On Leyte in the Philippines, the Japanese units committed were among the best in their army, but "almost all the sixty-five thousand-man force was destroyed at a cost to the Americans of thirty-five hundred dead."226 On Luzon, Japanese forces numbered around 170,000 troops, of whom approximately 50,000 remained to surrender in August 1945.²²⁷ The US Sixth Army lost 8,297 killed or missing, and 29,557 wounded in the 173-day struggle to defeat that force and conquer Luzon.²²⁸

American ground tactics and operations were better than Japan's, but the Japanese had learned to be more economical with their lives. They adapted their tactics to the defense to maximize their ability to inflict losses on the United States. They were able to do so because they could focus on the de-

fense. The United States, however, had to conduct offensive operations to realize victory.

From October 1943 on, the United States Navy surged ahead of the Japanese navy in all forms of combat. In surface warfare, the United States won eight victories to Japan's zero.²²⁹ Carrier warfare followed a similar pattern, though instances of such battle dropped significantly after 1942. The only true carrierto-carrier battle was in the Marianas in June 1944.²³⁰ The United States won the battle in the Marianas, though it was US submarines that inflicted much of the damage on the Japanese carriers.²³¹ The Japanese failed utterly at combating the submarine threat. When they finally instituted a convoy system for their merchant ships, they used small and inefficient convoys that failed to provide adequate protection.²³² Nineteen fortyfour was a banner year for US submariners. They sank 1.5 million tons of Japanese shipping, including 400,000 tons of oil tankers, which caused severe Japanese fuel shortages and hampered fleet operations.²³³

The Japanese continued unduly to seek decisive battle. Wood elaborated on Japan's failure to capitalize on their successful deception at Leyte Gulf: "For one of the few times in the war, powerful Japanese surface units, including a Yamato class battleship, came within gunnery range of a temporarily unprotected invasion fleet of hundreds of supply and transport vessels. But Admiral Ozawa lost his nerve and turned back in the face of bluffing by a few American destroyers and escort carriers. And to what purpose? Preservation of his units took precedence over a delivery of an extremely damaging blow." 234

American admirals were not, however, totally immune from mistakes. It is interesting to note how the US Navy, when inferior, never lost sight of why it was fighting each particular battle, whether to repel an invasion, or protect its own invasion or convoy. But at Leyte Gulf, when in a position of vast superiority, Admiral Halsey took the Japanese bait and pursued a decoy fleet in search of a decisive battle, leaving the invasion transports unguarded. Nevertheless, because of the Japanese navy's failures, Leyte Gulf proved to be a clear American victory, after which the Japanese navy never posed a significant threat. The US Navy reigned supreme whether it was a surface, carrier, or undersea action.

The United States also owned the skies. As James Wood noted, control of the land and sea depended on control of the air and "by late 1943, Japan's air forces had lost this decisive struggle."237 Sakai confirmed this observation, recounting that US Navy fighters downed their Japanese enemies by the bushel in 1944 around Iwo Jima, destroying 20 Zeros out of 40 in one fight and then 60 out of 80 engaged in another.²³⁸ The Americans also developed some innovative tactics. In the Battle of the Bismarck Sea, US air forces destroyed an entire Japanese merchant convoy using skip-bombing, costing the Japanese 3,664 troops.²³⁹ The United States also began strategic bombing of Japan. Between April and August of 1945, bombing destroyed 40 percent of 66 Japanese cities, causing factory absenteeism to skyrocket.240 Japan's Kamikaze tactics were deadly, but they did not alter the course of the war. The Japanese were unable to wrest the skies back from the Americans.

In sum, the United States dominated the lower levels of war on land, sea, and in the air. "The American Navy won all but one of their engagements with the Imperial Japanese Navy after Guadalcanal. All seventy-two army and marine amphibious landings in the Pacific succeeded. By late 1944, U.S. submarines owned the sea lanes; and her land and carrier-based planes ruled the sky," Wood noted.²⁴¹ Despite their legendary tenacity, the Japanese suffered defeat after defeat until their ultimate surrender in September 1945.

Summary

The United States held the strategic initiative throughout this third phase. The Japanese attempted several large operations to alter the course of the war, but to no avail. The United States enjoyed large advantages in all four elements and significant advantages in each of their sub-areas for this phase. These cumulative advantages made it impossible for Japan to challenge the firm American grasp of strategic initiative.

Analysis

As with the Russo–German War of 1941–45, several questions remain to be answered. Why did Japan's hold on strategic

initiative fall into dispute in June 1942? Why did it then pass permanently into American hands in February 1943? How did the four elements of resources, quality of intelligence, strategic acumen, and operational and tactical methods relate to one another? Is there a hierarchy among these elements? If so, what is it?

The relative advantage(s) each side held in these elements for each entire phase has been established. Analysis must now focus on the comparison of these factors at the junctions between the first and second phases and the second and third phases.

The transition from Japanese possession of initiative to disputed initiative occurred in June of 1942. The Japanese had actually increased their overall resource advantage slightly by June 1942 due to the disparity in losses during the opening months of war. US industrialization and mobilization had not yet matured sufficiently to influence the war.

There was, however, a significant shift in intelligence that directly affected the Battle of Midway on 4 June 1942. Once they attempted to move beyond their intended perimeter, the Japanese intelligence capabilities dropped dramatically. The United States, in contrast, increased its intelligence gathering and analysis capabilities through improved deciphering and integration. This intelligence disparity best explains the clear American victory at Midway.

The balance in strategic acumen also tipped dramatically. The Japanese overreached, attempting simultaneously to complete unplanned thrusts at Midway, the Aleutians, and the South Pacific all at once. The United States knew its limits, put up minimum resistance in the Aleutians, and focused nearly all its resources to repel the Japanese at Midway. Nimitz executed an effective deception plan that allowed him to ambush Nagumo's carriers near Midway. The resulting surprise provided a strategic victory with long-term implications for the war and immediate implications for strategic initiative.

In June 1942, the Japanese remained tactically superior, particularly in the air. Yet the Americans performed effectively at the tactical level and performed in superior fashion at the operational level. This operational superiority enabled their victory at Midway and helped place strategic initiative in dispute.

The United States seized strategic initiative at the second transition point in February 1943. Japan continued to maintain a resource edge, but the United States was closing the gap. Troops, aircraft, and ships began arriving in the Pacific, making up for losses and increasing operational flexibility. The Japanese, meanwhile, were beginning to feel the effects of attrition, particularly in pilots.

The Americans maintained intelligence superiority. The synergy between their success with Magic and the contribution of the Australian coastwatchers proved critical to victory at Guadalcanal. Japanese failures in intelligence contributed to their eventual withdrawal from the island after a titanic six-month struggle.

Superior strategic acumen also favored the United States. Although Guadalcanal had been a risky undertaking and a close run battle, the Americans matched their capabilities with their plans and won a significant victory. Japan, on the other hand, fought the battle piecemeal and continued to feed its limited resources into a sinkhole. Neither side had an advantage in deception or surprise that contributed to the February 1943 shift.

Tactically, the Japanese remained superior only in surface warfare. The Americans bested them in the air and on the ground. Tactically, carrier warfare was very close to equilibrium, but operationally the United States remained superior across the board. Even when suffering significant tactical defeats, such as at Savo Island, the US Navy carried out its primary responsibilities of protecting the transports and turning the Japanese back. By the end of the Guadalcanal campaign, the United States had demonstrated superior operational and tactical prowess.

Analyzing the relationship among the four elements during these transition points and over the course of the war brings some informative insights. The pattern from the Russo–German War held true in the Pacific, with clear Japanese and American advantages in the first and third phases, respectively, granting each nation supremacy in strategic initiative. Once again the transition to, experiences during, and transition from the second phase prove most revealing in allowing us to understand how strategic initiative shifts in war.

The Americans enjoyed significant advantages in quality of intelligence, strategic acumen, and operational method at Midway, while ceding advantages in resources and tactical method. American advantages allowed them to contest initiative almost immediately and permitted them to vie for initiative at Guadalcanal a mere two months later. Because of its resource advantage, particularly in naval and air units, Japan did not immediately *lose* initiative. Yet Nimitz and the Americans displayed polished strategic acumen by using their intelligence advantage to seize a fleeting opportunity and inflict debilitating damage on the Japanese fleet.

The Japanese resource base and, to a degree, their tactical advantages mitigated the Midway disaster for a while. Thus, the Americans could not immediately *gain* the strategic initiative; they could only *dispute* it.

Strategic initiative in the second phase of the Pacific War was more closely contested than it was in the second phase of the Russo–German War. One could attempt to argue that the 7 August 1942 landings on Guadalcanal represented seizure of American initiative; but the ebb and flow of that campaign, along with the Papuan struggle, makes such reasoning problematic. This campaign, in fact, indicates just how closely the struggle for initiative was waged. Throughout the second phase, Japan's superior resources balanced US advantages in intelligence, strategic acumen, and operational and tactical method until the Battle of Guadalcanal was over.

By the end of the second phase, the resource gap was closing as America's industrial might was inexorably brought to bear and Japan strained under the punishment of attrition warfare. When the United States approached parity in resources with the Japanese air and sea forces, its advantages in the other three elements solidified its hold on strategic initiative for the duration of the war.

In sum, the Japanese seized initiative in December 1941 with advantages in every category. In June 1942, their resource superiority prevented the loss of initiative. The United States challenged Japanese initiative with advantages in intelligence, strategic acumen, and operational (though not tactical) method. During the second phase, the United States improved in all four elements and seized the initiative, though it continued to operate at a resource disadvantage.

Determining the relationships between each element again requires interpretive analysis. The Americans used greater wisdom to seize a fleeting opportunity at Midway and to match ends with means at Guadalcanal. They also, like the Soviets, expended great effort to improve in the areas over which they could exert some direct control: resources and intelligence. Intelligence efforts paid rapid dividends, increasing American knowledge and buttressing strategic acumen. American capacity remained adequate, but the geography of the Pacific slowed American attempts to leverage its industrial might. Improvements in operational technique followed quickly, while tactical performance grew more slowly.

The Americans were first able to use the benefits of their superior knowledge at the Battle of Midway. Their capacity after that battle was limited, but it would slowly increase as the second phase progressed. But knowledge alone is insufficient; it must be put to good use or it is wasted. The Americans used their increased knowledge to employ the limited capacity they had in a very wise fashion, displaying strategic acumen. Hence, they were able to dispute, though not seize, initiative. In short, superior American strategic acumen, aided by improved intelligence and supported by an edge in operational method, caused a shift in strategic initiative. Continued Japanese advantages in resources and tactical method limited the magnitude of that shift.

The Guadalcanal campaign produced the final shift. American advantages in strategic acumen, intelligence, and operational method continued. The United States assumed the risks inherent in the Guadalcanal operation to some extent out of desperation, but also out of recognition of the opportunity that the Midway victory provided. During the campaign, the Americans improved tactically, holding an edge in every area except naval surface warfare. The Japanese initially maintained a resource advantage, but America was closing the gap. The narrowing resource gap and improved American tactical performance meant that US advantages in strategic acumen, intelligence, and operational method achieved greater results. The Americans seized the initiative and never let go.

Thus, we see another clear hierarchy for the elements in the Pacific War from 1941–45. Strategic acumen led the way. Japanese strategic acumen was superb for their initial operations.

However, the Americans learned quickly and took advantage of opportunities, while the Japanese misjudged the situation at Midway and in the Solomon Islands. Intelligence was again the second element. It gave the United States' better knowledge of the situation and enabled wiser choices for the war. The inherent maneuver dimensions of a maritime war meant operational and tactical methods placed third. Operational prowess wielded greater influence than tactical proficiency. As long as the combatants performed adequately in tactical areas, any advantage here was offset by more important advantages in the other areas. Resources placed fourth; but resource superiority allowed the Japanese to avoid total loss of initiative until the United States enhanced its own war-making capacity around the second transition point in February 1943.

Yet further analysis is still required. These two historical examples must be compared and contrasted to see if there are any additional insights into shifts in strategic initiative in modern, conventional war.

Notes

- 1. Keegan, Second World War, 249.
- 2. Fuchida et al., Midway: The Battle That Doomed Japan, 32.
- 3. Ibid., 33.
- 4. Van der Vat, Pacific Campaign, 59-65.
- 5. Cook and Cook, Japan at War, 261-62.
- 6. Wood, Japanese Military Strategy in the Pacific War, 88.
- 7. Dower, War without Mercy, x.
- 8. Van der Vat, Pacific Campaign, 42-43.
- 9. Kato, Lost War, 51.
- 10. Ibid., 52.
- 11. Dull, A Battle History of the Imperial Japanese Navy, 5.
- 12. Gailey, War in the Pacific, 58.
- 13. Wood, Japanese Military Strategy, 10.
- 14. Gailey, War in the Pacific, 59.
- 15. Agawa, Reluctant Admiral, 128.
- 16. Gailey, War in the Pacific, 144.
- 17. Forrestal. Forrestal Diaries. 32.
- 18. Kato, Lost War, 40.
- 19. Dull, Battle History, 22–26.
- 20. Van der Vat, Pacific Campaign, 117.
- 21. Costello, Days of Infamy, 3.
- 22. Dull, Battle History, 115.

- 23. Dunnigan and Nofi, Victory at Sea, 523.
- 24. Gailey, War in the Pacific, 59.
- 25. Ibid., 51.
- 26. Ibid., 109-10.
- 27. Holmes et al., eds., Oxford Companion to Military History, 534.
- 28. Gailey, War in the Pacific, 63-64.
- 29. Wood, Japanese Military Strategy, 92.
- 30. Fuchida, *Midway*, 28–29.
- 31. Halsey and Bryan, Admiral Halsey's Story, 70.
- 32. Dunnigan and Nofi, Victory at Sea, 4.
- 33. Wood, Japanese Military Strategy, 75.
- 34. Dunnigan and Nofi, Victory at Sea, 4.
- 35. Brereton, Brereton Diaries, 6-7.
- 36. Cook and Cook, Japan at War, 206.
- 37. Ibid., 261-62.
- 38. Keegan, Second World War, 268.
- 39. Sakai, Caidin, and Saito, Samurai!, 42.
- 40. Bergerud, Fire in the Sky, 9.
- 41. Sakai, Caidin, and Saito, Samurai!, 50.
- 42. Overy, Why the Allies Won, 221-22.
- 43. Fuchida, Midway, 27.
- 44. Ibid., 209.
- 45. Halsey and Bryan, Admiral Halsey's Story, 72.
- 46. Dull, Battle History, 60.
- 47. Wood, Japanese Military Strategy, 48.
- 48. Ienaga, Pacific War, 141.
- 49. Keegan, Second World War, 268.
- 50. Fuchida, Midway, 26.
- 51. Agawa, Reluctant Admiral, 251-52.
- 52. Brereton, Brereton Diaries, 51.
- 53. Ugaki et al., Fading Victory, 119.
- 54. Groom, 1942: The Year That Tried Men's Souls, 38.
- 55. Costello, Pacific War, 118.
- 56. Dull, Battle History, 120.
- 57. Brereton, Brereton Diaries, 37.
- 58. Keegan, Second World War, 254.
- 59. Brereton, Brereton Diaries, 35.
- 60. Spector, Eagle against the Sun, 457.
- 61. Sakai, Caidin, and Saito, Samurai!, 41.
- 62. Van der Vat, Pacific Campaign, 156.
- 63. Wohlstetter, Pearl Harbor: Warning and Decision, 382.
- 64. Schom, Eagle and the Rising Sun, 143-45.
- 65. Van der Vat, Pacific Campaign, 121.
- 66. Ibid.
- 67. Ibid., 120.
- 68. Fuchida, Midway, 35.
- 69. Gailey, War in the Pacific, 47.

- 70. Ibid., 50.
- 71. Van der Vat, Pacific Campaign, 26.
- 72. Fuchida, Midway, 43.
- 73. Wood, Japanese Military Strategy, 63.
- 74. Van der Vat, Pacific Campaign, 140.
- 75. Wood, Japanese Military Strategy, 12.
- 76. Agawa, Reluctant Admiral, 278-79.
- 77. Sakai, Caidin, and Saito, Samurai!, 46.
- 78. Ibid., 108. The shock of the Doolittle Raid changed Japanese attitudes towards the war. The chimera of invulnerability disappeared.
 - 79. Gailey, War in the Pacific, 126.
 - 80. Fuchida, Midway, 45.
 - 81. Brereton, Brereton Diaries, 20.
 - 82. Ibid., 38-41.
 - 83. Agawa, Reluctant Admiral, 128.
 - 84. Keegan, Second World War, 257.
 - 85. Gailey, War in the Pacific, 55.
 - 86. Costello, Days of Infamy, 5.
 - 87. Morton, United States Army in World War II, 21.
 - 88. Ibid., 27-30.
 - 89. Goldstein and Dillon, ed., Pacific War Papers, 74.
 - 90. Wood, Japanese Military Strategy, 75.
 - 91. Agawa, Reluctant Admiral, 288-89.
 - 92. Overy, Why the Allies Won, 33.
 - 93. Hoyt, Carrier Wars, 56.
- 94. Schom, *Eagle and the Rising Sun*, 278–79. Despite their tactical victory against the American carriers in the Battle of the Coral Sea, the Japanese aborted their attempt to invade Port Moresby. This was their first failure at conquest. Wake Island had repelled one invasion, but fell on the second attack. Port Moresby remained a Japanese target and shaped the initial New Guinea campaign, but it never fell to Japan.
 - 95. Van der Vat, Pacific Campaign, 161.
 - 96. Sakai, Caidin, and Saito, Samurai!, 88.
 - 97. Bergerud, Fire in the Sky, 327.
 - 98. Fuchida, Midway, 51.
 - 99. Brereton, Brereton Diaries, 43.
 - 100. Ibid., 44.
 - 101. Sakai, Caidin, and Saito, Samurai!, 74-75.
 - 102. Ugaki et al., Fading Victory, 65.
 - 103. Frank, Guadalcanal, 43-44.
 - 104. Wood, Japanese Military Strategy, 18.
 - 105. Halsey and Bryan, Admiral Halsey's Story, 141.
 - 106. Wood, Japanese Military Strategy, 19.
 - 107. Overy, Why the Allies Won, 34.
 - 108. Dull, Battle History, 238.
 - 109. Ibid., 238.
 - 110. Wood, Japanese Military Strategy, 90.

- 111. Fuchida, Midway, 208.
- 112. Van der Vat, The Pacific Campaign, 162.
- 113. Gailey, War in the Pacific, 170.
- 114. Dunnigan and Nofi, Victory at Sea, 364.
- 115. Fuchida, Midway, 62.
- 116. Frank, Guadalcanal, 615.
- 117. Bergerud, Fire in the Sky, 668.
- 118. Overy, Why the Allies Won, 37.
- 119. Ugaki et al., Fading Victory, 217.
- 120. Groom, 1942, 334.
- 121. Wood, Japanese Military Strategy, 92–93.
- 122. Frank, Guadalcanal, 135-36.
- 123. Wood, Japanese Military Strategy, 91.
- 124. Sakai, Caidin, and Saito, Samurai!, 129.
- 125. Bergerud, Fire in the Sky, 463-64.
- 126. Marion, Cuddihy, and Cuddihy, On the Canal, 225.
- 127. Van der Vat, Pacific Campaign, 246-47.
- 128. Ibid., 267-68.
- 129. Ugaki et al., Fading Victory, 131.
- 130. Groom, 1942, 197-98.
- 131. Wood, Japanese Military Strategy, 17.
- 132. Griffith, Battle for Guadalcanal, 193.
- 133. Clemens, Alone on Guadalcanal, 14-15.
- 134. Ford, Rosenberg, and Balano, Admirals' Advantage, 12.
- 135. Griffith, Battle for Guadalcanal, 44.
- 136. Groom, 1942, 301. General Kawaguchi, during his September 1942 attack on Henderson Airfield at Guadalcanal, believed the Americans had only 5,000 men on the island. He felt, incorrectly, his force would be at least equal in strength to his enemy.
 - 137. Fuchida, Midway, 85.
 - 138. Dull, Battle History, 134.
 - 139. Overy, Why the Allies Won, 38.
 - 140. Kahn, Codebreakers, 590.
 - 141. Ibid., 587.
 - 142. Fuchida, Midway, 200.
- 143. Van der Vat, *Pacific Campaign*, 163. These objectives extended the Japanese perimeter beyond that for which IGHQ aimed in its prewar planning. Japan's rapid conquests and slight losses seemed to provide an opportunity to extend their perimeter even further while simultaneously forcing the decisive battle that would force the Americans to negotiate a peace.
 - 144. Wood, Japanese Military Strategy, 15.
 - 145. Ibid., 19.
 - 146. Fuchida, Midway, 91-92.
 - 147. Van der Vat, Pacific Campaign, 147.
 - 148. Ibid., 180-81.
 - 149. Spector, Eagle against the Sun, 185-86.
 - 150. Griffith, Battle for Guadalcanal, 31.

- 151. Spector, Eagle against the Sun, 186.
- 152. Larrabee, Commander in Chief, 290–91.
- 153. Clausewitz, *On War*, 573. Clausewitz, while discussing the culminating point of victory takes measure of military commanders: "This is why the majority of generals will prefer to stop short of their objective rather than risk approaching it too closely and why those with high courage and an entertaining spirit will often overshoot it and fail to attain their purpose. Only the man who can achieve great results with limited means has really hit the mark." The Americans did this at Midway and Guadalcanal.
 - 154. Wood, Japanese Military Strategy, 7.
 - 155. Ibid., 93.
 - 156. Overy, Why the Allies Won, 37.
 - 157. Fuchida, Midway, 146.
 - 158. Van der Vat, Pacific Campaign, 223.
 - 159. Griffith, Battle for Guadalcanal, 86-87.
 - 160. Frank, Guadalcanal, 606.
 - 161. Griffith, Battle for Guadalcanal, 129.
 - 162. Groom, 1942, 339.
 - 163. Frank, Guadalcanal, 81.
 - 164. Gailey, War in the Pacific, 207.
 - 165. Ibid., 321.
- 166. Frank, *Guadalcanal*, 120. The Battle of Savo Island on the night of 8–9 August 1942 resulted in the sinking of four Allied cruisers: *Canberra*, *Vincennes*, *Astoria*, and *Quincy*. The destroyer *Jarvis* was also crippled and the cruiser *Chicago* heavily damaged. The Japanese force suffered only light damage in the exchange. The Japanese incurred 214 casualties to the Allied total of 1,777. (pp. 102–23).
 - 167. Ibid., 121.
 - 168. Halsey and Bryan, Admiral Halsey's Story, 131.
 - 169. Wood, Japanese Military Strategy, 77.
 - 170. Bergerud, Fire in the Sky, 424.
 - 171. Van der Vat, Pacific Campaign, 245.
 - 172. Sakai, Caidin, and Saito, Samurai!, 89.
 - 173. Bergerud, Fire in the Sky, 570.
 - 174. Dunnigan and Nofi, Victory at Sea, 240.
 - 175. Bergerud, Fire in the Sky, 670.
 - 176. Frank, Guadalcanal, 611.
 - 177. Griffith, Battle for Guadalcanal, 179.
 - 178. Ugaki et al., Fading Victory, 319.
 - 179. Cook and Cook, Japan at War, 261.
- $180.\$ Ibid., 126– $27.\$ By the end of the war, according to recruiter Debun Shigenobu, even Japanese mayors and assemblymen were called up to serve in the armed forces.
- 181. Ibid., 192–93. Somewhere between 670,000 and 1,000,000 Koreans toiled in Japan's mines and construction sites by the end of the war.
- 182. Ibid., 403. Cook records 4.3 million in Japan, 3.5 million in Asia and the Pacific, which included the 1.1 million posted to China and Manchuria.

- 183. Hoyt, Carrier Wars, 129.
- 184. Dunnigan and Nofi, Victory at Sea, 256.
- 185. Ibid., 256.
- 186. Costello, Pacific War, 501-02.
- 187. Ibid., 554–55.
- 188. Overy, Why the Allies Won, 43.
- 189. Dull, Battle History, 273.
- 190. Hoyt, Carrier Wars, 216.
- 191. Cook and Cook, Japan at War, 171.
- 192. Overy, Why the Allies Won, 224-25.
- 193. Dunnigan and Nofi, Victory at Sea, 61.
- 194. Wood, Japanese Military Strategy, 30.
- 195. Overy, Why the Allies Won, 220.
- 196. Cook and Cook, Japan at War, 138.
- 197. Gailey, War in the Pacific, 311.
- 198. Van der Vat, Pacific Campaign, 249.
- 199. Bergerud, Fire in the Sky, 347.
- 200. Van der Vat, *Pacific Campaign*, 319. The B–29 could fly at 360 miles per hour, 36,000 feet altitude, with a 3,250-mile range (with half a load of bombs). Its bombing capacity included 20,000 lbs. carried internally.
 - 201. Overy, Why the Allies Won, 296.
 - 202. Ford, Rosenberg, and Balano, Admirals' Advantage, 12-13.
 - 203. Spector, Eagle against the Sun, 302.
 - 204. Wood, Japanese Military Strategy, 54.
 - 205. Kahn, Codebreakers, 594.
 - 206. Van der Vat, Pacific Campaign, 269.
 - 207. Ford, Rosenberg, and Balano, Admirals' Advantage, 17.
 - 208. Bergerud, Fire in the Sky, 675.
 - 209. Kahn, Codebreakers, 584.
 - 210. Van der Vat, Pacific Campaign, 261.
 - 211. Gailey, War in the Pacific, 308.
 - 212. Spector, Eagle against the Sun, 421-22.
 - 213. Wood, Japanese Military Strategy, 47.
 - 214. Spector, Eagle against the Sun, 276-78.
 - 215. Ibid., 298.
 - 216. Gailey, War in the Pacific, 301.
 - 217. Spector, Eagle against the Sun, 253.
 - 218. Gailey, War in the Pacific, 345.
 - 219. Van der Vat, Pacific Campaign, 342.
 - 220. Spector, Eagle against the Sun, 431-36.
 - 221. Costello, Pacific War, 500-01.
 - 222. Ibid., 547.
 - 223. Gailey, War in the Pacific, 445.
 - 224. Ibid., 261.
 - 225. Van der Vat, Pacific Campaign, 328.
 - 226. Gailey, War in the Pacific, 372.
 - 227. Hart, History of the Second World War, 689-90.

- 228. Morison, Two-Ocean War, 489.
- 229. Dull, Battle History, 341.
- 230. Costello, Pacific War, 514-15.
- 231. Spector, Eagle against the Sun, 310-11.
- 232. Wood, Japanese Military Strategy, 48.
- 233. Van der Vat, Pacific Campaign, 332.
- 234. Wood, Japanese Military Strategy, 78.
- 235. Van der Vat, Pacific Campaign, 355.
- 236. Gailey, War in the Pacific, 364.
- 237. Wood, Japanese Military Strategy, 88-89.
- 238. Sakai, Caidin, and Saito, Samurai!, 235.
- 239. Van der Vat, Pacific Campaign, 260.
- 240. Overy, Why the Allies Won, 126.
- 241. Wood, Japanese Military Strategy, 31.

Chapter 4

Conclusion

The disparate characteristics of the two wars studied demand a comparison of the hierarchy of elements underlying shifts in strategic initiative. Comparison of the two transition points in which initiative fell into dispute and comparison of the two points in which initiative finally changed hands will prove especially revealing. A final comparison of the overall rank order of the elements in each historical example should prove similarly educational.

If a nation can stave off defeat in an opening campaign, what matters most is not who possesses the strategic initiative at the beginning of the war, but who has it at the *end* is the most obvious, and perhaps most important, insight to be gleaned from these studies. Underlying this truth is the finding that an advantage in strategic acumen was the most significant contributor to the efforts of both the Soviets and the Americans to wrest the initiative from their opponents. Both recognized and grasped opportunities, despite the commensurate risks involved, to fight important battles whose outcomes had positive, strategic consequences. In each case, surprise was a critical element in gaining this advantage. The Moscow counteroffensive was audacious, although its ill-advised expansion to a general offensive overreached Soviet capabilities. The American plan at Midway proved bold but more reasonably calculated.

In both examples, intelligence proved to be the key enabler of superior acumen. Soviet advantages at the Moscow transition point were limited. They did enjoy a slightly better appreciation of reality than the Germans, but not to the extent that the Americans did over the Japanese at Midway. Nevertheless, their more accurate awareness of the situation enhanced Soviet judgment and enabled them to bring about surprise. Intelligence at the Midway transition point was superb, allowing the American perception to match reality, while denying the same to Japan. These advantages helped produce a better plan for the battle and again enabled the achievement of surprise.

Examination of resources and operational methods reveals noticeable differences between the Soviet and American experiences. The Soviets held resource superiority around Moscow in 1941, but the United States was inferior in strategic resources at the Battle of Midway. Operationally, the reverse was true; the United States bested Japan, while the Germans were superior to the Soviets. Tactically, both Axis nations were better than their Allied foes. Nevertheless, the outcome was the same: initiative fell into dispute.

This contrast requires further analysis. At the first transition points, the Soviets held a moderate edge in strategic acumen and smaller advantages in intelligence and resources, while the Germans held a moderate operational and tactical superiority. The United States held large advantages in strategic acumen and intelligence as well as an edge in operational method to Japan's significant resource advantage and small tactical superiority. The smaller Soviet edge in resources, combined with its other advantages, offset their operational and tactical inferiority, while Japan's lackluster strategic acumen, intelligence, and poor operational method undermined its advantages in resources and tactics. At Midway, the Americans achieved resource parity in the critical element of aircraft—caused by Japanese decision making and operational methods that dispersed their carrier force. This comparison reveals that the elements of the strategic initiative paradigm are highly interactive. It also illustrates that resources and operational methods may potentially supplant each other in the hierarchy of significance.

We must also compare the transitions of the two experiences from disputed initiative to the erstwhile defender's attainment of initiative. The Soviets had multiple advantages over Germany at the close of the Stalingrad campaign. They held a large edge in strategic acumen, demonstrating vastly superior planning, deception, and surprise. The Germans retained only a very slight operational edge. Similarly, at Guadalcanal the United States held significant advantages over Japan in all categories except resources. These advantages were less pronounced than in the Russo–German experience. Thus, strategic acumen proved the most significant contributor to the shifts of strategic initiative in both cases.

In assessing the shifts from the second to the third phases of both wars, intelligence retained its position as the second-most significant contributor to and determinant of strategic initiative. By the time of Stalingrad, the Soviets had developed a better picture of the situation than the Germans; and they materially improved their own security operations. At the end of the Guadalcanal campaign, the Americans had clear intelligence superiority over the Japanese. Their understanding of the situation towered over that of their Asian foe, and their security measures contributed to Japan's lack of situational awareness. Once again, knowledge proved critical to prudent decision making and judgment.

There was also a diversion between the relative significance of resources and operational and tactical method between the two examples. At Stalingrad, the Soviets held a large resource advantage but were marginally inferior to the Germans operationally and tactically. The reverse was true between the Americans and the Japanese. The Americans held a significant operational and tactical edge, but the Japanese held a slight resource advantage after Guadalcanal. Nevertheless, the outcomes were similar, with the Soviets and the Americans both seizing strategic initiative and holding it for the remainder of the war. Why the difference? The German operational and tactical advantages at Stalingrad were razor thin. In some instances, such as urban combat, the Soviets were superior. Thus, Soviet resource superiority proved critical. On the other side of the globe, the significant operational and tactical superiority of the Americans undercut the Japanese edge in resources.

The overall hierarchy of the elements in both conflicts was generally parallel. Strategic acumen ranked first, followed by its supporting element, intelligence. In Russia, resources and operational and tactical method finished a very close third and fourth, respectively. Operational and tactical prowess seems to have played a more critical role in the Pacific than it did in Russia, surpassing resources for the third rung in the hierarchy. Overall, however, resources placed third, with operational and tactical methods placing fourth.

The rank ordering of the four elements makes a certain amount of theoretical sense. There is a clear demarcation between strategic acumen and intelligence on the one hand, which correspond to wisdom and knowledge, and resources and operational and tactical methods on the other, which correspond to capacity and techniques. Wisdom and knowledge exist in the realm of thought, and capacity and technique exist in the realm of action. Many implications flow from this correlation.

Strategic acumen consistently ranked first because of its relationship to the other elements and its existence in the realm of thought and conception. Wisdom in war requires the knowledge given by intelligence, but it also requires an understanding of one's own capacity for war and one's own abilities in war. Hence, intelligence, resources, and methods are factors the strategist must consider. Consistently sound judgment depends on a proper understanding of all three subordinate elements. Such an understanding is easier to describe than to achieve. Fortunately, a country at war does not have to achieve perfection; it must only achieve a relative advantage. But, the greater the advantage, the greater the payoff rings true.

The second mental component is knowledge, or intelligence. Knowledge is critical to proper judgment. Without it, decisions are but a guess. However, knowledge is subordinate because the truly gifted can make up in intuition what they lack in factual awareness. Thus, intelligence is a foundational element of strategic acumen.

Resources, which ranked third in our hierarchy, delineate the transition to the more tangible elements. They are the currency of war. Accumulation and expenditure of resources is required to achieve one's aims. Without men and equipment, war simply cannot be waged. Resources, however, do affect the other categories. The strategist must understand what is available for expenditure and decide where and when to expend it. The more a combatant has available, the more options the combatant enjoys. Thus, resources can either ease or complicate strategic dilemmas. Similarly, resources, including both their number and quality, affect the operational and tactical methods of the party in question. As former Secretary of Defense Donald Rumsfeld once famously remarked, nations are compelled to fight with the military forces they have. Thus, resources potentially provide flexibility or restraint at all levels of war.

Operational and tactical methods challenge resources for third place in the hierarchy, but generally seem to fall just short of the influence material richness or poverty exert. In the Russo-German War, Soviet resource advantages at both transition points proved critical to the shifts in initiative. Nevertheless, after the Battle of Moscow, Germany's operational and tactical superiority limited the Red Army to disputing the initiative, rather than seizing it. The opposite was true in the Pacific. American operational superiority was critical to placing the initiative in dispute, while Japanese resource superiority ensured the Americans could not immediately seize the initiative when it became disputed. The Americans, however, did seize the initiative at Guadalcanal while still suffering from resource inferiority. One explanation for this difference is in the geographic characteristics of the two theaters. Logistics were of vital importance in both wars, but the Pacific's breadth and the maritime nature of the war fought there made logistical support significantly more difficult. One might be able to use rail, roads, or barges to supply Stalingrad; but there was only one major way to sustain Guadalcanal; that way, shipping, had to traverse thousands of miles of ocean, often vulnerable to submarine or air attack. Therefore, raw numbers of resources told only a partial story. Thus, the import of operational and tactical method was enhanced in the vastness of the Pacific and closely rivaled that of resources. Yet the general observation stands: as long as a combatant performed adequately tactically and operationally, any advantage in that arena could be offset by more important advantages in the other three elements.

In sum, both the Russo-German War and the Japanese-American War demonstrate that while resources and operational and tactical method are important, strategic acumen and intelligence exert noticeably greater influence over strategic initiative in a modern, conventional war. Japan and Germany executed very well at the operational and tactical levels during the beginning of and well into their wars, but Allied advantages in the other areas turned the tide and eventually decided the issue.

Areas for Further Study

The historical examples studied here clearly point to the need for further investigation. Both studies correspond to a specific era and to conventional war, albeit in maritime and land-centric theaters. A greater understanding of the concept of strategic initiative requires broader analysis.

The scale of the war investigated may influence the underlying precepts of strategic initiative. Geography played a key role in both these wars. The breadth of the Soviet Union resulted in a land campaign of unprecedented size. German successes against smaller, less populous nations in Europe stand in stark contrast to Operation Barbarossa. The vast expanses of the Pacific also produced a long war and effectively shielded, for a time, the homelands of both major combatants. It may be that in wars confined to smaller areas or of shorter duration, the hierarchy of elements fluctuates.

The character of the war in question may also influence strategic initiative. These were conventional wars. The state-of-theart forces of two or more nations vied for victory against similar adversaries. Strategic initiative and the influence of its underlying precepts may exhibit decidedly different characteristics in irregular conflicts.

Time may also imply changes. These examples from World War II tell us about the nature of strategic initiative and shifts therein in the middle of the twentieth century. To obtain greater confidence in the dynamics of strategic initiative over time, the chronological breadth of study must be expanded. Industrialization is a fact in the modern era. Analysis of conflicts from the pre-industrial age may well exhibit substantially different influences on shifts in strategic initiative.

There is also room for more in-depth investigation of the differences between a land-centric war and a maritime conflict. The potential for maneuver in a war in which the sea plays a large role may increase the import of operational and tactical methods. Whether this was unique to the Pacific in World War II or a common facet of war in a maritime theater warrants additional study.

Strategic air campaigns may provide another venue for analysis. The European air war from 1939 through 1945 could provide one example. The North Atlantic Treaty Organization's Kosovo campaign of the 1990s could provide another. The air war over China during World War II may also be worth consideration. The fluid nature of air campaigns will probably make

the concept of initiative more difficult to define and analyze; but this challenge would be worthy of addressing.

Conventional wisdom views Allied resource dominance as the ultimate arbiter of victory in World War II. It is often presumed that Soviet masses and American industrial might were predestined to overcome Germany's and Japan's military machines. This study of strategic initiative sharply challenges such an interpretation. Possession of initiative at the end of the war proved critical in both examples. But resources ranked only third in the hierarchy of elements that underlie strategic initiative. There is no doubt that resources are essential to the conduct of war. Similarly, there is no doubt that a nation with an overwhelming resource advantage may enjoy a significant edge in modern, conventional war, even if lacking in the other elements. Examples such as the Soviet victory in the Russo-Finnish War of 1939–40 seem to validate this assertion. But in a conflict lacking such a wide disparity in resources, strategic acumen supported by good intelligence frequently overcomes brute strength. Both the Soviets and Americans eventually fielded huge military machines that helped them end the war. But, they both started down the path to victory and were winning the war before they accumulated such overwhelming power.

Thus, the burden of these two cases is clear. A four-fold hierarchy of superior wisdom, knowledge, capacity, and technique drives shifts in strategic initiative in modern, conventional war.

Note

1. Schmitt, "Iraq-Bound Troops Confront Rumsfeld," *New York Times*, 8 December 2004. Rumsfeld, when answering questions about lack of armored protection on US vehicles in Iraq, stated, "You go to war with the army you have, not the army you might want or wish to have at a later time."

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