



Operational Art and Maneuver Warfare

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In the decade leading up to the codification of the doctrine of maneuver warfare in the Marine Corps, a number of thoughtful officers within the Army devoted a great deal of attention to a phenomenon they called *operational art*. Officers in the Marine Corps joined the conversation, and in 1990, the Marine Corps published *FMFM 1-1, Campaigning*, which was revised in 1997 as *MCDP 1-2*. This effort was critical to the Marine Corps because it occurred at a time when Marine forces were transitioning from being thought of as essentially tactical to being recognized as truly operational formations.

It is true that the theory of operational art is not central to maneuver warfare theory. The two developed essentially in parallel, as different aspects of the broader post-Vietnam Era military reforms. They are indirectly related, however, in that maneuver warfare includes the idea that all leaders must consider how their decisions and actions impact the broader situation and not merely their own immediate situation, which is central to the logic of operational art. This paper provides details on the German, Russian, Soviet, and American efforts to develop a theory of operational art.

German Efforts

From the latter years of the Napoleonic Wars through the early years of World War II, the Prussians and Germans

evidenced attributes of a superb learning organization. Names associated with their tactical and operational innovations are familiar: Gerhard von Scharnhorst, Helmuth von Moltke the Elder, Alfred Count von Schlieffen, and Hans von Seeckt. Only one comes to mind, however, when we think of strategic creativity, Carl von Clausewitz. Herein lies the problem, for as strong as the Germans were tactically and operationally, they were weak strategically. This is crucial because if what an observer declares to be operational art does not link tactical success to strategic goals, create specifically designed units and headquarters, and employ unique operational formations, it is not operational art. As we shall learn, this is the reason Blitzkrieg does not instantiate operational art.

Alfred Count von Schlieffen's study of history led him to conclude that for the German Army to reestablish effective maneuver in modern war the army had to replace:

an arithmetical concept of operations, which added up battles into a campaign, with a dynamic one that developed out of deployment and rolled on, self-sustaining and gathering velocity in a grand enveloping action encompassing the whole European theater of war.¹

His renowned "Schlieffen Plan" focused on continuous movement to overwhelm the enemy—psychologically as much as physically—rather than aiming toward a single war-ending battle. In 1914, this plan, as modified by Helmuth von Moltke

Study of the "Schlieffen Plan," developed between 1905 and 1914, illustrates both German tactical and operational successes and their strategic failures. (Photo credit: U.S. Army Center for Military History.)

the Younger, failed and a 440-mile-wide near-stationary front formed. Maneuver did not return to the Western Front in the following four years of grinding war.

The peace treaties ending World War I severely limited the size of the German Army and the types and numbers of weapons it could possess. Hans von Seeckt, first as the post-war chief of staff and then as chief of the Army Command, set out to study and learn from the recent conflict, and to build a small but highly professional army. He saw the value in an honest examination of the war. He also believed that a cadre of well-trained and well-educated officers and noncommissioned officers would be the basis upon which to mobilize a larger force in the event of war. Seeckt endeavored to isolate the army from larger political and international issues and to re-establish an officer corps with traditional Prussian values. Though he had the loyalty of most officers, there was an opposing faction advocating for greater mechanization, a return to a mass army, and closer ties to the political leadership. While never seen as a formal group, this latter group had noted proponents like Werner von Blomberg, Minister of Defense and later Minister of War. For the most part, the efforts of both groups centered on tactical, training, and technical issues. One notable exception was Ludwig Beck, who in 1933 and 1934 oversaw the writing of *HD-300, Truppenführung*, which was an example of operational thinking, a rarity among German officers of the period.

When Adolph Hitler came to power, he found the views of those in the school advocating for a large, mechanized army more akin to his own ideas. Eventually, he replaced the traditionalists with German officers who tended to focus on the technical aspects of war and saw in the National Socialist movement the means to create the large army they believed the nation needed. Surreptitiously at first and then openly, Germany began to modernize and enlarge its army well beyond the limitations the Allies imposed after World War I. When that army went to war in 1939 and achieved colossal success, observers around the world sought to understand why.

Two schools of thought have emerged on Germany's development of operational art. The first asserts that the German Army made a deliberate attempt to solve the early 20th century's operational and tactical challenges and, in the effort, constructed an operational theory we now know as Blitzkrieg. The second school maintains that the German military simply scaled up its tactical concepts to an operational scale. The first is an intentionally constructed myth that endures to the present day. The second is the historically accurate account, of which too few U.S. military officers are aware.

The myth had its origins in literature that appeared in the early days of World War II, which claimed that the rapid success enjoyed by the Wehrmacht was the result of a radical new form of warfare. The myth grew after the war, largely at the hands of British military theorist Basil H. Liddell Hart who put forth the notion that the Germans had based Blitzkrieg on his ideas. He sought to draw Gen Heinz Guderian into this distorted version of history, which was not difficult as the latter was trying to embellish his own post-war reputa-

tion. Retired Israeli Defense Force BGen Shimon Naveh, writing about an exchange of letters between Liddell Hart and Guderian, states that this correspondence "discloses the fact that Liddell Hart imposed his own fabricated version of *Blitzkrieg* on [Guderian] and compelled him to proclaim it as his own."²

Numerous books in the succeeding years advanced the bogus belief that Blitzkrieg was the product of a deliberate undertaking, an example being Charles Messenger's 1976 work, *The Blitzkrieg Story*.³ The fable was alive and well in 2015, as made evident by articles such as Tal Tovy's "1930's German Doctrine: A Manifestation of Operational Art" whose defense of the claim that Blitzkrieg was the result of deliberate German design rests on the unsupported assertions of Liddell Hart, reiterated by Azar Gat in *British Armour Theory and the Rise of the Panzer Arm*, and on Guderian's self-serving memoir written eight or nine years after the events in question occurred.⁴ Gat obviously changed this view, for he

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wrote later in *The History of Military Thought*: "Only recently have scholars begun to realize that the famous 'Blitzkrieg' was not developed before the war in any formal or orderly manner, indeed, was not even a German term but one created by foreign media."⁵

Matthew Cooper, in *The German Army 1933–1945*, in 1978 wrote flatly that "*Blitzkrieg* is a myth. It is a word devoid of any meaning, having substance not in fact, but in fiction, serving only to mislead and deceive."⁶ German historian Michael Geyer, arguing that Blitzkrieg was not a new concept, declares:

The core of these operations did not consist in any particular use of new means of warfare, but in a kind of operational opportunism that knew no pre-set and standardized methods, only the fullest possible exploitation of success with all available means in the pursuit of the ultimate goal of overthrowing the enemy by breaking the will of its leadership. ... It was the opposite of doctrine.⁷

This line of argument bears attention as a corrective to the emphasis that many military theorists placed, and continue to place, on the German contribution to operational art.

In summary, the German military scaled up the lessons it learned during World War I as its army endeavored to break the stalemate on the Western Front with infiltration tactics. It married these emerging tactical concepts to new weapons and equipment—tanks, airplanes, and radios, which the internal combustion engine and the vacuum tube made

possible. However, the Germans missed the essential logic of bridging from strategic goals backward to the tactical actions that, properly assembled in time, space, and purpose, would facilitate achievement of those goals. Moreover, in their failure to create a comprehensive operating concept, the Germans lost sight of the importance of intelligence and logistics, a shortcoming in capabilities that proved their undoing in World War II. Finally, because they did not identify the need to integrate the battlefield from the enemy's strategic rear to the opposing front lines, their operations lacked coherence.

Americans, in the late 1970s and 1980s, studied closely the German military successes, but they did so in the context of a highly articulated, theoretically developed model presented by their Cold War rival: the Soviet Union.

Russian and Soviet Efforts⁸

From the end of the Russo-Turkish War until the outbreak of World War I, Russian military thinkers wrestled with the problem of how to conduct military operations over greater distances with increasingly larger and better-equipped forces. One authority writes of this period:

Between 1878 and 1914, the Russians redefined their understanding of operations and of their preparation and conduct to produce a concept that was either linked to, but theoretically and practically distinct from, strategy or tactics. ... It is to these developments and their consequences that the modern concept of Soviet operational art owed its origin.⁹

The most prominent intellectual during this era was Genrikh A. Leyer (Leer in some texts) who exercised great sway on Russian military thought until after the Russo-Japanese War of 1904–1905. His orientation came from the Napoleonic paradigm and a belief in scientific laws, which proved to be obstacles to new ways of thinking about operations. Countering his thoughts were those of Polish banker Jan Gotlib Bloch, who first saw the linkage between the military front and the civilian rear, and those of Hans Delbrück, who introduced the idea of strategies of annihilation and attrition.¹⁰ (See “Maneuverist No. 11,” *MCG*, Aug21, for an explanation of Delbrück's flawed interpretation of these purported strategies.)

The debacle of the Russo-Japanese War gave rise to a group of “realists” known as the “Young Turks” who sought ways to achieve mass and mobility with a modern army while retaining control. Among these were:

- Nikolay P. Mikhnevich who showed some understanding of war as an art form.
- Aleksandr A. Neznamov who favored maneuver with a concentration of firepower, decisive initial operations, and the use of covering forces.
- Aleksandr A. Svechin who made sober calculations on offense versus defense, introduced the “waiting operation,” saw the importance of meeting engagements, and most importantly, introduced the term and early concepts of operational art.

These advanced concepts had little impact, however, on the way the Russian Army fought in World War I.¹¹ In the aftermath of World War I and the Russian Civil War, two opposing schools of thought arose. In one camp were Leon Trotsky

and Aleksandr Svechin, who argued for concepts based on a militia system, priority of the defense, and reliance on attrition in what they expected to be a war that was protracted but limited in intensity and geographical scope. Trotsky feared doctrine would become dogma before the Soviet military fully grasped the lessons of the past two wars. Svechin introduced the idea of a linked front and rear and opposed the idea deep battle. In the other camp were Mikhail V. Frunze, Red Army commander in the Civil War, Mikhail N. Tukhachevskii, Vladimir K. Triandafillov, and Georgii S. Isserson. Frunze proposed a “unified military doctrine,” which joined political and military thought. Tukhachevskii was a proponent of deep operations and combined arms mechanization. Triandafillov wrote on deep operations and unification of front and rear. Recent scholarship places Isserson as the foremost Soviet operational theorist, especially for his authorship of the 1933 *Fundamentals of Deep Operations*, which along with Svechin's 1926 *Strategy* codified the concepts of operational art.¹² The intellectual ferment that these two schools of thought created proved beneficial in the end because it forced proponents to study deeply rather than to assert their ideas without historic or analytical evidence—an unfortunate trait of much contemporary American military thought.

The Stalinist purges of 1937 and 1938 halted further development of operational art. The dire conditions the Soviets faced in 1939 and 1940 caused them to work feverishly to bring back what they had so foolishly thrust aside two years earlier, but it took until 1943 before Soviet fielded forces could execute the concepts in a rudimentary form.¹³

The Soviets came out of World War II with a comprehensive and cohesive operational doctrine. Nonetheless, they began examining the performance of their forces during the war and evaluating that doctrine against the postwar political and military situation. They concluded they needed to change the army's force structure, creating new combined arms armies. It was also during this period that the Soviets created what we know today as deep battle and deep operations, both enabled by mobile groups. Soviet thinkers soon turned to the challenges of an atomic battlefield and reorganized their mechanized armies into more agile formations while retaining the concept of operational maneuver. In 1960, the Soviets deemed that the threat of nuclear weapons demanded yet another change of the army's force structure as well as a new doctrine. They reduced the size of their ground forces and lessened the number of soldiers and weapons in maneuver units while creating and emphasizing the importance of strategic nuclear forces. Operational art took a backseat to strategic concerns. As the Soviets neared parity with the United States in nuclear weapons and observed the latter's adoption of a strategy of flexible response, they returned to the concept of operational maneuver, strengthening it with the introduction of operational maneuver groups.

Marines can gain insights on this important period by reading any number of the multitude of books and pamphlets on Soviet operational art authored by retired Army COL David M. Glantz. A good place to begin is with his “Soviet Operational Art Since 1936: The Triumph of Maneuver

Warfare” from *Historical Perspectives of the Operational Art*.¹⁴ Condoleezza Rice’s “The Making of Soviet Strategy” in *Makers of Modern Strategy* also provides a good overview.¹⁵

In its final form, Soviet operational art answered the operational challenge with a concept that integrated several distinctive solutions. First among these were new types of operations: *deep battle* that saw units fighting their way to the rear of an enemy’s battle area, *deep operations* that brought operational maneuver groups into an enemy’s strategic rear, and *successive operations* that forced an enemy to face continuous battle. Massive column formations and the echeloning of formations facilitated these operations. To control these large formations, the Soviets developed new organizations to exercise command and control (C2), the *Stavka* or Unified Supreme Headquarters, and fronts or army groups. C2 would be detailed and centralized. To conduct maneuvers, the Soviets formed linear holding groups, columnar shock groups, forward detachments, mobile groups, and operational maneuver groups. To manage forces across vast areas, the Soviets created theaters of war and linked the strategic rear to the tactical front. At a macro level, operational art provided the bridge from strategy to tactical actions, generated tactical shock with the breach of an enemy’s linear defenses, and sought operational shock (a form of systemic disruption) vice attrition with penetration to an enemy’s vital rear area.

American Efforts

The Americans who planned for and led the Nation in its fight against the Axis Powers in World War II proved to be adept strategists despite a lack of any notable previous experience. They developed a global strategy, supporting campaigns, and numerous operations that the U.S. military and its Allies prosecuted in two major theaters—the European and the Pacific—and across several other theaters to include the Mediterranean, North Africa, and Southeast Asia. In the larger theaters they organized subordinate fronts and areas, as examples the Pacific Ocean Area and the Southwest Pacific Area. These civilian and military leaders of America’s “greatest generation” imagined and then created the plans that moved a strategic vision through the campaigns, operations, battles, and engagements that brought that vision to fruition.¹⁶ Americans proved particularly skilled in logistics and intelligence. Although it is unlikely they were aware of or used the Soviet-invented term, operational art, as the means to carry their strategy into tactics, that term covers much of what they did in a little more than three-and-a-half-years of war.

Surprisingly, five years afterward in 1950, this mastery of war had faded when the United States, as part of a United Nations effort, fought to save the Republic of Korea from the aggression of its northern kin, the Democratic People’s Republic of Korea. A decade and a half later, any remnant of mastery was gone when the United States went to the aid of the beleaguered Republic of Vietnam. The U.S. government had no strategy worthy of the name during the Vietnam War, and the war’s seventeen “campaigns” served only to mark dates between significant events. As a result, the U.S.

military fought battle after battle—never refusing to engage the enemy—without a meaningful strategic and operational framework. As has frequently been noted, it won every battle, sometimes at great cost, without winning the war.

A number of U.S. military officers who served in the Vietnam War and remained on active duty vowed to learn from the United States’ all too-evident shortcomings and to take actions that would ensure the nation never repeated its mistakes in a future war. They were severely disillusioned with the doctrine taught during their professional military education. This was particularly true of the junior officers—the lieutenants, captains, and majors. Under the stewardship of a handful of similarly disillusioned senior mentors, a small group of these officers undertook to reform both doctrine and professional military education from 1975 to 1990. Though their labors were initially disparate, the products they produced eventually merged into two powerful and overlapping warfighting concepts, *AirLand Battle* and *maneuver warfare*. In true Kuhnian fashion, a new paradigm replaced an older one.

The mentors—several of the most notable being ADM Stansfield Turner, GEN Donn Starry, and Gen Alfred M. Gray—ensured that a theoretical understanding of war and operations underpinned their apprentices’ work. U.S. military officers returned to the study of history and the classical theorists. As a result, Clausewitzian theory and key elements of Sunzian thought informed the fifteen-year-long intellectual renaissance. Early on, these officers recognized that the absence of any means to connect battles to strategy was a critical failing in Vietnam, and they endeavored to return campaigning to U.S. doctrine.

During the tenure of ADM Turner, who assumed the presidency at Newport in 1972, the Naval War College did some



ADM Stansfield Turner’s tenure at the Naval War College saw some of the earliest thinking and writing on strategy, policy, and joint operations. (Photo by U.S. Navy official photo.)

of the earliest work, especially concerning policy, strategy, and joint operations. The College had a junior and a senior course, the former for majors and lieutenant commanders and the latter for lieutenant colonels and commanders. Both courses sought to study military history through the eyes of classical strategists beginning with the Peloponnesian Wars and continuing to contemporary wars. Another portion of the course concentrated on the conduct of naval operations.¹⁷

Motivated by advancements they perceived the Soviets had made while the United States was engaged in Vietnam, as well as the startling results of the Arab-Israeli War of 1973, officers of the Army focused on the emerging ideas of operational art. The 1976 revision of *Field Manual (FM) 100-5, Operations*, introduced the doctrine of Active Defense. This started a doctrinal debate, as critics perceived it focused too heavily on the defense and attrition. This debate proved healthy for the institution, and it continued until a revised version of *FM 100-5* introduced AirLand Battle doctrine in 1982. That manual introduced a new set of terms: the strategic, operational, and tactical levels of war.¹⁸ The impetus for this new construct came from the German Army's use of the terms and a journal article by the influential defense analyst Edward N. Luttwak.¹⁹ Before long, this naming convention and the graphics that briefers created to depict it engendered the idea that the levels corresponded to echelons of command. Questions arose as to what units operated at each level. Was the corps a tactical, an operational, or perhaps even a low-level strategic organization? There were similar questions about what activities fit within each level. Few of the discussions around these issues were productive.

A co-author of the 1982 *FM 100-5*, LTC Huba Wass de Czege, recognized the problem, and when he outlined the 1986 version of *FM 100-5*, he introduced the "structure of modern war" as strategy, operational art, and tactics.²⁰ The manual provided this definition: "Operational art is the employment of military forces to attain strategic goals in a theater of war or theater of operations through the design, organization, and conduct of campaigns and major operations."²¹ This definition of operational art corresponds with that of its originator, A.A. Svechin, who conceived the term in 1922.²² In 2011, Wass de Czege reinforced his conviction on this matter in the online *Small Wars Journal*:

Operational art is not a level of war, or the art of generalship. It is what goes on in the [commander's] mind, the mediating and balancing interaction between his strategic and tactical reasoning.

Wass de Czege went on to explain how the confusion over operational art as a level of war had arisen in the first place:

We doctrine writers of the 1980's inserted operational art as a mid-level of war between tactics and strategy—making it the art of translating the governing strategy into the implementing tactics of the "tactical echelons." And thus, making operational art the province of "campaigning" generals. Because of the way I was conditioned to think then, that strategy was the business of the upper echelons and tactics the business of the lower ones, I miss-translated an idea borrowed from Soviet doctrine about the mediation between strategy and tactics. I



BG Huba Wass de Czege was instrumental in developing the Army's AirLand Battle doctrine. (Photo courtesy Ft. Leavenworth Hall of Fame.)

was then a product of indoctrination in the U.S. Army's War and Command and Staff Colleges. These institutions, and the business schools of the time, taught based on the industrial age organizational model of the head (where strategic decisions are made) and the rest of the body (where tactical decisions implement the strategy). I now believe that, without violating the historical meaning of the terms strategy and tactics, this is a much more useful and natural way to think of the relationship between tactics, strategy and operational art.

In fact, this allows one to close the conceptual gap between our bifurcated way of thinking about warfare between nation states and that between states and armed movements of any kind.²³

The likelihood of putting the levels-of-war genie back in the bottle is slim but worth the try. Among the several reasons is the fact that the tri-level structure has been one of the causes of military officers shunning the study of and participation in strategy as they focused on operations and battles. Antulio J. Echevarria, a noted historian and retired U.S. Army officer, points this out when he writes:

the American way of war tends to shy away from thinking about the complicated process of turning military triumphs, whether on the scale of major campaigns or small-unit actions, into strategic successes. This tendency is symptomatic of a persistent bifurcation in American strategic thinking—though by no means unique to Americans—in which military professionals concentrate on winning battles and campaigns, while policymakers focus on the diplomatic struggles that precede and influence, or are influenced by, the actual fighting. This bifurcation is partly a matter of preference and partly a by-product of the American tradition of subordinating military

command to civilian leadership, which creates two separate spheres of responsibility, one for diplomacy and one for combat ... *the American style of warfare amounts to a way of battle more than a way of war.*²⁴

Another highly respected historian, Hew Strachan, declares that the focus in Clausewitz's *On War* on the aphorism "war is a continuation with an admixture of other means" has caused readers to believe erroneously that this is a statement about the nature of war. In actuality, war's nature "is an act of force to compel our enemy to do our will." This error, he maintains, has contributed to a conflation of policy and strategy in the minds of many current civilian and military leaders. According to Strachan, the conflation has effectively diverted senior military officers from thinking about strategy, thus disconnecting strategy from operations, and in turn precluding conceptual thinking about smaller conflicts.²⁵

We know of no source Marines can turn to that better places operational art in the context of policy, strategy, war, and warfare than the 1986 edition of *FM 100-5*. Commanders and planners will find current joint terminology verbose and confusing compared to the concise language of *FM 100-5*. As an example, compare the definition of operational art in the Army manual—"Operational art is the employment of military forces to attain strategic goals in a theater of war or theater of operations through the design, organization, and conduct of campaigns and major operations"—to the following *Joint Publication 1-02* definition: "The cognitive approach by commanders and staffs—supported by their skill, knowledge, experience, creativity, and judgment—to develop strategies, campaigns, and operations to organize and employ military forces by integrating ends, ways, and means."²⁶ This definition says nothing about tying strategy to tactics and hides the idea of conducting operations behind

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the ends, ways, and means construct. Moreover, it adds words that have marginal utility. What does "supported by their skill, knowledge, experience, creativity, and judgment" add to an officer's understanding of operational art?

To push the argument further, compare the 1986 FM 100-5's definition of strategy, to *Joint Publication 1-02*'s definition. The former: "Military strategy is the art and science of employing the armed forces of a nation or alliance to secure policy objectives by the application or threat of force."²⁷ The latter: "A prudent idea or set of ideas for employing the instru-

ments of national power in a synchronized and integrated fashion to achieve theater, national, and/or multinational objectives."²⁸ Would we expect a nation or its military deliberately to offer an imprudent idea or set of ideas? Even if an idea is imprudent, is it still not a strategy, albeit a poor one? Will the phrase "synchronized and integrated fashion" improve a leaders's understanding of strategy? We remain convinced that Marines will be better off if they are able to place operational art in its larger context and to converse in plain, simple English.

Conclusion

The development of operational theory in the United States was an important outgrowth of the post-Vietnam War military reforms. In the Marine Corps, it was an important adjunct to the development of maneuver warfare theory. Many people inside and outside the military mistakenly believe that the Army and Marine Corps, and later the larger joint community, drew most, if not all, of their ideas about operational art from German ideas worked out in the years leading up to World War II. While Army and Marine Corps leaders certainly showed great interest in German interwar military thought, many of the key operational ideas offered in the 1980s with respect to operational art came from Russian and Soviet literature. The theoretical rigor long associated with operational art mostly stemmed from path-breaking work done by the Soviets after World War I.

Marines wanting to delve deeper into the U.S. military's post-Vietnam intellectual renaissance have several excellent sources regarding the Army and Marine Corps but few for the other Services. For Marines, the most comprehensive view is offered by Ian T. Brown's *A New Concept of War: John Boyd, The U.S. Marines, and Maneuver Warfare*.²⁹ The best overview of the Army's actions is Richard M. Swain's "Filling the Void: The Operational Art and the U.S. Army."³⁰ A useful official document is John L. Romjue's *From Active Defense to Airland Battle: The Development of Army Doctrine 1973–1982*.³¹

Notes

1. Michael Geyer, "German Strategy in the Age of Machine Warfare, 1914–1945," *Makers of Modern Strategy: from Machiavelli to the Nuclear Age*, Peter Paret, ed., (Princeton, NJ: Princeton University Press, 1986).
2. Shimon Naveh, *In Pursuit of Military Excellence: The Evolution of Operational Theory*, (London: Frank Cass, 1997).
3. Charles Messenger, *The Blitzkrieg Story*, (New York, NY: Charles Scribner's Sons, 1976).
4. Tal Tovy, "1930's German Doctrine: A Manifestation of Operational Art," *Military Review*, (Fort Leavenworth, KS: Army University Press, May–June 2015. See also Heinz Guderian, *Panzer Leader*, (New York: Ballentine Books, 1957). (Originally published in German in 1950.) See also Azar Gat, *British Armour Theory and the Rise of the Panzer Arm*, (London: Palgrave Macmillan, 2017).

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

6. Matthew Cooper, *The German Army 1933–1945*, (New York, NY: Stein and Day Publishers, 1978).

7. “German Strategy in the Age of Machine Warfare, 1914–1945.”

8. The spelling of the names of Soviet officers differs among various publications. We have chosen to use those of Richard Harrison in his several books on the Russian and Soviet military.

9. Bruce W. Menning, “The Imperial Russian Legacy of Operational Art, 1878–1914,” in *Historical Perspectives of the Operational Art*, Michael D. Krause and R. Cody Phillips, eds., (Washington, DC: U.S. Army Center of Military History, 2005).

10. Delbrück’s notion of two types of strategies led to much confusion later including within the U.S. military. For a discussion of this issue see *MCG*, Aug 2021.

11. For details on this period, we refer readers to Richard W. Harrison’s “Twilight of Empire, 1904–1917,” chapter 1, *The Russian Way of War: Operational Art, 1904–1940*, (Lawrence, KS: University of Kansas, 2001).

12. See Richard Harrison’s translation of Isserson’s major works, *G.S. Isserson and War of the Future: Key Writings of a Soviet Military Theorist*, (Jefferson, NC: McFarland and Company, 2016); and Kent D. Lee’s translation of Svechin’s *Strategy*, (Minneapolis, MN: East View Information Services, 1992).

13. Richard W. Harrison’s “Twilight of Empire, 1904–1917” from *The Russian Way of War: Operational Art, 1904–1940* and Jacob W. Kipp’s “The Origins of Soviet Operational Art, 1917–1936” from *Historical Perspectives of the Operational Art* are excellent references for this period.

14. David M. Glantz, “Soviet Operational Art Since 1936: The Triumph of Maneuver Warfare,” *Historical Perspectives of the Operational Art*, Michael D. Krause and R. Cody Phillips, eds., (Washington, DC: U.S. Army Center of Military History, 2005).

15. Condoleezza Rice, “The Making of Soviet Strategy” in *Makers of Modern Strategy: From Machiavelli to the Nuclear Age*, Peter Paret, ed., (Princeton, NJ: Princeton University Press, 1986).

16. Michael R. Matheny presents a persuasive case that the American military practiced operational art at a high level in the Second World War in *Carrying the War to the Enemy: American Operational Art to 1945*, (Norman, OK: University of Oklahoma Press, 2011). He contends that the competence exhibited by American officers stemmed from the professional military education they received in Army schools and colleges during the interwar years. I believe a similar case exists for Navy and Marine Corps officers and the lessons taught by Naval War College instructors during this same period.

17. The remaining third addressed the Planning, Programming, and Budgeting System, which links operational requirements to the then Five-Year Defense Plan. The Planning, Programming, and Budgeting System is now the Planning, Programming, Budgeting, and Execution process and the Five-Year Defense Plan is now the six-year Future Year Defense Plan.

18. Headquarters Department of the Army, *U.S. Army Field Manual (FM) 100-5, Operations*, (Washington, DC: August 1982). The co-authors of

this manual were Lieutenant Colonels Huba Wass de Czege and Leonard Donald Holder, Jr.

19. John L. Romjue, *From Active Defense to AirLand Battle: The Development of Army Doctrine 1972–1982*, (Fort Monroe, VA: U.S. Army Training and Doctrine Command, June 1984); and Edward N. Luttwak, “The Operational Level of War,” *International Security*, Winter 1980/82, 6179.

20. *FM 100-5, Operations*. LTC Richard H. Sinnreich joined the co-authors of the 1982 edition of this manual in writing the 1986 edition.

21. *FM 100-5*.

22. Jacob W. Kipp, “General Major A.A. Svechin and Modern Warfare: Military History and Military Theory” in Aleksandr A. Svechin’s *Strategy*, (Minneapolis, MN: East View Information Services, 1991, a translation of *Strategiia*, Moscow: Voennyivestnik, 1927).

23. Huba Wass de Czege, “Thinking and Acting Like an Early Explorer: Operational Art is Not a Level of War,” *Small Wars Journal*, (March 2011), available at <http://smallwarsjournal.com>.

24. Antulio J. Echevarria II, *Toward an American Way of War*, (Carlisle, PA: U.S. Army War College Strategic Studies Institute, March 2004).

25. Hew Strachan, *The Direction of War: Contemporary Strategy in Historical Perspective*, (Cambridge: Cambridge University Press, 2013). For additional discussion on this issue see, Paul K. Van Riper, “From Grand Strategy to Operational Design: Getting it Right,” *Infinity Journal*, (Fall 2014), available at <https://www.infinityjournal.com>.

26. Office of the Joint Chiefs of Staff, *Joint Publication 1-02, Department of Defense Dictionary of Military and Associated Terms*, (Washington, DC: November 2010).

27. *FM 100-5*.

28. *Joint Publication 1-02, Department of Defense Dictionary of Military and Associated Terms*.

29. Ian T. Brown’s *A New Concept of War: John Boyd, The U.S. Marines, and Maneuver Warfare*, (Quantico, VA: Marine Corps University Press, 2018).

30. Richard M. Swain, “Filling the Void: The Operational Art and the U.S. Army,” *The Operational Art: Developments in the Theories of War*, B.J.C. McKercher and Michael A. Hennessy, eds., (Westport, CT: Praeger, 1996).

31. John L. Romjue, *From Active Defense to AirLand Battle: The Development of Army Doctrine 1973–1982*, (Fort Monroe, VA: U.S. Army Training and Doctrine Command, June 1984).

