PIERCING THE VEIL
OF OPERATIONAL ART

by
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Since the term “operational level of war” was added to the US Army’s lexicon with the 1982 edition of Field Manual 100-5, Operations, many soldiers, scholars, and other students of war have struggled to understand it. Attempts to define or describe it, to show its linkage to strategy and tactics, or simply to describe the activities which take place there have been frustrating intellectual exercises. These efforts have been at times difficult, but they have strengthened students, scholars, and the Army professionally. Even now we see the other services, as well as many of our allies, joining the intellectual pursuit to better conceptualize warfare in the modern era.

The May 1986 revised edition of FM 100-5 reflects some of the progress of these discussions both within and outside the Army. In the new FM, the broad divisions of war have been revised to military strategy, operational art, and tactics. This slight change in terms should cause students of war no real conceptual difficulty if we keep in mind that our central concern is with the perspective involved within each of these three divisions.

This article is based on the assumption that certain stumbling blocks have been commonly encountered in pursuing an understanding of these three perspectives of war, and especially in chasing the concept of the operational art. These stumbling blocks include:

• A failure to examine and understand war as a whole before trying to understand its individual parts.

• An inability to distinguish military science from military art and to see how the creative-intellectual process of the commander becomes the linchpin between the two.

• A deficiency in the analysis of most military historical accounts of wars and campaign studies, particularly with respect to military strategy and operational art.

PERSPECTIVES OF WAR

Prussian General Gerhard von Scharnhorst, 19th-century military theorist, reformer, and Clausewitz’s mentor, purportedly said that one must habitually consider the whole of war before its components. Clausewitz expressed the same concern in On War, where he wrote, “But in war more than any other subject we must begin by looking at the nature of the whole; for here more than elsewhere the part and the whole must always be thought of together.”

Clausewitz later amplified this point as follows:

No one starts a war—or rather, no one in his senses ought to do so—without first being clear in his mind what he intends to achieve by that war and how he intends to conduct it. The former is its political purpose; the latter its operational objective. This is the governing principle which will set its course, prescribe the scale of means and effort which is required, and make its influence felt throughout down to the smallest operational detail.
The lesson for us is that war cannot be understood, for planning or execution, without this total view. Concentration on one perspective at the expense of the others can lead to problems or even disaster, as Colonel Harry Summers points out in On Strategy, A Critical Analysis of the Vietnam War. The central thesis of this work is that “a lack of appreciation of military theory and military strategy (especially the relationship between military strategy and national policy) led to a faulty definition of the nature of the war.” Our focus on the “parts” of war, principally from the tactical perspective, caused us to lose sight of the strategic perspective. We failed, in Scharnhorst’s terms, to consider the whole of war before its components. Thus, in hindsight, we pursued a tactical solution to a strategic problem.

Strategic considerations are first and foremost the concern of the National Command Authority, where the responsibility lies for identifying and articulating the purposes of a war and developing the overall strategy to achieve those purposes. National strategy, which we might call the “art of the civilian,” will determine how the elements of national power will be used to secure national objectives. Military strategy, “the art of generals,” is but one part of the national strategy. Military strategy is developed by the Joint Chiefs of Staff, approved by the National Command Authority, and passed in the form of strategic goals or objectives to the various theater commanders. Theater commanders are necessarily concerned and involved with the development of military strategy. Based upon the assigned strategic goals and resources, they must develop theater-specific objectives and a related strategy which will guide their campaigns or major operations in their respective theaters. After the theater commander develops his concept, he and his subordinate commanders fully develop the theater campaign or major operations plan. The theater commander’s intent is visualized through his operational concept, the hub of the campaign plan. The worth of this product is determined only in the plan’s execution.

We know of the confounding characteristics of the nature of war: War is filled with uncertainty. Change is the norm, not the exception. War is not waged with uniform, mathematical precision and intensity. The tempo of operations in theaters rises and falls according to the availability of resources, political factors, and many other variables. The enemy’s center of gravity is elusive. And time is too easily lost and at times decisively so. When the linkage between national strategy and military strategy is unclear, or when the linkage between theater strategy and the execution of that strategy in the form of a campaign (the operational art) is unclear, then war is complicated even further. Clausewitz charged the military leader with keeping the art of war, the nature of war, and policy in perspective:

In its relation to policy, the first duty and right of the art of war is to keep policy from demanding things that go against the nature of war, to prevent the possibility that out of ignorance of the way the instrument works, policy might misuse it.3

As the Joint Chiefs consider their responsibility, their “duty and right,” their task is complicated by the characteristics noted above. They must translate the broad, relatively imprecise policy direction into an effective military strategy for subsequent consideration and approval by the National Command Authority. Once the military

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strategy is approved, the Chiefs must then translate it into strategic tasks so that theater commanders can understand what is expected of them and their commands. This difficult task is crucial, as we saw during the Vietnam War. As General Bruce Palmer points out in *The 25 Year War—America’s Military Role in Vietnam*,

The JCS seemed to be unable to articulate an effective military strategy that they could persuade the commander-in-chief and secretary of defense to adopt. In the end the theater commander—in effect . . . could only view force requirements in a strategic vacuum.6

The student of war must understand the political purpose of the military objective and strategy before attempting to understand or analyze reactions or decisions by the theater commander and his subordinates in the conduct of campaigns. Any campaign-oriented analysis of military operations must be preceded by this top-down view if it is to make sense. Upon taking over as Chairman of the Joint Chiefs of Staff, General John Vessey made the following statement:

Our first priority is war plans. We need to ensure our military plans support our national strategy . . . . It is our job to direct the effort from the top and get clear to-down guidance in the planning process. We must work closely with the CINCs and be sure they receive the planning support they require.7

For a member of the officer corps, looking at war as a whole with a top-down perspective does not come easy; the experience of his earlier years instinctively causes him to look from the battlefield up, yielding a fuzzy picture of war in its totality. To overcome this stumbling block requires a conscious effort by those who would study war.

**SCIENCE, ART, AND CREATIVE INTELLECT**

The second major stumbling block in understanding operational art is an indistinct understanding of the terms military science and military art. Certainly, the three broad categories of war—strategy, operations, and tactics—include elements of both military art and science. Understanding these terms requires one to see the difference between art and science and to distinguish the various levels of military application.

Students of war are understandably more comfortable addressing military science than peering into military art. Here are the words of French artist George Braque ring true: "Art was made to disturb, science reassures."8 Students who delve into military history generally look for what the military commander did in a campaign without gaining a perspective of the larger problem—why he did what he did. What other options were available to him? Looking more deeply, what was the creative-intellectual process that inspired the military commander to settle on the decisions he made? Therein lies the military art.

A dictionary definition of science is "the possession of knowledge through study."9 Art, on the other hand, "is performing actions acquired by experience, study, or observations."10 Art is the ability to apply knowledge through action. Science is knowing; art is doing.

Clausewitz said "all thought is art," and went on in his discussion of the art and science of war to say, "The use of these terms seems still to be unsettled, and . . . we apparently still do not know on what basis we should choose between them." While he emphasized the need to understand both the art and science aspects of war, he was primarily concerned with the art component in his observation that

creation and production lie in the realm of art, while science will dominate where the object is inquiry and knowledge. It follows that the term "art of war" is more suitable than "science of war."

Concerning the object of each, he stated, "The object of science is knowledge; the object of art is creative ability."11
J. F. C. Fuller took another view. In 1926 he argued in *The Foundation of the Science of War* that "to deny a science of war and then to theorize on war as an art is pure military alchemy, a process of reasoning which for thousands of years has blinded the soldier to the realities of war, and will continue to blind him until he creates a science of war upon which to have his art."^11^3

One aspect that seems clear is that military art is more prevalent at the strategic level, where the complexities of war are greater, and military science is more prevalent at the tactical level. At the operational level the two are more evenly applied.

Military art is set apart from other forms of art in that it must be created in an environment where resistance, in the form of friction and moral factors, is ever present. Clausewitz defined friction as "the force that makes the apparently easy so difficult . . . a force that theory can never quite define." To overcome friction requires "that much-admired sense of warfare which a good general is supposed to possess."^13^3

Moral elements, according to Clausewitz, "are among the most important in war. They constitute the spirit that permeates war as a whole . . . . Unfortunately they will not yield to academic wisdom." Clausewitz also tells us that because of the presence of these moral factors in war, war cannot be analyzed on the basis of material factors alone.^14^ A commander in war, particularly a higher commander, seems to be faced with almost insurmountable problems. Decisions are often made on the moment, under pressures of time and circumstance beyond the commander's control. Yet the commander must have an appreciation for what lies beyond the battlefield or theater. He must consider war as a whole; he must understand how his military actions are driven by the political purposes, military strategy, and strategic military objectives; he must consider both the science and the art aspects of war; and he must contend with both moral factors and friction in their environment. And armed with an understanding of these problems, the commander must exercise his educated judgment, maturing skills, and instincts to overcome them and to arrive at his decision, to frame his intent—the fundamental work of the military artist.

It would be nonsense to suggest that on the verge of battle a commander should sit and ponder where science ends, where art begins, and what historical template he might conjure to suit his current circumstances. But it is not nonsense to suggest that if a commander has studied the work of past battle captains, considered what courses have borne success and failure, and developed some appreciation for the distinction between military science and art—then he may enter battle better able to command wisely, better prepared to achieve success.

As students of war dissect a past military operation for lessons to be learned, only to encounter a sticky web of impediments like definitions of military art and science, moral factors, and friction, their search is apt to stall. Perhaps the path through this web lies in the study of the commander himself, the nature of the leader, his environment, and how he used his knowledge (science) and his creative ability (art) to contend with the moral factors, friction, and other intangibles of the moment. How he executed his intention in the form of a campaign, a combination of applied art and science, is worthy of study.

While Scharnhorst was among the first to recognize and objectively analyze the interdependence of the commander's personal qualities (intellect, character, innovativeness, etc.) and his environment (social and political realities in a wartime context), his star pupil, Clausewitz, elaborated on this subject by discussing such aspects as military genius, intellect, creative ability, imagination, and military virtues throughout his work. Baron Colmar von der Goltz, one of the most prominent late-19th-century German military writers, suggested in *Conduct of War* that a thorough study of the psychological aspects of the art of war scattered throughout Clausewitz's works be collected and logically arranged so that their practical value could be brought into military instruction. This challenge was accepted in 1905 by Major General Baron von Freytag-Loringhoven. In *The Power of Personality in War*, he attempted to relate the personality of
the commander to war’s environment as well as to establish a connection with Clausewitz’s thoughts. His efforts tend to focus on what he calls “the higher portions of the art of war.” He begins from the premise that “there is no profession in which training of the personality is so important as that of the soldier.” War is the domain of danger, physical exertion and suffering, friction and uncertainty, where a commander’s strong mind, imagination, and strength of character are the determinants of successful military leadership; and Freytag-Loringhoven attempted to relate his observations from that domain to examples of military history. The essential point of this enlightening work is expressed in its closing paragraph: “The effort to express one’s own personality is not an object in itself; it is merely a means to prepare us for the one thing that measures the value of a man in war—that is, action.”

While contemporary studies and writing concerning the creative, intellectual, and innovative or imaginative side of war are somewhat limited, a well-written and soundly researched book published in 1968, The Art of Winning War, by Colonel James Mrazek, is an admirable exception. Mrazek, with solid credentials as a soldier, took an in-depth look at some of the ideas put forth by Clausewitz and Freytag-Loringhoven. Although the latter is not specifically quoted by Mrazek, parallels between the two authors are apparent. Mrazek’s fascinating work sheds much light on the creative process used by both successful and unsuccessful military leaders. As Freytag-Loringhoven did, Mrazek takes great pains to relate the need to look at the environment in which the commander labored. Mrazek’s work also addresses the broader aspects of the spectrum of conflict, and it discusses the intellectual creativity of leaders in low-intensity conflicts and guerrilla warfare. Mrazek summarizes the thesis of his book as follows:

The idea that obtains the victory is a creative product, and as such it is art. Its fulfillment, execution in battle, is only the external expression of the idea. The military leader, who is the generator of this type of creative idea, is an artist in the truest sense and it is on the battlefield that his talents find supreme expression. Consequently, an understanding of art and intellectual processes and external conditions that lead to the creation of an artist’s idea are essential to an understanding of some of the dramatic accomplishments in war.

If students of war are to bridge the art-science dichotomy in military endeavor, each must attempt to intellectually address and become comfortable with the terms, and must consider the personality and creative-intellectual processes of military leaders. The works by the authors mentioned above can help.

**MILITARY HISTORY**

The third stumbling block on the path to appreciating the three levels of war results not only from many of the written accounts of military history but also from the analysis of that military history. Whether writing or studying military history, students of war have often failed to approach the history of wars and campaigns with a holistic view, without which the various events cannot be placed in proper context. Likewise, they have often approached military history with a view toward finding simple cause-and-effect relationships, without attempting to delve into the creative intellectual processes of commanders and thereby find the reasons behind the historical events.

Professor Michael Howard has written, “The lessons of history are never clear,” and “Wars are not tactical exercises writ large.” He cautions those who study history to be aware that one is studying not always what happened in the past but what historians say happened in the past. With that in mind, Howard suggested three general rules of study which a student of military history should use as a guide if he wishes to avoid its pitfalls:

First, he must study in width. He must observe the way in which warfare has developed over a long historical period. Only
by seeing what does change can one deduce what does not; and as much can be learnt from the great “discontinuities” of military history as from the apparent similarities of the techniques employed by the great captains ... [K]nowledge of the principles of war must be tempered by a sense of change, and applied with a flexibility of mind which only wide reading can give.

Next he must study in depth. He should take a single campaign and explore it thoroughly, not simply from official histories but from memoirs, letters, diaries, even imaginative literature, until the tidy outlines dissolve and he catches a glimpse of the confusion and horror of the real experience . . . .

And lastly, he must study in context. Wars are . . . conflicts of societies, and they can be fully understood only if one understands the nature of the society fighting them. The roots of victory and defeat often have to be sought far from the battlefield, in political, social, and economic factors which explain why armies are constituted as they are, and why their leaders conduct them as they do . . . . Without some such knowledge of the broader background to military operations one is likely to reach totally erroneous conclusions about their nature, and the reasons for their failure and success.21

Martin Blumenson expressed a similar idea:

A proper study of war includes not only the leadership, battles, campaigns, logistics and strategy, but also the political direction of the conflict, as well as influencing social, economic, intellectual, and other forces. To understand the clash of arms, we need to understand the larger context within which it takes place.21

Thus, first, students of war must approach military history with some skepticism. They must make their own determination whether historical accounts have taken into consideration the points made so well by Howard and Blumenson. When encountering authors who haven’t considered these points, students should proceed with caution, and their study should attempt to fill in the blanks through their own research into other sources.

The student of war, like the military historian, is faced with the task of reconstructing an intricate mosaic which has been broken up and from which some parts are gone forever. To try the fragments in likely places and finally discover that those remaining pieces fit together again, gradually reforming the picture, can be a source of immense satisfaction. This effort, although difficult, is the most important of the mental operations that Clausewitz tells us are demanded of the inquirer. He suggested that critical analysis includes the historical investigation and determination of doubtful facts; tracing events to causes, which is genuine critical inquiry; and, lastly, testing the means employed by opposing commanders, which is the higher criticism and involves the allocation of praise or blame.23 Aspiring military artists should seek to master the skills of an informed critic of operational art.

The military history stumbling block is an important one to overcome. It is here, in history, where much of the perspective of operational art must be pursued and obtained. The truths of this perspective are often slippery—some simple, some complex, and some only vaguely visible. As in battle, strength of will and perseverance are required in pursuit of the truths of operational art through historical study. We cannot escape the study of military history even if we wanted to;24 therefore, we must make the best of our efforts. Such analytic historical study will sharpen our judgment, improve our perceptions, broaden our perspective, and provide valuable, albeit vicarious, experiences otherwise not available.25

FINIS

In his book Six Armies in Normandy, John Keegan tells us:

Even higher in the German army’s scale of values than the nurture of the warrior spirit...
in its conscripts . . . stood the cultivation of "operational" talent in their leaders. Operati

tiv is an adjective which does not translate exactly into the English military vocabulary. Lying
somewhere between "strategic" and "tactical," it describes the process of transforming paper
plans into battlefield practice, against the tactical pressures of time which the strategist does not
know, and has been regarded by the German army as the most difficult of the commander's arts
since it was isolated by the great von Moltke in the 1860s. Taught, in so far as it can be
taught, in his famous staff college courses, its traits were eagerly looked for in the
performance of general staff candidates and its manifestation in practice, in wartime, was
rewarded by swift promotion.26

From Keegan's words, we can see that our Army's current effort to come to grips with
operational art is really a new look at an old subject. Not only is it "the most difficult of
the commander's arts" to learn, as Keegan points out, it is just as difficult to teach.
Frustration falls on historians, students, teachers, and mentors as well.

One can't teach genius; one can't instill instinct. But we can study the artistry of great
military commanders. We can closely examine their moves in specific situations, their
wise decisions, and their unwise ones. We can develop and spread through our profession
an appreciation of their application of military art—as distinguished from the
learning of military science—and informed with that appreciation we can become better
commanders and better teachers.

Colonel G. F. R. Henderson, in his seminal work Stonewall Jackson and the
American Civil War, said, "A general in the field literally walks in darkness, and his
success will be in proportion to the facility with which his mental vision can pierce the
veil."27 Students of military history are not unlike the general, since they too walk in
darkness. Overcoming the stumbling blocks in the study of wars and campaigns will help
us "pierce the veil."

NOTES
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2. Carl von Clausewitz, On War, ed. and trans. Michael Howard and Peter Paret
3. Ibid., p. 579.
2032.
10. Ibid., p. 122.
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17. Ibid., p. vi.
18. Ibid., p. v.
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(February 1962), pp. 6-7. (Reprinted in Parameters, 11 [March 1981], pp. 9-14.)
22. Martin Blumenson, "Why Military History? To Analyze the Past, Discover the Present," Army, 25
(February 1975), 35-36.
23. Clausewitz, p. 156.
(October 1978), 136.
27. G. F. R. Henderson, Stonewall Jackson and the American Civil War (New York: Grosset and Dunlap, 1943;