THINKING AT
THE OPERATIONAL LEVEL

by

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Throughout the 19th century, military history, as it was taught in military academies, schools of application, and staff colleges—except those of the Prussian army—stressed the “scientific” study of principles which experienced soldiers such as Napier, Jomini, and the Archduke Charles had deduced from campaigns waged during the Napoleonic wars. Most texts explained these principles in elaborate detail, using ancient as well as modern campaigns to show how they had been successfully applied, on the assumption that “their correct application in theory may easily be acquired by any person of average intellect.” The emphasis clearly was on the universal validity of accepted principles. In the words of Jomini,

Correct theories, founded upon right principles, sustained by actual events of wars, and added to accurate military history, will form a true school of instruction for generals. If these means do not produce great men, they will at least produce generals of sufficient skill to take rank next after the natural masters of the art of war.

Napoleon, one of the greatest practitioners of the operational art, agreed that Jomini would have been excellent for explaining the campaigns of Frederick at the École Polytechnique and the various military schools because his information “would have inspired excellent ideas in these young minds.” But Napoleon did not share Jomini’s emphasis upon principles, even though he frequently alluded to “the principles of the art” in correspondence to his generals. “Genius,” he argued, “acts by inspiration. What is good in one case is bad in another, and the principles must be considered merely as axes by which curves are traced.”

Tactics, the evolutions, the science of the engineer and the artillerist can be learned in treatises much like geometry, but the knowledge of the higher spheres of war is only acquired through the study of the wars and battles of the Great Captains and by experience. It has no precise, fixed rules. Everything depends on the character that nature has given to the general, on his qualities, on his faults, on the nature of the troops, on the range of weapons, on the season and on a thousand circumstances which are never the same.

The Great Captains must therefore serve as “our great models.” Only by imitating them, by understanding the bases for their decisions, and by studying the reasons for their success could modern officers hope to approach them. Napoleon’s most enduring suggestion was the deathbed advice he offered to his son: “Let him read and meditate upon the wars of the great captains: it is the only way to learn the art of war.”

Frederick the Great was another who, like Napoleon, focused attention upon men rather than maxims, stressing the need for a
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commander to view each military situation from the vantage point of his opponent and for the military student to become privy to the thinking process of successful commanders. This had been the advice that Prince Eugene, Marlborough's sidekick and the greatest commander who ever served the Hapsburgs, gave to young Frederick during operations along the Rhine in 1734. Years later, when he had become the foremost general of his day, Frederick urged his own officers, when studying the campaigns of Prince Eugene, not to be content merely to memorize the details of his exploits but "to examine thoroughly his overall views and particularly to learn how to think in the same way."

Obviously this approach was not particularly well suited to military schools for young officers, and both Frederick and Napoleon assumed that to learn the art of war at this level—which to soldiers in the 19th century meant strategy and in recent years have come to call the operational level—involved years of reading and self-study.

In the hands of Carl von Clausewitz, however, a methodology was developed that had a profound influence upon instruction at the Kriegsakademie and, in the words of a standard history of that institution, educated "all of the victorious commanders of the glorious campaigns of our Fatherland."

Unlike most contemporary military writers, Clausewitz did not look to military history for any specific doctrine or "manual for actions." Rather he saw theory as providing the framework for a serious study of campaigns, past as well as present. In his view:

Theory will have fulfilled its main task when it is used to analyze the constituent elements of war, to distinguish precisely what at first sight seems fused, to explain in full the properties of the means employed and to show their probable effects, to define clearly the nature of the ends in view, and to illuminate all phases of warfare in a thorough critical inquiry.

It is difficult to summarize Clausewitz's theory on war in one tidy paragraph, but the major ingredients are implicit in everything that he wrote. War is an act of violence. It is also an act of policy, and strategy is the grand instrument of that policy. Strategy in turn is defined as the use of engagements—that is, of violence—for the object of the war.

Clausewitz saw war as a spectrum of conflict in which there is no logical limit to the application of force. In practice, however, there are many modifications. War is never an isolated act, nor are the results likely to be final. Once at war "the world of reality takes over from the world of abstract thought" because of chance, human nature, and friction—which was Clausewitz's term for nearly every factor that causes things to go wrong.

Clausewitz also stressed the paramount importance of moral factors:

They constitute the spirit that permeates war as a whole, and at an early stage they establish a close affinity with the will that moves and leads the whole mass of force . . . . Unfortunately they will not yield to academic wisdom. They cannot be classified or counted. They have to be seen or felt . . . . If the theory of war did no more than remind us of these elements, demonstrating the need to reckon with and give full value to moral qualities, it would expand its horizon, and . . . condemn in advance anyone who sought to base an analysis on material factors alone.
It follows that theory, to be valid, must not deal exclusively with any particular kind of war, or with war during a specific period in history. Theory must deal with each war and each age on its own terms, and Clausewitz did not even insist that war as it was experienced during the Napoleonic era, when it "attained the absolute in violence" would necessarily recur. Theory must always accommodate itself to change.

In applying this theory to historical studies, Clausewitz employed the methodology described in his chapter on "Critical Analysis," by which he meant "the application of theoretical truths to actual events." The theoretical truths were his observations on the nature of war—war should be an instrument of policy, strategy should be geared to that policy, be prepared for friction, look for the moral factors, etc. If the purpose of theory is in fact to train a commander's mind, then critical analysis tempered with the "theoretical truths" should enable the careful student to recreate, as far as is possible, the thinking process of the commander that preceded a given action.

The man who means to move in such a medium as the element of war, should bring with him nothing from books but the general education of his understanding. If he extracts . . . cut and dried ideas that are not derived from the impulse of the moment, the stream of events will dash his structure to the ground before it is finished. He will never be intelligible to . . . men of natural genius; and least of all will he inspire confidence in the most distinguished among them, those who know their own wishes and intention.

Consequently Clausewitz, in his analysis of the campaigns of Frederick the Great and Napoleon, endeavored to get inside the skin of each while in the process of making decisions, for only when the modern soldier thus understands the motives, the apprehensions, and the problems confronting a successful commander is he able fully to develop his own talents. He recognized that experience alone, even with its wealth of lessons, could never produce a genius such as Newton, but he believed that the experience of others, properly analyzed, "may well bring forth the higher calculations of a Condé or a Frederick."12

Clausewitz did not get lost in the minutiae of battle, but viewed each action from the vantage points of military strategy and national policy. Frederick's campaign of 1760 may have been "famous for its dazzling marches and maneuvers," but "what is really admirable is the King's wisdom: pursuing a major objective with limited resources; he did not try to undertake anything beyond his strength, but always just enough to get him what he wanted." The future commander who perused these pages was not expected to revive Frederick's celebrated oblique order, but Clausewitz obviously hoped that by analyzing Frederick's decisions during the campaign the student might come to appreciate how Frederick manipulated his resources.

His whole conduct of war . . . shows an element of restrained strength, which was always in balance, never lacking in vigor, rising to remarkable heights in moments of crisis, but immediately afterward reverting to a state of calm oscillation, always ready to adjust to the smallest shift in the political situation.13

Similarly, in describing the campaigns of Napoleon, Clausewitz revealed the interconnection between separate tactical actions. Applying his distinctive method of critical analysis, which took into account the decisions and actions of a commander and how these affected subsequent events, Clausewitz examined all possible alternatives that had faced Napoleon in his various campaigns. His purpose was not to second-guess or to pass judgment on Napoleon, but only to recreate, insofar as historical research might permit, the situation as Napoleon must have viewed it and to explore the likely outcome of alternative courses of action. Thus Clausewitz used both theory and history to analyze Napoleon's generalship and to weigh his options. If not all of these possibilities in fact occurred to Napoleon,
they nonetheless remained viable. The purpose was always to force the student to think his way through a military situation.

Through his own critical analysis, Clausewitz effectively used Frederick and Napoleon to help teach later generations of soldiers the need for a strategy that would implement policy and the thought process required in the pursuit of the operational art. The Order of Teaching prescribing the method of instruction at the Kriegsakademie was written by Field Marshal Helmuth von Moltke, who had been a student there during Clausewitz’s tenure as Director.

These lectures, Moltke had cautioned, must not degenerate into a mere succession of unconduted descriptions of military occurrences. They must regard events in their causal connections, must concern themselves with the leadership, and must at the same time bring out the ideas of war peculiar to each age. They will acquire a high value if the teacher succeeds in bringing into exercise the judgment of his pupils. This judgment . . . must never degenerate into mere negative criticism, but must clothe itself in the form of distinct suggestions as to what ought to have been done and decided.  

Similarly, von Moltke’s own history of the Italian campaign of 1859, as it is described by an English military critic,

. . . is a model of this positive criticism. At every stage the writer places himself in turn in the position of the commander of each side, and sketches clearly and concisely the measures which at that moment would, in his opinion, have been the most appropriate. This is undoubtedly the true method of teaching the general’s art, and the best exercise in peace that can be devised for those who have acquired its mastery.

Beginning in 1883 the Historical Section of the German Great General Staff commenced the publication of a series of historical monographs on more recent campaigns “to throw light upon important questions relating to the art of command,” and official histories of earlier campaigns in order to “enrich our insight into the nature of war, and to make possible a profounder and more correct judgment of events, and of the persons concerned in them.” The emphasis was on “the unchanging conditions upon which good generalship depends.”

The Prussian victories over Austria in 1866 and France in 1870 caused soldiers everywhere to study and emulate Prussian military practices and institutions. Many armies even adopted the spiked helmet or pickelhaube, without however paying strict enough attention to the thinking process of those who wore it. A few foreign officers even emulated the critical method first introduced by Clausewitz.

Probably the foremost exponent of this method was Colonel G. F. R. Henderson, an English officer who served for many years on the faculty of the British Staff College. Henderson became disenchanted with the military texts of the day, feeling that most of them stressed principles at the expense of “the spirit of war . . . moral influences . . . (and) the effect of rapidity, surprise and secrecy”:

The methods by which the great generals bound victory to their colours are scarcely mentioned in the tactical text-books; and in Hamley’s “Operations of War” the predominating influence of moral forces is alluded to in only a single paragraph. In short, the higher art of generalship . . . has neither manual nor text-book.

Henderson’s solution was to write a biography of Stonewall Jackson which, instead of outlining campaigns and expounding principles, would describe each situation as he thought Jackson himself would have viewed it and thus focus attention upon the commander’s methods and psychological reactions. His own views on strategy, which today we would consider the operational level, probably colored some of his historical judgments and enabled him to fill in gaps where there was no documentation, but this merely enriched the result as a military text.
And in his *Battle of Spicheren* Henderson followed the Prussian commander through the campaign, developing each situation as it unfolded and frequently posing questions of the reader. Like Clausewitz, Henderson insisted that:

It is . . . possible, by appropriating the experience of others, to find an efficient substitute for practical acquaintance with almost every phase of active service. But if we would make this alien experience our own, it must be dealt with systematically. It is not sufficient to read or to listen to the account of a campaign or battle . . . . To gain from a relation of events the same abiding impressions as were stamped on the minds of those who played a part in them—and it is such impressions that create instinct—it is necessary to examine the situations developed during the operations so closely as to have a clear picture of the whole scene in our mind's eye; to assume, in imagination, the responsibilities of the leaders who were called upon to meet these situations; to come to a definite decision and to test the soundness of that decision by the actual event.17

Only in this way, Henderson maintained, could the intellect be brought into collision with reality.

This was also the advice the late Field Marshal Earl Wavell gave to a class at the British Staff College on the eve of World War II. "The real way to get value out of the study of military history," he insisted, "is to take particular situations, and as far as possible get inside the skin of the man who made a decision and then see in what way you could have improved upon it." Colonel J. F. C. Fuller, one of the foremost early proponents of *blitzkrieg*, put it another way in his initial lecture to a class at the Staff College soon after World War I: "Until you learn how to teach yourselves, you will never be taught by others."18

If the purpose of an exercise or a course is to cultivate *thinking* at the operational level, then the method of Frederick, Napoleon, Clausewitz, Moltke, Henderson, and Wavell is probably still valid. At least it appears to have worked well for them.

**NOTES**


5. Ibid., XXXII, 379.


13. Ibid., p. 179.


15. Ibid., p. 98.

