Truly Learning the Operational Art

JOHN E. TURLINGTON

"For me as a soldier, the smallest detail caught on the spot and in the heat of action is more instructive than all the Thiers and the Jominis in the world." — Ardant du Picq[1]

If operational art is as important to successful warfighting as our leaders and schools say it is, and if operational art is to be learned in the manner that it is now being taught, then I believe, as the saying goes, "You can't get there from here."

There is no criticism intended. On the contrary, the reintroduction, after many years in the closet, of operational art and the concept of an operational level of war points to a renaissance in the Army's attention to warfighting doctrine. Nowhere is the renaissance more pronounced than in the curricula of our staff and war colleges and in the pages of our professional journals. One has only to look at the tables of contents of recent journals to see the proliferation of thoughtful, challenging, and in some cases visionary articles on the subjects of military strategy and doctrine.

Field Manual 100-5, Operations

The seminal work of the revolution in doctrine (some might say evolution, but it does not matter which) is the 1982 version of Field Manual 100-5, *Operations*, the Army's statement of its AirLand Battle doctrine—

how it will fight and win in war. What is revolutionary is the concept of the operational level of war. It is certainly not new in world military history, nor is it new in American military history. But you have to look back more than thirty years to find it, so it is new to the current generation of officers whose rapidly waning warfighting experience is confined to the tactical victories and strategic defeat of Vietnam.

Just what exactly is "operational art"? It is the expertise required of a leader and his staff to fight successfully at the campaign level of war. The 1986 revision of FM 100-5 does a much better job of definition than the 1982 version. It says, in part, that "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."[2] FM 100-5 describes three levels of war—strategic, operational, and tactical. Military strategy is derived from national policy, establishing goals, providing resources, and imposing constraints to secure policy objectives through the application or threat of force. Operational art involves the skillful translation of strategic goals into achievable military objectives and the subsequent planning, positioning, and maneuvering of forces to achieve those objectives. It is the bringing, normally, of field armies and larger forces to bear at the appropriate time and place on the battlefield to impose our will on the enemy. Tactics is the skillful employment of forces, normally corps and lower, to fight those battles at the place and time the operational art has dictated.

Operational art is the link between strategy and fighting battles. It is what gives substance to strategy and meaning to the loss of life and materiel inevitable on the battlefield. It is the highest purely military activity in the three levels of war. It is Alexander the Great in Persia and Hannibal in Italy. It is Genghis Khan in Asia and Gustavus Adolphus at Breitenfeld. It is Frederick the Great at Leuthen and Napoleon at Austerlitz. It is Jackson in the Shenandoah Valley and Moltke at Königgratz. It is Rommel in North Africa and MacArthur at Inchon. All of these great captains conducted campaigns that were, in their time, decisive. All were masters of the operational art.

Operational art is what wins wars and is what the profession of arms is all about. It is an art the citizens of our country pay us, in the interest of national security, to apply with skill in wartime. I do not of course mean to sell short the value of tactics. Without good soldiers, well equipped, well

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led, and well supported in good combat units, skill in operational art will count for nothing. Moreover, in this writer's opinion at least, the ability to fight at the tactical level is this country's strong suit. We have good soldiers who are well equipped and well led. There is room for improvement in all aspects of the tactical level of war, obviously, but on the whole our Army has great tactical strength. It has always been a part of our doctrine, and has always received the most emphasis.

In a recent *Parameters* article titled "Training for the Operational Level," Lieutenant Colonel L. D. Holder says, "Over the years we have watched operational levels of command disappear. Commanders . . . have let our joint training programs slip almost out of existence."[3] Tactical jobs were more desirable than higher-level assignments, and joint operational assignments were treated with disdain by officers with the greatest demonstrated potential. "Our schools have not troubled themselves too much with campaign studies until very lately, nor have we made time for or encouraged professional reading in large unit operations in the officer corps. In sum, we have to recover a lot of ground before we can convert the ideals of doctrine into a real operational capability."[4]

Current Approaches to Teaching the Operational Art

If operational art is as important to winning as FM 100-5 says it is, and if FM 100-5 is "the most important doctrinal manual in the Army"[5] as former TRADOC commander General William R. Richardson claims it is, then surely one of the vital questions facing Army leadership today should be: How do we teach operational art to our officers? True, recent graduates of the staff and war colleges can provide a very good definition of the operational art. Moreover, they can cite the operational principles, which are the same as those for tactics. They can probably cite in some detail the example of MacArthur at Inchon as a classic of the operational art in action. Selected students at the School of Advanced Military Studies get even more on the subject. But the Army correctly recognizes that such schoolhouse history and theory is not enough, and so it encourages self-study. A special Army War College text, titled *Operational Level of War—Its Art* and distributed throughout the Army last year, proffers the following advice: "There are not enough hours in our duty days in our various jobs nor formalized schooling to master the vastness [of the] art of war. Thus, our only recourse must be through a self-education process."[6] Professional reading is the implied principal vehicle for this "self-education" process.

But if the Army's goal is, as it should be, to institutionalize competence in the operational level of war, then the question becomes, Will voluntary participation in some kind of self-education program accomplish the goal? I say no, but let us develop this argument a little further. Assuming for the sake of discussion the best case—that all field-grade officers are

highly self-motivated to teach themselves the real art of the operational level of war, how does the Army propose they go about it? General Richardson says we do it by "thoroughly and systematically searching military history while simultaneously scanning the future for new technology and new concepts."[7] Colonel Holder says we do it "only through mastery of military history and theory." He goes on to add that "the individual responsibility for this development will continue throughout the officer's career."[8] I could not agree more with both of these visionary officers. The disconnect comes between what they say and what the Army is doing.

Toward a Better Approach

The operative words from General Richardson and Colonel Holder are, it seems to me, "systematically searching" and "mastery." Let's return now to the Army War College's special text on the operational level of war and its invitation to master that subject through self-study. Suppose that all field-grade officers spend the prodigious amounts of non-duty time required to study systematically and master this book of 364 pages and all of its future editions. Will the US Army have in, say, five years a group of operational-level officers skilled in the art? The answer I believe is no. We will certainly have a corps of officers who are more widely read and articulate in military matters. Their perspectives will be broader; their depth of understanding and clarity of vision will be enhanced. They will be better officers and even better operators, but they will not have learned, really learned, the operational art. These officers will have studied a mile-wide field to a depth of one inch, maybe a foot. It is my belief, however, that real learning of the art will take place only through inch-wide, mile-deep study.

A dust-covered book found in the Military History Institute will help illustrate my point. The title of the book is *The Franco-German Campaign of 1870*. It is a "source book" printed by the US General Staff School, Fort Leavenworth, in 1922. The book contains over 700 pages of translations of the actual documents, maps, charts, and messages of both the combatants. The material deals only with the planning and execution of movements of corps, armies, and army groups. Tactical material was omitted. With this book, it is possible in a week of intense work to realistically reconstruct the critical opening weeks of the Franco-Prussian War of 1870. It is possible to cast yourself alternately in the roles of the opposing commanders to see the situation as they saw it. You see only the fragments of the often conflicting information available to the commander at the time crucial decisions were made. You know the state of training and morale of your soldiers, their weapons capabilities, your logistic constraints, the capabilities of subordinate commanders. You know the enemy and the terrain. In other words, with work, and a lot of it, you can get inside the mind of the commanders, see the situation about as it confronted them,

and make judgments as to what you should or should not do. The object is to train your intuition and your instincts.

These things cannot be learned just by reading. As anyone who has put together a large jigsaw puzzle can tell you, you cannot find where an obscure piece fits just by "reading" the puzzle picture. You find where it fits by studying the nuances of color, detail, and shape of the piece and the puzzle. After you are well into the puzzle, many pieces are fitted by sheer intuition alone. The more puzzles you do, the quicker your intuition about color, detail, and shape develops.

I did the Franco-Prussian War exercise in about 60 hours. When I finished, I was convinced that if the French had had a commander with even average skill in operational art, at best they could have stalemated the overwhelmingly superior Prussian Army. At worst they could have delayed the Prussians long enough to have mobilized additional forces. Who knows what kind of political forces might have come to play in a long, drawn-out struggle? As it was, the war for all practical purposes was over in four weeks. Emperor Napoleon III had surrendered; the French Army's 300,000 soldiers were casualties, prisoners, or bottled up in fortresses under siege. The course of European history was fundamentally changed, and the stage was set for the great wars of the 20th century.

What would the original Napoleon have done, or, for that matter, what would *I* have done with those 300,000 soldiers? I now know what I would have done. I felt it intensely; I even dreamt about it for weeks after that exercise. It became, surprisingly, a keenly emotional experience. At times I felt like I was no longer a spectator in the war but a participator.

I got the idea for the exercise from Dr. Jay Luvaas's article titled "Thinking at the Operational Level." In it he suggests a methodology for learning the operational art, and, in my view, gives substance to those operative words of General Richardson and Colonel Holder: "systematically searching" and "mastery." He invokes the wisdom of many of the great military captains and thinkers such as Frederick the Great, Napoleon, Clausewitz, and Moltke, and suggests that if it worked for them it "is probably still valid."[9] The essence of the article can perhaps best be described by a quotation he attributes to the English military critic Spenser Wilkinson. Wilkinson is describing Field Marshal Helmuth von Moltke's history of the 1859 Italian Campaign, which was written in 1862 for use at the *Kriegsakademie*—where the German General Staff was schooled. The critic writes that Moltke's history

> is a model of . . . 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.[10]

This quotation, incidentally, comes from Wilkinson's 1890 classic on the German General Staff—*The Brain of an Army*—a book which Elihu Root acknowledged played an important part in the creation of the US Army War College.[11]

Moltke's own words as quoted in the preface to Wilkinson's work are equally instructive. The object of his history of the Italian Campaign is "to ascertain as accurately as possible the nature of the events in Northern Italy during those few eventful weeks, to deduce from them their causes—in short, to exercise that objective criticism without which the facts themselves do not afford effective instructions for our own benefit."[12]

Frederick the Great had similar thoughts. He cautioned his officers not to be content with memorization of the details of a great captain's exploits but "to examine thoroughly his overall views and particularly *to learn how to think in the same way.*"[13]

Thus, it seems to me, there is ample testimony of the great value of intimate study of military history to the professional soldier of today. But let me go further: there is positive danger in *not* studying in this fashion. FM 100-5 contains excellent and well-grounded theory about how to fight. The basic tenets of AirLand Battle—initiative, depth, agility, and synchronization—are set forth. The dynamics of battle—maneuver, firepower, protection, leadership—are described. The US Army's nine principles of war are listed and defined. While few would question the validity of these theoretical concepts of warfighting, the danger lies in unskilled application of such theory. There are so many variables in war that no two operations will ever be exactly the same. It follows, then, that no two individual applications of some principle or rule will produce the same result. A German historian of the late 19th century wisely observed, "It is well known that military history, when superficially studied, will furnish arguments in support of any theory or opinion."[14] The danger lies with the operational commander and his staff who are well-read on the narrative level of history but without experience in actual combat (or in the vicarious re-creation of combat through systematic historical exercising). However competent their intelligence might be, their operational intuition and instincts are untested. They may be easily betrayed into placing too great a value on theory to produce victory. In his classic, *The Conduct of War*, Baron Von der Goltz talks about the pitfalls of exalting theory over experience:

> It is a remarkable yet explicable phenomenon, that precisely in those armies where the commander is afforded the fewest opportunities to acquire practical experience, the number of those is great who imagine that they were intended for generals, and who consider the practice of this vocation easy. But in the school of golden practice such impressions are, of course, quickly rectified through experience of failure, difficulties, and misfortune.[15]

Combat Experience in Peacetime?

All right, then, we need to expose our would-be leaders to the experience of war in order to train them to succeed in war. But how are we to solve this problem in a peacetime army? Liddell Hart provides the clue:

> [History] lays the foundation of education by showing how mankind repeats its errors, and what those errors are. It was Bismarck who made the scornful comment so apt for those who are fond of describing themselves as "practical men" in contrast to "theorists"—"fools say they learn by experience. I prefer to learn by other people's experience." The *study* of history offers us that opportunity. It is universal experience—*infinitely longer, wider, and more varied* than any individual experience.[16] (italics supplied)

What the US Army has is a new (new, at least, to the current officer generation) warfighting concept—operational art. It is a fundamental concept of the AirLand Battle doctrine, and it is a skill without which we cannot expect to win. It is a skill that requires, in addition to technical competence, qualities of judgment, intuition, and instinct that can be developed only through combat experience. We have no way now, and we hope never to have a way, to gain such experience through actual combat. Wars are not provided for training and few leaders in war get a second chance. Therefore, if we are to be able to develop leaders skilled in the operational art we must find a way to approximate, as closely as possible, the experience of combat. We can do this through the *systematic study* of military history.

Earlier I described an exercise I did based on the Franco-Prussian War. The object was to get so intimately familiar with the situation that I could actually picture myself as the commander on the ground, where I could see the situation develop approximately as he might have seen it. It was similar to any of a number of war games I have played—with the crucial exception that *with detailed preparation* I felt a part of the action. I felt pressure, frustration, anger, impatience. I made good decisions and I made fatal decisions. It was by far the most instructive academic experience in the art and science of war that I ever had.

This is how I went about it. I studied translations of original documents such as message traffic and correspondence, G2 estimates, march tables, maps, operation plans, newspaper reports, eyewitness accounts, and, to a limited extent, official and unofficial histories written soon after the war to fill information gaps in the primary sources. (Literally hundreds of volumes are available for study on every conceivable aspect of the war.) Using these documents I reconstructed, day by day, the events that occurred from mobilization in mid-July 1870 through the first battles in early August to the defeat of the French Army at Sedan on 1 September

1870. I concentrated on the French forces in the period 27 July to 3 August 1870, just prior to the outbreak of hostilities, when the opportunity for the initiative was equally available to both forces. I deployed both forces, in turn, down to corps level and studied everything I could find about the corps' and armies' mobilization status, state of training, commanders, logistics, morale, weapons, and lines of communication. I also tried to determine as accurately as possible what the opposing commanders knew about the enemy and friendly situations, when they knew it, and what they did with available information.

It was tedious work at first, but after getting deeply involved the exercise became absorbing. Advantageous and dangerous situations began to jump out at you. More often, however, there was great confusion and uncertainty on both sides, although more so on the French than the German side. I looked for moments when important decisions were or could have been made and asked myself—tentatively—what I would have done under the same circumstances. I then examined whether what I would have done was supportable in terms of logistics, lines of communication, forces available, terrain, and chances of success versus risks incurred.

For instance, on 1 August 1870, the French had more than three corps, about 130,000 men, which were sufficiently ready for war to have

Courtesy The Daily Press, Inc.

In addition to individual study, terrain walks are a valuable training method. USAWC professor Jay Luvaas is shown here conducting such a walk for senior officers over the Chancellorsville battlefield.

taken a limited offensive against the flank of the 3d Prussian Army, the southernmost army in the Prussian forces. A limited objective attack could have been launched by 3 August, with a very reasonable chance of success in my view. The objective could have been to convince the Prussians that a deep French attack through the southern flank of Germany was in progress. (Such a grand plan was, in fact, proposed.) Positive results might have been an early French tactical victory, which was badly needed for political and morale reasons, and consequent repositioning of the 1st and 2d Prussian Armies if the deception worked. In any event, significant disruption of Prussian plans and mobilization progress could be expected, and an element of uncertainty as to French capabilities and intentions might have been imposed on the minds of the Prussian leadership. Additional time for mobilization would probably have been provided to the French as the Prussians reacted to the French "invasion." Even if defeated in battle, the French had a protected southern flank and avenues of withdrawal, making the risk of destruction of the French Army remote. They would certainly have succeeded, to some degree, in altering Prussian plans.

The value of this and numerous other "what if" analyses in this exercise lies not in what the student is taught but in how he is taught. It is the decisions of the operational-level leader that ultimately determine success or failure of an operation. All of the friction, luck, and misfortune of war are set in motion, directly or indirectly, by the implementation of the commander's decisions. It is simple—the better the decision, the better the chance of success. This type of exercise—a thoughtful, step-by-step, critical retracement of a campaign—improves the student's capacity to make operational decisions *by actually exercising his decisionmaking in an authentic historical context.*

Instead of reading about or being told that in war information is often confusing and conflicting, the student grows accustomed to "working" in this type of environment. Through these experiences he gains familiarity with war by his vicarious participation—by empathizing with the historical operational commander in the act of reaching decisions and then by second-guessing those decisions where indicated. His intellect acquires an enhanced ability to penetrate the fog of war by actually having to do it. By "firsthand" experience the student acquires an enhanced level of insight to such important considerations as ammunition resupply, reconstitution of reserves, reconnaissance, maps, space required for maneuver, fire support, the time it takes to concentrate large forces, and so forth. His appreciation of the value of such factors as strong reserves, the initiative, freedom of maneuver, synchronization, deception, and surprise is given added substance by "seeing" those values rather than by simply being told of such values. In the same way his shortcomings will be highlighted and techniques to compensate devised.

A leader's perspective is seasoned and broadened by his "living" the experience of others. History will not and cannot give us ready-made answers to problems. Situations will never be the same. But the leader whose intellect has been enriched by a systematically cultivated perspective derived from sharing the experience of predecessors will be more likely to make sound decisions. He will be able to confront a complicated situation filled with uncertainty and risk and more readily discover the best way to achieve the objective because his habits and instincts are sound. Colonel G. F. R. Henderson was probably the greatest proponent of this method of learning the operational art. Henderson thought little of most of the military texts of his day. He felt that they stressed the memorization of principles at the expense of truly internalizing the art of war so that the proper course becomes reflexive:

> The principles [of war] are few in number and simple in theory; they are . . . the guiding spirit of all manoeuvres, . . . but if there is one fact more conspicuous than another in the records of war, it is that, in practice they are as readily forgotten as they are difficult to apply. The truth is that the . . . maxims and . . . regulations which set forth the rules of war go no deeper than the memory; and in the excitement of battle the memory is useless; habit and instinct are alone to be relied upon.[17]

The passage above and the one that follows below are from Henderson's book, *The Battle of Spicheren*—a classic which should be on every officer's bookshelf. Leading with famous words from Clausewitz and ending with words from Baron Von der Goltz on the subject of generals, he says:

> "In war all is simple, but the simple is difficult." . . . Without practical experience the most complicated problems can be readily solved upon the map. To handle troops on manoeuvers . . . is a harder task; but its difficulties decrease with practice. But before the enemy where the honor of the nation and the judgement of the present and of future generations are at stake, where history is making and the lives of thousands may be the cost of a mistake, there, under such a weight of responsibility, common sense and even practised military judgment find it no simple matter to assert themselves. "Very frequently," says Von der Goltz, "the time will be wanting for careful considerations. Sometimes the excitement does not permit it. Resolve, and this is a truth which those who have not seen war will do well to ponder over, is then something instinctive."[18]

If we want to be good at warfighting we have to learn to think at the operational level. We have to train our minds, hone our instincts,

sharpen our intuition, enliven our reflexes, and form our habits by getting as close as possible to the real thing. Nothing else will work. Reading, no matter how voracious and no matter how relevant, is not enough. Increases in schoolhouse hours, no matter how great, are not enough. The Germans have a word for what we seek to develop—*fingerspitzengefühl*. It means, roughly, a feeling in the fingertips. You cannot teach it—you can only learn it, and then only if you go about it right. Perhaps this is what J. F. C. Fuller really meant when he said: "Until you learn how to teach yourselves, you will never be taught by others."

Recommendations

To teach the tactical levels of warfighting, the Army has in place functioning, effective systems in the schools and in the field to institutionalize tactical excellence. Even the Army's series of field manuals on training (FMs 25-1 thru 25-5) are devoted entirely to training at the tactical level. FM 25-1, *Training*, embodying the Army's training philosophy, should be titled "tactical training." To institutionalize excellence at the operational level of war, no such comprehensive system exists. There are two aspects of the operational art which must be taught. One is the mechanical or scientific aspect. This aspect includes the skills and procedures required to supply, maneuver, and manage large forces over large, often populated areas; the apparatus to acquire sufficient intelligence data upon which to act; and the command, control, and communications to bring it all together and enable it to work. Colonel Holder's article on "Training at the Operational Level" offers workable, systematic solutions to this half of the operational art training problem. The other half of the problem, the one I've concentrated on in this article and in my view the more important half, is how operational-level leaders and their staffs can be imbued with the necessary *fingerspitzengefühl* to serve them in the face of the enemy: what maneuver might work and what won't, what's important and what's not, when to strike and when not, what's too much and what's not enough. Without leadership with this practiced feel for battle, even the most highly refined operational machine may go charging off in the wrong direction.

With AirLand Battle doctrine comes a new training imperative for the US Army: to teach those officers who are or may become operational-level commanders and staffers how to teach themselves lessons that otherwise can be learned only in wartime. Some suggestions:

- *Officer schools*. All schools should require each student to complete one or more historical studies (roughly 40 hours each) similar to the Franco-German War exercise described above and not unlike those accomplished by officers of the German General Staff under Moltke and by US officers of the staff and war colleges before World War II. At the basic

and advanced course levels the study should be tactical. At the staff and war college levels there should be a minimum of two studies, each oriented on the operational level. It is critical that all studies be based on individual effort, and there must be oral and written feedback and evaluation mechanisms. This means getting serious about training and, yes, putting some heat on the students.

- *Individual study.* Annually, when not in one of the officer schools, each officer should complete an exercise similar to those conducted under school supervision. A written report and feedback would be provided to the proponent (either branch school or TRADOC directorate) which provided the individual study packet. Again, quality of performance should be noted on evaluation reports.
- *Operational-level terrain walks and staff rides.* There should be field-grade and general officer terrain walks, drives, and flights over the actual terrain of important historical operations (see illustration, p. 58). These would be in addition to current operational terrain walks now conducted by the forward-deployed corps and armies. There are many accessible locations in the States, Europe, and Korea. Guide packets would be prepared by the proponent and terrain walks conducted by corps- or army-level personnel, especially selected and prepared for the duty. Extensive individual preliminary preparation would be required, and operations briefings would be presented by the participants before, during, and after the exercise. (It is interesting to note that the War College class of 1936-37 was given a full month to prepare for a terrain walk.)
- *Specialized war-gaming.* While much can be learned from historical campaigns, the nature of future warfare may be very different. Applicability of historical lessons to current warfighting is, therefore, limited in degree depending on the campaign studied. Hypothetical scenarios based on updated versions of earlier campaigns, providing the same level of background and detail, would have to be developed. A variety of realistic, stressful campaign simulations could be created and played annually by senior officers individually or in small groups at centrally located war-gaming sites. Feedback and evaluation for the record will again be critical.

These suggestions, or similar proposals, will not be cheap or easy to develop, obviously. Neither will it be easy for senior officers to find the time—two or more weeks per year when not in school—for systematic study and exercise in the operational art. However, if we are going to institutionalize excellence in the operational art as we have in tactics, we have to do a lot more than provide a few hours' instruction in our schools, reading lists, and voluntary self-study programs. There must be a structured, intensive, and comprehensive training program with frequent evaluation that has significant implications for promotion.

"Evaluation means getting serious about training and, yes, putting some heat on students."

In this, we might look to the German example. Readers of Trevor N. Depuy (*A Genius for War*) and Martin van Creveld (*Fighting Power: German Military Performance, 1939-1945*) are persuaded that the German armies of World War II, and of the hundred years preceding that war, were then the finest fighting forces in the world by any standard. "Masterpieces of the military art" was how van Creveld described German campaigns of World War II.[19] Depuy says that "performance comparable to that of the German armies . . . can be found only in armies led by such military geniuses as Alexander, Hannibal, Caesar, Gustavus Adolphus, Genghis Khan and Napoleon."[20] The Germans' secret, the phenomenon that separated their army from all others in excellence, was the German General Staff, and "the special qualities of professionalism that differentiated that General Staff from imitations in all other nations."[21]

One of the principal components of the German General Staff developmental process, and the institutionalization of military excellence which the General Staff accomplished, was an intense emphasis on the study of military history. Staff officers wrote about its significance, and "they invariably emphasized the importance of history for acquiring the theoretical foundations for military science, and for gaining an understanding of human performance in conflict situations."[22] The German Army institutionalized excellence in large part by emphasis on the *study* of military history, and that is an experience from which we should learn.

Another principal component of the General Staff developmental process was examination. Evaluation as a prerequisite to promotion *required* German officers to study the profession *seriously* and contributed to a higher quality of "professional understanding and performance throughout the entire Army."[23] In order to institutionalize excellence in the operational art, systematic operational studies impelled by meaningful evaluation are the only way.

Conclusion

As the US Army and its AirLand Battle doctrine mature together, the Army is without a laboratory of actual warfighting experience. The only way to gain such experience is to appropriate the experiences of others and to learn from them. With small armies, like Napoleon's, the wellspring of

such experience could reside in the head of one or just a few. In large armies like the German Army of World War II or the American Army of the 1980s and 1990s, the wellspring of experience must reside in the heads of many. We cannot make AirLand Battle doctrine work the way we are going about it now. The operational gap between military strategy and tactics is too large and too important to be filled with current training philosophy and practice. You can get there from here *if* the need for major change is recognized and progress toward change is forthcoming.

We deter war by being ready to fight and win the war. Skill in the operational art is the bedrock of winning. The potential Napoleons and Pattons in our Army today might emerge given a long enough war. But we may not have that kind of time. Unless we can institutionalize excellence in the operational art, we may be ready to fight, but we will not be ready to win.

NOTES

1. Ardant du Picq, *Battle Studies*, trans. from 8th ed. by Greely and Cotton (London: Stackpole, 1920), p. viii.
2. US Department of the Army, *Operations*, Field Manual 100-5 (Washington: GPO, 1986), p. 10.
3. L. D. Holder, "Training for the Operational Level," *Parameters*, 16 (Spring 1986), 7.
4. Ibid.
5. William R. Richardson, "FM 100-5, The AirLand Battle in 1986," *Military Review*, 66 (March 1986), 11.
6. R. L. Allen, preface, *Operational Level of War—Its Art*, Special Text prepared by the Department of Military Strategy, Planning and Operations, (Carlisle Barracks, Pa.: US Army War College, 1985), p. v.
7. Richardson, p. 5.
8. Holder, p. 10.
9. Jay Luvaas, "Thinking at the Operational Level," *Parameters*, 16 (Spring 1986), 6.
10. Ibid., p. 5.
11. Letter, Elihu Root to Spenser Wilkinson, 15 October 1919, Victoria Wilkinson papers.
12. Spenser Wilkinson, *The Brain of an Army: A Popular Account of the German General Staff*, New Edition (Westminster: Archibald Constable and Company, 1895), reprinted for the Art of War Colloquium, US Army War College, 1983, p. 57.
13. Luvaas, p. 3.
14. Quoted in *A Guide to the Study and Use of Military History*, J. E. Jessup, Jr., and R. W. Coakley, eds. (Washington: GPO, 1978), p. 76. Quote attributed to von Schellendorf and found in Prince Kraft Hohenlohe, *Letters on Artillery* (London: E. Stanford, 1890), p. 108.
15. Baron Colmar von der Goltz, *The Conduct of War*, trans. by US Infantry and Cavalry School, Fort Leavenworth, Kans., 1896, reprinted for the Art of War Colloquium, US Army War College, 1983, p. 1.
16. B. H. Liddell Hart, *Why Don't We Learn from History?* (London: George Allen and Unwin, 1946), p. 10.
17. G. F. R. Henderson, *The Battle of Spicheren: A Study in Practical Tactics and War Training* (2nd ed.; London: Gale & Polden, 1909), p. v.
18. Ibid., p. 294.
19. Martin van Creveld, *Fighting Power: German Military Performance, 1939-1945* (Westport, Conn.: Greenwood, 1982), p. 4.
20. Trevor N. Depuy, *A Genius for War: The German Army and General Staff, 1807-1945* (Englewood Cliffs, N.J.: Prentice-Hall, 1977), p. 302.
21. Ibid.
22. Ibid., p. 304.
23. Ibid., p. 303.