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Teaching Maneuver Warfare

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Teaching maneuver warfare places new and different demands on the teacher. Interestingly, the contrast in methodology between teaching the old and the new parallels the contrast between the two styles of fighting. For instance, before 1989, the U.S. Marine Corps doctrine called for *methodical battle*: a set-piece, closely orchestrated, slow-moving battle, tightly controlled from a highly centralized command. Instruction was also methodical. Today, U.S. Marine Corps doctrine calls for *maneuver warfare*: a fast-paced battle, loosely controlled and decentralized, highly responsive to a changing situation. The new teaching techniques are also less controlled and highly responsive—responsive to the understanding of the students.

The imperative of my message here is that the old style of teaching will not work anymore. Maneuver warfare cannot be taught through methodical teaching. I have watched instructors try it in the Marine Corps for nearly two years and witnessed its failure. At the same time, I have watched others in the Marine Corps teach in a different style that is suited to the subject matter, and seen the results: enthusiastic students who can talk the language and understand combat in a context of maneuver. The new style of teaching that I shall describe is mandatory if the new style of fighting is to be learned.

Before 1989, Marines learned methodical battle from an instructor who stood on a stage with a pointer and lectured to one or two hundred men at a time. He began by giving them definitions to learn. He introduced them to the old control measures that defined linear battle: the inevitable box formed by a *line of departure* at one end and the inevitable *FSCL* (*fire support coordination line*) at the opposite end, and a boundary on each side. A piece of terrain, almost always a hill, but occasionally a town or a bridge, or maybe even a treeline, occu-

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pied the center of the box and was designated the *objective*. An oval-shaped line was drawn around it and this became the end towards which the battle was fought. The enemy became an inanimate object that sat immobile on the objective waiting to be defeated, shown graphically as a box colored red, in contrast to the blue friendly forces whose predictable courses were drawn with straight arrows, reflecting the certainty with which commanders expected to seize their terrain objectives. Seizing objectives was what the methodical battle was about, never defeating the enemy. In Vietnam we made a subtle shift from seizing terrain to counting bodies. We went back to terrain after the war. But while we were counting bodies we were no closer to an understanding about defeating the enemy. The war's having ended with the enemy in control of Ho Chi Minh City is proof enough of that.

Field exercises eventually followed the lectures. Yet they, too, were set pieces. Most of the students filled the ranks of platoons and companies, and few were exposed to learning about making decisions save those designated platoon leaders, company commanders, and the like. Even then, leaders did not learn to make decisions so much as they were taught a decision-making *process*, a methodology outlined step by step in a book that no commander is ever known to have actually followed in a real war.

Methodical battle was taught in an orderly sequence. *Order*, after all, was the hallmark of methodical battle. After definitions and control measures, it was time to lecture the students on a limited repertoire of attacks: frontal assault, envelopment, and a thing called penetration, which was really a frontal assault that had somehow managed to smash its way through.

The defense was introduced later and was often taught as a separate course. Defensive battle had its own definitions, control measures, and rules. There were the FEBA (*Forward Edge of the Battle Area*), the *Security Area*, *Battle Area*, and *Reserve Area*, all neatly laid out in an orderly schematic. Instructors quizzed students to trip them up on the fine points like the subtle differences between the *Combat Outpost Line* and the *General Outpost Line*. Lines provided a pervasive structure that defined defensive warfare, and left their imprints forever in students' minds. The student could pick from a narrow repertoire of defenses that included such imaginative choices as the linear defense (keep the enemy on *his* side of the line) and the perimeter defense (circle

the wagons). As in the attack, little or no thought was given to destroying the enemy unless it could be assumed he would commit his forces in a suicidal—yet orderly—attack into our *Final Protective Fires*.

Orderliness dominated everything. Lectures were scheduled in 50-minute blocks, each governed by an approved outline that dictated to the instructor what he was to cover from beginning to end. If he didn't finish in 50 minutes, the instructor had to embarrass himself by running overtime and disrupting a carefully orchestrated schedule by encroaching on the next instructor's time. The alternative was to deprive the students of the information.

Teaching maneuver warfare is like doing maneuver warfare. When the teacher begins, he does not know how far he will go in an hour or how many turns he will take in how many different directions. His mission, after all, is to teach students to think, to exercise judgment. It is not to teach a repertoire of attacks or formulistic procedures, as it was in the Marine Corps before 1989.

Distinctions between offense and defense tend to merge in practice and in teaching. The idea is to defeat and destroy the enemy, however best. Whether through a lightning attack or a deceptive ambushlike defense, the goal is the same. Transition from offense to defense is rapid, almost instantaneous. Sometimes both are conducted simultaneously, or an operation has the characteristics of both at once. The teacher cannot discuss offense in isolation from defense, because in maneuver warfare the two are so closely tied.

The content of the maneuver warfare course cannot be neatly divided into 50-minute blocks, each predisposed to cover a given outline. Instead, the class will meet biweekly or more, and each session will take up where the other left off. It cannot be accurately predicted at the beginning of the semester exactly where students will be in the middle. The *teacher* governs the content of each session, not the central institution. Only the teacher is "at the front," i.e., on the ground on the spot and able to know. The teacher must proceed at whatever pace will keep his students challenged and exercising their minds. The course is not about imparting knowledge. It is about teaching judgment. There are no rules or formulas.

Maneuver warfare is fighting without formulas. Therefore there are none to teach. The teacher feels and probes his students as the soldier in combat feels and probes his enemy in maneuver warfare. He

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seeks opportunities, isolates resistance, and exploits breakthroughs. He decides how fast to go, what examples to use, and how much depth to go into, all based on what he learns about his students as he goes along. When a student grasps an idea and develops it in open discussion, the teacher acts like a fisherman, playing out line, letting him run. The student might, after all, possess genius. He might form ideas the teacher has never dreamed of. The classroom is not a place to limit thought.

Maneuver warfare is decision making; that is, the application of mission tactics. So the teacher must equip his students to make decisions. Mission tactics are the tactics of employing the mind of every Marine in the battalion and turning him loose to think and to make decisions. Given this, it is decision-making ability that, in maneuver warfare, determines whether or not the unit is successful. Therefore, it is the maneuver warfare teacher's task to develop judgment: judgment that can be applied in decision making. More than content, methodology, or procedures, the task at hand is teaching the student to make decisions.

And what better way to teach decisions is there than to require the student to *make* decisions? He must make them repeatedly and often, under a multitude of circumstances, subject to the harshest criticism of his teacher and his peers. Several settings should be used. Students should be taken to the field and be called upon to make decisions there. They should gather around a sand table to make decisions while viewing the whole battle graphically. They should be brought to the classroom where they can get more map exercises and more varied, short, simple scenarios with greater frequency, free from the overhead of terrain models and limitations imposed by the scale of the sand box.

I prefer to start beginning students in the field. Though the student might get a better picture in the classroom or around the sand table, it is in the field that the student experiences the atmosphere most like that which will prevail when he leads in combat. Therefore it is most productive for him to begin making his decisions in this environment. Yet, he will need to get a picture of the battle at some point and see it graphically, as he only can around a sand table or on a map in a classroom. But this can come a little later. In combat he will not have such a clear picture. Why mislead him in the beginning? Show him as much as you can from the beginning what it will really be like. Then the whole picture will be more meaningful when you show it to

him in the classroom. He will have a better appreciation for what you are talking about. Fewer of your words will be wasted.

An expedient terrain model can be made in the field. When we do get to sit in the classroom, one of the things we will call on the student to do is to imagine himself on that piece of terrain depicted on a map sheet or sand table. He has to think of himself as being there on the ground, bearing the elements, making decisions. He will have difficulty doing that if he has never been in the field.

Field work can be a combination of exercises where students (1) play the part of riflemen and actually participate in a sham battle and (2) take terrain walks where the teacher calls upon individuals to make decisions. In the sham battle the student experiences the requirement for teamwork and coordination. In the terrain walk, he is called upon to exercise his hand at making decisions under the close scrutiny of teacher and peers.

An ideal teacher-to-student ratio in a terrain walk is about one to twelve. Field work of this nature should not be restricted to wilderness settings. Battles are more often than not fought in and around populated areas. That means the student should be called upon to consider roadways, bridges, railroads, houses—all the things he will very likely have to contend with when he faces combat.

A three- to five-day period in the field doing terrain walks is ideal. He learns something of the field skills essential to maneuver warfare while he is studying decision making. Though he should travel to populated areas and make decisions among man-made features, he will probably need to spend his nights on some government reservation—very likely in a wilderness setting. This is not counterproductive. All the time he does this he is developing his field skills.

Indoor sessions are valuable, too, for reasons already expressed. The view of the whole battlefield is important, even though the commander in a real situation who leads from the front, as maneuver warfare demands, will seldom have the luxury of seeing the whole battle laid out so nicely. In combat, he nevertheless must be able to visualize the whole battlefield. It is important that he begin making this connection while a student.

But whatever the setting, the function of the teacher who is working with students on decision making in maneuver warfare is the same. He must make his students commit themselves. He poses a problem and he asks the student, "What are you going to do?"

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The student is allowed to answer only that question: "What are you going to do?" His answer must describe *action*. And he must answer quickly. He is allowed to make no other remark except to answer the question, "What are you going to do?" He must not be allowed to "feel the teacher out" by suggesting various possible answers, seeking eye contact from the teacher that will hint the "right" course. He must not be allowed to fall into the mode that he learned in college philosophy or sociology classes, where all kinds of academic suppositions are encouraged and everything is acceptable. Warfare, after all, is not an academic exercise and it is not a game of words. Warfare is action. Decisive action. The student's mind must be trained to act.

The student will certainly want more information than you have given him upon which to base his decision. If you have given him as much information as he feels he needs, then you have given him too much. Combat decision making is decision making with incomplete information. It is dealing with uncertainty and thriving on chaos. In Vietnam we never knew what was really happening. I, myself, am guilty of telling students, "You must attack command and control—the brains of the opposing force," and it is good if you can do that. But in Vietnam we had no way of knowing whom we were attacking. I never knew if I was fighting command and control people, logisticians, infantrymen, privates, majors, colonels, or what. Suddenly someone was there. Was it even the enemy? How could we be sure? We could never be sure. We had to be careful. But we also had to be bold. And we had to make the right decision. It was life and death. There was no room for error. But errors would occur. The teacher needs to give the student an appreciation for this feeling. Only then is it meaningful when the student gives his answer to "What are you going to do?"

Rationale will be discussed later—only *after* the student commits himself to a decision. Why? Because this is how it must be done in combat, where time is always of the essence. And in maneuver warfare, time is even more critical.

This is not to suggest that the rationale for the student's decision is not important to the teacher. It is crucially important. It is so important, in fact, that the teacher should refrain from criticizing the student's decision until the student has been given the opportunity to explain why he did what he did. The teacher may question the student about his decision before he presents rationale. This is to test his resolve.

He may even goad the student, to test his confidence. But in so doing, the teacher begins the process of drawing out the rationale. It is through assessing the rationale that the teacher will determine whether or not the student is developing judgment, whether his course of action was wise or unwise. In discussing rationale, examples from combat history may be evoked. So may capabilities of weapons, the intent or presumed intent of the enemy, weather, morale, terrain—all the variables.

The principle that has been applied here is that combat decision making must be done implicitly if it is to be effective. The demands of combat simply do not allow for passage of time between deciding and acting. Acting now is nearly always better than acting later, even if the later action might have been better thought out. In a contest between two opposing wills, much can be gained through catching one's opponent off guard. When the goal is to shatter the enemy's cohesion, as it is in maneuver warfare, catching the enemy off guard is among the greatest of opportunities likely to come your way.

Sound rationale is no less important in maneuver warfare. But one's ability to apply it must be developed so that it becomes instinctive. Thus the importance of exercises such as described here—making decision upon decision in a multitude of varying situations, different terrain, different kinds of enemy. The more you do it the better you get, like calisthenics. The teacher should put his students in one jam after another and make them decide how to get out of it.

There is a danger here for the teacher. He can go overboard in this direction and teach the wrong lesson. If the message becomes "Anything you do is going to get you in trouble" then the lesson the student may erroneously carry away is likely to be "Don't make decisions—they get you in trouble." For example, if the teacher's response to an attack in one direction is "You've hit a minefield, now what do you do?" and as soon as the student changes direction, it is "You're in an ambush," then when he decides to bypass the ambush site with his reserves, his reserves get hit in the rear with a tank attack supported by air. Everything he does is wrong. The lesson inadvertently taught is to do nothing.

Instructors err just as frequently at the opposite end of the spectrum, however, when they fall into the "everything's OK" syndrome. Everything's OK can make for happy students and a relaxed life for the instructor, but not much is taught. There *are* wrong answers. Wrong

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answers in a maneuver warfare course do not include any specific action. Unlike the old methodical battle courses, teaching maneuver warfare allows the student to do anything: he can decide to attack, defend, go right, left, backward or forward, use his supporting arms or not use them, go in stealthily without preparation fire or blow everything up before he moves. Any of these actions is fine. Where he can go astray is in the realm of *how* he does things.

For instance, the student might disperse too much or not enough. Here the teacher is called upon to know his stuff—not just a bunch of rules. He also must make provision for the student to justify what appears to be an error in judgment when he gives his rationale. Dispersing too much is a common error made by the student without combat experience. He has dispersed too much if he loses focus and can no longer realistically bring his unit together and employ it decisively against the given enemy. Admittedly, this is a subjective call for the teacher. But this is why teachers need to be well schooled in combat history and, whenever possible, have combat experience. (Combat experience without knowledge of combat history is not of much value for the teacher, however, as I shall soon show.)

Overdispersment to the detriment of focus was a common error in Vietnam. When I was a company commander in that war, I found that I could preside over a firefight very effectively against pretty much anything the North Vietnamese could throw at me if I had my whole company together. Two firefights I also could handle, but it was difficult and taxed all my faculties. Three firefights and I was not a company commander anymore; my company degenerated into three platoons engaged in three separate, unconnected battles. This was fine if the enemy we confronted was weak enough that our platoons could do what was necessary to win. Otherwise, however, it was a case of overdispersment and lost opportunity to win. When I was working an area where the enemy was tough, I wanted to have my whole company close enough so its elements could work together toward a single end. I wanted to have what it took to win a firefight decisively, no questions asked.

An equally common error is not to disperse enough. There was plenty of that in Vietnam, too. Keeping your Marines too close together can lead to disasters, a recent and classic case in point being the 1983 Beirut bombing of the Marine barracks which cost over 240 lives, with no

payback to the enemy. But disasters measurable in high casualties are not the only consequences of underdispersion. Missed opportunities are another. In Vietnam, when units "holed up," husbanding forces together for protection, the enemy was able to run roughshod over the civilian population. Concentrated U.S. units were visible to the North Vietnamese and could be avoided.

Another common student error to which the maneuver warfare teacher must be alert is the tendency to close out options. Maneuver warfare is a style of fighting that keeps options open, recognizing the unpredictability of combat. It would be futile to try to list here all the ways a commander can inappropriately close out options in combat. A few examples would include failure to keep a large enough reserve, not dispersing enough, using a single route of advance when multiple routes are available, defending in isolated areas, holding one side of a river and letting the enemy have the other, and the classic mistake of blowing or burning bridges behind you.

As students progress, the teacher will be able to transition from demanding a simple statement of what action they will take to having them actually issue the order they would give to their subordinates in the situation postulated. Emphasis must remain on action, however, reminding students that combat is an action thing and not wordsmithing. Orders given in class should predominantly be oral because the oral order is preferred in maneuver combat, written orders being slow and cumbersome. This is not to say that the written order does not have a certain utility in the classroom on occasion. It does, as long as the requirement is only to write brief renditions of what would be communicated orally—not the lengthy formatted documents that typified study of methodical battle in the past. The value in the classroom of committing the decision to writing in the form of a brief order is that it forces the student to make a commitment. When the class is large, it becomes difficult for the teacher to put all the students on the spot as much as he might. By demanding that they write their orders down and hand them in, the teacher forces them to make a commitment, which is difficult for many people. This ability to commit decisively is, after all, the rare quality we seek in combat leaders. Then, after the written work is handed in, the teacher can call on students to give supporting rationale for their decisions. Because the teacher now has the written

commitment in hand, the student cannot revoke or withdraw his decision as he begins to feel pressure, especially when he realizes that his fellow students had ideas quite different than his own, which may, by the time he is called on, make his own look foolish.

Another technique in demanding student decisions is to use a stopwatch. Give them ten minutes, five minutes, or ten seconds—whatever is appropriate and reasonable in the situation.

In requiring students to give their orders, de-emphasize format. Once again, combat is an action thing. Too often in the classroom and in the bureaucracy, I have seen Marines—especially senior Marines—wanting to make it a game of words. The instructor who feels insecure about his background in tactics seeks refuge in criticism of words. In the days of methodical battle, Marines insisted on using the five-paragraph format for orders. Too often I have seen Marines rejecting good tactical ideas because they could not fit them into the format. Too often I have heard squad leaders stutter through the format of the five-paragraph order and then, afterward, say, "Alright, guys, now, here's what we're going to do . . ." and proceed in their own words and with no set format to give a clear, concise imperative statement of what needs to happen.

Now that we have rejected the format, let us discuss two elements that really ought to be in the order somewhere. Or if they are absent in words, the student must be able to show that they are implied so clearly that no words are necessary. These are intent and focus of effort.

The student must know what his intent is, and he must convey it clearly, remembering that in maneuver warfare it falls upon his subordinates and his subordinates' subordinates to know the commander's intent two echelons up. They cannot know it if he does not express it clearly. He has no requirement to restate his senior's intent and his senior's senior's intent every time he issues an order; however, he must be aware and must keep his subordinates aware as appropriate. The teacher should query the student about his intent whenever the student gives an order. He should ensure that the intent focuses on the enemy—on what the student intends to do to the enemy.

Focus of effort—*Schwerpunkt*—is the richest of all the maneuver warfare concepts. Without this, the commander is less than a commander. His subordinates are left without focus, unsure of how their leader

envisions the battle. The teacher who hears a student's order and cannot quickly identify his chosen *Schwerpunkt* needs to interrogate the student until it becomes clear.

Teaching maneuver warfare stresses judgment more than knowledge, but this does not mean that the teacher can be void of knowledge. In fact, he needs more knowledge than the teacher of methodical battle did. The teacher of methodical battle needed knowledge about, obviously, *methodology*. The teacher of maneuver warfare, i.e., the teacher of judgment, needs knowledge of war.

Combat experience on the teacher's part is extremely valuable. It allows him to criticize and lend insights he otherwise could not possibly have. It also gives him credibility with the students. But this credibility becomes dangerous if the teacher has not studied combat history. There might be an exception if the veteran-teacher had experienced several wars. The problem emerges at its worst when he has only experienced one. When I was a lieutenant in Vietnam, we all despised majors. The common criticism that every Marine lieutenant in combat in Vietnam seemed to have of majors was "He thinks he's still in Korea." I promised myself that when I became a major, my lieutenants would never say of me, "He thinks he's still in Vietnam." Successive wars tend to be different. The most common criticism of the military mind is that it gravitates to the war already fought and is insensitive to the demands of the present. Professional warriors, if they are equivalent to professional physicians who can treat pain and even cure patients of disease not heretofore encountered, must be able to respond to war situations that are completely new. To do this requires an in-depth understanding of war itself. It requires answers to such questions as: What are the enemy's real strengths and where are his vulnerabilities? What is the importance of speed? What is the meaning of speed in combat, and how can I achieve it? What will constitute this enemy's defeat? Where can I take risks?

So the study of history becomes important to everyone who would presume to teach warfare. One war is insufficient. He needs to know the degree to which wars have differed and how they have differed, because the war he is preparing his students for is likely to be vastly different than the last one. How else to know that except to study a whole range of wars and how they have differed; to know how the Greeks and Romans fought and contrast this early Western thinking

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with Genghis Khan's revolutionary style, yet be able to draw comparisons between Genghis Khan and Xenophon? Why did the United States do so well in World War II and so poorly in Vietnam? What was so different? Or did we do so well in World War II? Why did the Germans lose? The instructor who finds himself out of his depth when confronted with such questions is ill equipped to prepare students for a future war, the nature of which no one can predict with accuracy.

Military history is an unfortunate term because in the minds of would-be warriors it conjures up the image of arrogant students and professors, idly speculating about things they never will be called upon to do and couldn't if they had to. It conjures images of school days and academic questions, such as why Roosevelt did what Stalin wanted and not Churchill, or why Marines wear red stripes on their blue trousers. It is for this reason I so often say "combat history" instead of "military history." What I really mean is war: the study of war. Our profession's discipline has simply not enjoyed much respectability, and no wonder! Our fixation on methodical battle deserved no respect. The study of the old khaki-covered FMFMs, which were so prolific in the U.S. Marine Corps in the 1960s, had little relevance to the demands of Vietnam. The same manuals in the 1970s had even less relevance to the future. By 1980 we should have known better. By 1989 we did.

But any profession, art, or science studies its history. They call it something else. We do not learn physics without an awareness of Newton, Faraday, and Einstein. The psychologist needs to know who Freud and Jung were and what they thought and did. A lawyer studies his profession largely through precedents set in the past. The maneuver warfare teacher should use historical case studies in much the way that business case studies are used at Harvard Business School. That is, in advance of a decision-making exercise, students study historical material relative to an actual engagement. They are called upon in the classroom or in the field to make decisions and support them with rationale. The availability of information about the actual outcome and the knowledge that the event actually happened keep the exercise in touch with reality. In this way the students are studying human behavior, which is the essence of the determinant in battle. They are not simply theorizing.

No one expects that the historical event being studied will somehow be repeated. Even if it is, the outcome is likely to be different. Changed technology is but one of many variables, and even if all else

stayed the same, the mere fact that different human beings would be making the decisions and doing the fighting would likely lead to a different outcome. What the student gains from the case study is not a formula for achieving success, but a look at human behavior in combat, an understanding of the many variables involved, an appreciation of which variables weigh more under different circumstances, and some additions to his "bag of tricks" for application in real war.

Furthermore, it was through the study of combat history that we derived the various concepts that, taken together, define what we now know as maneuver warfare. It is important that students understand these concepts; not only how to apply them, but where they came from. That is, they need to know and be confident that maneuver warfare is not somebody's new theory, but rather a style of fighting that has been proven very powerful again and again.

There is a temptation to teach the concepts of maneuver warfare by selecting a number of historical examples, at least one for each concept, and then showing the student an example of that concept in action—surfaces and gaps in the German Operation Michael, April 1918, for instance. But there is a problem with this method because it misuses history. I am unimpressed with the student whose thinking starts and stops with what the professor tells him ("Operation Michael is an example of surfaces and gaps," for instance) and even less impressed with the professor who teaches that way. We have already established that teaching maneuver warfare is teaching people to think. If we are indeed interested in teaching soldiers and Marines to think, then let's not tell them "Here is what you are to get out of studying this battle." That equates to "Here is what I want you to think." Instead, have them read about Operation Michael, give them the German doctrine that was published in January 1918 and applied for the first time in that operation (*Angriff im Stellungskriege*) and have them study it. Expose them to how the Germans prepared and trained for the operation. Study the British and French reactions to it. Then, ask the students what *they* discover from the operation. The teacher may be surprised: maybe there is more than surfaces and gaps in that example. A student may see the key to the whole thing as being integration of the light machine gun in German assault squads. Low-level integration of combined arms and decen-

Use historical cases together with hypothetical cases to put students' minds to work making decisions. Then bring out the concepts as they come up in class discussion or in the field during the exercise or terrain walk. Let the ideas flow as they will, as Sun Tzu's army was likened to flowing water. A student solution to a map exercise may be to issue new orders to a reserve platoon to go through a recently discovered gap. Another student may point out that this may be unnecessary. You may want to hold your reserve in case of an even greater opportunity, he points out. In a unit that is actually practicing maneuver warfare and demanding high initiative at low levels, nearby units would go through the gap without orders, based on the first intimation from lead units that the gap exists. So no new order need be issued. The initiative of the soldiers in lead units may be depended upon. The commander may hold on to his reserve for a future opportunity. Here is *reconnaissance-pull*. An alert teacher will point this out while it is relevant to the discussion. This leads to discussion of the effect created on the enemy when your forces get inside and behind his men. Now the teacher introduces concepts of *infiltration attack*, and *isolation and penetration*. As students weigh various courses of action, some emerge as slower than others. Now the teacher mentions the value of *high tempo and security in speed*.

All these points would likely come out in a discussion of 1st Marine Division's invasion of Kuwait in Desert Storm, 1991. Other case studies will introduce other concepts, though with different groups of students. Different case studies will introduce different concepts just as different bodies of individuals and different leaders will influence battles differently, even though they are fought under otherwise similar circumstances. The German crossing of the Meuse, May 1940, will likely evoke discussion about *multiple thrusts* and *der Schwerpunkt*. Discussion of the U.S. Army's crossing the Rhine at Remagen bridge demonstrates the wisdom of "*don't wait for orders*." Napoleon's decision making at Austerlitz may be the perfect vehicle to introduce discussion of the *reserve*. The skilled teacher would have in his repertoire the ability to demonstrate how Hermann Balck used reserves repeatedly to good effect on the eastern front in 1943.

The thought of building such a repertoire of historical knowledge may seem intimidating at first. It need not be so. Out of the thousands of engagements that can be drawn upon for teaching, a small number are used repeatedly, knowledge of which constitutes a cultural literacy

in the subject through which one can communicate relatively well with most anyone who has acquired a background in combat history. Any teacher ought to be conversant in all of these before he teaches a fundamental course in tactics:

Desert Storm, 1991
 Beirut, 1983
 Grenada, 1983
 Falkland Islands, 1982
 Golan Heights, 1973
 Dewey Canyon, 1969
 Khe Sanh, 1968
 Israel's Six-Day War, 1967
 Ia Drang Valley, 1965
 Inchon, 1950
 Normandy, 1944
 Kursk-Orel, 1943
 Stalingrad, 1941-1943
 Germany's defeat of France, 1940
 Operation Michael, 1918
 Tannenberg, 1914
 First Marne, 1914
 The Schlieffen Plan, 1905
 Sedan, 1870
 Königgrätz, 1866
 Cold Harbor, 1864
 Gettysburg, 1863
 Vicksburg, 1863
 Jena-Auerstädt, 1806
 Leuthen, 1757
 Cannae, 216 B.C.
 Leuctra, 371 B.C.

These are not uniquely maneuver battles. They are simply battles one should know in order to study, draw comparisons, and discuss warfare intelligently with others. Students should become familiar with them.

It is of utmost importance that students be made to read. Since developing military judgment requires studying war, students need to

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read about battles. Because our society, including our colleges, has deemphasized reading in the past twenty years, it is important that the maneuver warfare teacher both give reading assignments and ensure his students are doing them. He will quickly discover that many college graduates are apt to neglect reading; they have learned in American colleges that no one really expects them to read. Written work, including "pop" essay quizzes, and graded classroom discussion of assigned reading will help ensure that students are doing their reading. They must read if they are to learn to analyze and make connections between battles of the past and battles of the future, and to conceptualize in order to deal with the unknown.

One of the things that fascinated me when I taught tactics in the Marine Corps—years before there was any official encouragement to read—was how quickly students who had not been reading discovered that they enjoyed it. Getting the hook in students to read about warfare is one of the easiest tasks the maneuver warfare teacher has. Warfare is probably the most exciting activity that one can read about. What we had done in the post-World War II Marine Corps was to take the most exciting subject in the world—tactics—and make it boring. By neglecting decision making and, in its place, teaching methodology, we had managed to make our Marines' lives as dull as possible.

Of course, the argument that this discussion inevitably evokes is the argument for teaching procedures and definitions first. Definitions and procedures have their place and they are important. Whether definitions ought to be "taught," however, is a legitimate question. I think people can learn definitions without a teacher. The teacher can demand their use. He probably should. But somehow this seems outside the realm of teaching and more a matter of maintaining discipline. Procedures, such as how to employ weapons, how to communicate, how to request air support, are indeed important also. Many require rote memory and should be applied instinctively. Training and discipline are required to instill them, and I have no argument against them. What we have done in the past, however, is to emphasize procedures, and so surround them by bureaucratic trivia that we lose focus and miss completely the main task at hand: making sure our warriors are up to the harshest intellectual demands of combat—making tough decisions under stress.

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But the question remains: What do we do about definitions, procedures, and weapons capabilities? The answer is that we demand our soldiers and Marines know these things so well that they do not need to stop and think about them. How do we do that?

Step number one is to distill the essential from the nonessential. We cannot fool the troops. If it's unimportant, they know it's unimportant, and we become laughingstocks. Step number two is to identify where this essential information is available. Definitions, procedures for requesting needed support in combat, coordination, and capabilities of weapons are in most cases already set down. Many need streamlining. That which is not set down or needs to be streamlined must be put into its most useful form and printed. For the most part it need not be taught or lectured about. It is best assimilated through study and hands-on experience. In fact, study and hands-on experience are the only ways that students are ever going to assimilate, and apply quickly enough, things like picking up a radio and communicating with it, laying a machine gun, calling an artillery mission, or providing for logistical needs. But none of these things can be done well or appropriately by anyone who does not know about tactics. Tactics in maneuver warfare is decision making and speed. Everything else must follow the tactics. Tactics are not built around radio procedures. Radio procedures should be built around tactics. The same applies with all other procedures. Therefore, the first step is to make sure our soldiers are competent tacticians. That is what makes soldiers soldiers: being tacticians—being warriors. Understanding tactics makes them able to use radios, machine guns, artillery, airplanes, supply trucks, and spare parts, both conventionally and in all kinds of innovative ways that speed up the process and make this equipment so much more relevant to maneuver warfare. So let us leave definitions and procedures to book study followed by field application. Recognize that adequate coaching in the field can be gotten from good NCOs. Let us not neglect the discipline of definitions and procedures, but let us not get so fixated in them that we neglect teaching tactics. Tactics come first.

So the answer to the question of whether to teach definitions or tactics first is *teach tactics first*. No procedure irrelevant to tactics is relevant to the battle. If it is not relevant to the battle, it is not relevant to war and not relevant to the profession. So teach tactics first.

to mean that the sole object of war is to engage in battle. That would be wrong. Wars *can* be won without decisive battle. Napoleon's Ulm maneuver was decisive even without engagement. But the army that is not competent to win in battle is unlikely to intimidate its adversary as Napoleon's did Mack's in 1805. So I stand on my bold statement. No tactical competence means no credibility, and therefore no relevance to war.

Regarding teaching maneuver warfare, if a student can learn decision making at the tactical level and apply it to maneuver, he is well on the way to learning to apply maneuver at the operational and strategic levels also. He will need to study at these levels eventually, and be exercised at these levels, but tactics is the foundation.

Recognizing, then, that definitions and procedures are important, but only relevant if they are relevant to tactics, let us return to how to teach tactics, this most fundamental of military subjects.

I taught an evening course at Quantico when I was vice president of the Marine Corps University. I opened it to all ranks and used it to experiment with ways of teaching maneuver warfare. I taught it five successive semesters and it was never the same twice. It helped me to develop some of my thoughts on the subject and helped a number of Marines gain an appreciation for what these so-called maneuver tactics were all about. I called the course "Contemporary Tactical Thought." I did not call it "Maneuver Warfare" because, deep in my heart, I feel there are only two kinds of tactics: good tactics and bad tactics. In developing maneuver warfare, very simply, we tried to adopt that which was good and reject that which was bad about tactics. Maneuver warfare has been a fitting name because it restored maneuver to tactical thinking, maneuver having fallen by the wayside in the technology explosion that accompanied the aftermath of World War II and development of the atomic bomb.

In "Contemporary Tactical Thought" I usually began by requiring reading of Lupfer's *Dynamics of Doctrine* and Lind's *Maneuver Warfare Handbook* as prerequisites, so that we could start right out discussing battle with an understanding of the fundamentals presented in those two books.

In order to immerse students immediately into the solving of combat problems, I gave them the first four chapters of William Glenn Robertson's "Counterattack on the Naktong" (*Leavenworth Papers*, No. 13), a well-documented study, including superb maps, on the very early

days of U.S. involvement in the Korean War. I had a number of reasons for selecting this study. It involves defense of a river line, and rivers make nice, clear issues of contention, besides presenting the temptation (especially for the defender) to become linear and to orient on a terrain feature (the river) instead of the enemy, which is exactly what the Americans did in August 1950. Also, I wanted my students to see how bad we had gotten during just a few years of peace, and how quickly we had put all thought of maneuver aside in deference to firepower, especially once we were able to rest our minds under the false security blanket of the atomic bomb. I like studying the Korean War because it is so heavy with lessons for us *today* and because it tends to be neglected. Had we paid attention to what was happening in Korea, we might have been prepared for Vietnam and able to cope with it. Furthermore, the problems introduced to us in 1950 have yet to be played out. It was in Korea that a low (*very* low) technology army, the Chinese, did relatively well against the highest technology army (including Marines) in the world. In fact, the Naktong study shows also that the North Korean Army was doing quite well, at least for a while. Students of maneuver warfare need to consider why that was and what it augurs for the future.

Now that we have Desert Storm to consider as history, we have an example of a Third World country trying to resort to high technology and discovering that it was not a good way to confront the United States. Even now I am not comfortable that either the U.S. Army or Marine Corps has faced up to the problem of preparing their "warriors." Our adversaries in the Far East had to be warriors; that is, they had to apply the art of war because they had no other option. I am neither holding them (North Koreans, Chinese, North Vietnamese) to be the premier soldiers of the world, nor am I condemning technology. I am simply pointing out that for years we neglected the essence of good tactics, that it hurt us, and that even though we do have the best technology in the world, there is nothing wrong with being the best tacticians in the world as well. In fact, the U.S. Army and Marine Corps have a responsibility to the eighteen-year-olds of this country to be the best tacticians in the world. In Vietnam, I saw starkly the price of neglecting that responsibility.

So, in "Contemporary Tactical Thought," we studied the early stages of Korea. I let my students' minds run free so they could make the decisions they thought ought to have been made by American com-

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manders fighting North Korean infiltrators. I did not restrict them to the training inadequacies or military inadequacies of the 1950s American military. They supplemented their readings in Robertson's book with Max Hastings's *Korean War* and Russell Spurr's *Enter the Dragon*.

We did decision-making exercises in class, and soon left the Korean War behind as we tackled John English's *On Infantry*, chapter by chapter. This is an important book and it never works as a prerequisite. People don't really read it. They say they do but they don't. Perhaps it's the misguided emphasis on speed-reading in this country. Many officers told me they have read the book but then they can't discuss it in class. So I made them go through it, and we discussed it, applied its concepts in decision exercises, and wrote about it in essay quizzes.

After this we tackled the German stuff. In the early days of maneuver warfare I was shocked by the prejudice against Germans. It is simply a hurdle we have to overcome. I know they lost two world wars, but suffice it to say, one of the reasons they lost was not bad tactics. Their tactics, in fact, were so powerful that the entire world had to go to war against them. Hitler, Nazism, and all kinds of evils spelled their doom, but if we ignore the intellectual breakthroughs in tactics that they made in a century and a half of unprecedented military study, then we are indeed neglectful. So, in "Contemporary Tactical Thought," we read Rommel's diary, Gudmundsson's *Stormtroop Tactics*, and some chapters out of Manstein and von Mellenthin.

I must mention at this point another book I used in the course, *Infantry in Battle*, tactical problems compiled by the U.S. Army Infantry School in the 1930s. The book serves throughout any modern tactics course for a number of reasons. Its combat examples cross cultural lines to include U.S., British, French, and German so it helps a little with the prejudice problem. It is one of those rare books, along with Lupfer's, Rommel's, and English's, that takes you down to the tactical level and poses questions relevant to the squad leader and platoon leader. Furthermore, the book is extremely well done. It is an excellent text and workbook for a tactics student who is curious to learn about how to maneuver on the battlefield and concerned about learning good tactics as opposed to bad.

This takes us into yet another dimension. In the 1930s, the U.S. Army Infantry School was doing it right. I own a copy of the post-World War II version of *Infantry in Battle* and it is decidedly inferior. Somewhere we lost the way. The Marines were teaching it right in the '30s also.

I have investigated the archives at Quantico and discovered old problem exercises that are very similar to those presented in *Infantry in Battle*. In the 1930s the Army and Marine Corps were teaching their students what we now call the case study method. They were giving their students real-world cases and demanding that they make decisions with incomplete information. They placed heavy emphasis on maneuver along with firepower, and did not fall into the post-World War II trap of neglecting maneuver and considering firepower almost exclusively. They followed the philosophy I am trying to restore. The evidence is that I am offering little new here, but a return to some valuable lessons of the past. Where and why we lost the way raises other questions I will not endeavor to answer in this essay.

One of the best experiences I had with "Contemporary Tactical Thought" was the semester I did the exam in the field. Because it was given as an evening course—and maybe also because of my overwillingness to compromise with work schedules—I did not conduct the course according to my ideal, which would have meant beginning in the field. As an alternative, I finished in the field by giving the exam orally outdoors. It was not difficult to get permission from students' commanding officers for them to be with me during daylight working hours on the last day of class. I was already getting favorable comments about the course, and commanders were understanding. There is something about the idea of an exam in the field that seems fitting for Marines. Should any Marine be allowed to stay in the Corps if he does not periodically go into the field and submit himself to a test of his tactical decision-making ability? Is it right to release the private from boot camp if we have not personally quizzed him about what he would do on a given spot of ground if he were in a tactical crisis upon which his life depended—and his fellow Marines' lives? Should the gunnery sergeant be a gunnery sergeant if he has not been taken outdoors and tested, made to think on his feet about combat? How can the major be given a certificate that says he is a graduate of the Command and Staff College if he has not demonstrated in the field that he can make tactical decisions and deal with the unexpected at the battalion and regimental level?

In "Contemporary Tactical Thought" I took a group of young NCOs to the field for their final exam. We talked frankly about tactics, Vietnam, and wars of the future. They shared with me afterward (in fact, after

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their grades were awarded and they were "safe"! that it was during this session that tactics became real to them for the first time and that their confidence grew like never before. Of course we should have done it during the *first* meeting of the class, and in many more sessions. Without any doubt, the field is the place to begin. All my best experiences have occurred when I have done it that way. Not only were the sessions in the field among the most instructive, but the classroom periods that followed "took" in a way they never would have with students who had not yet gone outdoors. But it is important to do the exam at the end of the course in the field, too. That was a major lesson I carried away from "Contemporary Tactical Thought."

Overall, we find that a great deal more is expected of the maneuver warfare teacher than was of the instructor of methodical battle. The teacher of maneuver warfare must study war and be able to discuss on his feet real issues of decision making. To be bound to the structure of schedules and lesson plans is to demonstrate the modus operandi that is counter to maneuver warfare. Maneuver warfare is a style of operating as well as a style of fighting. The adage "how we operate in peace is how we will operate in war" applies here. We can hardly hope to conduct business in peacetime along the old bureaucratic lines that typified the days of methodical battle, and then suddenly, in time of war, switch successfully to high-tempo maneuver thinking, demanding the highest initiative at the lowest level and focusing on the enemy's moves instead of a preordained plan.

The up side is that teaching maneuver warfare is more interesting to the student, more exciting, and it better prepares him for combat. The down side is that it requires a lot more work and study on the part of the teacher. But the down side has an up side. The teacher who has labored to equip himself to handle the new demands of teaching maneuver warfare is a better soldier—better prepared for war and better prepared to lead.