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Maneuver Warfare Theory: Creating A
Tactically Unbalanced Fleet Marine Force?

A Monograph
by

Major G.S. Lauer

United States Marine Corps

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ABSTRACT

Maneuver Warfare Theory: Creating a Tactically Unbalanced Fleet Marine Force? by Major G. S. Lauer, USMC, 44 pages.

The application of the maneuver warfare theory as tactical doctrine within the U. S. Marine Corps has been a contentious issue for several years. The Marines adopted this theory for its tactical doctrine in 1988. The purpose of this monograph is to examine the soundness of this theory through an analysis of its logic.

The maneuver warfare theory presents an inductive logical argument. The theory takes a subject, or class, 'military victory in battle,' and through a process of analysis provides backing assertions about *some* events of this class supported by proofs (battles). From the assertions, the argument makes an inductive 'leap' to a conclusion, or assertion, about *all* such events.

The conclusion, or inductive leap, reached by the theory is that future battles are to be won through the disruption of the enemy's decision cycle, through maneuver, and not through physical destruction. The backing assertions which support this conclusion are, in essence, that small forces can consistently win against larger forces using a maneuver warfare style of warfare. This style of warfare emphasizes disruption caused by fast tempo, or movement within the enemy's decision cycle to disrupt his view of reality. Fighting is incidental to victory because the target is the enemy's mind and not his physical destruction. The Prussian/German army is the primary and most important proof of the maneuver warfare theory.

This monograph refutes the maneuver warfare theory by demonstrating that the backing assertions and proofs are neither sound nor truthful enough to warrant the conclusion or inductive leap. The criteria, Bidwell's Five Fallacies, demonstrate the unsoundness of the backing assertions. A counter-example, the methods and intent of the Prussian/German army, refutes the proof that this army practiced a maneuver style of warfare.

Finally, the implications for the United States Marine Corps lie in the unbalancing of its force structure caused by adoption of this theory as tactical doctrine. The theory is unsound as a basis on which to build tactical doctrine, which in turn drives unsound force structure decisions.

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I. Introduction

This monograph considers the tactical effect on United States Marine Corps doctrine and force structure of the adoption of the maneuver warfare style of warfighting. The Marine Corps adopted the maneuver warfare style of warfighting as doctrine in Fleet Marine Force Manual (FMFM-1)¹ and defined this style as:

Maneuver warfare is a warfighting philosophy that seeks to shatter the enemy's cohesion through a series of rapid, violent, and unexpected actions which create a turbulent and rapidly deteriorating situation with which he cannot cope.²

Further, FMFM-1 draws a distinction between a maneuver style of warfare and an attrition/firepower style of warfare, and defines the attrition style as:

Warfare by attrition seeks victory through the cumulative destruction of the enemy's material assets by superior firepower and technology.³

This distinction first appeared after the Vietnam War as used by a group of loosely associated analysts, known collectively as the Defense Reform Movement, and the distinction was accepted as a useful academic device to study the fundamental nature of modern war.⁴ The term maneuver as defined above emphasizes the use of disruption of the enemy force in battle as the means to victory.⁵ The terms firepower and attrition as defined above emphasize the destruction of the enemy in

battle as the means to victory.³ Implicit in these definitions, as well as the Marine Corps adoption of the maneuver style, is the notion that disruption creates a greater effect on the enemy than the effects of destruction.⁷

If a maneuver doctrine allows combat forces to 'buy' more on the battlefield through disruption than a firepower doctrine 'buys' through destruction, then force structure can be modified in two ways. First, we can reduce the heavy firepower systems to a minimum as the Marine Corps is planning with the following proposed force structure changes:

- 1) Elimination of two F/A-18 squadrons;
- 2) Reduction of the M1A1 tank buy by half;
- 3) Removal of self-propelled artillery, 155mm and 8-inch, from the active to reserve force;
- 4) No procurement of the Multiple Launch Rocket System (MLRS);
- 5) Changing Direct Support (DS) artillery to 105mm from 155mm.⁸

Second, we can lighten the existing forces to increase their tactical mobility. The Marine Corps has accomplished this by reducing the combat service support (CSS) units and increasing the size of the infantry battalion.⁹ Maneuver warfare theory, when applied as tactical doctrine, calls for a force structure light in firepower and possessing great tactical mobility.¹⁰

Does the adoption of maneuver warfare theory, as

tactical doctrine, lead to the creation of a tactically imbalanced force of combined arms in the Fleet Marine Forces? In the context of this study, the tactical level is the Marine Expeditionary Force and below; notionally, this force contains one division, one air wing, one service support group, and one command element." Since WWII, Marine Corps force structure has been based on a balanced force of line infantry and combined supporting arms; balanced to best provide the mobile tactical forces necessary to win in a contingency or expeditionary conflict.

The first assumption of this study, then, is that the current Fleet Marine Force structure represents a compromise as a contingency and expeditionary combined arms force; best described as "light enough to get there, and heavy enough to win." The second assumption is that tactical maneuver warfare theory suggests a bias towards smaller, lighter forces, with fewer firepower assets, focusing on maneuver for victory. These assumptions assist in the organization of the study and in determining the relevance of the study for the United States Marine Corps.

This study will address the adequacy and correctness of the maneuver warfare theory and the tactical implications of the conclusion drawn for the future of the United States Marine Corps. A brief

history of the roots of the concept of maneuver warfare and its modern development as a theory of war will be presented. The logic of maneuver warfare theory will be examined in detail. The application of the theory as doctrine will also be presented.

The maneuver warfare theory presents an inductive logical argument. The theory takes a subject, or class, and, through a process of analysis, derives backing assertions about *some* events of this class supported by proofs. From the assertions, the argument makes an inductive 'leap' to a conclusion, or assertion, about *all* such events. Based on the inductive logical argument of the theory, this analysis will key on the assertions and proofs which lead to its conclusion.¹² The criteria used to evaluate the assertions are "The Five Fallacies," as presented by R.G.S. Bidwell and summarized as follows:

- 1) Miniaturism or David and Goliath Fallacy;
- 2) The Magic Weapon Fallacy;
- 3) The Chess Fallacy;
- 4) The Bloodless Operation Fallacy;
- 5) The Passive Enemy Fallacy.¹³

Further, the study will present a detailed analysis of one proof from the theory for verification of the assertions. Finally, the study will present the implications for the United States Marine Corps which result from the adoption of the maneuver warfare theory. The study begins with a look at the history of

the development of the maneuver warfare theory. This is vital to an understanding of the theory of maneuver warfare, and its current prominence for discussions of tactical doctrine.

II. Development of Maneuver Warfare Theory

Securing national policy objectives by military force, when called upon, is the purpose of the Marine Corps.¹⁴ The ability of the Marine Corps to fulfill its national security purpose is directly reflected in its stated theory, tactical doctrine, and force structure. The adequacy and correctness of the conclusions drawn from the maneuver warfare theory will have a direct impact on the future composition and effectiveness of the Marine Corps in pursuit of national policy objectives.

The first official statement accepting the maneuver warfare doctrine for the U.S. States Marine Corps appeared in OH 6-1 "Fundamentals of Combat" in Jan 1988.¹⁵ The acceptance of this theory as doctrine represents the victory of the defense reformers over the perceived American doctrine of firepower/attrition. The Marines are the first service to fully accept this doctrine, which has as its roots the divisive debate over the nature of the failure in Vietnam.

The perceived deficiencies in American military

policy, and the failure of that policy to adapt to the overall decline in American power and influence, drove the debate over theory and doctrine.¹⁶ The generally accepted term which describes those associated with this effort is the "defense reform movement."¹⁷ A central theme to the defense reformers is a shift in the emphasis in military doctrine from attrition to a maneuver style of warfare.¹⁸ The defense reform movement, then, presents war as either one in which attrition or maneuver is the key to victory.¹⁹ The concept of victory through maneuver has been paramount at various periods of military history.

Sun Tzu was the perhaps the first to state what is one of the central assertions of the maneuver theory. "To subdue the enemy without fighting is the acme of skill."²⁰ Sun Tzu wrote at a time of virtually continuous war in China. He speaks throughout The Art of War of maneuver as the key to victory. "Thus a victorious army wins its victories before seeking battle."²¹

The basic assertions of the maneuver theory which seek to avoid battle, and which seek to use skillful maneuver to prevent battle but to gain victory, are present in Sun Tzu. The avoidance of battle preserved the army. Skillful maneuvering could prevent a battle with an opponent unwilling to risk his own army in a

disadvantageous battle. Destruction of the enemy army was not the key to victory. Disruption caused by speed, surprise, and deception were the keys to preserving your army and attaining the surrender or withdrawal of the enemy.²² Thus avoidance of battle was in the best interest of the state as destruction of the enemy army in battle might also weaken your own to an unacceptable degree. Preservation of the state was synonymous with the preservation of the army, so the best way to preserve both was to avoid the test of battle.²³ This idea has been prevalent at various periods of military history, most notably the eighteenth century.

Since World War I, armies and nations have sought to avoid the slaughter associated with the attrition caused by the firepower used in battles such as the Somme and Verdun. Liddell Hart is the name most clearly remembered as the earliest and most eloquent modern opponent of attrition.²⁴ J.F.C. Fuller is another British officer associated with the opposition to attrition and the search for an alternative doctrine.²⁵ The German and French Armies also sought to find a way out of the impasse that produced the stalemate and resulting attrition of the Western Front of WWI.²⁶

The common theme of these officers was to return

mobility and decisive maneuver to warfare as an alternative to the mass bloodshed of the First World War. The means derived by the Germans, during WWI, and recommended by Liddell Hart for the British army after WWI, was infiltration. Infiltration was a means to produce a penetration in the enemy defensive front which sought to isolate and bypass the enemy strongpoints. Preceded by a short, intense artillery barrage, specially trained forces conducted the infiltration in small numbers. These small groups moved quickly into the depth of the enemy defense followed by larger forces to reduce strongpoints and widen the breach. Finally, large mobile formations would pour through the gaps, moving quickly to prevent the formation of cohesive deep defensive lines.²⁷

Liddell Hart coined the phrases 'man-in-the-dark' and 'expanding torrent' to describe the actions of the forces conducting these types of operations.²⁸

While Liddell Hart saw infantry as the means to conduct these operations, Fuller saw the tank as the best means to return decisive maneuver to war, and converted Liddell Hart to this view as well.²⁹ Liddell Hart believed in the need for a small, professional, mechanized army relying on speed and maneuverability as the means to victory.³⁰ Mobile war was the key to avoiding the carnage and stalemate of WWI.

The reaction to WWI, by these writers and theorists, resulted in a demand for a small, highly mobile British army. This small army would fulfill several of the desires of these reformers. First, a small army would be unsuitable for combat on the European continent. Second, a small army would not suffer the tremendous losses of WWI. Able to win without severe casualties and used in the traditional British method of a colonial fire brigade, the British army would not be subject to the destruction of a future war on the continent.³¹ A similar reaction to the stalemate and attrition of the Vietnam War led to a demand for reform of the United States military.

In the period 1975-1977, persons associated with the defense reform movement such as Senator Gary Hart, William S. Lind, Edward Luttwak, Stephen L. Canby, Jeffery Record, and John Boyd, among many others, began a serious delineation of what is now meant by the theory of maneuver and theory of attrition/firepower. The leading proponents of doctrinal change by the U. S. military to a maneuver style of tactical warfare, and away from the perceived emphasis on an attrition style of tactical warfare, have been Luttwak, Lind, Canby, and Boyd. Their perception of the results of the Vietnam War, led them to a strict separation of a theory of maneuver and a theory of attrition/firepower.

They established these two theories as opposites which defined the debate.³² In the view of these writers and theorists, the Vietnam War was lost due to an adherence to attrition/firepower and would not have been lost if the military had fought using a maneuver style of warfare.³³ In parallel to the British debate after WWI, mass armies, supported by massive firepower, caused only stalemate and mass bloodshed.

Historically, then, the current maneuver versus firepower/attrition debate has its parallel in the post-WWI debate in Britain over the size, composition, and doctrine of the British armed forces. The British desire to never again be involved in large scale ground combat in post-WWI Europe, and the American desire to avoid large scale military efforts, such as required in Vietnam, are similar. Both periods produced writers and theorists who questioned the style of warfare prevalent in their period. The questioning of these individuals led to debate, and, in some cases, reform of tactical doctrine.

The leading reformers in Britain, Liddell Hart and Fuller, argued against the need for large armies using a firepower intensive doctrine. Further, they argued that the best way to avoid such carnage in the future was a return to a small army with a new doctrine based on maneuver and the indirect approach.³⁴ In the United

States, the leading reformers seek a smaller, more mobile armed forces, using a maneuver-style tactical doctrine.³⁵ The goal, as in Britain, is to avoid attrition warfare and its attendant casualties.

The central argument of the defense reform movement lay in this reaction to the failures of the Vietnam War and what was widely viewed as a senseless loss of life. The reformers sought a method for small forces to defeat larger forces in battle without having to pay the price in casualties.

The goals of the defense reformers can be distilled to the idea that small, affordable, and professional armed forces using the maneuver style of warfare can fight and win in a short, decisive war. Further, the defense reformers base this belief on the idea that the American people, and the Congress, will only accept, and pay for, the relatively smaller and presumably more capable armed forces possible with a maneuver style of warfare.³⁶ A basic belief of the defense reformers is that America cannot field large forces any longer and must accept the smaller forces more in tune with political and budgetary reality. In short, smaller is both more affordable and politically acceptable. In order for these smaller forces to win against larger forces, the military forces must accept a tactical doctrine which makes it feasible for small

forces to consistently win against larger armies. The maneuver warfare theory proposes that doctrine. The details and doctrinal application of the theory of maneuver warfare are the subjects of the next section.

III. Maneuver Warfare Theory

John Boyd is the chief theoretician and father of maneuver warfare theory.³⁷ Boyd derived a theory of conflict based on observation of air-to-air combat between Mig-15 and F-86 fighter aircraft during the Korean War. During fighter combat, the F-86 fighter consistently outfought and outmaneuvered the Mig-15. Boyd observed that the cause of this disparity was due to several factors, including, the better training of F-86 pilots, the F-86 was a more powerful aircraft, and the F-86 was easier to control in flight. F-86 pilots observed that the faster transitions of the aircraft in combat, combined with better pilot skills, caused the Mig-15 pilots to passively give up before being shot down.³⁸

Boyd attributed this passive reaction of the Mig-15 pilots to the ability of the F-86 pilot to go through a cycle of observation, orientation, decision, and action (OODA), faster than the Mig-15 pilot. Unable to overcome the tempo of the F-86 in combat, the Mig-15 pilot lost control of his environment and was beaten psychologically before being shot down.³⁹

The decision cycle, and the speed through which it is processed, is the key to understanding the application of the Boyd theory of conflict to maneuver warfare theory. Boyd observed that it was the act of going through this decision cycle at a faster rate than your enemy which presented him with a series of disrupting events. It is this disruption of the enemy's decision which Boyd believed to be the key to victory and the essence of the maneuver style of warfare.⁴⁰

Boyd conducted some historical research and believed that he found this same phenomenon to be at work in certain significant battles of ground combat. In these battles it was apparent to Boyd that the victor, who was often outnumbered, won through the psychological disruption of his opponent. The victor in these battles apparently was cycling through the decision cycle at a faster tempo than the loser, presenting the loser with an ever-increasing number of uncontrollable situations with which the loser could not cope. The disruption of the losers psychological control of events and environment caused the victory. Physical destruction was not a cause of defeat.⁴¹

Boyd described the fundamental tactical action which was the cause of victory as follows:

Observe-orient-decide-act more
inconspicuously, more quickly, and with more

irregularity as basis to keep or gain initiative as well as shape and shift the main effort: to repeatedly and unexpectedly penetrate vulnerabilities and weaknesses exposed by that effort or other effort(s) that tie-up, divert, or drain away adversary attention (and strength) elsewhere.⁴²

Further, Boyd described three categories of conflict: attrition warfare, maneuver conflict, and moral conflict. Boyd further described what he believed to be the essence of each and the aim of each which are summarized as follows:

Attrition warfare aim: Compel the enemy to surrender and sue for peace.

Attrition warfare essence: Destruction to break the enemy's will to resist.

Maneuver conflict aim: Generate many non-cooperative centers of gravity, as well as disorient, disrupt, or overload those that adversary depends upon, in order to magnify friction, shatter cohesion, produce paralysis, and bring about collapse.

Maneuver conflict essence: Disruption to break enemy will to resist using ambiguity, deception, novelty, fast transient maneuvers, and main effort to achieve disorientation, surprise, and the shock of paralysis.

Moral conflict aim: To destroy the moral bonds that permit an organic whole to exist.

Moral conflict essence: To create, exploit, and magnify fear, anxiety, and alienation in order to generate many non-cooperative centers of gravity, as well as subvert those that adversary depends upon, thereby magnify internal friction.⁴³

Maneuver warfare, then, in relation to Boyd's theory of conflict, fits very closely into the two areas of

conflict which sought to disrupt the enemy's mental processes as the means to victory, maneuver and moral conflict.

Selecting examples of historical battles in which the victor was generally inferior in strength, Boyd found some common important characteristics. The assertions which Boyd drew from his historical examples as proof can be summarized as follows:

- 1) Consistent victory by smaller forces;
- numbers less important since the aim is to disrupt enemy's mind.
- 2) Tactical victory is caused by psychological disruption;
- Disruption is caused by speed (tempo) of movement, surprise, and deception.
- 3) Destruction is incidental to victory.⁴⁴

Boyd cited the German Army and its method of war, which received the name "Blitzkrieg" from western journalists, as the most important and primary modern proof of the application of his theoretical observations.⁴⁵ He noted the following characteristics:

- 1) Use of Schwerpunkt (main effort) concept to focus, shift forces, and harmonize operations at all levels.
- 2) Intelligence, reconnaissance and stratagem emphasized to unmask and shape patterns of the enemy.
- 3) Initial surprise coupled with fast tempo/fluidity of action.
- 4) Concentrate strength against weakness.
- 5) Decentralized command with wide freedom of action for subordinate leaders.
- 6) Superior mobile communications to maintain control and shift Schwerpunkt.
- 7) Minimum logistics tail.⁴⁶

Boyd stated that the purpose of German operations was to disrupt the enemy and that this psychological disruption was the cause of victory.⁴⁷

With the above theory as basis, William Lind, in his book The Maneuver Warfare Handbook, described the specifics of the tactical application of this theory. Lind provided a list of principles, mental reference points (techniques), and tools through which the tactical unit commander could successfully apply Boyd's prescription to seek the disruption of the enemy's cohesion as a fighting force. Lind's principles of the tactical maneuver warfare doctrine are:

- 1) Decentralization of command.
- 2) Accept confusion and disorder as the natural state of affairs.
- 3) All patterns, recipes, and formulas are to be avoided.⁴⁸

The mental reference points (techniques) for the application of the tactical maneuver warfare doctrine are:

- 1) Mission-type orders.
- 2) Use of Schwerpunkt or force of main effort to focus force.
- 3) Use of surfaces and gaps. Use recon to pull schwerpunkt through gaps and avoid the enemy's surface of front line.⁴⁹

The tools of tactical maneuver warfare doctrine are:

- 1) Use firepower only as suppression to help a unit maneuver.
- 2) Use of counterattack as essential tool to obtain decisive results.
- 3) Maintain strong reserve.
- 4) Command and control system based on monitoring.⁵⁰

Lind's views on tactical maneuver warfare, based on the Boyd theory, are best summarized by Lind himself.

... object (of German maneuver) is to shatter the enemy's organizational and mental cohesion by creating unexpected and dangerous situations more rapidly than he can deal with them.⁵¹

Because the object is not the physical destruction of the opponent's men and equipment but, rather, the destruction of his mental cohesion and will, a maneuver doctrine permits the offensive forces to avoid rather than seek tactical engagements.⁵²

Maneuver warfare, correctly understood, offers hope to an army that must expect to fight outnumbered. Against physical superior forces, an attrition contest can have only one outcome. But maneuver warfare makes physical size and strength less important. A large and powerful, but slower and more clumsy, force can fall victim to a small force adept at maneuver as history has often shown.⁵³

The theory of maneuver uses inductive logic. An analysis of this logical construction provides the class, assertions, proofs, and the conclusion of the maneuver warfare theory.⁵⁴

Class: Military victory in battle.

Assertions:

- 1) Inferior forces achieve consistent victory in battle.
- 2) Victory in these battles is due to psychological disruption of enemy mental balance, view, and control of reality.
- 3) Maneuver of forces on the battlefield is the means to the end of disruption and not the application of firepower.
- 4) The speed of maneuver (Tempo) creates the conditions for disruption by

moving more quickly (inside) the enemy decision cycle.

5) Fighting (combat) is incidental to victory.

Proofs:

- Leuctra
- Cannae
- Marathon
- Prussian/German Army
 - Leuthen
 - German infiltration tactics of 1918 offensives
- Poland 1939
- France 1940
- Russia 1941
- Israel 1956, 1967, 1973⁵⁵

Conclusion: (Inductive Leap) - The cause of victory in battle is the disruption of an enemy force through maneuver to interrupt his decision cycle and his perception of reality.

Therefore: Victory in future battles is to be sought, not in the physical destruction of the enemy, but in the disruption of his cohesion to act.

The essence of tactical maneuver warfare down to the squad level is to avoid battle and to seek the disruption of enemy forces rather than their physical destruction. Subject to the evaluation presented in the next section, the essence of maneuver warfare theory predicts victory in battle through psychological disruption vice physical destruction.

IV. Analysis and Evaluation

The previous sections have presented the history and theory of maneuver warfare. In this section the

primary question of the thesis will be answered. The validity of the argument is the basis of the analysis and evaluation section. This section will analyze the correctness of the conclusion or inductive leap of the theory. First, the technical aspects of this refutation will be presented. Second, the criteria will be explained and the relevance of the criteria determined. Third, the backing assertions will be compared to the fallacies for historical validity, and one proof will be examined in detail to determine the correctness of the backing assertions as they pertain to that proof. With this as the road map for analysis, the evaluation will seek to answer the thesis question as it pertains directly to the theory of maneuver warfare.

"The validity of an argument depends on its adherence to the standards of good form--deductive, inductive, or other--which govern it."⁵⁶ An inductive argument can be refuted by showing that its inductive leap is unwarranted. This is a method of attacking the move from backing assertions to conclusions. Another method of refutation is to attack the backing assertions themselves, and by showing at least one of them to be false or uncertain is to prove the argument *unsound*, though not invalid.⁵⁷

As shown in the previous section, the theory has a

valid logical construction in that it adheres to the correct form for an inductive argument. This section will refute the theory by attacking the backing assertions in two ways. First, Bidwell's Five Fallacies will be the criteria to judge the backing assertions for historical and theoretical correctness in relation to the fundamental nature of war. Second, the Prussian/German army example used as proof of the assertions will be used as a counter-example to refute the proof of these assertions.

Brigadier R.G.S. Bidwell presented "The Five Fallacies: Some Thoughts on British Military Thinking" to the Royal United Services Institute in February 1967. Bidwell described "The Five Fallacies" as substitutes for the "genuine laws of war," which distorted British military thinking between WWI and WWII and again after WWII.⁵⁸ The first fallacy presented was 'miniaturism' or the 'David and Goliath' fallacy.⁵⁹ This fallacy illustrated the school of thought which sought to avoid a large, offensively capable army, which could fight in another continental war. Certain authors espoused this fallacy in their writing, including such well-known writers and theorists as Liddell Hart, J.F.C. Fuller, and T.E. Lawrence, and sought to prevent a repeat of British involvement in a continental war on the order of WWI.

These proponents sought to return to reliance on an army of the size of the old colonial army. The small colonial British army, 'the thin red line,' possessed an heroic record of victories over larger native forces.

The second fallacy was the 'Magic Weapon' fallacy.⁶⁰ The magic weapon was any weapon which was the key to allowing the small, professional army to defeat any larger foe. Prior to WWI, 'the thin red line' of British soldiers, as described at the battle of Badajoz (1812), Waterloo (1815), and Mons (1914), was that magic weapon. After WWI, the tank became the magic weapon by which a small British army could defeat a larger continental foe, although the British army was never allowed to build the numbers of tanks desired by the theorists.⁶¹ And again after WWII, a new magic weapon appeared in the form of tactical nuclear weapons, which gave promise of allowing a tiny professional army to fight on the continent again, if required.⁶² The magic weapon negated the need for large, expensive armies and held out the promise of victory at small cost in blood and treasure.

The third fallacy is the 'Chess' fallacy.

Here we have the clearest example of not merely a valid but essential approach to the study of war becoming distorted by wishful thinking. The object of grand tactics; that is to say the direct or indirect approach, the attack on the rear or the flank.

surprise, the concentrated attack on separate fractions of the enemy, infiltration, and so on, is to give one's own soldiers the best possible chance in the decisive combat that must be the culmination of manoeuvre. The 'chess' fallacy elevates the manoeuvre to the decisive factor, as if wars were won by shadow-boxing.⁶³

The fourth fallacy, the bloodless operation, is related to the third.⁶⁴ This fallacy speaks to the idea that battles can be won without fighting. Clausewitz best addresses the true nature of war when he stated:

Kind hearted people might, of course, think there was some ingenious way to disarm or defeat an enemy without too much bloodshed, and might imagine this is the true goal of the art of war. Pleasant as it sounds, it is a fallacy that must be exposed: war is such a dangerous business that the mistakes which come from kindness are the very worst.⁶⁵

The fifth fallacy, the passive enemy⁶⁶, is also related to the third fallacy and speaks to the idea that maneuver can somehow induce an enemy to quit with little, if any, fighting.

Why should it be assumed in the face of all military history that good troops whose headquarters has been captured or neutralized, whose supply line has been cut, and who have been outflanked or surrounded, or who have been faced with some novel form of war, will tamely give in?⁶⁷

The application of these criteria to the maneuver warfare theory will determine whether or not the theory falls victim to espousing these 'substitutes for the true laws of war.' The soundness or truthfulness of

the assertions can be demonstrated by pointing to the incorporation of these fallacies as facts.

A legitimate question may be asked as to the relevance of these criteria to the modern theory of maneuver warfare. The relevance lies in the historical parallel presented earlier between the rise of the maneuver theory after Vietnam and the British experience after WWI. In the experience described by Bidwell, the fallacies were used to justify a small army, with little offensive capability, reliance on the magic weapon of the tank, and the intense desire to avoid the bloodshed of WWI. These fallacies can be seen as a primary contributing factor in the unpreparedness of the British nation to fight Nazi Germany in 1940.¹⁸ In the end, reality prevailed, though not in time to prevent the loss of most of the army's equipment at Dunkirk. Following Dunkirk, the British built a large army capable of taking on the German Army in offensive battle. The British nation again faced the reality of a major war with the attendant major lists of casualties.

The fallacies, then, provide a reality check to verify the assertions of the maneuver warfare theory against the real world of modern tactical combat. The following table and analysis will present a direct comparison between the backing assertions of the

maneuver theory with the fallacy(ies) it embraces. Each assertion is followed by the given proof (battles) and each fallacy or group of fallacies is followed by historical proofs as counter-examples. The table is followed by discussion of the assertions and fallacies and addresses the soundness or truthfulness of the backing assertions to the maneuver warfare theory in the context of the Prussian/German Army.

<u>ASSERTIONS</u>	<u>EXAMPLES</u>	<u>FALLACY</u>	<u>COUNTER-EXAMPLES</u>
Inferior forces can win consistently in battle using maneuver warfare style	Prussian/German Army 1757-1945 -Leuthen 1757 -1918 Offensives -1939 Poland -1940 France -1941 Russia	Miniaturism	France 1914 Poland 1939 France 1940 Russia 1941 Stalingrad 1942 El Alamein 1942 Byelorussia 1944 Oder-Vistula 1945
Psychological disruption is the key to victory-- (tempo, maneuver, surprise, deception)		-Magic Weapon -Chess ---Bloodless Operation ---Passive Enemy	
Avoid Battle; Fighting is incidental to victory		-Chess ---Bloodless Operation ---Passive Enemy	

The initial assertion of the maneuver theory to be evaluated is the idea that smaller forces can consistently win against larger forces using a maneuver style of warfare.⁶³ The fallacy of miniaturism applies directly to this assertion. The proof which will be

evaluated is the Prussian/German army and its battle performance and characteristics during the period 1757-1945. The purpose for selecting this proof lies in the extensive documentation, particularly for the modern period of battle in World Wars I and II. Further, this proof is the bedrock of Boyd's theory of conflict and the theory of maneuver warfare.⁷⁰

In the case of the German army in WWII, this assertion can not be demonstrated as truthful. The German army in Poland vastly outnumbered the Polish Army. In France 1940, the German army was roughly equal in strength to the combined Allied armies. In Russia, the German army was always inferior in strength, and except for the spectacular early victories, was never able to overcome the vast Russian superiority in men and equipment. As the war progressed and the second front was opened in France in 1944, the numerical and qualitative advantage of the allies crushed the German army by 1945.

The point of using the German experience is to demonstrate that numbers count regardless of the doctrine or style of warfare.⁷¹ The assertion that small good armies can defeat large good armies consistently at the tactical level is not supportable by the this proof of maneuver doctrine.

The importance of this point cannot be

overemphasized. The idea of the inferior force defeating a larger force using the maneuver style of warfare is central to the Boyd theory.⁷² A key foundation of the maneuver theory is the shift from reliance on numbers and firepower/attrition which a doctrine based on maneuver provides.⁷³ This shift from reliance on firepower and numbers to maneuver is only valid if maneuver can be proven to demonstrate a greater impact on the battlefield than the numbers implied by the firepower/attrition theory. In the case of the German army, the Germans sought to bring numerical and firepower superiority to bear wherever possible, whether only at the point of decision, as in France and Russia, or overall as in Poland and the Balkans.

The German General Waldemar Erfurth wrote a book entitled Surprise, which was published in English in 1943.⁷⁴ In a section addressing battle, he stated that in order to achieve a decisive victory it was necessary to achieve an *incredible* (Erfurth's emphasis) numerical superiority.⁷⁵ The assertion that small forces can consistently defeat larger forces using a maneuver style of warfare cannot be demonstrated as truthful using the German Army of World War II as proof.

The remaining assertions will be addressed as a unified set. These assertions are summarized as

follows:

Tempo is the means to achieve disruption of the enemy.

Disruption is the means to defeat an enemy.

Destruction is incidental to victory which is due to the disruption of the enemy's decision cycle, which is caused by the tempo of maneuver.⁷⁶

"In maneuver warfare, tempo is a weapon, often the most powerful weapon. ...It is, therefore, highly important in sustaining tempo to avoid unnecessary battles, battles where victory really does not do much beyond causing some attrition."⁷⁷ This statement by William Lind, clearly demonstrates the maneuver warfare theory assertion which the 'Magic weapon' fallacy addresses. Tempo, translated as moving more quickly than your opponent through the decision cycle, seeks to avoid battle.⁷⁸ The avoidance of battle means that this quick movement around or through an enemy will not be interrupted by any bloodletting. The avoidance of battle and bloodshed clearly demonstrates the maneuver warfare theory assertion which the 'bloodless operation' fallacy addresses.

The insistence by the maneuver warfare theory that a quick movement around or through an enemy, avoiding battle, elevates the maneuver to the central place in the battle.⁷⁹ Since it is the maneuver itself which causes the disruption and the defeat of the enemy, the 'chess' fallacy clearly addresses this assertion. Lind

states, "Maneuver means Boyd cycling the enemy, being consistently faster through however many OODA Loops it takes until the enemy loses his cohesion-- until he can no longer fight as an effective, organized force."⁸⁰

Finally, "sometimes, a Boyd Cycled enemy panics or becomes passive. This is an ideal outcome for the victor, because a panicked or passive enemy can be annihilated or captured at the lowest cost in friendly casualties. ...the basis of victory was ...one side Boyd Cycled the other."⁸¹ The application of the 'passive enemy' fallacy is clearly demonstrated by the above passage. The implication is plain that an enemy will lose cohesion and quit when faced with a force using the maneuver style of warfare.⁸²

With the above discussion as a basis, the proof cited for the assertions of tempo, disruption, and avoidance of battle through maneuver, will be discussed as they apply to the German army.

The first and most important question which must be asked is what is the intent of German tactical maneuver? The maneuver warfare theory states that the German army seeks to disrupt the enemy through the higher pace of its movement. Boyd stated,

The idea is to avoid battle. ...What is the intent? Is it to kill? No. Here is the intent--to shatter cohesion, produce paralysis, and bring about adversary collapse by generating confusion, disorder, panic, and chaos.⁸³

Clearly, this passage demonstrates the proof of the assertion that disruption, based on faster tempo and the avoidance of battle, was not only what the Germans intended, but the root cause of their tactical victories. Lind states that the German army is the only country in this century to institutionalize maneuver warfare, "The German army remains the single well-documented case of institutionalization of maneuver warfare."³⁴ The documentation for this assertion is lacking, however.

The search for German intent is best conducted through German documents which conveyed their intent through orders or interviews. If the German army practiced maneuver warfare in this century, then German documents should demonstrate the practice of disruption, tempo, and avoidance of battle as key features of the art of war as the German army conducted it. Clausewitz, although he was published in 1835 after his death and did not come to public prominence until the elder Moltke's statements following the Austro-Prussian War of 1866³⁵, is the logical place to begin the search for German intent and practice of war.

Clausewitz clearly stated the primacy of destruction in the following passages:

The object of fighting is the destruction or defeat of the enemy.³⁶

What do we mean by the defeat of the enemy?

Simply the destruction of his forces, whether by death, injury, or any other means--either completely or enough to make him stop fighting.⁸⁷

How are we to counter the highly sophisticated theory that supposes it possible for a particularly ingenious method of inflicting minor direct damage on the enemy's forces to lead to major indirect destruction; or that claims to produce, by means of limited but skillfully applied blows, such paralysis of the enemy's forces and his will-power as to constitute a significant shortcut to victory? ...We do claim, however, that direct annihilation of the enemy's forces must always be the dominant consideration.⁸⁸

The destruction of the enemy's forces is admittedly the purpose of all engagements.⁸⁹

Alfred Count von Schlieffen is best remembered for the famous plan of attack used as the basis for the German invasion of France in August, 1914. The views of this officer carried great credibility within the German army long after WWI. At the time of his tenure as the Chief of the German Great General Staff, he wrote a letter concerning his views on the purpose of battle. In this letter of 18 September 1909, he stated, "the battle of annihilation alone is the desirable battle."⁹⁰

German regulations of this period reflect the same insistence on the annihilation of the enemy forces as the purpose of battle. The 1910 manual 'Principles of Higher Troop Conduct' states,

The utmost goal of every martial act is the annihilation of the enemy. That must always

be striven at. Surrounding, or, under certain circumstances, encircling, present annihilation as the price of victory.⁹¹

Concerning the idea of avoiding battle, it is useful to note that all German sources considered for this study noted the requirement for annihilation of the enemy's forces as the object of battle. Colmar von der Goltz in 1906 stated,

The attempt to frighten the enemy sufficiently to cause him to submit to our will, by simply moving masses of troops or, - as a well known writer of the present century has expressed it, - 'to gain a victory without battle, through the mere power of maneuver,' will no longer accomplish its purpose.⁹²

Further, Sigismund von Schlichting, writing in 1897-99, believed that the final objective of all operations was the battle.⁹³

In the 1933 version of Truppenfuhrung, the purpose of battle is to seek the annihilation of the enemy.⁹⁴ This manual served as the basis of German tactics throughout WWII, as well as the model for the U.S. Army's FM 100-5, Operations, of 1939.⁹⁵ As further evidence of the continued and significant emphasis placed on seeking battle and the physical destruction of the enemy, two authors of the interwar years were of importance, Waldemar Erfurth and Heinz Guderian.

While maneuver warfare theorists such as Lind, Luttwak, and Boyd cite Guderian's book, Panzer Leader,

as a primary source of their proof of the German use of maneuver doctrine, an important counter-example is Guderian's article entitled 'Armored Forces.' Written in 1937, Guderian described the most important component of the mobile attack by tanks as the effect of its fires, i.e., the effect of the destruction of the enemy by fire.⁹⁶ Further, he described the moral effect of a tank attack as produced by the effect of the actual fires, or the destruction of the enemy by fire.⁹⁷ Thus, Guderian, cited as a primary proof of the practice of maneuver warfare by the maneuver theorists, believed that the moral dislocation of the enemy was 'bought' as the result of his destruction by fire and not the other way around.

Waldemar Erfurth wrote a study of the concentric movement of large units for the purpose of producing an encirclement battle. Erfurth's Concentric Action of Separate Armies, written in July 1939, is important for several reasons. First, he emphasized that the concentric movement of armies sought as its goal the battle of annihilation, in accordance with the tradition of von Schlieffen.⁹⁸ Second, as an example of the fallacy of miniaturism, he stated the absolute requirement for superior strength in numbers and fires required to move large units deep in an enemy rear.⁹⁹ Finally, Erfurth indirectly demonstrates the error made

by Boyd when he, Boyd, cites as proof of maneuver warfare the influence of the infiltration tactics used in 1918. In his study, and in the writings of the other officers studied, no mention is made of the infiltration technique as the precursor of 'Blitzkrieg.'

This connection between infiltration tactics and the German practice of maneuver warfare is most important as proof of the assertion that the Germans avoid battle, seeking to avoid the enemy forces in order to get into the rear for the purpose of disruption.¹⁰⁰ In fact, the German method of war in WWII was a continuation of their traditional method of war.

The Germans recognized two methods of war, positional war (*Stellungskrieg*) and a war of movement (*Bewegungskrieg*).¹⁰¹ German conduct of war traditionally emphasized the necessity to fight a war of movement. All German maneuver was conducted with that thought in mind. Erfurth cited only examples of wars of movement such as those conducted in 1866, 1870, 1914, 1915-17 on the Russian front, and the 1918 offensives.¹⁰² No mention is made of the infiltration technique except as a means to effect a penetration through which a war of movement could be conducted. German General Hermann Balck, an often quoted officer

in maneuver circles, when questioned about infiltration tactics as 'von Hutier' tactics, stated that he did not know of such specialized tactics.¹⁰³ Further, he stated that he led a stormtrooper detachment during the offensives of 1918, but was unaware of any special significance to the tactical method employed.¹⁰⁴ Here again, the Boyd theory fails to demonstrate a connection with the theory of maneuver warfare. German forces conducted the penetration attack on a broad front, and sought to destroy enemy defensive forces in order to provide the paths through which mobile forces would then attack to encircle and annihilate enemy formations. The Germans sought battle to destroy the enemy.

As presented earlier, Erfurth wrote the book entitled Surprise. In it he stated, "The principle of annihilation is the fundamental law of war."¹⁰⁵ He emphasized the influence of von Schlieffen and the need to combine surprise with superior numbers to achieve success. Further, he stated,

Consequently, only the commander has a chance of winning a decisive victory who, *by surprise*, is able to concentrate an almost *incredible* numerical superiority at the center of battle. This superiority must be so overwhelming that the organization of the enemy army is immediately crushed.¹⁰⁶

Again, the emphasis is on numerical superiority and the seeking of battle to crush an enemy.

Further, if the German Army in WWII sought to use disruption as the means to defeat an enemy, then the operations orders given to German formations must have reflected this emphasis. Since German authors prior to WWII did not support the theory or practice of maneuver warfare in their writings, did the actual operations orders?

In 1939, the operations orders for the Polish campaign stressed that "The Polish Army would be destroyed in the western part of Poland, and reserves would be prevented from mobilizing or concentrating to resist the German advance."¹⁰⁷ These intentions were carried down to the orders for tactical formations.

In 1940, the concept of the German Army High Command, OKH (*Oberkommando des Heeres*), was to cut off the mobile forces of the Allied armies from the Channel Coast and force a battle of annihilation in his rear.¹⁰⁸ Army Group A was the 'hammer' and Army Group B was the 'anvil' for the attack into France.¹⁰⁹ In support of the concept of maneuver warfare, William Lind cites the example of Guderian's XIXth Corps which was tasked to cross the Meuse at Sedan, in May, 1940. Lind gives the credit for success of the entire campaign to the three Panzer divisions of this Corps. In fact, Panzer Group von Kleist (assigned to Army Group 'A'), of which Guderian's XIXth Corps was part,

contained a total of five Panzer divisions, three motorized infantry divisions, and one elite motorized infantry regiment *GrossDeutschland*, organized into three corps.¹¹⁰ Rather than the narrow breakthrough frontage described by Boyd and Lind in the analysis of this battle as proof of the practice of maneuver warfare, Army Group A's breakthrough frontage was approximately 60 km wide.¹¹¹ Further, William Lind characterizes the decision by Guderian to send his corps to the channel coast after the breakthrough at Sedan, as the essence of the maneuver warfare thought process.¹¹² In fact, the original orders for Panzer Group von Kleist, from Army Group 'A', directed that General von Kleist, who led his attack with Guderian's corps, advance to the channel coast after breaking through at Sedan.¹¹³

In 1941, during the Balkan campaign, the operations orders for the First Panzer Group of General von Kleist were to annihilate strong enemy concentrations near the Yugoslav capitol and to capture the capitol.¹¹⁴ Again in 1941, the objectives set for the attack into Russia specified the encirclement and destruction of the Russian army.¹¹⁵ These examples point to the obvious lack of emphasis placed on the disruption of enemy forces in battle as a means to achieve victory.

Long after WWII, as United States forces were faced with the possibility of conventional war in Europe with the Soviet Union, an attempt was made to capture the experience of officers of the former German *Wehrmacht*. As part of this effort, a series of lectures which included Generals Balck and von Mellenthin were conducted in 1979. During the course of a lecture conducted on 10 May 1979, with General von Mellenthin as the principal speaker, William Lind and John Boyd were able to question von Mellenthin on the purpose and intent of German tactical methods. The following quotes are pertinent to this study.

Bill Lind: General, in the counterattacks you discussed, you emphasized how the attempt was always made to hit the Russian penetration in the flank or in rear. In your view, what was the decisive point of the counterattack? Was it the destruction that was inflicted on the enemy by firepower or was it the disorganization and disruption of his cohesion that was caused by appearing suddenly from an unexpected direction?

von Mellenthin: The main point was to destroy the enemy. The Russian does not like to be attacked by surprise--then he panics. As soon as you have got a normal attack, well prepared, and he has the opportunity to dig in, and so on, you have no chance. The only chance you have with Russian units is to attack them not from the front line but from the rear or from the flank, therefore our aim was to attack the enemy by surprise and destroy him.

Bill Lind: Would you say that the destruction was in effect a *denouement* in the tactical action, but that the actual decision, the point where he came apart, was where he was surprised?

von Mellenthin: The actual decision was to get him by surprise and destroy him(original emphasis).

David Keener: I'd like to follow up on the question that Bill Lind asked a few minutes ago, and that was 'What was the effective instrument of defeat--disruption or destruction of an enemy unit?'

von Mellenthin: There is no doubt that the Russians succeeded in reorganizing their divisions and groups very quickly, and the only hope for us was not to disrupt them, but to destroy them. That was our only hope.

John Boyd: General, on your comments relative to the destruction of the forces, are you talking about every element or are you talking about their organic whole? Are you taking any prisoners or are you destroying them as individuals, annihilating them, killing them? I am talking about whether you are talking about your battle of the Chir or are you talking about your operations in general.

von Mellenthin: I am talking about the battle of the Chir. That means that...

John Boyd: I'm referring to your notion, destruction of the forces.

von Mellenthin: You know, you will see it when I describe our battles at Zhitomir, and so on. You see, always the aim of our tank corps was not to destroy the single man, but to destroy the whole unit(original emphasis).¹¹⁰

In summary, then, Bidwell's Five Fallacies are shown to be present in the maneuver warfare theory in several ways. First, the theory asserts that small units can consistently defeat larger units by adopting a maneuver warfare style of fighting. The fallacy of miniaturism is demonstrated by the use of the German

example. The German army using the maneuver style of warfare is destroyed by the vastly superior forces of the Russian and Anglo-American alliance. With the exception of the spectacular early victories, no amount of tactical skill at maneuver, no elegant movement, no clever stratagem, ruse or deception, could overcome the enormous qualitative and quantitative advantage of the Allied Armies.

Second, the theory asserts that the use of tempo to cause disruption of the enemy's decision cycle is the key to victory. The fallacy of the magic weapon is demonstrated by the German example. Throughout WWII the German army demonstrated the ability to outmaneuver and strike more quickly than any other army it faced.¹¹⁷ In the final judgement of war, the tactical tempo of the German army could do little to overcome the numerical superiority of the Allies.

Third, the theory asserts that disruption is the means to victory on the modern battlefield. The chess fallacy, the fallacy of the bloodless operation, and the fallacy of the passive enemy are demonstrated by the German example. The Germans simply did not believe in the primacy of maneuver over firepower, but in the superiority of combined arms operations.¹¹⁸ The Germans conducted operations for the purpose of destruction of the enemy forces. They believed, and demonstrated by

their orders and conduct, that wars were won by the application of the maximum violence against an enemy force. The Germans simply never convinced themselves that an enemy would passively surrender when encircled, and, therefore, drove their attacks home to destroy any encircled force or any force which was in the way of their operation. The Germans never avoided battle, on the contrary, they sought the destruction of the enemy at every opportunity.

Finally, the theory asserts that fighting and casualties are incidental to victory once the disruption of an enemy force has been achieved. Once again, the chess fallacy and its attendant fallacies of the bloodless operation and the passive enemy apply to the German example. The German army demonstrated that the means to break the enemy's will was to destroy him. Destruction of the will was sought through the physical destruction of the enemy.

In the end, then, the primary proof of the maneuver warfare theory, illustrated by the use of the criteria of the five fallacies, clearly is no proof at all. The German army and its tactical intent are not consistent with the tactical maneuver theory. The next section addresses this result.

V. Conclusion

Based on the above analysis, the maneuver warfare theory does not reach a truthful conclusion. The inductive leap which the theory makes concerning the fundamental nature of war, i.e., that maneuver within the decision cycle of an enemy is the means to his disruption and that disruption is the means to the end of his defeat, is not sound. The proof of the conclusion of this study was demonstrated by the presence of the Five Fallacies in the structure of the assertions. Further proof of the conclusion of this study lies in the counter example of the German army. While the German army is given as the primary and most important proof of the maneuver theory, in fact the German army cannot be shown to possess the intent or experience in war which supports the contention that they practiced a maneuver style of warfare.

How, then, does the maneuver warfare theory, when applied as tactical doctrine, create the imbalance which is the focus of this study. Maneuver warfare theory demands that "For Marine infantry the primary meaning of FMFM-1, Warfighting, is a requirement to transition to light infantry."¹¹⁹ Further, weapons such as 155mm and larger artillery, M1A1 tanks, MV-22 Osprey, F/A-18, AV-8B, and other firepower systems are of limited utility.¹²⁰ Given its history since WWII as

a balanced force of line infantry and combined supporting arms, the Marine Corps is turning to a force of light infantry with little firepower. This results in an unbalancing of an otherwise proven force of combined arms. The basis for this unbalancing is unsound.

The theory of maneuver warfare, which the Marine Corps has adopted as doctrine, cannot be demonstrated as reaching a sound and truthful conclusion based on its assertions and the proof of the assertions.

VI. Implications

The obvious implication for the United States Marine Corps is that the basis for its doctrine is unsound. While the discussion which the maneuver warfare theory has generated has served to revitalize the intellectual atmosphere of the Marine Corps, little in its doctrine has changed. While OH 6-1 explicitly states that the doctrine of the Marine Corps is that of maneuver warfare, the actual mission statement of the infantry, for example, has not changed. Currently, the infantry mission remains "to locate, close with, and destroy the enemy by fire and maneuver and to repel his assault by fire and close combat."²¹ That mission statement does not sound like a maneuver warfare mission. A more appropriate maneuver warfare style mission might be 'to locate, avoid, and disrupt the

enemy by tempo and maneuver and to repel his assault by disruption and counter-maneuver.'

The United States Marine Corps has a long and glorious history of victory in battle. Marine operations have always been historically associated with violence and the destruction of the enemy in battle. William Lind dismisses Marine Corps combat history and experience as the result of an attrition-style of thinking and fighting.¹²² Perhaps, we in the United States Marine Corps would profit from a closer study of our own history. From that history would be found the hard, real lessons of 215 years of fighting. Marines have learned that combat is a dirty, frightening, straightforward and bloody business. The real laws of war lie in that 215 years of experience.

The decisions stated at the beginning of this paper to reduce the firepower assets, and to lighten the force in accordance with a reliance on a doctrine of maneuver, have been put on hold. With the prospect of war against the heavy forces of Iraq, the value of a balanced tactical force once again becomes vitally important. The maneuver theory calls for an unrealistic imbalance of light, foot-mobile infantry with limited ability to employ the reduced combined arms left within the Marines. The concepts of maneuver and firepower are inseparably linked. To separate them

into disparate theories, must call into question the value of the maneuver theory. The Marine Corps force structure is balanced to provide a mobile tactical force which is capable of bringing the necessary firepower to bear to destroy an enemy. Brigadier Bidwell understood that all the stratagems, ruses, deceptions, and indirect approaches must be for the purpose of giving the moving force the advantage in the combat which is the ultimate aim of maneuver. Richard Simpkin, a proponent of the maneuver theory, nevertheless was drawn by his study to the following conclusion concerning the relative merits of the argument about firepower versus maneuver:

Thus, once fighting starts, attrition theory becomes complementary to manoeuvre, in fact an element in it. Put another way, manoeuvre theory literally and figuratively adds a new dimension to attrition theory.¹²³

While the maneuver theory of war has generated an invaluable awakening of study and knowledge within the Marine Corps, we should never forget that no matter what theory we seek, our real experience teaches us that victory is bought in battle and in blood. No elegant and attractive theory which makes of war an elegant and bloodless social event can change our own experience and combat history.

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⁸⁰ Lind, Maneuver Warfare Handbook, op. cit., p. 6.

⁸¹ Ibid.

⁸² Ibid.

⁸³ Boyd, "Patterns of Conflict," op. cit., p. 35.

⁸⁴ Lind, "Why the German Example?" Marine Corps Gazette, June, 1982. p. 60.

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⁸⁶ Carl von Clausewitz, On War, eds. and trans. by Michael Howard and Peter Paret, (Princeton: Princeton University Press, 1976), p. 227.

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⁸⁹ Ibid., p. 236.

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⁹³ Sigismund von Schlichting, Taktische und Strategische Grundsatz der Gegenwart (Tactical and Strategic Principles of the Present), 3 vols., (Berlin: Ernst Siegfried Mittler und Sohn, 1897-99), V.1: p. 90. Trans. LTC Donald Cranz, SAMS Monograph, May 1989.

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⁹⁵ Heinz Guderian, "Armored Warfare," The Infantry Journal, (September-October and November-December 1937), SAMS Reprint, p. 73.

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⁹⁸ Lieutenant General Waldemar Erfurth, "Das Zusammenwirken getrennter Heeresteile (Concentric Action of Separate Armies)," Militarwissenschaftliche Rundschau, Berlin, Germany, July 1939, trans. Tech.Sgt. Fred W. Merten, Translation Section, The Army War College, January, 1940. p. 35, 39.

⁹⁹ Ibid., p. 17.

¹⁰⁰ Boyd, "Patterns of Conflict," op. cit., p. 22.

¹⁰¹ Samuel J. Lewis, Forgotten Legions: German Army Infantry Policy 1918-1941, (New York: Praeger, 1985), p. 45.

¹⁰² Erfurth, "Concentric Action of Separate Armies," op. cit., pp. 17-39.

¹⁰³ William DePuy, Generals Balck and von Mellenthin on Tactics: Implications for NATO, (McLean, VA: BDM, December 1980), p. 53.

¹⁰⁴ Ibid.

¹⁰⁵ Erfurth, Surprise, op. cit., p. 31.

¹⁰⁶ Ibid., p. 154.

¹⁰⁷ U.S. Department of the Army, The German Campaign in Poland (1939), German Report Series, Department of the Army Pamphlet No. 20-255, (Washington, DC: GPO, 1956), p. 60.

¹⁰⁸ General Kurt von Tippelskirch, "Der Ansatz der deutschen Westoffensive im Mai 1940," Probleme der Kesselschlacht, ed. General Edgar Rohricht, (Karlsruhe: Badendruck GmbH, 1958), p. 19. General von Tippelskirch was born 9 Oct 1891 and died on 10 May 1957. He entered active service in 1907 with the Guard Grenadier Regiment No. 3 (the same elite unit in which von Hindenburg and von Manstein served). From November 1938 until January 1942, he served as the Deputy Chief of Staff of the Army General Staff Directorate for Foreign Intelligence; under him were the staffs for Foreign Armies East and West. In 1942, he commanded the 30th Infantry Division in Russia, and rose to lead the 4th Army in June-July of 1944 during its destruction in the Russian Byelorussian Offensive (Operation Bagration). He subsequently remained as deputy or leader of various armies in the West, Italy, and Germany until the end of the war.

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- ¹¹¹ Alistair Horne, To Lose a Battle, (London: Penguin Books, 1969), p. 196.
- ¹¹² William S. Lind, "Preparing for Maneuver Warfare," Marine Corps Gazette, June, 1984, p. 48.
- ¹¹³ Rothbrust, "The Cut of the Scythe," op. cit., p. 49. For the order from Army Group 'A' to Panzer Group von Kleist see *Der Oberbefehlshaber des Heeres Gen St k H Op. Abt. (1a) Nr. 100/40 g.Kdos. H. Qu. OKH, den 24 Febr. 1940. See also (XXII A K. (Gruppe von Kleist Kriegstagbuch (KTB) Nr. 3, (March 6, 1940, to May 9, 1940), entry for March 6, 1940).*
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- ¹²³ Richard Simpkin, Race to the Swift, (New York: Brassey's Defense Publishers, 1985), p. 96.

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