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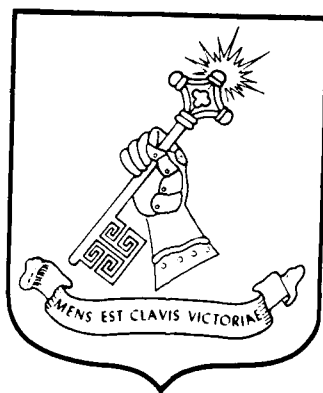
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**The U.S. Army
and
Ground Combat Theory**

**A Monograph
by
Lieutenant Colonel Ricky M. Rowlett
Armor**



**School of Advanced Military Studies
United States Army Command and General Staff College
Fort Leavenworth, Kansas**

First Term 90-91

Approved for Public Release; Distribution is Unlimited

91-03584



REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE April 1991		3. REPORT TYPE AND DATES COVERED Monograph: Aug 1990 - Mar 1991	
4. TITLE AND SUBTITLE The U.S. Army and Ground Combat Theory				5. FUNDING NUMBERS	
6. AUTHOR(S) Lieutenant Colonel Ricky M. Rowlett, U.S. Army					
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) School of Advanced Military Studies United States Army Command and General Staff College Fort Leavenworth, Kansas 66027 Attn: ATZL-SWC COM (913) 684-3437 AUTOVON 552-3437				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) Director, Graduate Degree Programs U.S. Army Command and General Staff College Fort Leavenworth, Kansas 66027				10. SPONSORING / MONITORING AGENCY REPORT NUMBER	
11. SUPPLEMENTARY NOTES					
12a. DISTRIBUTION / AVAILABILITY STATEMENT APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED				12b. DISTRIBUTION CODE	
13. ABSTRACT (Maximum 200 words) This monograph examines the role of theory in the development of warfighting concepts and doctrine. It describes the nature and potential importance of theory and provides examples of successful and unsuccessful application of theory in war. It concludes that the U.S. Army does not have an explicit, contemporary theory of ground combat, even though we use theoretical constructs in developing concepts and doctrine. Finally, the monograph examines theory within the national context and provides a paradigm which demonstrates how a national theory of war would affect national military strategy, joint operational concept development, and service theories of war.					
14. SUBJECT TERMS Theory, Theory of Ground Combat, National Theory of War Doctrine, Concept Development, Concept-Based Requirements System				15. NUMBER OF PAGES 49	
				16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT UNCLASSIFIED	18. SECURITY CLASSIFICATION OF THIS PAGE UNCLASSIFIED	19. SECURITY CLASSIFICATION OF ABSTRACT UNCLASSIFIED	20. LIMITATION OF ABSTRACT UNLIMITED		

SCHOOL AF ADVANCED MILITARY STUDIES
MONOGRAPH APPROVAL

Lieutenant Colonel Ricky M. Rowlett

Title of Monograph: The U. S. Army and Ground Combat Theory

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Accepted this 9th day of April 1990



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ABSTRACT

THE U.S. ARMY AND GROUND COMBAT THEORY by LTC Ricky M. Rowlett, USA, 43 pages.

This monograph examines the role of theory in the development of warfighting concepts and doctrine. It describes the nature and potential importance of theory and provides examples of successful and unsuccessful application of theory in war. The paper examines how doctrine writers have considered classical and contemporary theory in developing U.S. Army doctrine since 1976. It shows that the current writers of the draft FM 100-5, Operations, and the AirLand Battle-Future Umbrella Concept are considering theory in developing their documents.

The monograph concludes that the U.S. Army does not have an explicit, contemporary theory of ground combat, even though we use theoretical constructs in developing concepts and doctrine. The paper provides models which demonstrate how we can incorporate a theory of ground combat into the TRADOC Concept Based Requirements System (CBRS). The monograph states that the Army should develop an explicit, contemporary, comprehensive theory of ground combat to assist us in forecasting the nature of future wars.

Finally, the monograph examines theory within the national context. It provides a paradigm which demonstrates how a national theory of war would affect national military strategy, joint operational concept development, and service theories of war. It states that such a paradigm would ensure a totally integrated, joint approach in determining how the U.S. military would fight future wars.

TABLE OF CONTENTS

TITLE PAGE	i
APPROVAL SHEET	ii
ABSTRACT	iii
TABLE OF CONTENTS	iv-v
LIST OF ILLUSTRATIONS	vi
INTRODUCTION	1
THE NATURE OF THEORY	2
-- The Value of Theory	3
THEORY, DOCTRINE, AND OPERATIONAL CONCEPT	5
THE CONCEPT-BASED REQUIREMENTS SYSTEM (CBRS)	10
EXAMPLES FROM HISTORY	12
-- The Germans on the Western Front	12
World War II	
-- The Americans in Europe - World War II	13
-- The Japanese in the Pacific - World War II	14
-- U.S. Air Power in World War II	15
-- The Americans in Vietnam	16
CONTEMPORARY U.S. ARMY DOCTRINE REVIEW	17
-- FM 100-5 - 1976	18
-- FM 100-5 - 1982	20
-- FM 100-5 - 1986	22
-- FM 100-5 - 1992	23
-- The AirLand Battle-Future Operational	24
Concept	
ANALYSIS	24
-- Do We Have a Theory of Ground Combat?	25

-- Should We Develop an Explicit, Contemporary Theory of Ground Combat?	27
-- Can We Develop Such a Theory?	30
JOINT AND NATIONAL IMPLICATIONS	33
CONCLUSIONS	36
END NOTES	
BIBLIOGRAPHY	

LIST OF ILLUSTRATIONS

Figure	Page
1. Ground Combat Doctrine Development (Without Theory)	7
2. Ground Combat Doctrine Development (With Theory)	8
3. Concept Based Requirements System . . .	10
4. CBRs Using Theory	12
5. Joint Warfighting Doctrine Development	34

INTRODUCTION

Even when the 1992 version of FM 100-5 goes to press, a small team of concept writers will be continuing their work on the next generation operational concept - AirLand Battle-Future. They will use the operational concept at the heart of AirLand Battle doctrine as the springboard. With it they will blend a variety of factors including threat projections, advanced technologies, Army guidance, and historical perspective to derive an operational concept by which the U.S. Army should fight beginning in the year 1996¹. However, if these visionaries do not have a firm theoretical base upon which to build, their final product may be flawed. A flawed concept could lead to defeat on a future battlefield, decline of the United States as a world power, and even the destruction of our nation.

This paper examines the role of theory in the development of operational concepts and doctrine. It describes the nature and potential importance of theory and provides examples of successful and unsuccessful application of theory in war. The paper examines whether or not our doctrine writers used theory to develop U.S. Army doctrine since 1976, including the role of theory in the AirLand Battle-Future operational concept. It addresses whether or not we have a theory of ground combat and whether or not we need such a theory. The paper answers the question, "Should the Army develop an explicit (written), contemporary body of

theory upon which we will base future concept development?" Finally, it briefly reviews the joint and national implications of developing an overarching theory of war.

THE NATURE OF THEORY

What is theory? Why is theory important? What are the relationships between theory, concepts, and doctrine? Answers to these questions are central to the discussion of whether or not the U.S. Army should have an explicit theory of ground combat. Consider the following definitions:

-- *Theory*: "A speculative idea or plan as to how something might be done. A systematic statement of principles involved. A formulation of apparent relationships or underlying principles of certain observed phenomena which has been verified to some degree".²

-- *Theory of War*: "A reliable system of beliefs about the employment of a nation's armed forces during the preparation [for] and conduct of armed conflict. A theory of war also embraces the integration of a nation's industrial base with the ground, air, and sea services. Conceptually, a theory of war should flow directly from an overarching theory of conflict".³

-- *Military Theory*: "A structure of knowledge consisting of a set of principles that explain the processes and phenomena that lead to the destruction, disorganization, and disintegration of armies in battle."⁴

These three terms gradually become more specific in definition. The first could apply to any discipline

(economics, biology, or social science for example). The second applies to the preparation for and conduct of war in general. The third term implies that its focus is on ground combat, although it does not exclude the contributions of sea and air services to the ground war. The third term would define a military theory developed by the Army if we changed *military theory* to *ground component theory* (to differentiate it from sea and air component theories).

The definitions seem simple, but their simplicity belies the complex nature of theory. If we are to believe that we need theory, we must understand the value it provides to us in developing our doctrine and preparing for war.

The Value of Theory

A theory can perform two valuable functions - it can help us understand the past and anticipate the future. A study of history alone can help us understand the past. However, lessons from previous wars become much more valuable when we overlay the events on a theoretical model of general ideas and principles which we believe will usually describe the dynamics of combat. As we continue to update our theory based on experience, its capacity to help us anticipate should increase. Perhaps the most important contribution our theory can make is that of helping us visualize future war. In discussing the importance of theory, scientist Carl Hempel said:

man wants not only to survive in the world, but also to improve his strategic position in it. This makes it important for him to find reliable ways of foreseeing changes in his environment and, if possible, controlling them to his advantage. The formulation of laws and theories that permit the prediction of future occurrences are among the proudest achievements of empirical science; and the extent to which they answer man's quest for foresight and control is indicated by the vast scope of their practical applications, which range from astronomic predictions to meteorological, demographic, and economic forecasts, and from physico-chemical and biotechnology to psychological and social control.⁵

Michael Handel, writing in War, Strategy, and Intelligence, describes his view of the importance of theory to Carl von Clausewitz:

Many useful concepts of great practical value cannot be readily derived from experience alone (i.e., to extrapolate from a single case or a narrow statistical sample). Their conceptualization requires painstaking analysis and meticulous theoretical construction. Clausewitz could not have developed his innovative ideas about the role of friction, uncertainty, and chance in war without his theoretical study of war in the abstract, which he then compared and contrasted with war in the real world. It was the methodological device of the ideal type, when compared with war in practice, that led him to the formulation of his most creative ideas.⁶

Handel goes on to describe how Brigadier Dudley Clark formulated a theoretical observation that successful deception is based primarily on reinforcing rather than changing the perceptions of the deceived. Handel contends that this was not a self-evident phenomenon and that Clark, ". . . took what may have been done intuitively by many before him and made it explicit perhaps for the first time as a concept that could guide others to take more successful action."⁷

The potential value of theory should be evident from the previous discussion. A sound ground component theory would help us analyze past engagements, battles, and campaigns and identify issues which might have otherwise gone unnoticed. It would ensure theoretical consistency of doctrine and concepts and provide a rational framework for doctrinal criticism. With a sound theory we would have a basis for rapid doctrinal change. Finally, theory would help both concept and doctrine writers develop a rational approach to thinking about war.⁸ We would thus be in a better position to anticipate and understand the nature of the future battlefield.

Now that we better understand the value of theory, it is equally important that we understand its role in the concept and doctrine development process. Theory, the operational concept, and doctrine are closely related.

THEORY, OPERATIONAL CONCEPT, AND DOCTRINE

Doctrine and operational concept are terms which relate to theory. It is important to define them and describe the linkage in order to better understand their relationship and put theory in its proper context.

JCS Pub 1-02 defines doctrine as, "Fundamental principles by which the military forces or elements thereof guide their actions in support of national objectives. It is authoritative but requires judgement in application."⁹ FM 100-5, Operations places the definition of doctrine in the Army context by stating, "An army's fundamental doctrine

is the condensed expression of its approach to fighting campaigns, major operations, battles, and engagements. . . . It must be rooted in time-tested theories and principles, yet forward-looking and adaptable to changing technologies, threats, and missions."¹⁰

If doctrine is the end product, an operational concept is both an intermediate product and a part of the doctrine itself. It is the core of the Army's current, approved doctrine.¹¹ It is, ". . . a broad concept which describes what operations are to be executed by Army forces on future battlefields."¹² The Army's current operational concept (also known as an umbrella concept) is contained in the 1986 edition of FM 100-5.¹³ The Combined Arms Command (CAC) at Fort Leavenworth is developing the next generation operational concept, AirLand Battle-Future.

Figure 1 shows the development of concepts and doctrine without the benefit of theory.¹⁴ If we were tasked to develop an operational concept for how our Army might fight in the future, each of us would begin by viewing absolute military reality. This reality is composed of a complex combination of how military events really were in the past (military history) and current reality. In other words we would research lessons learned from previous wars and battles, review our current doctrine, training, and capabilities, and perhaps even consider good ideas used by the armies of other nations. Each of us, however, would view this reality through different filters. These filters,

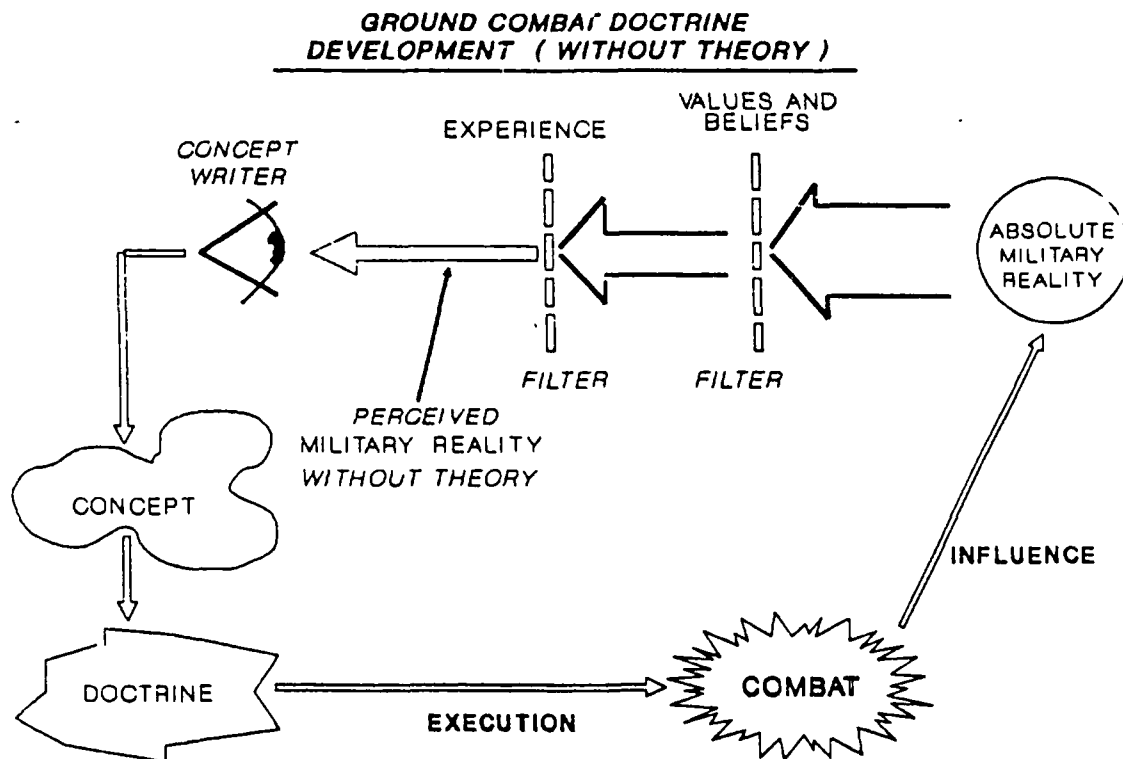


FIGURE 1

composed of our values and beliefs, military experience, depth of reading and research, and other variables will alter the absolute military reality into what we view as *perceived military reality*. Thomas Kuhn, writing in The Structure of Scientific Revolutions, provides a good example of the impact of filters:

An investigator who hoped to learn something about what scientists took the atomic theory to be asked a distinguished physicist and an eminent chemist whether a single atom of helium was or was not a molecule. Both answered without hesitation, but their answers were not the same. For the chemist the atom of helium was a molecule because it behaved like one with respect to the kinetic theory of gases. For the physicist, on the other hand, the helium atom was not a molecule because it displayed no molecular spectrum. Presumably both men were talking of the same particle, but they were viewing it through their own research training and

practice. Their experience in problem-solving told them what a molecule must be. Undoubtedly their experiences had much in common, but they did not, in this case, tell the two specialists the same thing.¹⁵

A concept writer will develop an operational concept from perceived reality. After evaluation, the operational concept will become the core of our doctrine.

Figure 2 describes the development of doctrine when the process includes a comprehensive theory of ground combat.¹⁶

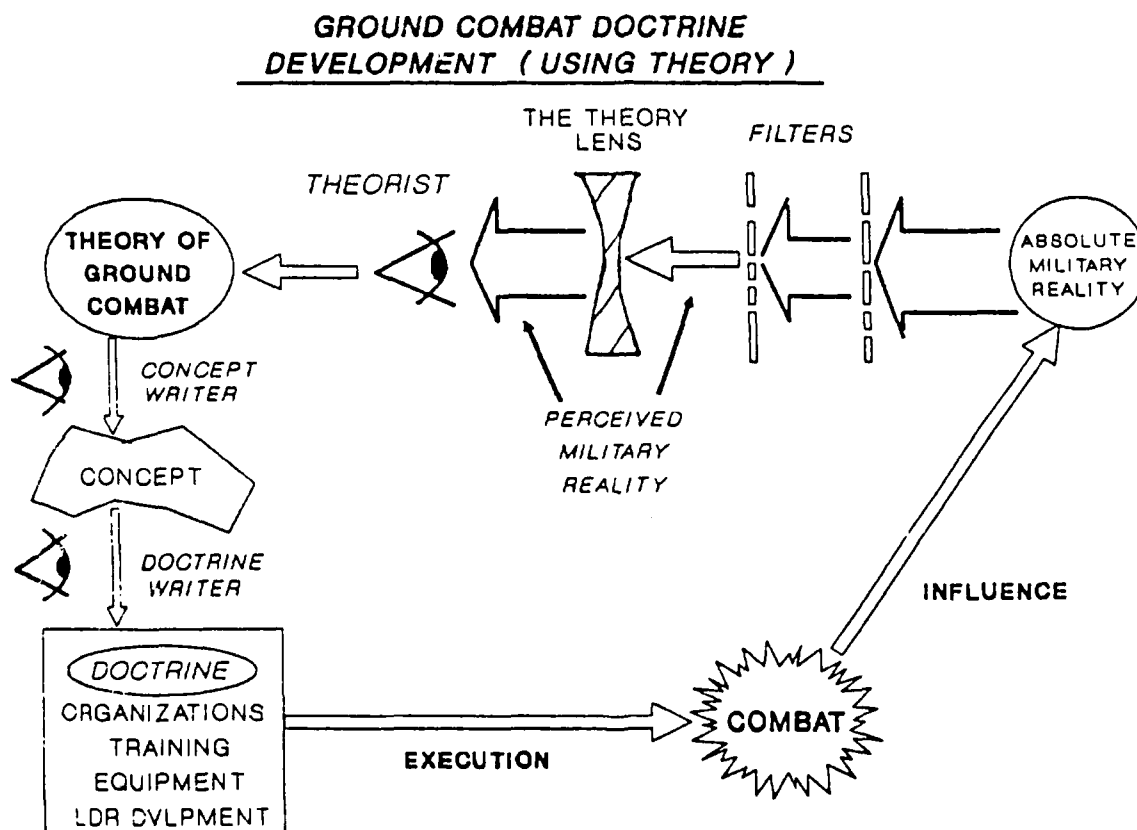


FIGURE 2

The theorist uses a theory lens to offset the effect of the various filters and clarify his view of absolute military reality. This lens contains various theoretical principles which help explain the processes and phenomena related to war and the battlefield. This aids the theorist in

developing a *perceived military reality* which is closer to *absolute military reality*. Viewing this approximation of reality, the theorist develops a theory which helps the concept writers publish a better concept. This results in better doctrine (and organizations, equipment, etc.) which, in turn, should increase our chance for success on the battlefield. When our Army fights, the results will alter reality somewhat, causing the theorist to modify the theory lens. The process continues through the model to the eventual modification of doctrine.

By its nature, doctrine will probably include some theoretical elements. Although I will review FM 100-5 in more detail later, it is appropriate to mention now that the current manual discusses some classical theoretical elements by name such as the *principles of war*, *center of gravity*, and *culminating point*. Theoretical constructs probably form the basis for additional discussion in the manual, but are not specifically identified. In the absence of a separate, explicit theory, I believe that service doctrine becomes the service's theoretical statement. However, it would be a deficient statement in many ways when compared with a true theory. Likewise, JCS Pub 0-1, Basic National Defense Doctrine (when published), would become the national military theoretical statement in the absence of a separate, comprehensive theoretical work.

In summary, AirLand Battle doctrine should be the practical application of an operational concept for fighting

the ground war. A solid theory of ground combat will help us write a better operational concept, thereby improving our chances for success on the battlefield. To determine how we might use an explicit theory of ground combat, it helps to understand the current system by which we develop warfighting concepts.

THE CONCEPT-BASED REQUIREMENTS SYSTEM (CBRS)

CBRS provides the focus for the development of doctrine, training, force design, and new or improved materiel systems.¹⁷ Figure 3 depicts CBRS. It clearly describes the philosophy behind the system by showing that our warfighting concept should drive the development of

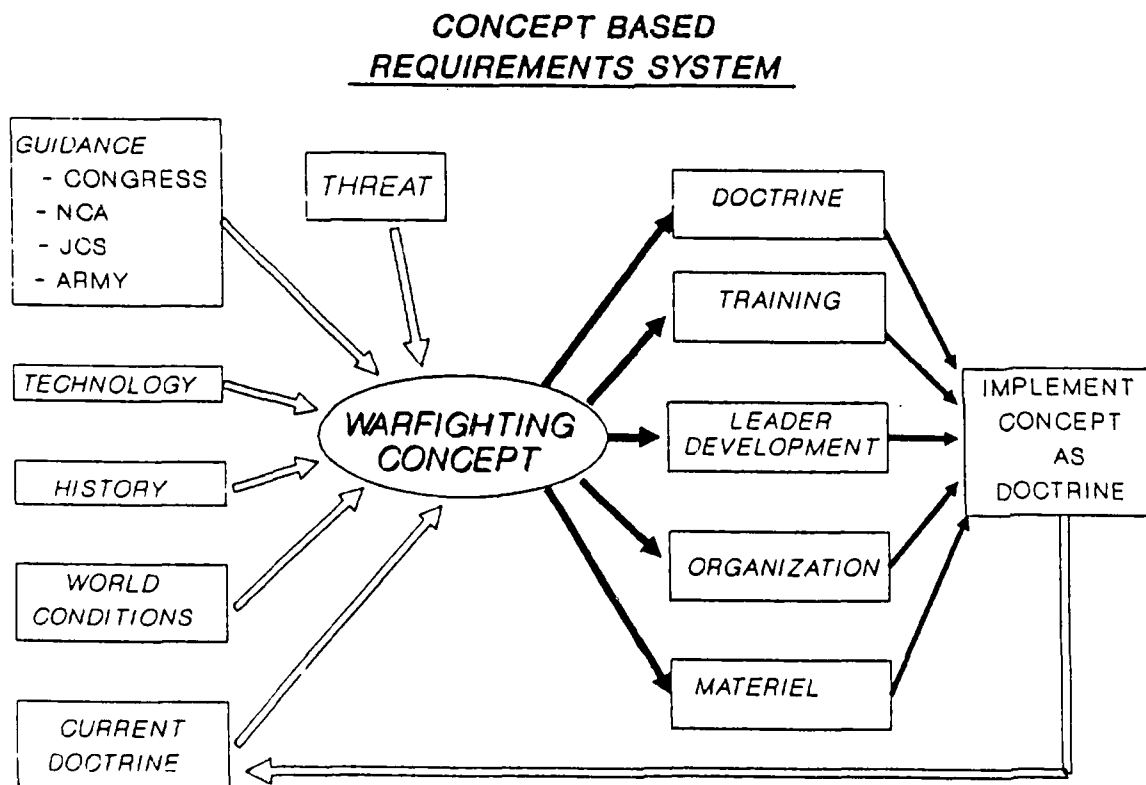


FIGURE 3

doctrine, training, organizations, materiel, and leader-development programs. In essence, the warfighting concept describes how we believe we must fight on the future battlefield after we consider the various inputs. We then determine the outputs we must have (doctrine, new equipment, organizational designs, etc) so that we can successfully execute the concept.

CBRS does not directly and independently consider theory as a separate input to the warfighting concept. However, the process may consider theory indirectly because the current doctrine input will probably include theoretical concepts as I described earlier. The process also considers historical successes and failures and thus might incorporate related theoretical elements. Finally, conceptualists might research classical and contemporary works in order to incorporate various theoretical principles.

If the Army developed an explicit, contemporary theoretical work, it would probably subsume the history input to the operational concept since the theorist would view historical lessons learned within the context of the theory. We could then consider theory as a separate input to the warfighting concept. However, the ideal approach might be to move the current CBRS inputs through our theory of ground combat enroute to the warfighting concept. This would result in a modified CBRS model described in Figure 4.

CBRS USING THEORY

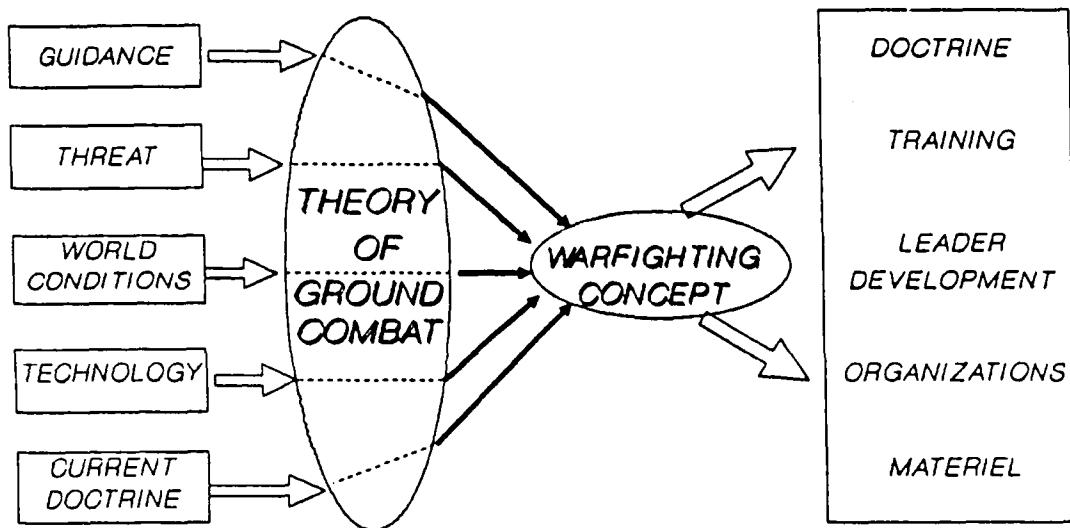


FIGURE 4

Historical examples will help us better understand the value of theory in this system.

EXAMPLES FROM MILITARY HISTORY

Following are selected examples of operations which demonstrate the application of theory in war. They might help us understand how the military of various nations applied or modified their current doctrine to meet certain situations. Even though these are not examples of the application of a comprehensive, contemporary theory, they still show the use of theoretical constructs which were incorporated into doctrine or strategy.

The Germans on the Western Front - World War II

In The Rise and Fall of the Great Powers, historian Paul Kennedy assesses the German effort late in the war. He

describes how the Allied forces were enjoying an advantage of 20 to 1 in tanks and 25 to 1 in aircraft in 1944, yet amazingly the Reich still occupied much more territory than it had at the beginning of the war.¹⁸ Kennedy writes:

To this question military historians have offered a virtually unanimous response: that German operational doctrine, emphasizing flexibility and decentralized decision-making at the battlefield level, proved far superior to the cautious, set-piece tactics of the British, the bloody, full-frontal assaults of the Russians, and the enthusiastic but unprofessional rushes of the Americans. . . .¹⁹

Note that although Kennedy speaks about "the enthusiastic but unprofessional rushes of the Americans . . .", he does not state that American doctrine was flawed.

The Americans in Europe - World War II

The Americans employed a doctrine which capitalized on the ability to put the nation's industrial and manpower might behind the war effort. Thus they could afford to seek combat with the German army while the German leaders were forced to be more innovative. Historian Maurice Matloff describes how the Americans were ready to meet the Germans headon with an army of 215 divisions.²⁰ This strategy embodied the ". . . core of the American theory of war of mass and concentration."²¹ The American leadership and public believed that the nation could rely on its industry and large citizen army to win the war.²²

British and American ideas at the strategic level were also different. The Americans wanted to build up combat power in England and conduct a cross-channel operation to

France as early as mid-1942. Prime Minister Churchill preferred hard-hitting, mobile armored operations on the periphery of German-held territory rather than a full confrontation with the main German forces in Germany or France.²³ Thus, the British and the Americans operated predominantly in the Mediterranean, North Africa, and Italy until the D-Day invasion in June, 1944.²⁴ we know that the cross-channel strategy was successful. But we cannot deny that the British peripheral strategy might also have worked in the end.

The previous examples focused primarily on ground combat campaigns and the theater strategy in Europe. The war with Japan provides a good example of the misapplication of theory by the Japanese while pursuing a strategy in the Pacific.

The Japanese in the Pacific - World War II

In his article, "American and Japanese Strategies in the Pacific War", D. Clayton James discusses Japanese strategic failure which he ties to classical theoretical principles:

Throughout the war the Japanese High Command manifested a lack of flexibility in adjusting to the changing circumstances of combat. Little heed was paid to the principle formulated by Carl von Clausewitz over a century earlier: "The first, the supreme, the most far-reaching act of judgement that the statesman and commander have to make is to establish . . . the kind of war on which they are embarking; neither mistaking it for, nor trying to turn it into, something that is alien to its nature."²⁵

James continues his analysis by stating that the Japanese were slow to realize that the United States would employ primarily a maritime strategy in the Pacific. Even though it went on the defensive by mid-1942, Japan never committed a large part of its military strength against the American offensives.²⁶

The next example shows how the U.S. Army Air Force attempted to prove Giulio Douhet's theory of air power in a successful attempt to establish an independent Air Force.

U.S. Air Power - World War II

The theory of "command of the air", advanced by Giulio Douhet, caused Army Air Force leadership to strive for, "The central control of air power in a separate, independent, autonomous Air Force."²⁷ They made their bid for an independent air force primarily by strategic bombardment in an effort to prove Douhet's theoretical premise that, "National defense can be assured only by an Independent Air Force of adequate power."²⁸ In an analysis of the effect of air operations, Carl Builder writes:

While many, perhaps most, of the air strategy theorists were, and still are, true believers in its three basic premises, the air strategy was never proven before, during, and after World War II; its only demonstrable utility was institutional: the achievement of an independent air force. . . . Thus, the real and demonstrable effect of the air strategy was institutional independence; all the rest remains disputed theory even today.²⁹

The U.S. approach in Vietnam provides a final example of failure due, perhaps, to flawed strategy.

The Americans in Vietnam

The U.S. entered and fought the Vietnam war with an overwhelming superiority in technology and potential combat power. John Shy and Thomas Collier (writing in Makers of Modern Strategy), believe that the American sustained aerial attack against the North Vietnamese and the buildup of American combat forces in the South were, ". . . symptoms in 1965 of strategic bankruptcy."³⁰ They state that Americanizing the war was a mistake in that our strategy, ". . . never grasped the kind of war being fought nor the particular Vietnamese conditions that gave the war its revolutionary character."³¹ In essence, the United States fought the way it knew how to fight, throwing manpower, firepower, and technology against the enemy. This worked against the Germans and Japanese in World War II. It did not work against the North Vietnamese.

The historical examples in this section demonstrate how different military organizations used (or perhaps misused) various theoretical principles during war. In some cases they incorporated these principles into their fighting doctrine. In other cases the principles were contained in a broader strategy. In summary:

- The Germans adapted to a significant numerical disadvantage by employing an innovative maneuver doctrine.

- The Americans were able to follow the principles of mass and concentration because of their ability to mobilize the nation's people and industrial resources.

-- The British and the Americans had different ideas of a grand strategy to win the war. The American strategy was successful; the British strategy may have been viable also.

-- The Japanese failed to pursue an appropriate strategy in meeting American offensives in the Pacific.

-- The U.S. Army Air Force never proved Douhet's theory of air power.

-- The Americans pursued the revolutionary war in Vietnam with a conventional war strategy built on experience in World War II and Korea.

CONTEMPORARY U.S. ARMY DOCTRINE REVIEW

In previous sections, I discussed definitions and relationships among key terms, established the importance of theory, and provided a few examples of successes and failures which appear to be related to the application of theory. In this section, I will look at past and current U.S. Army doctrine and the next generation of operational concept (AirLand Battle-Future) to answer the question, "Does the U.S. Army have a theory of ground combat?".

I limited the doctrine review to the 1976, 1982, and 1986 versions of FM 100-5. The 1976 edition represented a significant change for an Army coming out of the Vietnam era.³² The 1982 edition moved from the Active Defense of the previous manual to AirLand Battle as its central theme and incorporated theory in a much more open manner. I compared the 1982 version to the current (1986) manual to

assess any theoretical changes. I also talked with one of the writers of the next edition of FM 100-5, projected for publication in 1992. My intent was to assess the impact of theory on the changes he projects for the future doctrinal manual. Finally, I spoke with an author of the AirLand Battle-Future operational concept to determine how theory is driving his vision of how we will fight in the early 21st century.

FM 100-5 - 1976

The doctrinal reassessment that began in the early 1970s occurred while the Army was refocusing from the infantry-airmobile modus operandi in Vietnam to the arena of conventional, combined-arms warfare in Western Europe. General William DePuy, as the Training and Doctrine Command (TRADOC) Commander, was certainly the most influential of the many people who participated in developing the 1976 doctrine.³³ The writers of the 1976 manual were influenced primarily by the Vietnam "experience", the Mideast War of 1973, and the Soviet military buildup in Eastern Europe.³⁴

General DePuy perceived his charter to go beyond just publishing a revised Army doctrinal manual. He believed that he should, "reorient and restructure the whole body of Army doctrine, from top to bottom. . .".³⁵ He began with the 1968 version of FM 100-5.

Headquarters DA published the new FM 100-5 in July 1976. Its focus was clearly on addressing the problem of a U.S. force inferior in numbers of men and weapons systems on

an armor-dominated European battlefield.³⁶ From the 1976 FM 100-5 came the recognizable phrases "fight outnumbered and win" and "prepare to win the first battle of the next war".³⁷ Concerning the thrust of the manual, TRADOC historian John Romjue writes:

Such influences discouraged the hypothetical, and a reading of the 1976 FM 100-5 reveals the writers' deliberate intent to depict a corpus of tactics bound by the concrete. Tactics were tied firmly to the capabilities of weapons employed on the well-studied terrain of the most likely deployment, all in the context of actual strategic circumstances believed likely to continue for the foreseeable [sic] future.³⁸

The 1976 FM 100-5 appears very specific and prescriptive in nature and contains many charts and graphs which show mobility characteristics of vehicles, probabilities of hit and kill for different weapons systems, characteristics of various chemical agents and so forth.³⁹ Because of the European focus, there is a detailed discussion of operations within NATO, including organizational charts of Allied Command Europe and U.S. European Command.⁴⁰ There is no similar discussion for other regions to which U.S. forces might be deployed (Korea, for example). It is not apparent that the authors purposely used any theoretical constructs in developing their ideas concerning fighting the European battle. Romjue states:

One early outcome to the doctrinal debate was the Army's reemphasis on its principles of war. A general criticism of the doctrine of 1976 was that it was not firmly grounded in enduring principles. The 1976 FM 100-5 indeed did not identify or even list them.⁴¹

Nonetheless, a doctrine written by authors well-versed in the lessons of military history will probably include

theoretical constructs even if the authors do not specifically discuss them as such. John Romjue describes a favorable critique of the 1976 manual written by Archer Jones in February 1978. In his analysis, Jones saw the doctrinal commitment of most or all battalions to action as an original contribution to the theory of the defense. He believed that this concept of "the unsubtracted tactical reserve" was the last, logical step in a process described by de Bourcet and de Guibert in the 18th Century.⁴²

FM 100-5 - 1982

Generals Donn Starry and William Richardson (then Commander and Deputy Commander respectively of TRADOC) influenced the 1982 version of FM 100-5 as General DePuy influenced the 1976 doctrine. Their early intent was to correct the 1976 manual's perceived deficiencies related to the active defense doctrine and firepower orientation.⁴³ They also wanted to produce a manual with a more general geographical orientation rather than a specific NATO and European focus. ⁴⁴

The 1982 manual described a more maneuver and initiative-oriented doctrine which addressed the battlefield in its totality and applied also to large-scale mechanized war in the Middle East and to the threat in Korea.⁴⁵ "The AirLand Battle concept was described as an approach to military operations that realized the full potential of U.S. forces by blending the notions of extending the battlefield and integrating conventional, nuclear, chemical, and

electronic means to permit attack of the enemy to the full depth of his formations."⁴⁶

AirLand Battle doctrine included several theoretical constructs:

- It reinstituted the nine principles of war, omitted from the 1976 version.⁴⁷

- The new doctrine established the four basic "tenets" - initiative, depth, agility, and synchronization. Success on the battlefield depends on the Army's ability to fight in accordance with these tenets.⁴⁸

- It included seven new "combat imperatives".⁴⁹ They provided more specific guidance than the tenets and principles of war and applied to all operations.

- The manual incorporated historical examples at the beginning of the chapters on offensive and defensive operations and related the principles used in these examples to success on the AirLand Battle battlefield.⁵⁰

- The authors occasionally referenced classical theorists.⁵¹

Thus, the 1982 version of FM 100-5 represented a significant change from the 1976 version. It broadened the applicability of the doctrine by moving away from a strictly European focus. It appeared to be a more flexible approach to warfighting. Finally, it incorporated theoretical constructs which were missing from the 1976 version.

The 1986 revision of AirLand Battle doctrine represented an incremental rather than radical change from the 1982 manual. The 1986 manual's preface states, "This edition reaffirms the Army's doctrinal thrust introduced in 1982".⁵² While the 1982 version retained some of the detail associated with the 1976 manual, the 1986 FM 100-5 focused primarily on describing the general nature of warfare. For example, it eliminated the charts and text which described characteristics of chemical agents, effects of nuclear radiation, and materiel resupply by surface and air. These more detailed discussions were moved to subordinate doctrinal manuals. In the theoretical arena, the 1986 version:

- Retains (and expands the discussion on) the principles of war⁵³ and AirLand Battle tenets.⁵⁴
- Adds three new combat imperatives.⁵⁵
- Recognizes the operational level of war for the first time, with a discussion of operational art.⁵⁶
- Retains the historical examples which open the chapters on offensive and defensive operations.⁵⁷
- Adds a discussion of exterior and interior lines to the chapter on sustainment planning and execution.⁵⁸
- Adds an appendix which discusses three key concepts of operational design: the center of gravity, the culminating point, and lines of operation.⁵⁹
- Contains occasional references to classical theorists.⁶⁰

FM 100-5 - 1992

TRADOC is continuing to work on the revision of our current warfighting doctrine. One of the writers projects publication of a new FM 100-5 in 1992. He believes that the new manual will contain revisions which will address the changes of Army missions caused by changes in the strategic environment, particularly the deemphasis of the Soviets as a threat to Western Europe. It will cover the full continuum of possible Army missions by introducing non-warfighting operations for the first time. FM 100-5 will describe an increased role for the Army in deterring war. In writing the concept for deterrence, the author researched several theorists to provide a solid theoretical foundation. Also, he intends to move the principles of war, currently in Appendix A, into the body of the manual. While he may not list the combat imperatives, he intends to retain their spirit in an expanded discussion of the principles of war by describing how the imperatives link AirLand Battle tenets to the principles. He also intends to expand the discussion of operational art, while discussing the key elements of operational design in more contemporary terms.⁶¹

Even though the proposed (1992) FM 100-5 should carry us through 1996, concept writers are now working on the next generation operational concept. It will describe, ". . . the employment of the Army as the land component of U.S. military power in the next 5-15 years."⁶²

The AirLand Battle-Future Operational Concept

"The ALB-F Umbrella Concept will describe the capabilities the Army will need to conduct joint and combined combat and noncombat operations in support of our national security strategy."⁶³ The authors are revising a concept which evolves from the current AirLand Battle doctrine. Thus, they believe that much of the theoretical base will remain unless evaluation of the concept shows the theory to be invalid. The concept will rely heavily on significant research into various regional environmental assessments. The writers recognize the requirement for a solid theoretical base and are researching accordingly.⁶⁴

So far I have discussed the nature and value of theory, provided historical examples of the application of theory, and reviewed the use of theory in our capstone doctrinal manuals. In the next section I will analyze what we have learned and lead us to an answer to the question, "Should the Army develop an explicit, contemporary theory of ground combat."

ANALYSIS

Earlier I established the potential value of theory as a tool which could help us analyze past engagements, battles, and campaigns and identify issues which might otherwise have gone unnoticed. Theory is more than just a systematic method of compiling "lessons learned". A sound theory can insure consistency of concepts and doctrine and help us anticipate the nature of future war. One who is

skeptical might list several reasons against developing a current, explicit theory. For example one might say, "We have theory in our doctrine already"; or, "It would be too difficult to develop one theory which combines the works of all theorists"; or perhaps, "You could never get consensus from the Army leadership". This section will begin by addressing whether or not we have a theory of ground combat. Next I will discuss the desirability of developing an explicit, contemporary theory. Finally I will discuss the feasibility of developing such a theory.

Do We Have a Theory of Ground Combat?

There is a two-part answer to this question. Try as you might, you will not find a single, explicit, comprehensive, theoretical work which describes the contemporary U.S. Army theory of ground combat. Given this as part one of the answer, I can also conclude that our current doctrine does have some basis in theory because of the following:

-- I described in the previous section the nature of the theoretical elements contained in our current capstone doctrinal manual. The theoretical emphasis in the current FM 100-5 is certainly greater than in previous versions.

-- The author of the 1992 version of FM 100-5 researched a variety of theorists to help him develop an appropriate concept of deterrence to include in the new manual. It appears that he will include even more

theoretical constructs in the new FM 100-5 than are present in the 1986 manual.

-- The writers of the AirLand Battle-Future operational concept are using the 1986 FM 100-5 as their base. They recognize the current theoretical constructs in the manual and intend to consider the theoretical validity of any changes.

However, I believe there is still a void. There is a significant difference between *including theory* in an operational concept and *having a comprehensive theory* upon which you base a concept. The writers of the 1982 and 1986 versions of FM 100-5 used theoretical constructs. Some are not obvious to the average reader. Others, such as the principles of war, are very familiar. Yet the principles of war have been with us in one form or another since 1921.⁶⁵ The only major new theoretical additions to doctrine since 1976 are the AirLand Battle tenets, the ten combat imperatives, the discussion of the three key concepts of operational design, and the increased emphasis on operational art. Thus, while our capstone doctrinal manual has some foundation in theory, I do not consider it to be a true, comprehensive, contemporary theory of ground combat.

This answer leads us to the central question of this paper. If we do not have an explicit, comprehensive, theoretical work upon which to base our concepts and doctrine, should we develop one?

Should We Develop an Explicit,
Contemporary Theory of Ground Combat?

The theoretical basis in the current FM 100-5 seems to rest primarily with Clausewitz and Jomini, which seems very selective considering the large number of classical and contemporary theorists from whom we can draw theoretical wisdom. In Race to the Swift, British soldier and scholar Richard Simpkin wrote:

I cannot imagine why the United States Army's 'Reformists' (the protagonists of manoeuvre theory) spend their time agonizingly re-enshrining Clausewitz when they have a far sounder authority close at hand in the shape of Mahan - and a far greater one, Sun Tzu, brought to them by the scholarship of an American General. . . . Sun Tzu lived well over 2000 years ago, but might have been writing not so much yesterday, as tomorrow. And his translator, General Samuel B. Griffith, not only offers a translation of high intrinsic literary quality, but takes us into his author's mind with his background information and notes... ..⁶⁶

In addition to leaning toward a narrow field of classical theorists, our concept and doctrine writers may not be considering technology in the proper context. Although CBRS considers technology as an input to operational concept development, it does not do so within a theoretical framework. Thus, concept developers consider technology more from the perspective of enhancing the capabilities of various systems than determining how technology changes the nature of war itself. The theorist would consider the nature of war as he viewed and modified his theory in light of new technology. For example, I know of no one who anticipated the combined impact of innovations such as the rifled musket, the breechloading mechanism, the

magazine, and smokeless powder. It would seem that the first three would increase the lethality of the battlefield, resulting in larger numbers of casualties. In fact, even though the battlefield became more lethal, casualty rates declined.⁶⁷ This seemed to be a paradox until someone understood the cause-and-effect dynamics. Casualty rates declined due to a combination of the effects of these inventions.

-- The rifled musket, more lethal and with greater range than previous muskets, drastically increased battlefield lethality.⁶⁸

-- The breechloading mechanism allowed soldiers to fire from a prone position, decreasing their target area by 80 percent and thus decreasing their vulnerability.⁶⁹

-- The magazine further increased the rate of fire of the modern rifle. This allowed tacticians to spread their soldiers, yet achieve the same density of fire as before. This decreased vulnerability and casualty rates.⁷⁰

-- Smokeless powder decreased vulnerability since it was more difficult to see soldiers who used it.⁷¹

The net effect of these inventions was that one soldier was now able to effectively cover an area normally covered by five men. Thus the "concentrated" battlefield of 1815 became the "distributed" battlefield of 1900. The decrease in density of soldiers on the battlefield caused casualty rates to decrease.⁷²

If we consider the current rapid rate of technological innovation, we might conclude that technology could well be the dominant force impacting on the nature of war. Scientists strive to take advantage of emerging technologies which show promise of allowing us to leap ahead of the threat. As we can see by the previous example, it is important to understand the interaction between these technologies in order to form a better picture of the future battlefield. A theorist revising his theory in light of new technology should be able to anticipate changes to the nature of war. This will help us develop solid operational concepts so that we can fight effectively on the future battlefield without being surprized. Considering the role of technology vis-a-vis theory, Michael Handel writes:

Almost everything that Clausewitz wrote seems to describe accurately the nature and conduct of war for his time. Yet technology has rendered some of his observations obsolete, while others require only minor adjustment or revision, and still others remain accurate. . . . On the most fundamental level and in order to emphasize the decisive role played by technology in modern warfare, I suggest that were Clausewitz alive today, he would not only be unable to ignore the role of technology in war, but would actually incorporate it into his basic theoretical framework as an important independent force. I have therefore proposed 'squaring the triangle' (i.e., adding the technological and material aspects of war as a new qualitative dimension to his existing triangular framework of the people, the military, and the government.) In the end, after all, war has always been a physical and material clash.⁷³

Earlier in this paper I discussed the value of theory. I concluded that a theory of ground combat would help both concept and doctrine writers develop a rational approach to

thinking about war. I began this section by discussing the theoretical nature of our doctrine. Finally, I discussed the impact of technology on the nature of war. Four factors should now convince us that the U.S. Army should develop a comprehensive, contemporary theory of ground combat:

-- Theory has value.

-- We do not currently have a ground combat theory.

-- Theoretical ideas in our current doctrine (and the supporting operational concepts) seem to come from a narrow range of theorists.

-- Technology has changed the nature of war such that many of the classical theoretical constructs are no longer valid (or at least should be revalidated in light of technology).

Can We Develop Such a Theory?

It was not difficult to demonstrate the need for an explicit, contemporary theory of ground combat. Now, however, I am obligated to discuss whether or not it is feasible to develop this theory. It could be complicated and arduous to complete such a project. Michael Handel states:

As I have argued elsewhere, modern conventional war has become so complicated that development of a single and elegant comprehensive theory would be extremely difficult.⁷⁴

I believe, however, that we can develop an explicit, comprehensive, contemporary theory of ground combat.

Answers to certain questions might reinforce this statement before we begin such an undertaking.

-- Question: Would such a theory replace the classical works which so many people hold in high esteem?

-- Answer: Scientist Thomas Kuhn writes:

. . . a new theory does not have to conflict with its predecessors. It might deal exclusively with phenomena not previously known, as the quantum theory deals. . . Or again, the new theory might be simply a higher level theory than those known before, one that linked together a whole group of lower level theories without substantially changing any.⁷⁵

Many classical theorists have provided timeless constructs which still appear valid today. We use several of these in our current doctrine as I described earlier. If we write a contemporary theory of ground combat, we should keep those constructs which we determine are still valid, write them in contemporary terms with contemporary examples, and discard the rest.

-- Question: How could we ever secure the approval of the senior Army leadership for what would probably be a complicated concept? Would it not be "watered down" in an effort to gain consensus?

-- Answer: This could be a problem. I do not see a requirement for senior Army leadership approval of our theory. If you recall Figure 4, theory could be a primary input to the next generation warfighting concept in CBRs. I would expect that the TRADOC Commander would be the "approval authority". I believe that most of the interest outside of TRADOC would continue to focus on our current or

projected editions of FM 100-5. Of course, if we ever developed a single work which we titled, "The U.S. Army Theory of Ground Combat", I do not doubt that many senior general officers would want to read it. We would then get a variety of comments from them colored by the various filters through which they view *absolute military reality*.

-- Question: How would we develop this theory?

-- Answer: I believe this would require a systematic, comprehensive review of all existing classical and contemporary theories. We would take from them what we believe is valid and mold a single, comprehensive, contemporary theory. We would factor in history in some manner. Our theory would contain those principles and constructs that describe the nature of war as we envision it today and in the future.

-- Question: Who would work on this project?

-- Answer: This could be a special project group formed by the TRADOC Commander and working for the Combined Arms Command (CAC) Commander or the Commandant of the Army War College. The group should be relatively small (perhaps ten people) and composed of historians, theorists, and selected officers. This core of people would be devoted to the project, but could be augmented from other Army resources on a temporary basis. It should have the authority and funding to draw from resources outside of the Army if necessary. The group should have a charter of at least two years to ensure more than a superficial effort.

In this section I have answered the paper's central question - *we should develop an explicit, contemporary theory of ground combat*. I have also discussed how we might undertake such a project. However, it is important to understand that we must not consider the development of a ground combat theory in a vacuum. Our theory would be only a part of an overarching national theory of war contained in a paradigm composed of many elements, including air and sea theories as well. The next section briefly discusses theory from a national perspective.

JOINT AND NATIONAL IMPLICATIONS

Future conflicts will normally require the commitment of two or more services. It is unlikely that the Army will ever fight on its own. Close air support of Army combat operations is routine; we need the Air Force and Navy for transportation; and the Marines are best suited for forced entry operations over the shore followed by Army reinforcing forces.

A national theory of war would help us analyze past wars and provide a rational, theoretical basis for the development or refinement of our national military strategy and our service theories of war. Figure 5 describes the relationship between the various important elements of a national theory paradigm. Again we have our theorist viewing absolute military reality and modifying a national theory of war. National values and beliefs influence both

our theory of war and our national security strategy. The national theory influences the national military strategy, the joint operational concept, and the air, sea, and ground component combat theories. The services should develop their warfighting concepts guided by both the joint concept and the service theory. Finally, the services develop their warfighting doctrine which they then apply in combat.

JOINT WARFIGHTING DOCTRINE DEVELOPMENT

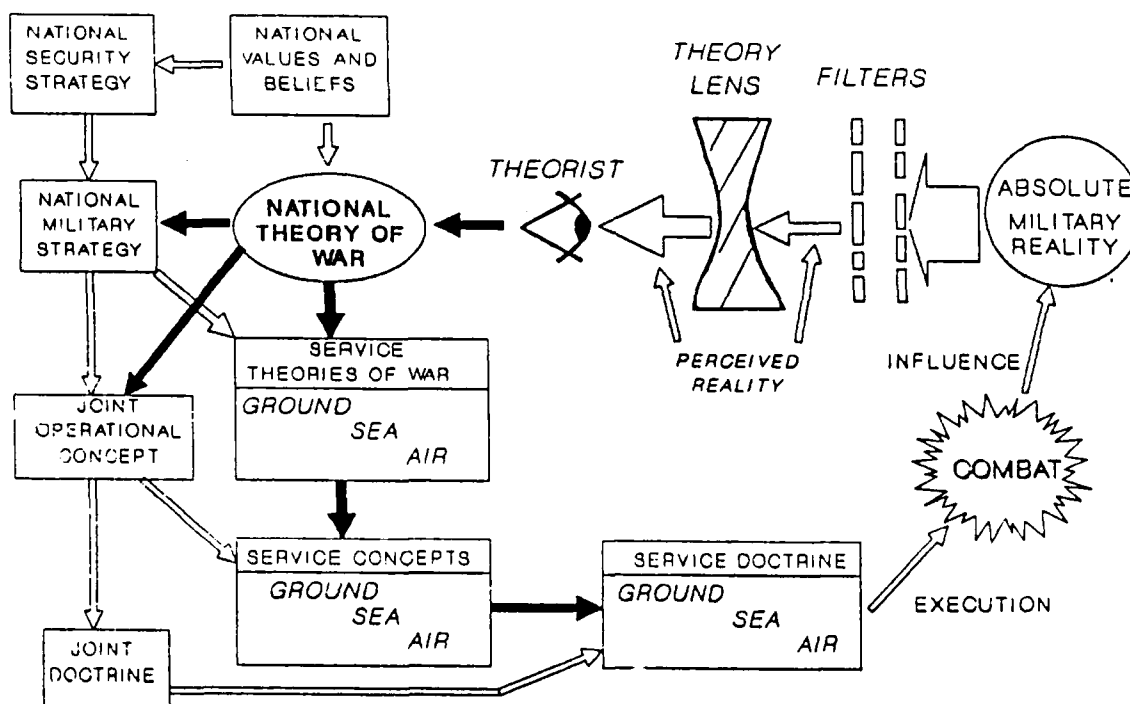


FIGURE 6

This process would ensure a totally integrated approach to determining how the U.S. military would fight future wars. Yet there is no such process at the present time. There is no national theory of war and no approved overarching joint concept. The services develop their

doctrine, organizations, and equipment according to strategies, ideas, and fundamental traditions which often drive them in divergent directions. I am arguing here for the development of a national theory of war. But I know that this will not be easy. Michael Handel writes:

Much more research must be completed on a variety of related issues before scholars attempt to construct a new comprehensive theory on war that would not so much replace as complement and update Clausewitz's study of war. Among the many subjects in need of further attention are the problem of attrition in war; changes in concepts of time and space since the early nineteenth century; offense and defense in modern war; how the role of the military genius has changed in modern war; whether the bureaucratization and the 'computerization' of war has diminished the value of the military genius; whether developments in modern intelligence have increased or decreased uncertainty in warfare; and the influence of the modern mass media and democracy on the political guidance of war.⁷⁶

However, there is some hope at the joint doctrine level. JCS is working on draft JCS Pub 0-1, Basic National Defense Doctrine. Among other things, this document ". . . provides the national position for the development of combined military doctrine."⁷⁷ It also ". . . links joint doctrine to national security strategy, the contributions of other government agencies, and alliance endeavors."⁷⁸ Although it includes some general theoretical principles and constructs in the opening chapters, it later mixes more specific doctrinal principles and procedures. Just as FM 100-5 is not the Army's theory of war, JCS Pub 0-1 is not the national theory of war.

CONCLUSION

Early in the paper I defined theory and established its value. In figures 2 and 4 I showed how theory should influence the development of operational concepts. One section of this paper reviewed past, present, and projected Army doctrine. In that section I demonstrated that our use of theory has increased beginning with the 1982 edition of FM 100-5. The analysis section stated that we use theoretical constructs in our doctrine, but that we do not have an explicit, comprehensive, contemporary theory of ground combat upon which to base our operational concepts. I stated that we should develop such a theory because: theory has value; we do not have a theory of ground combat; our doctrine writers have relied on a narrow range of classical theorists; and technology has significantly changed the nature of war. Finally, I discussed joint and national implications, with Figure 5 showing the contribution of a national theory of war to the development of national military strategy, joint concepts, and service theories.

I believe that it is important for us to develop a national theory of war. Such a theory could help us develop an overarching joint operational concept. This concept could help the U.S. military establishment prepare for future wars in a totally integrated fashion. In the absence of a national theory of war, the Army should establish a special study group with a two-year charter to develop and publish an explicit, contemporary theory of ground combat.

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59. Ibid., pp. 179-182.
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61. Discussion with the primary author, LTC (P) Tom Mitchell, School for Advanced Military Studies, Command and General Staff College, Fort Leavenworth, KS, 3 Dec 90.
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