NAVAL RESERVE OFFICERS
TRAINING CORPS

EVOLUTION
OF
WARFARE

INTRODUCTION

CNET P1550/7 (REV. 3-94)
CHIEF OF NAVAL EDUCATION AND TRAINING

SAUF 32597

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1	6/16/98		

LETTER OF PROMULGATION

This curriculum guide contains the instructor lesson and resource guides for a one- or two-term course in Evolution of Warfare. The course is a survey of the operational art of warfare from the beginning of recorded history to the present. The three volumes of lesson guides are intended to assist the NROTC Marine Officer Instructors to develop more personalized/detailed lesson plans. These guides also provide a list of references made available by Chief of Naval Education and Training (CNET). The resource guide contains numerous articles which can be reproduced and used as references. A number of outside readings are also referenced and may be available through university library systems.

The three volumes are designed to accommodate some variance in teaching techniques and methodology and are in no way intended to limit the individual instructor's creativity or academic freedom. Instructors should design their respective course syllabus and individual lesson plans to encompass the maximum breadth of the course as feasible while ensuring that the professional competency objectives are attained.
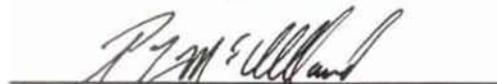
This course is approved for implementation upon receipt. The NROTC curriculum for Evolution of Warfare, CNET P1550/7 (6-87) is canceled and superseded by this course.
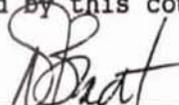
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DEFINITION OF MEASUREMENT TERMS

I.   Know - recall facts, bring to mind and recognize
         appropriate material.

     Examples: Know the objectives of damage control aboard
               ship.

               Know the safety procedures used to provide the
               fullest measure of safe small boat operations.

II. Comprehend - interpret principles and concepts and relate
         them to new situations.

     Examples: Comprehend the mission of the U.S. Navy and the
               U.S. Marine Corps.

               Comprehend the concept of internal forces (e.g.,
               stress, strain, shear, etc.).

III. Apply - utilize knowledge and comprehension of specific
         facts in new relationships with other facts,
         theories, and principles.

     Examples: Apply correct plotting procedures when navigating
               in piloting waters.

               Apply correct procedures to determine times of
               sunrise and sunset.

IV. Demonstrate - show evidence of ability in performing a
         task.

     Examples: Demonstrate third class swimming skills and
               fundamental water survival skills.

               Demonstrate the correct procedures used in radio-
               telephone communications.

PROFESSIONAL CORE COMPETENCY OBJECTIVES

The professional competency objective statements for this course are taken from the Professional Core Competency Manual for Officer Accession Programs promulgated in February 1993.

Comprehend the evolution of the means and methods of warfare, particularly land warfare, including the following typical areas:

1. Know the preeminent leaders and military organizations of history and the reasons for their success.

2. Know the interrelationship between technological progress and military change in rendering obsolete previous successful strategies, policies, doctrines, and tactics.

3. Comprehend the evolution of the influence of economic, psychological, moral, political, and technological factors.

COURSE OVERVIEW

I. **OVERVIEW**

The purpose of the Evolution of Warfare course is to provide the Marine Option midshipmen with a very basic understanding of the art and concepts of warfare from the beginning of recorded history to the present day. Emphasis should be placed upon educational value, vice training. The intent of the curriculum is to familiarize the student (future Marine officers) with an understanding of the threads of continuity and the interrelations of political, strategic, operational, tactical, and technical levels of war from the past, while bringing into focus the application of these same principles and concepts to the battlefields of today and the future.

II. **EDUCATIONAL OBJECTIVES**

Throughout this course, military history is used as a means by which the future officer may challenge and question the decisions of the past. While the violence and uncertainty of the battlefield cannot be recreated, an appreciation for the complexities and dynamics posed by the art and science of warfare can be realized. Therefore, we must take the opportunities to learn lessons presented by the past, while acquiring knowledge of the present and future, in order to better anticipate future conflicts.

III. **METHODOLOGY**

A. The curriculum guide is divided into three volumes and an instructor resource manual. Each volume facilitates a different type course. The individual instructor may decide which method is best suited for his/her particular educational situation. Throughout each volume, twelve chronological topic areas are common. The topic areas are designed to facilitate the integration of the material provided in different volumes. Instructors are encouraged to augment the material in one volume with material found in other volumes or elsewhere.

1. Volume I provides a "skeletal" framework of content, references, readings, broad learning objectives and key points or highlights that can be useful in a one-term course. This allows the individual instructor to fill in the "muscle" of the course outline and provide whatever perspectives deemed necessary to assist the student to gain insights into the relationship between politics and war or between societal values and their respective military forces.

2. Volume II provides lesson guides which can be used to develop a two-term course or to better focus on an area given limited coverage in Volume I. These guides can be useful in a pure lecture format. There are over 400 transparency "masters" provided with Volume II; instructors may use or alter these transparencies as necessary.

3. Volume III facilitates a seminar approach to instruction in a one-term course. Since one of our goals as instructors is to facilitate in the development of "thinking" officers, it is essential that the learning environment be conducive to creative thinking, innovation and problem confrontation.

4. The instructor resource manual is a collection of articles selected to be used with the seminar course format. Publishers have agreed to allow these articles to be reproduced for the educational purposes of NROTC instructors and students. It is hoped that when instructors find other useful articles, the course coordinator can evaluate them for distribution to all units.

B. In selecting an approach to teaching, keep in mind that the primary element in successful education is the <u>student</u>. Every effort should be made to encourage active participation. The bottom line is that each Marine Officer Instructor is expected to ensure the students meet the professional core competency objectives of the course. Any method employed to bring the course alive, to encourage problem solving and make this survey of military history "useful" or "practicable" is highly encouraged.

C. Every instructor will approach the task of teaching the professional competency objectives in a manner best suited to his or her strengths, weaknesses, and experiences. For those who are beginning in earnest their professional historical studies, the Luvaas, "Fundamentals Concepts, History of the Military Art" - USMA, and "How to Get the Most out of a Seminar Format" - Meyer, are provided as part of this overview. It is hoped that the ideas and framework provided in these articles will be of help to both the avid military historian and those with less knowledgeable backgrounds.

IV. **COMMON THREADS/THEMES**

The study of warfare and weapons can be presented in a number of ways. FMFM 1 <u>Warfighting</u> and FMFM 1-1 <u>Campaigning</u> review and consider the levels of war from the political/ strategic through tactical levels of warfare, and provide one framework. This framework is by no means the only or even best method for studying warfare at the introductory level. For example, the examination of leadership and its effect on combat effectiveness could present some interesting challenges. The framework used to add focus to these diverse areas of concern can be developed using the course professional competency objectives and more specific lesson learning objectives designed by the instructor. This design assumes preparation and knowledge of the subject matter and in most cases demands that the student prepare and actively participate.

TOPIC AREA OUTLINES

Throughout this curriculum guide, 12 chronological topic areas are used to provide continuity between the volumes. The following outlines provide a general framework which each instructor can use to develop their own personalized curriculum.

Topic Area 1: The Nature of War

This topic will set the tone for the remainder of the course. The student should be introduced to the concepts contained in FMFM 1, Warfighting, particularly those found in chapters 1 and 2. This will give the student a sound theoretical foundation and a point of reference for the remainder of the course. Additionally, the handouts "Military History--Is it Still Practicable?" and Fundamental Concepts History of the Military Art should be used to examine the usefulness of history and to provide a sound foundation of military operational language.

Topic Area 2: Classical Warfare: Macedonians and Romans

The era of the ancient Greeks and Romans presents the first well-documented period of military history in the western world. The impact of political and economic institutions on warfare are introduced. The development of the phalanx (Greek), articulated phalanx (Macedonian) and legion (Roman) as weapon systems as well as tactical organizations can be studied. Great Captains, such as Alexander, Hannibal, and Julius Caesar are also examined.

Topic Area 3: Byzantine and Feudal Warfare (Mongol Warfare)

The collapse of the Roman Empire in the West presents a whole new set of political, economic and social realities - the result of which is the establishment of the feudal system relying on heavy cavalry for military effectiveness. The Battle of Hastings is studied as an example of the enduring value of combined arms despite prevailing conventional wisdom. The Byzantines, on the other hand, continue the Roman tradition of scientific warfare, albeit adapted to new conditions. Their system of staffing and education is in many ways a precursor of the German General Staff system. The Byzantine cataphract was the mounted successor of the Roman legionary. The campaigns of Belisarius and Narses are of particular interest for their applications of speed, deception and combined arms. Of all the military systems of the ancient world, the Mongols have the most to offer modern students. The Khwarezemian Campaign of Genghis Khan (1219-1220) and Subotai's invasion of Europe (1237-1241) are used to vividly illustrate the operational concepts contained in FMFM 1-1. As these campaigns demonstrate, the Mongols were the supreme practitioners of maneuver warfare prior to the age of gunpowder.

<u>Topic Area 4</u>: The Age of Transition (15th and 17th Centuries)

     The breakdown of the old feudal order and the emergence of
the modern world had far reaching effects on warfare. Technology
began to have a significant and rapidly evolving impact on
weapons, tactics and organizations. The solutions to the
problems posed by this evolving technology used by Gonzalvo de
Cordoba, Maurice of Nassau, and Gustavus Adolphus are worth
serious attention. The pace of change and the suddenly increased
lethality of weapons during this period are precursors to modern
times. The emergence of the strong, centralized, dynastic state
results in the bureaucratization of warfare. The expense and
lethality of late 17th – early 18th century battle leads to a
highly stylized, even ritualistic approach to warfare with
emphasis on maneuver, fortification and siege operations.
Mercantilist economic philosophy is a critical component of this
period. Commanders such as Marlborough and Frederick the Great
who attempted to transcend the bonds of their time are examined.
The French and Indian War of 1754-1763 (Seven Years' War in
Europe) is in many ways the First World War, and its impact is
studied. The reintroduction of light troops and the theories of
Marshal de Saxe are also important elements of this topic.

<u>Topic Area 5</u>: The Revolutionary Period

     While not all that remarkable from a purely military
standpoint, the contrasting approaches of Washington and Greene
are an interesting case study. From the political/social
standpoint, the American Revolution paves the way for the
emergence of nationalism as the most important force in world
affairs.

     Frenchmen are no longer subjects of a king, but citizens of
a modern nation-state with the right and the responsibility to
bear arms in defense of the state. This revolutionary concept
makes available hitherto unimagined manpower for military
purposes. The military currents of the latter portion of the age
of maneuver, e.g., light troops, skirmisher tactics, divisional
organization and the artillery reforms of Gribeauval also come
together to change the face of the battlefield.

     One of the greatest of the military captains, Napoleon,
capitalized on all that preceded him during the revolutionary
period and forged one of the finest, most cohesive, and most
responsive military instruments in history. The Grand Army,
under his leadership, practiced maneuver warfare in a manner
clearly reminiscent of the Mongols. The Italian Campaigns (1796-
97 and 1800), Ulm-Austerlitz and Jean-Auerstadt all provide
abundant material to illustrate concepts found in FMFM 1 and FMFM
1-1. Wellington's counter to Napoleonic methods and Napoleonic
interpreters, Jomini Clausewitz, are introduced to round out this
topic.

Topic Area 6:   American Civil War

     Not only is the Civil War considered the first modern war in history, it affects American military thought and practice up to this very day. The impact of technology on tactics is never more clearly illustrated than when Napoleonic tactics run head-long into rifled weapons in the early years of the war. While the tendency to attack in massed formations was never entirely overcome, the last year of the war saw considerable modifications in tactical practice. On the operational and strategic levels, grant, as the first great modern commander, and Lee, as the great Napoleonic general, are juxtaposed very successfully.

Topic Area 7:   Pax Britannica and the Prussian Influence

As England's colonization program expanded and industrialization spread throughout Europe, North America, and Japan, the military potential of the nation-state increased exponentially. While the Prussian-German General Staff had its roots in the Napoleonic Age, it came into its own during the late 19th century, providing a means to harness this greatly expended military power. Its evolution and the spread of the general staff idea was one of the key military developments leading to the 20th century.

Topic Area 8:   World War I

     The fully mobilized military power of technologically advanced, industrialized nation-states is seen on the battlefield for the first time. Stalemate ensues on both Eastern and Western Fronts. The various approaches to breaking this stalemate are examined in depth. The Allies largely relied on material-technological solutions, i.e., more and heavier artillery fire, tanks, etc.; while the Germans took a doctrinal-tactical approach. Gallipoli is looked at as one of the Allies' few strategic initiatives away from the Western Front. The reasons for its failure in execution should be looked at closely. Be careful not to duplicate Amphibious Warfare instruction.

Topic Area 9:   Interwar Years

     The 1920's and 1930's were a period of reaction against the horrors of total war. The various attempts to limit war are examined. Against this political/economic/social background, the theories of strategic airpower, naval airpower, mechanization of warfare, and amphibious warfare are studied. The developments in strategic airpower and mechanization were aimed at returning decision at a reasonable cost to the industrialized battlefield. Naval airpower and the development of amphibious warfare, particularly in the United States, were studied to ensure the viability of sea power in the modern world. The conduct of World War II is a direct outgrowth of the developments in these areas.

<u>Topic Area 10</u>: World War II

    This topic is a broad and complex period to be totally analyzed. An examination of the Blitzkrieg as unleashed by the Germans against the Allies in 1940 with its lessons in leadership, command and control, and combined arms are conducted. Secondly, the Allied strategic bombing campaign against Germany is studied, with objective analysis of its strengths and weaknesses. Finally, a Pacific war overview with its interplay between carrier task force and amphibious operations will drive home the desired concepts.

<u>Topic Area 11</u>: Post World War II

    Strategic nuclear strategy, limited war, counterinsurgency/ revolutionary warfare, terrorism, continued technological progress, and the enduring value of maritime power are all subjects that are included in this topic. Korea, Vietnam, the Arab-Israeli Wars, the wars of decolonization, and the Gulf War provide fertile ground for appropriate case studies.

<u>Topic Area 12</u>: War Today

    Drawing upon a semester/year's worth of experience, students should be prepared to draw logical and supportable conclusions regarding the shape of future warfare.

WORLD WAR II

POST-WORLD WAR II

WAR TODAY

<u>INSTRUCTIONAL AIDS - AUDIOVISUAL</u>
(Instructional aids updated to reflect Change 1 of 16 Jun 98.)

1. Evolution of Warfare Transparency Collection for Volume II – This collection is provided in paper form. The transparencies were prepared using Harvard Graphics 3.0 and are available from the course coordinator in disc format. *(**NOTE:** As of Jan 03, these slides are now available in PowerPoint format on the CNET Website at* https://www.cnet.navy.mil/cnet/nrotc/cig.html*.)*

2. Chalkboard

3. Overhead projector

4. Easel

5. Instructor-produced transparencies

6. Maps -- The <u>Breasted-Huth-Harding History Map Series</u> published by Rand McNally may be of assistance in presenting the materials in this course. Units desiring to use these maps are to budget and purchase them with unit funds. The maps listed below are recommended and may be ordered as a customized set from Rand McNally's educational department (1-800-678-7263).

Map Sheet Number	Title
214-10404-4	Ancient Greece
214-10408-7	Sequence Map of Greece
214-40410-9	Alexander's Empire
214-10421-4	Europe at the Time of the Crusades, 1097
214-10430-3	Europe in 1648, After Peace of Westphalia
214-10433-8	Europe at the Time of Napoleon, 1812
214-10438-9	Growth of Prussia and Modern Germany
214-10528-8	European Area, WWI, 1914-1918
214-10446-X	Europe, 1918-1937
214-10535-0	European Area in WWII, 1939-1945
214-10536-9	Pacific Area in WWII, 1941-1945
214-10463-X	People's Republic of China, Through 1965
114-12529-5	Korean War and Vietnam War
214-10582-2	Contemporary World

7. It is highly recommended you consider using the West Point Military History series by Avery Publication Group (1-800-548-5757). Instructors will find many useful maps and illustrations throughout the bibliography which can easily be used as transparencies.

8. The Osprey Military Campaign series edited by David G. Chandler and the Military History Quarterly (MHQ) are two other terrific sources for instructors. Currently, there are 14 books published in the Osprey series, each of which focuses on a particular battle.

9. "Fellowship of Valor" is for general use throughout the course. It may be included as introductory material or to support specific lectures.

BIBLIOGRAPHY
(Bibliography updated to reflect Change 1 of 16 Jun 98.)

1. <u>Texts</u> (1 per student, 1 per instructor)

    a. Department of the Navy, Headquarters United States Marine Corps, <u>Warfighting</u>, Marine Corps Doctrinal Publication (MCDP) 1, Government Printing Office, Washington D.C., 1997

    b. Jones, Archer, <u>The Art of War in the Western World</u>, Oxford University Press, New York, Oxford, 1987 (ISBN 0-19-506241-8)

    c. Preston, Richard A. and Sydney F. Wise, <u>Men in Arms</u>, 4th. ed., Holt, Rinehart, and Winston, New York, NY, 1979 (ISBN 0-03-0456241-8)

    d. Weigley, Russell F., <u>The American Way of War</u>, Indiana University Press, Bloomington, IN, 1977 (paperback, ISBN 0-253-28029-X)

2. <u>Student Resource Materials</u> (3-5 texts per unit for students, 1 per instructor)

    a. Keegan, John, <u>The Face of Battle</u>, Random House, Vintage Books, New York, NY, 1977 (ISBN 0-394-72403-8)

    b. Mao Tse-tung, <u>Mao Tse-tung on Revolution and War</u>, M. Rejai, ed., Peter Smith, trans., Doubleday, Garden City, 1969, 1970 (paperback, Library of Congress no. 74-111194)

3. <u>Instructor References</u>

    a. Department of the Navy, Headquarters, United States Marine Corps, <u>Warfighting</u>, Marine Corps Doctrinal Publication (MCDP) 1, Government Printing Office, Washington D.C., 1997

    b. Diagram group, <u>Weapons, An International Encyclopedia from 5000 B.C. to 2000 A.D.</u>, St. Martin's Press, New York, NY, 1990

    c. Dupuy, R.E. and Dupuy, T.N., <u>The Encyclopedia of Military History (4th Revised Edition)</u>, Harper and Row, New York, NY, 1986 (ISBN 0-06-01139-9)

    d. Dupuy, Trevor N., <u>The Evolution of Weapons and Warfare</u>, Hero Books, Fairfax, VA, 1984

    e. Fuller, J.F.C., <u>A Military History of The Western World</u>, Vols I-III, Da Capo Press, New York, NY, 1954-7 (ISBN Vol I: 0-306-80304-6, Vol II: 0-306080305-4, Vol III: 0-306-80306-2)

    f. Hagan, Kenneth J., ed., <u>In Peace and War</u>, Greenwood, Westport, CT, 1984 (2nd edition paperback, ISBN 0-313-24581-9)

g. Historical Atlas of the World, Hammond Inc., Maplewood, NJ, 1997

h. Preston, Richard A., and Sydney F. Wise, Men in Arms, 5th ed., Holt, Rinehart, Winston, New York, NY, 1991

i. Ropp, Theodore, War in the Modern World, Collier Books, New York, NY, 1962 (ISBN 0-02-036400-8)

4. Other References

a. Other references are listed with many of the lesson guides. These References are not available from CNET, but may found in your University's library system or through the interlibrary loan system. Universities will usually place books on hold for you during the academic semester.

b. The Instructor Resource Manual contains numerous other references which are closely tied to Volume III, but may be used for any lesson.

MILITARY HISTORY:
IS IT STILL PRACTICABLE?

by

JAY Luvaas

There was a day, before the advent of the A-bomb, before smart bombs and nerve gas, before computer technology and war games, when professional soldiers regarded reading history as a useful pastime. Many who have scaled the peaks of the military professional have testified to the utility of studying military history.

Most of those, however, seem to be commanding voices out of the past. MacArthur, steeped in family tradition and familiar with many of the 4,000 volumes inherited from his father, was never at a loss for a historical example to underscore his point of view; Krueger, as a young officer, translated books and articles from the German military literature; Eisenhower spent countless hours listening to the erudite Fox Conner on what could be learned from military history; Marshall and his contemporaries at the Army Staff College at Leavenworth reconstructed the Civil War campaigns from the after-action reports; Patton took the time in 1943 to read a book on the Norman conquest of Sicily nearly nine centuries earlier and to ponder "the many points in common with our operations"; and Eichelberger summoned from memory a passage he had read ten years before in Grant's <u>Memoirs</u> (which ought to be required reading for all officers) and thereby stiffened his resolve to press home the attack at Burma. These Army commanders were all remarkably well-versed in history.

So were many of their civilian superiors. President Franklin D. Roosevelt was an avid reader of naval history, and Harry Truman frequently acknowledged the pertinent lessons that he had gleaned from a lifetime of exposure to history:

> Reading history, to me, was far more than a romantic adventure. It was solid instruction and wise teaching which I somehow felt that I … needed … It seemed to me that if I could understand the true facts about the … development of the United States government and could know the details of the lives of … its political leaders, I would be getting for myself a valuable …education … I know of no surer way to get a solid foundation in political science and public administration than to study the histories of past administrations of the world's most successful system of government.

Because the military is a "practical" profession geared much of the time to problem-solving, solider-like engineers and scientists tend to be pragmatic about what is meant by the word "practicable." History is "practicable" if it yields lessons, especially exemplary lessons in tactics and strategy that can be directly applied to some current situation. History is "useful" in illustrating points of doctrine, in instilling in the young officer the proper military values or an appreciation for our

military heritage. The "practical" man often scans the past for some magical formula that may ensure success in war, like Field Marshall von Schlieffen's theory of envelopment, or Captain B. H. Liddell Hart's strategy of indirect approach.

Such assumptions inevitably determine the way military history is taught. Because an important duty of the officer in peacetime is to teach, and because the Army <u>teaching</u> usually involves <u>explaining</u>, it is often assumed that history, to be taught, must be explained. The emphasis therefore is on organizing and presenting information in a lucid, often lavishly illustrated lecture, in which tidy answers outrank nagging questions most students, if not the instructor, is that a person who remembers the lecture will somehow have learned history. It's a mistaken assumption we all make.

It is also true that no other field of history is under as much pressure as military history to provide "practical" answers to some current problem. If military history cannot provide such answers, why study it? The specialist in renaissance diplomacy is rarely solicited for his views on foreign policy but, rather, if left alone to concentrate his thoughts on the cold war with the Turks in the 15th century. Nor is the scholar who has spent a lifetime studying the ramifications of the French Revolution apt to be consulted when news breaks of still another palace coup in some Latin-American "banana republic." But let no historian or journalist prowl around in some remote corner in the field of military history and often he will be expected, even tempted, to function as a current-affairs military analyst.

Perhaps we think this way because, as a society, we are largely ignorant about both the facts and the nature of history. In high school, European History no longer is required, having been replaced by something called "Western Civilization." We know astonishingly little about the history of other societies, and most of us, unfortunately, care even less. Students voting with their feet in colleges and universities across the nation have caused enrollments in history courses to plummet as they turn to "more practical" subjects such as economics, psychology, biology, engineering, and business administration. In the Army's schools, history has become a casualty of the Vietnam War; Academy, the required course in the military art was severely curtailed several years ago and only recently has been restored to its logical place in the curriculum. For that matter, how many officers who have invested off-duty hours to work toward an advanced degree have taken it in history? In the officer corps of today, the subject is rarely considered "practicable."

<u>More to the point, is the Army, as an institution, as historical-minded as it was in the past?</u> For without even a rudimentary understanding of history and its processes, there is not way that the past can be made to offer object lessons for the future. Professor Pieter Geyl, a distinguished Dutch historian reminds us that it is useless to talk about "the lessons of history" when the historian "is after all only a man sitting at his desk." The lessons that we would learn are his-the fruits of <u>his</u> labors, the creation of <u>his</u> imagination, perhaps the idea that <u>he</u> is to sell to the reader. For, as a German general asserted a hundred years ago, "it is well know that military

history, <u>when superficially studied</u>, will furnish arguments in support of any theory or opinion."

COMMON FALLACIES

Perhaps the most frequent error in the abuse of history is to take historical examples out of context. Once removed from its historical context, which is always unique, a battle or a campaign ceases to offer meaningful lessons from history. According to Napoleon, "old Frederick laughed in his sleeve at the parades of Potsdam when he perceived young officer, French, English, and Austrian so infatuated with the maneuver of the oblique order, which (in itself) was fit for nothing but to gain a few adjutant majors a reputation." Napoleon appreciated that the secret of Frederick's successes was not the oblique order, but Frederick. "Genius acts through inspiration," Napoleon concluded. "What is good in one case is bad in another."

One of Frederick's own soldiers demonstrated that in another environment even Frederick's maneuvers might fail. When Baron von Steuben, who had served in the Prussian Army throughout the Seven Year's War, was trying to make soldiers out of Washington's shivering, half-starved volunteers at Valley Forge, he knew better, more complex maneuvers he had mastered under Frederick. Instead, he selected only those that were essential to meet the unique conditions that prevailed in America, where volunteers had only a few months instead of years to master the intricacies of Frederick's drill, and where officers had to learn to lead by example instead of relying upon the severity or the Prussian system. Soldiers, Frederick repeatedly had warned, "can be held in check only through fear" and should therefore be made to "fear their officers more than all the dangers to which they are exposed … Good will can never induce the common soldier to stand up to such dangers; he will only do so through fear." Whatever may have motivated Washington's amateur soldiers at Valley Forge, most certainly it was not fear.

If there is a lesson here for us, it is simply that solutions to problems are not to be viewed as interchangeable parts. Even the Germans in World War II apparently failed to heed this lesson in drawing conclusions from their own war experiences. IN addition to displaying a tendency to generalize from personal or limited experience, they often indiscriminately applied the experiences of one situation to entirely different circumstances. Thus the German Supreme Command "applied the experiences acquired on the Western Front in 1940, unchanged, to the war against Russia" despite the "greater tenacity" of the Russian soldier, his "insensibility against threatening the flanks," the scarcity of roads, and the vast space involved "giving … the opponent the possibility of avoiding decision." In the words of one German general, not only did this misapplication of experience influence the operational plan against Russia, it also "contributed to the final disappointment."

It is also a distortion to compress the past into distinctive patterns, for it is as true of history as it is of nature that "each man reads his own peculiar lesson according to his own peculiar mind and mood." History responds generously to the adage "seek and ye shall find." At the turn of the century

the Chief of the German General Staff, Count Alfred von Schlieffen, was faced with the need to plan for a war on two fronts. His solution was to point toward a quick victory on one front in order to avoid ultimate defeat; annihilation essential to a quick victory came, at least in part, from reading the first volume of Hans Delbruck's Geschichte der Kriegskunst, which was published in 1900. Delbruck's treatment of the Battle of Cannae in 216 BC convinced Schlieffen that Hannibal had won his lopsided victory by deliberately weakening his center and attacking with full force from both flanks. The much publicized Schlieffen Plan was an adaptation of this idea. Having thus discovered the "key," Schlieffen turned in his writings to the idea of envelopment to unlock the secrets of Frederick the Great and Napoleon, both of whom, he claimed, had always attempted to envelop the enemy. Similarly, Captain B. H. Liddell Hart was to discover from his research fro a biography of Sherman that the key to Sherman's success lay in a strategy of indirect approach. When he turned to history at large for confirmation, of course he "discovered" that nearly all successful generals, whether they had been aware of it or not, had employed something akin to the strategy of indirect approach. The future British field marshal Sir Archibald Wavell, who always found Liddell Hart's ideas stimulating whether he agreed with them or not, once slyly suggested to the captain: "With your knowledge and brains and command of the pen, you could have written just as convincing a book called the 'Strategy of Direct Approach.'" Wavell appreciated that it was Liddell Hart and not the muse of history who preached this attractive doctrine.

Moreover, nothing is necessarily proven by citing examples from history. There are many works on military theory that provide examples of bad argument from analogy or authority; such faulty use of historical examples, according to Karl von Clausewitz, "not only leaves the reader dissatisfied, but even irritates his intelligence." The mere citation of historical examples provides only the semblance of proof, although the reader who understands little about the nature of history may set aside his book convinced of the essential truth of the new theory, and the audience exposed to a well-organized and seemingly cogent lecture sprinkled with examples from history is equally vulnerable. "There are occasions," Clausewitz noted,

> "Where nothing will be proven by a dozen examples … If anyone lists a dozen defeats in which the losing side attacked with divided columns, I can list a dozen victories in which that very tactic was employed. Obviously this is no way to reach a conclusion."

And if the author or lecturer has never mastered the events he describes, "such superficial, irresponsible handling of history leads to hundreds of wrong ideas and bogus theorizing."

Perhaps the greatest disservice to history and its lessons comes from its frequent association with a given set of military principles or doctrine, and here the celebrated Swiss theorist Baron de Jomini may have had an unfortunate influence. Drawing upon an exhaustive examination of 30 campaigns of Frederick and Napoleon, Jomini deduced certain fixed maxims and principles which he claimed were both eternal and universal in their

application. If such maxims would not produce great generals, they would "at lease make generals sufficiently skillful to hold the second rank among the Great Captains" and would "thus serve as "the true school for generals."

To future generations of young officers, Jomini said, in effect: "Gentlemen, I have not found a single instance where my principles, correctly applied, did not lead to success. They are based upon my unrivaled knowledge of the campaigns of Napoleon, much of it acquired at first hand, and of the basic works of Thiers, Napier, Lloyd, Tempelhof, Foy, and the Archduke Charles. Thanks to my labors you need not invest years of your own time in scrutinizing these voluminous histories. Did not Napoleon himself confess: 'I have studied history a great deal, and often, for want of a guide, have been forced to lose considerable time in useless reading'? You have only to study my principles and apply them faithfully, for 'there exists a fundamental principle of all the operations of war' which you neglect at your peril."

Jomini had many prominent disciples, and their books were nearly all written on the assumption that battles and campaigns, ancient as well as modern, have succeeded to the degree that they adhered to the principles of was as explained by Jomini and could be confirmed by the "constant teaching of history." But were Jomini read history, many of his followers read primarily Jomini and thus were on step removed from history and its processes.

The emergence of doctrine (as late as the American Civil War there were only drill manuals) and the introduction of historical sections on most European general staff meant that increasingly, in the eyes of professional soldiers at least, military history was linked to doctrine and more specifically, to the principles of war as these principles were rediscovered and refined. Since World War I it has become fashionable to use history to illustrate the official principles as they are variously defined.

There are three dangers inherent in this approach. In the first place, pressed into service in this way history can only illustrate something already perceived as being true; it cannot prove its validity or lead to new discoveries. This is probably the terrain on which most soldiers first encounter the subject, and they would do well to heed the warning of Clausewitz that if "some historical event is being presented in order to demonstrate a general truth, care must be taken that every aspect bearing on the truth at issue is fully and circumstantially developed- carefully assembled … before the reader's eyes." In other words, the theorist ought to be a pretty good historian. Clausewitz goes so far as to suggest that, even though historical examples have the advantage of "being more realistic and of brining the idea they are illustrating to life," if the purpose of history is really to explain doctrine, "an imaginary case would do as well." Moreover, to use history primarily to illustrate accepted principles is really to put the cart before the horse. If one starts with what is perceived as truth and searches history for confirmation and illustrations, there can be no "lessons learned." How can there be?

A second weakness in linking history to doctrine is the natural tendency to let doctrine sit in judgement of historical events. Sir William Napier, who had a healthy respect for Jomini's theories, used his maxims as a basis for rendering historical judgement on the generalship of French and British leaders in his classic <u>History of the War in the Peninsula</u>. Similarly, Major General Sir Patrick MacDougall "discovered" that these maxims could also serve as criteria for judging the generalship of Hannibal, and Matthew F. Steele's <u>American Campaigns</u>, which was published in 1909 and endured as a text at the Military Academy and other Army schools even beyond World War II, used the maxims of Jomini, von der Goltz, and other late 19th century theorists to form the basis for historical commentary on the generalship of individual American commanders.

Most serious of all is the ease and frequency with which faith in doctrine has actually distorted history. This was happening frequently by the end of the 19th century as each army in Europe developed and became committed to its own doctrine. It is the primary reason why the tactical and strategical lessons of the Civil War, which in many respects was the first modern war, went unheeded. Even the elaborate German General Staff histories on the ward of Frederick the Great and the wars of liberation against Napoleon never failed to drive home the soundness of current German doctrine, and the German official histories of the Boer War and the Russo-Japanese War similarly serve to demonstrate above all else the continuing validity of German doctrine. The Boers had applied that doctrine and <u>therefore</u> usually won, least in the earlier battles before the weight of numbers alone could determine the outcome. British doctrine was faulty, if indeed the British yet had a doctrine, and <u>therefore</u>, the British suffered repeated defeats. The Germans had trained the Japanese Army and the Japanese had won in 1904-05, "proving" again the superiority of German doctrine. Had a trained historian instead of an officer serving a tour with the Military History Section analyzed the same campaigns, surely he would have asked some searching questions about the differences in the discipline, morale, and leadership of the two armies. Did the Japanese cavalry win, for example, because of superior doctrine based on shock tactics or because it was better disciplined and led? To the officer corps of the day, the result demonstrated the weakness of the Russian Army's mounted infantry concepts in the face of shock tactics, whereas 10 years later, in a war that, at the outset, was strikingly similar in the conditions prevailing on the battlefield, shock tactics did not prevail anywhere for long.

Thus military history distilled by Jomini and his disciples ultimately found itself shaped by a commitment to doctrine, and the instinct of most professional soldiers before World War I was to explain away exceptions to the official rules rather than to use history as a means of testing and refining them.

FACTS IN HISTORY

Although it is not always evident in a lecture or a textbook, we can never be completely certain – and therefore in agreement – about what actually happened in history. Frederick and Napoleon knew this well. Skeptical both of the historian's

motives and of the reliability of his facts, they evinced a healthy skepticism about the ability of the human mind ever to recreate an event as it actually happened.

"The _true truths_ are very difficult to ascertain," Napoleon complained. "There are so many truths!"

"Historical fact … is often a mere word; it cannot be ascertained when events actually occur, in the heat of contrary passions; and if, later on, there is a consensus, this is only because there is no one left to contradict … What is … historical truth?… An agreed upon fiction … There are facts that remain in eternal litigation."

A Union staff officer whose corps bore the brunt of Pickett's charge at Gettysburg put it a different way:

"A full account _of the battle as it was_ will never, can never, be made. Who could sketch the charges, the constant fighting of the bloody panorama! It is not possible. The official reports may give results as to losses, with statements of attacks and repulses; they may also note the means by which results were attained … by the connection between means and results, the mode, the battle proper, these reports touch lightly. Two prominent reasons … account for the official reports … the literary infirmity of the reporters, and their not seeing themselves and their commands as others would have seen them. And factions, and parties, and politics … are already putting in their unreasonable demands …. Of this battle greater than Waterloo, a history, just, comprehensive, complete, will never be written. By-and-by, out of the chaos of trash and falsehood that newspapers hold, out of the disjointed mass of reports, out of the traditions and tales that come down from the field, some eye that never saw the battle will select, and some pen will write what will be names _the_ history. With that the world will be, and if we are alive we must be, content."

This writer intuitively understood that as soon as the historian begins to impose order on something as chaotic as a battle, he distorts. If his narrative is to mean anything at all to the reader, he must simplify and organize the "disjointed mass of reports." He must, for lack of space, omit incidents that did not contribute to the final result. He must resolve controversies, not merely report them, and he must recognize that not every general is candid, every report complete, every description accurate. Orders are not always executed; not every order is even relevant to the situation. At Gettysburg, the watches in the two armies were set 20 minutes apart, and after the battle Lee had some of this subordinates rewrite their after-action reports to avoid unnecessary dissension. Well may it be said that "on the actual day of the battle naked truths may be picked u for the asking; by the following morning they have already begun to get into their uniforms."

During World War I, German General Max Hoffman confided to his diary: "For the first time in my life I have … seen 'History' at close quarters, and I know that its actual process

is very different from what is presented to posterity." <u>Plutarch Lied</u> is the descriptive title of an impassioned indictment of the French military leadership on the other side of no-man's land:

> "Men who yesterday seemed destined to oblivion have, today, acquired immortality. Has some new virtue been instilled in them, has some magician touched them with his want? … Civilian historians have studied historical events from a point of view which is exclusively military. Far from trusting to their own judgement, they have not considered it respectful to exercise their critical faculties on the facts as guaranteed by a body of specialists. An idolatrous admiration for everything which concerns the army has conferred upon them the favour of having eyes which do not see and memories which are oblivious of their own experiences ….An incredible conspiracy exists in France at this very moment. No one dares write the truth."

Even with the best of intentions and an impartial mind, it is difficult to reconstruct what actually happened in history. This truth was given eloquent expression by a French pilot on a reconnaissance flight to Arras in May 1940 as he reflected on the chaos engulfing a dying society 30,000 feet below.

> "Ah, the blueprint that historians will draft of all this! The angels they will plot to lend shape to this mess! They will take the word of a cabinet minister, the decision of a general, the discussion of a committee, and out of that parade of ghosts they will build historic conversations in which they will discern farsighted views and weighty responsibilities. They will invent agreements, resistances, latitudinous pleas, cowardices…. Historians will forget reality. They will invent thinking men, joined by mysterious fibers to an intelligible universe, possessed of sound far-sighted views and pondering grave decisions according to the purest law of Cartesian logic."

Even where there can be agreement of facts, there will be disagreements among historians. "To expect from history those final conclusions which may perhaps be obtained in other disciplines is … to misunderstand its nature." Something akin to the scientific method helps establish facts, but the function of the historian is also to explain, to interpret, and to discriminate, and here "the personal element can no longer be ruled out …. Truth, though for God it may be One, assumes many shapes to men."

This explains the oft-quoted statement of Henry Adams, the famous American historian: "I have written too much history to believe in it. So if anyone wants to differ from me, I am prepared to agree with him.: No one who does not understand something about history could possibly know what Adams meant by this apparently cynical statement. Certainly he did not intend to imply that history, because it lacked unerring objectivity and precision, is of no practicable use to us. Quite the contrary. To recognize the frail structure of history is the first essential step toward <u>understanding</u>, which is far more important in putting history to work than blind faith in the validity of isolated facts. History tends to inspire more questions than

answers, and the questions one asks of it determine the extent to which the subject may be considered practicable.

MAKING HISTORY INSTRUCTIVE

What, then, can the professional soldier expect to learn from history? If it can offer no abstract lessons to be applied indiscriminately or universally, if it cannot substantiate some cherished principles or official doctrine, if the subject itself is liable to endless bickering and interpretation, what is the point of looking at history at all?

Here Napoleon, whose writings and campaigns formed the basis of study for every principal military theorist for a hundred years after his death, provides a useful answer in his first major campaign. When he assumed command of the French army in Italy in 1796, he took with him a history of a campaign conducted in the same theater by Marshal Maillebois half a century before, and more than one authority has noted the similarity in the two campaigns. "In both cases the object was to separate the allies and beat them in detail; in both cases the same passes through the maritime Alps were utilized, and in both cases the first objectives were the same." In 1806, when he sent his cavalry commander, Murat, to reconnoiter the Bohemian frontier, he recommended that Murat take with him a history of the campaign that the French had waged there in 1741, and three years later Napoleon approved the location of pontoon bridges at Linz because Marshall Saxe had successfully constructed two bridges there in 1740. In 1813 he sent one of his marshals "an account of the battle fought by Gustavus Adolphus in positions similar to those which you occupy."

Obviously history served Napoleon not so much because it provided a model to be slavishly followed, but because it offered ways to capitalize on what others before him had experienced. "History," Liddell Hart reminds us,

"is universal experience-infinitely longer, wider, and more varied than any individuals' experiences. How often do we hear people claim knowledge of the world and of life because they are sixty or seventy years old? … There is no excuse for any literate person if he is less than three thousand years old in mind."

By this standard Patton was at least 900 years old after studying the Norman conquest of Sicily.

Napoleon also proposed, in 1807, the establishment of a special school of history at the College of France that would have practical application for officers. Trained historians would teach the military student how to make sound historical judgments, for Napoleon understood that "the correct way to read history is a real science in itself." He regarded the wars of the French Revolution as "fertile in useful lessons," yet apparently there had been no systematic effort to retrieve them. This too "would be an important function of the professors in the special school of history." For similar reasons Napoleon had ordered his War Minister in 1811 to have the Depot of War prepare comprehensive records of the sieges and attacks of the fortified

towns captured by the French armies in Germany, not for publication but for ready reference. And he did not discourage the printing of a similar volume on the sieges in Spain.

Napoleon thus conceived of history as serving a purpose similar to that of the publications of the Old Historical Division and its ultimate successor, the Center of Military History. He would have applauded the appearance of the <u>Guide to the Study and Use of Military History</u>, for some way had to be found to steer the military students through the "veritable labyrinth" of campaign studies, technical treatises, and memoirs. Like Frederick, who viewed history as "a magazine of military ideas," Napoleon would have been delighted with the official histories of the campaigns of World War II, Korea, and Vietnam, and with extensive monographs on specialized subjects such as mobilization, logistics, and medical services.

On St. Helena, Napoleon spoke of the need to publish manuscripts in the Imperial Library as a way of establishing a solid foundation for historical studies. Probably one of the first proposals of its kind, it anticipated by half a century the decision of the US War Department to publish in 128 meaty volumes <u>The Official Record of the Union and Confederate Armies</u>, a unique compilation of the after-action reports and official correspondence of Union and Confederate leaders. Napoleon also gave the first impetus to official military history when he created a historical section of the General Staff and named Baron Jomini to head it.

His most enduring suggestion, however, was the deathbed advice he offered to his son: "Let him read and meditate upon the wars of the great Captains: it is the only way to learn the art of war."

Because Napoleon occasionally mentioned certain "principles of the art of war," he is often thought to have meant that the study of the Great Captains is valuable because it leads to the discovery of enduring principles or illustrates their successful application in the hand of genius. While acknowledging that these Great Captains had "succeeded only by conforming to the principles" and thus had made war "a true science," Napoleon offered more compelling reasons for studying the campaigns of Alexander, Hannibal, Caesar, Gustavus Adolphus, Turenne, and Frederick:

"Tactics, the evolutions, the science of the engineer and the artillerist can be learned in treatises much like geometry, but the knowledge of the higher spheres of war is only acquired through the study of the wars and battles of the Great Captains and by experience. It has not precise, fixed rules. Everything depends on the character that nature has given to the general, on his qualities, on his faults, on the nature of the troops, on the range of weapons, on the season and on a thousand circumstance which are never the same."

The Great Captains must therefore serve as "out great models." Only by imitating them, by understanding the bases for

their decisions, and by studying the reasons for their success could modern officers "hope to approach them."

Napoleon agreed with Frederick, who considered history "the school of princes" – princes, that is, who are destined to command armies – and who wrote his own candid memories in order that his successors might know "the true situation of affairs … the reasons that impelled me to act; what were my means, what were the snares of our enemies" so that they might benefit from his own mistakes "in order to shun them." And both would have endorsed Liddell Hart's observation that "History is a catalogue of mistakes. It is our duty to profit by them."

Whereas Jomini concentrated upon maxim, Frederick and Napoleon focused their attention on <u>men</u>. They stressed the need for a commander to view a military situation from a vantage point of his opponent, and for the military student to become privy to the thinking process of successful commanders. This was the advice Prince Eugene, Marlborough's sidekick and the greatest command we ever served the Hapsburgs, gave to young Frederick when, as the heir to the Prussian throne, Frederick accompanied the Prussian contingent serving with the Imperial Army along the Rhine in 1734. After he had become the foremost general of his day, Frederick urged his own officers, when studying the campaigns of Prince Eugene, not to be content merely to memorize the details of his exploits but "to examine thoroughly his overall views and particularly <u>to learn how to think in the same way</u>."

This is still the best way to make military history practicable. "The purpose of history," Patton wrote shortly before his death,

> "is to learn how human beings react when exposed to the danger of wounds or death, and how high-ranking individuals react when submitted to the onerous responsibility of conducting war or the preparations for war. The acquisition of knowledge concerning the dates or places on which certain events transpired is immaterial…"

The future field-marshal Earl Wavell gave similar advice to a class at the British Staff College shortly before World War II:

> "The real way to get value out of the study of military history is to take particular situations, and as far as possible get inside the skin of the man who made a decision and then see in what way you could have improved upon it."

"For heaven's sake," Wavell warned,

> "don't treat the so-called principle of war as holy writ, like the Ten Commandants, to be learned by heart, and as having by their repetition some magic, like the incantations of savage priests. They are merely a set of common sense maxims, like 'cut your coat according to you cloth,' 'a rolling stone gathers no moss,' 'honesty is the best policy,' and so forth."

Merely to memorize the maxim "cut your coat according to your cloth" does not instruct one how to be a tailor, and Wavell reminded his listeners that no two theorists espoused exactly the same set of principles, which, he contended, "all imply common sense and … are instinctive to the properly trained soldier."

> "to learn that Napoleon in 1796 with 20,000 men beat combined forces of 30,000 by something called 'economy of force' or 'operating on interior lines' is mere waste of time. If you can understand how a young, unknown man inspired a half-starved, ragged, rather Bolshie crowd; how he filled their bellies, how he out-marched, out-witted, out-bluffed, and defeated men who had studied war all their lives and waged it according to the textbooks of the time, you will have learnt something worth knowing, but the soldier will not learn it from military texts."

Sometimes military history is treated, in books and lectures alike, as thought it exists primarily for the future field commander. Frederick might have assumed something of the sort in his own writings, but he wrote more about such practical subjects as feeding and drilling an army, the gathering and evaluation of intelligence, and how to treat friendly and hostile populations than he did about strategy. Likewise, Napoleon was concerned about military education at every level, and his advice to his son on studying the decisions of the Great Captains should not obscure the fact that he believed strongly in military history in his officers' schools and as a practical subject for research.

History can be made practicable at any level. The future field-marshal Erwin Rommel did not have future corps commanders necessarily in mind when he wrote Infantry Attacks in 1937. His lessons, deduced from experiences of his battalion in World War I, could indeed have been of value to any company or field-grade officer. For example, describing the events he witnessed in September 1914, Rommel concluded:

> "War makes extremely heavy demands on the soldier's strength and nerves. For this reason make heavy demands on your men in peacetime exercises."

> "It is difficult to maintain contact in fog…. Advances through fog by means of a compass must be practiced, since smoke will frequently be employed. In a meeting engagement in the fog, the side capable of developing a maximum fire power on contact will get the upper hand; therefore, keep the machine guns ready for action at all times during the advance."

> "All units of the group must provide for their own security. This is especially true in close terrain and when faced with a highly mobile enemy."

> "Too much spade work is better than too little. Sweat saves blood."

> "Command posts must be dispersed…. Do not choose a conspicuous hill for their location."

> "In forest fighting, the personal example of the commander is effective only on those troops in his immediate vicinity."

> "The rain favored the attack."

Rommel drew his own conclusions from his experiences, but a discriminating reader could probably have extracted them for himself.

These observations were not lost on Patton, who probably shared similar experiences and had been involved in training troops. During the Saar campaign in early 1945, Patton confided to his diary:

> "Woke up at 0300 and it was raining like hell. I actually got nervous and got up and read Rommel's book, <u>Infantry Attacks</u>. It was most helpful, as he described all the rains he had in September 1914 and <u>also the fact that, in spite of the heavy rains, the Germans got along</u>."

And so, shortly, did the Third Army.

Another book of this genre is <u>Infantry in Battle</u>, which was prepared at the Infantry school in 1934 under the direction of then-Colonel George C. Marshall and revised four years later. Written on the assumption that "combat situations cannot be solved by rule," contributors to this book fell back upon numerous examples from World War I to introduce the reader to "the realities of war and the extremely difficult and highly disconcerting conditions under which tactical problems must be solved in the face of the enemy."

Military history has also been used to test the ability of military students. In 1891 a British colonel published a tactical study of the battle of Spicheren, fought 20 years earlier. In the introduction he explained:

> "To gain from a relation of events the same abiding impressions as were stamped on the minds of those who played a part in them – and it is such impressions that create instinct – it is necessary to examine the situations developed during the operations so closely as to have a clear picture of the whole scene in our mind's eye; to assume, in imagination, the responsibilities of the leaders who were called upon to meet those situations; to come to a definite decision and to test the soundness of that decision by the actual event."

LEARNING FROM HISTORY

What Frederick, Napoleon, Rommel, Patton, Wavell, and many others referred to here have shared in common can be summed in one word: <u>reading</u>. An English general in the 18th century urged young officers to devote every spare minute to reading military history, "the most instructive of all reading."

"<u>Books</u>!" an anonymous old solider during the Napoleonic wars pretended to snort. "And what are they but the dreams of

pedants? They may make Mack, but have they ever made a Xenophon, a Caesar, a Saxe, a Frederick, or a Bonapart? Who would not laugh to hear the cobbler of Athens lecturing Hannibal on the art of war?"

"True," is his own rejoinder, "but as you are not Hannibal, listen to the cobbler."

Since the great majority of today's officers are college graduates, with a healthy percentage of them having studied for advanced degrees, they have probably long since passed the stage at which they can actually benefit from the conventional lecture on history, with the emphasis on factual content and the expectation of a clear conclusion. The leading question therefore becomes: How do we teach them to learn from history? J.F.C. Fuller, co-author of the concept that later became known as blitzkrieg, had this problem in mind when he addressed a class at the British Staff College a few years after World War I. "Until you learn how to teach yourselves," he told the students, "you will never be taught by others."

Fuller did not specify how this was to be accomplished, but he probably would insist that to teach the officer how to teach himself should be the avowed objective of every course in military history. Can it really do much good if the officer is exposed every half-dozen years throughout his career to no more than a structured course of only a few months duration, especially if in the process he has gained little understanding of history as a discipline or a scant appreciation for how it can be used or abused? Assuredly such a voracious reader as Fuller – who at age 83 confessed to having recently sold off all of the books in his library that he could not read within the next 10 years – would argue that there would be no point to any history course whatever if the student is not stimulated to spend some time afterwards poking around the field a bit on his own. "Books," Fuller once wrote, "have always been my truest companions."

Any student of history must learn to identify with the men and events he reads about, seeking above all to understand their problems and to accept the past on its own terms. The student must also learn to ask questions, not of the instructor necessarily, but of his material and especially of himself. Historians usually worry more about asking the right questions than finding definitive answers, for they know from experience that no document or book can answer a question that is never asked. Had Patton read Rommel's book when the sun was shining, for example, and all was going well, chances are he would have never have paid any attention to the casual observation that rain seemed to favor the attach. Cannae was an important battle to Schlieffen because the double envelopment achieved by Hannibal suggested a method by witch a battle of annihilation might be fought in a war against France and Russia. But to Colonel Ardant du Picq, the foremost French military theorist of the 1860's, Hannibal was a great general for a quite different reason – "his admirable comprehension of the morale of the soldier." The two men were searching for solutions to different kinds of problems, and in reading about Cannae each responded to his individual interests.

In the old Army, when there was enough leisure time for reading, riding, or a regular game of golf, it was probably understood that the burden of learning from military history must rest primarily upon the individual officer. The annual historical ride to the Civil War battlefields – which had been preserved by Act of Congress "for historical and professional military study" – directly involved students of the Army War College in the unending dialogue between past and present. Students were frequently asked on location how they would have handled some problem in tactics or command and control that had confronted a commander during battle. "It is not desirable to have the questions answered," the instructions specified. "Some will know the answer, but all who do not will ask themselves the question."

This is the only way to learn from history. The textbook or the instructor can organize information, but only the student can put it to work. "Mere swallowing of either food or opinions," Fuller reminds us, "does not of necessity carry with it digestion, and without digestion swallowing is but labour lost and food wasted."

Today there is a shortage of both "labour and food," as other budgetary priorities and manpower shortages have forced severe cutbacks in history courses throughout the Army.

But in a sense this blinds us to the real problem, for it does not necessarily follow that more money and instructors must be the solution. SA formal course in military history, however desirable, is not the only way and may, in fact, not be the best way to teach students how to teach themselves history, which is the goal. George C. Marshall, as future Chief of Staff, regarded his two years at the Army Staff College in 1906-08 as having been "immensely instructive," but not because of the quality of the courses there. "The association with the officers, the reading we did and the discussion… had a tremendous effect … I learned little I could use," Marshall wrote, but "I learned how to learn … My habits of thought were being trained."

Marshall's words touch upon the essence of practicability. Military history may be of indeterminate value for the immediate future (if World War III were to be fought next week, for example), but among the captains in the career courses today are the Army's top administrators and leaders of tomorrow, and not all graduates of the war colleges in June will retire in the next six or eight years. Those that remain are bound to benefit from anything that can heighten their understanding of society, of the other armies, of the political process, of leadership, of the nature of war, of the evolution of doctrine, and of a dozen similar areas of human activity in which history, pursued by an intelligent and inquisitive reader, can still be strikingly practicable to the modern soldier.

To any set of military maxims, whatever their origin, perhaps the following literary maxims should be added:

"This history that lies inert in unread books does not work in the world."

"If you want a new idea, read an old book."

"It's the good reader that makes the good book."

"A book is like a mirror. If an ass looks in, no prophet can peer out."

FUNDAMENTAL CONCEPTS
HISTORY OF THE MILITARY ART

1. <u>Fundamental Concepts</u>. A primary purpose of this course is to teach each midshipman to master the fundamental concepts listed below. Such mastery provides a common language for professional discourse and a basis for analysis of military operations of the past, present and future.

This is by no means a comprehensive list. Instructors may add a concept here or there. As an officer, the graduate will encounter many more than these ideas as well as different definitions of each. The purpose here is to provide each midshipman with a solid foundation upon which to build his post-graduate professional development. These ideas are consistent with joint doctrine.

By the end of the course, each midshipman must be able to define each of these terms and to demonstrate his/her understanding of it with historical examples. Additionally, he/she will be expected to have mastered them, that is, to use them readily and in combination, verbally and in writing, to critically analyze military events.

2. <u>Threads of Continuity</u>. The study of military history reveals the art of war as an ever-changing phenomenon. Each war is different in some way from those preceding it. Sometimes the changes have been evolutionary; other times, they have been revolutionary. Military leaders must adapt to these changes, often under the pressure of battle. Failure to recognize the impact of these changes, often because reliance upon ideas and concepts that proved successful in the past, has resulted in defeat. On the other hand, we see historical examples of leaders who have accurately judged the impact of these changes, reacted accordingly, and emerged victorious. In the hope of joining the latter group, we study the process of change in military history.

Although the are of war has changed from age to age, we are able to distinguish several factors in different ages, in different societies, and in different armies, the changes that have occurred which stand out more clearly and can be better understood. These factors that provide a common reference for the study of the changes in the art of war are called <u>threads of continuity</u>. These factors fall into two groups: the internal threads, which are predominantly or exclusively a part of the military profession; and the external threads, which are part of a greater social milieu in which the military exists.

a. <u>Internal Threads</u>: The threads of continuity that are entirely or almost entirely a part of the military profession are: military professionalism, tactics, operations, strategy, logistics and administration, generalship, and military theory and doctrine.

(1) <u>Military Professionalism</u>. The definition of military professionalism is dependent on an understanding of a

profession. A profession is an occupation or a calling that
requires specialized knowledge of a given field of human
activity, that requires long and intensive training, that
maintains high standards of achievement and conduct through force
of education or concerted opinion, that commits its members to
continued study, and that has the rendering of a public service
as its prime purpose. Military professionalism as a thread of
continuity, then, is the conduct of war. Attitude thus
distinguishes the "professional" members of the military from
those who are not professionals. Those who are seeking to create
or striving to perfect the profession of arms are military
professionals. Those who practice or think about the conduct of
war solely for personal glory or material gain are not military
professionals.

       (2) <u>Tactics</u>. The second thread of continuity that is
strictly part of the military profession is tactics. Tactics are
the specific techniques smaller units use to win battles and
engagements. This includes activity out of enemy contact that is
intended to directly and immediately affect such battles and
engagements. The word tactics is derived from the Greek <u>taktos</u>,
which means ordered, or arranged; modern usages restrict the word
to ordered arrangement, to include the positioning of supporting
weapons, that facilitative the defeat of a rival in battle. In
the nineteenth and early twentieth centuries, "tactics" was
further refined by the adjectives "grand" and "minor". Grand
tactics were the tactics of large organizations, and minor
tactics were the tactics of small organizations or of
organizations consisting of entirely of one arm (infantry,
cavalry, or artillery). Grand tactics are now included in the
operational level of warfare.

       (3) <u>Operations</u>. The third thread of continuity,
operations, is also strictly part of the military profession.
Operations involves the planning and conduct of campaigns
designed to defeat an enemy in a specific space and time with
simultaneous and sequential battles. While this thread of
continuity can be used to analyze even the earliest campaigns,
its origins as a separate field of study date only from the era
of Napoleon. The two theorists who are most famous for their
analysis of Napoleon's success, Karl von Clauswitz and Henri
Jomini, both discerned the difference between Napoleon's conduct
of the battle and the actions that preceded and followed it.
They believed these techniques differed enough from the conduct
of the battle to merit separate study.

       By the beginning of the 20th century most military
writers accepted this distinction, although they differed on
terms and limits. "Grand tactics" and "military strategy" have
both been used in the past to describe what is now termed
"operations." The Prussians and later the German Army mad e the
most systematic studies of the subject, while it is a relatively
new concept in the American army. FM 100-5 <u>Operations</u> had
identified "operations" as the link between strategy and tactics
which governs the way campaigns are planned and conducted. As a
result, operations is concerned with using available military
resources to attain the objectives in a specific theater of war.
Therefore, operations seeks to attain the objectives of strategy

while at the same time addressing the way in which campaigns are planned and pursued in a theater.

(4) Strategy. The fourth internal thread of continuity, strategy, no longer belongs entirely to the military profession, for today's military leaders generally work closely with government officials in the field of strategy. "Strategy" is derived from the Greek strategos, which means the art of skill of the general, and this definition remains useful in understanding modern definitions of the term. Until late in the 18th and early in the 19th centuries, the specific tasks of generals differed little from the tasks of subordinate commanders or from the tasks of politicians, and no specific term was used to describe the art or the skill of the generals. Political and military leadership of a group was often vested in the same individual, and the resources of small u nit leaders on the battlefield differed little from the resources of the general in overall command.

By the late 18th century the existence of a resource available to higher leaders was recognized and given the "stratagem": a ruse or a trick that gives and advantage to one side in battle or in war. By the early 19th century, "strategy" referred to the use of resources or the particular tasks of war that were peculiar to the high-ranking officer. It was defined as the preparation for war that took place on the map or the use of battles to win campaigns. Since the modern appearance of the term, however, no precise definition has approached universal acceptance. Yet the term continues to be widely used, and it finds itself among the vital concepts used to examine and describe the evolution of the profession of arms. The following definition attempts to facilitate the student's quest; the student should also be aware that many other thoughtful definitions exist. Strategy is the long-range plans and policies for distributing and applying resources to achieve specific objectives. Strategy allows the achieving of adopted goals. But because conditions in war and peace are constantly changing, strategy must be modified as it is being executed, and at times even the goals of strategy must be altered.

Strategy, like tactics, can be further refined by restricting modifiers. For example, grand strategy is the strategy of a nation or of an alliance. The goal of grand strategy is the attainment of the political objective of a war. Grand strategy is formulated by heads of state and their principal political and military advisors. Grand strategy is more accurately called national strategy if the goals of a single nation are being sought. A third refinement or level of strategy is military strategy, which is a strategy where the means and resources are those of the armed forces of a nation and where the goal of strategy is the securing of objectives consistent with national policy through the application of force or the threat of force. Military strategy can be formulated by military commanders at all levels, but commanders below general officer rank are rarely involved in strategy that affects national policy. A fourth level of strategy is campaign strategy, which is the strategy of a commander of a force of considerable size that is acting independently. Its immediate goals are generally the occupation of territory or the defeat of all or a significant

part of the enemy armed forces; its long term goal remains to support political goals.

(5) <u>Logistics and Administration</u>. The fifth thread of continuity, logistics and administration, is much likely strategy, in the sense that even though most of its functions are wholly a part of the profession of arms, many functions are dependent upon and interact closely with civilian-controlled activities. In addition to this similarity with strategy, logistics and administration are closely involved with strategy, for logistics and administration provide many of the resources that strategy puts to work. Logistics is the providing, movement and maintenance of all services and resources necessary to sustain military forces. Administration is the management of all services and resources necessary to sustain military forces. Logistics includes the design, development, acquisition, storage, movement, distribution, maintenance, evacuation and disposal of material; the movement, evacuation, and hospitalization of personnel; the acquisition of construction, maintenance, operation and disposition of facilities; the acquisition of civilian labor; and the acquisition or furnishing of services, such as baths, laundry, libraries, and recreation. Since administration applies to the management of men, material and services, it is intimately associated with logistics.

(6) <u>Military Theory and Doctrine</u>. The sixth internal thread of continuity, military theory and doctrine, is almost wholly a part of the profession of arms, but since it is involved with external factors, it too has some application to areas outside the military. Military theory is the body of ideas that concern war, especially the organization and training for and the conduct of war. Doctrine is the authoritative fundamental principles by which military forces guide their actions in support of objectives. Those men whose thoughts about war have influenced considerable numbers of soldiers are know as military theorists. Doctrine in modern armies is generally disseminated through manuals, regulations, circulars, and handbooks that prescribe standardized procedures and organizations. After examination and acceptance by highly experienced professionals, theory became doctrine, with a reasonable assurance of positive results. Doctrine does not, however, alleviate the requirement for sound judgment, for the solutions to every critical decision cannot be found in doctrine.

(7) <u>Generalship</u>. The final thread of continuity that is wholly or largely a part of the profession of arms is generalship, which is defined as exercising the qualities and attributes necessary to command major units. Generalship is closely involved with each of the threads of continuity discussed above. It involves strategy, that is, an ability to use all means and resources available to achieve an assigned goal. It involves tactics – the formation and control of ordered arrangements of troops when training for the clash of arms or when the clash of arms is imminent or underway. It involves logistics – that is, a concern for services and material and administration, the ability to control and manage all the resources available to a senior commander. And it involves military theory and doctrine – the formulation of new ideas about war, their evolution, and acceptance or rejection. Generalship

also connotes a deep understanding of the conduct, aims and qualities of members of the military profession. Generalship involves leadership at the highest levels of command and represents a deep understanding of the value of moral and espirit to the profession.

b.   External Threads.   In addition to the important role played by strategy, operations, tactics, logistics and administration, military theory and doctrine, and military professionalism, the perceptive student of war is keenly aware that there are also external factors that influence the military profession. The most significant of these external factors, or "threads of continuity," are political factors, social factors, economic factors, and technology.

(1) Political Factors. Those ideas and actions of governments or organized groups that affect the activities of whole societies are political factors. They shape warfare, determine the composition and strength of military organizations, and often establish the goals and policies for which wars have been fought. Until the middle of the 19th century, the political chiefs, or heads of state or government, were usually the commanders of the military as well. Alexander, Caesar, Gustavus Adolphus, Frederick the Great, and Napoleon are prime examples. In such cases, political policy and military goals were nearly synonymous. However, in democratic societies of more recent vintage, such as Great Britain since the 17th century and the United States since its founding, political policies often have been quite removed from military capabilities and goals. Regardless of the conditions, political factors maintain a major influence upon the military profession. In modern democratic societies, political factors have a double meaning: at one level, they involve the activities of the military profession that influence legislation and administrative decisions regarding national security; at another lever, they involve the consequences of military actions on the international balance of power and the behavior of foreign states. The two levels are closely related, and in spite of the many differences between military leaders and civilian politicians, political factors themselves remain closely intertwined with the military profession.

(2) Social Factors. The activities or ideas emanating from human groups and group relationships that affect warfare are social factors. These factors involve such diverse concepts as popular attitudes, the role of religious institutions, level of education, roles of educational institutions, psychological warfare, reactions to and roles of mass media, interracial and minority rights questions, combat psychology, standards of morality and justice, and ultimately the will of a people to resist. In total war social factors are objectives that can be as important as terrain objectives or the destruction of the military forces in the field.

(3) Economic Factors. Those activities and ideas that involve the production, distribution, and consumption of the material resources of the state are economic factors. Different types of economies, for example: capitalist, communist, laissez-faire, industrial, agrarian, commercial, subsistence, or common

market, affect warfare differently. Economic war, which takes such forms as blockade or boycott, is a part of total war, but is can also occur when war as a general condition does not exist.

The interrelation of political, economic and social factors is generally complex, especially in modern societies, and the detailed study of one alone is often impossible. Together, these factors provide the foundations of national power.

(4) Technology. Political, social, and economic factors provide the foundations of power, and technology often provides the limits to power. Technology is the using of knowledge to create or improve upon practical objects or methods. Within the military profession, technology leads to progressive advancement in such important areas as transportation, weaponry, communications, construction, food production, metallurgy, and medicine. Technology has an undeniable influence on strategy, tactics, logistics, military theory and doctrine and generalship; when a group's technology is superior to its adversary's, it greatly enhances the probability of success in military endeavors.

The 11 threads of continuity discussed above do not provide an infallible means for learning about every aspect of the military past. Rather they offer a conceptual framework that seeks to provide a means to reconstruct at least the general outline of the tapestry of the military past. The full meaning and magnitude of that tapestry can be appreciated only after long study or long years of service and significant contribution to the profession of arms.

3.   The Principles of War: (FM 100-5, App A)

a.   **OBJECTIVE:** Direct every military operation towards a clearly defined, decisive and attainable objective.

b.   **OFFENSIVE:** Seize, retain and exploit the initiative.

c.   **MASS:** Concentrate combat power at the decisive place and time.

d.   **ECONOMY OF FORCE:** Allocate minimum essential combat power to secondary efforts.

e.   **MANEUVER:** Place the enemy in a position of disadvantage through the flexible application of combat power.

f.   **UNITY OF COMMAND:** For every objective, ensure unity of effort under one responsible commander.

g.   **SECURITY:** Never permit the enemy to acquire an unexpected advantage.

h.   **SURPRISE:** Strike the enemy at a time or place, or in a manner, for which he is unprepared.

i.   **SIMPLICITY:** Prepare clear, uncomplicated plans and clear, concise orders to ensure thorough understanding.

4.   Levels of War. War is a national undertaking which must be coordinated from the highest levels of policy making to the basic levels of execution. Strategic, operational, and tactical levels are the broad divisions of activity in preparing for and conducting war. While the Principles of War are appropriate to all levels, applying them involves a different perspective for each.

    a.   The Strategic Level of Warfare. The level of war at which a nation or group of nations determines national or alliance security objectives. Activities at this level establish national and alliance military objective; sequence initiatives; define limits and assess risks for the use of military and other instruments or power; develop global or theater war plans to achieve those objectives; and provide armed forces and other capabilities in accordance with the strategic plan (JCS pub 1-02)

    The strategic perspective is worldwide and long-range. The strategic planner deals with resources, capabilities, limitations, and force postures. He sets broad priorities for allocation of resources and time frames for accomplishment. Working within a broad perspective of forces and capabilities, strategy concerns itself with strategic mobility, mobilization, civil defense, forward force deployments, nuclear deterrence, rapid reinforcements and rapid deployment. Cooperation among the services and allied nations to produce a unity of effort is of vital concern in the strategic arena. Strategic planning is not a military function only. It is formulated by input from the Joint Chiefs of Staff, The National Security Council, members of Congress, and selected advisors to the President.

    b.   The Operational Level of Warfare. The level of war at which campaigns and major operations are planned, conducted, and sustained to accomplish strategic objectives within theaters or areas of operations. Activities at this level link tactics and strategy by establishing operational objectives, initiating actions, and applying resources to bring about and sustain these events. These activities imply a broader dimension of time or space than do tactics; they insure the logistic and administrative support to tactical forces, and provide the means by which tactical successes are exploited to achieve strategic objectives. (JCS pub 1-02)

    The operational art of war is primarily the planning and conduct of campaigns and practiced by large field, air, and fleet unity of the services. It involves joint, combined, and coalition forces that maneuver with the objective of defeating the enemy and achieving strategic objectives within a theater of operations, rather than a specific battlefield.

    Operations take the form of large-scale maneuvers such as penetrations, envelopments, double envelopments, frontal attacks, naval blockades, air interdiction, turning movements, feints, amphibious landings, and airborne assaults. At the operational level, maneuver may be sometimes entirely movement.

c. The Tactical Level of Warfare. The level of war at which battles and engagements are planned and executed to accomplish military objectives assigned to tactical units and task forces. Activities at this level focus on the ordered arrangement and maneuver of combat elements in relation to each other and to the enemy to achieve combat objectives. (JCS pub 1-02)

The objective of the tactical level of war is the detailed destruction of enemy forces or thwarting directly the enemy intentions. Tactics consists of the employment of division size and smaller units in weapons engagements and battles with the enemy. Close support, interdiction, destroying equipment, disrupting facilities, reconnaissance and surveillance, killing or capturing personnel, positioning and displacement or weapons systems, and supply and support are tactical activities.

The tactical commander's perspective is one of a battle or engagement when he "executes" a plan of movement with fire support to achieve a specific objective such as clearing an area, blocking enemy movement, protecting a flank, gaining fire superiority or seizing a location. The room for anticipating opportunities and risk-taking is somewhat limited by the confines of the immediate aspects of the battle and the specificity of the objective.

Maneuver at the tactical level is nearly always a combination of movement and supporting fires. These two functions are tightly integrated instead of being somewhat discrete as they may frequently be at the operational level. Movement, instead of resulting from opportunities for positional advantage, is usually an effort to position forces to concentrate fires on the enemy or to escape enemy fires.

Tactical unit commanders depend on their higher operational level commander to move them effectively into and out of battles and engagements. Success or failure at the tactical level, when viewed as a whole by the operational-level commander, are the basis for a wider scheme of maneuver. Small unit actions stimulate the operational-level commander's anticipation for result in victory. The perspective of the tactical commander is somewhat more subjective – his concern is destruction of the enemy forces in his zone of action and his own force's survival. He must concentrate on executing his portion of the overall mission effectively, at the same time visualizing the overall operational-level perspective.

d. Schematic

(1) Grand Strategy. A coalition's long-range plans and policies for using military and other resources of each member to achieve specific, shared objectives.

(2) National Security. The are and science of development and using the political, economic, and psychological powers of a nation or alliance, together with its armed forces, during peace and war, to security national or alliance objectives.

STRATEGIC LEVEL OF WAR

(3) <u>military Strategy</u>. The are and science of employing the armed forces of a nation or alliance to secure policy objectives by the application or threat of force.

(4) <u>Campaign Strategy</u>. A military commander's long-range plans and policies for using the resources available to him to achieve specific, assigned objectives in a given space and time.

OPERATIONAL LEVEL OF WAR

(5) <u>Operations</u>. The process of carrying on combat, including movement, supply, attack, defense, and maneuvers needed to gain the objectives of any battle or campaign.

TACTICAL LEVEL OF WAR

(6) <u>Tactics</u>. The employment of units in combat or the ordered arrangement and maneuver of units in relation to each other and/or to the enemy in order to utilize their full potentialities.

5.   <u>Forms of Strategy</u>

a.   **EXHAUSTION** – A strategy which seeks the gradual erosion of an enemy nation's will or means to resist.

b.   **ATTRITION –** A strategy which seeks the gradual erosion of the combat power of the enemy's armed forces.

c.   **ANNIHILATION** – A strategy which seeks the immediate destruction of the combat power of the enemy's armed forces.

6.   <u>Operations and Tactics</u>

a.   <u>Categories of Operations</u>

(1) **OFFENSIVE.** Operations designed to achieve one's purpose by attacking the enemy.

(2) **DEFENSIVE.** Operations designed to cause an enemy's attack to fail.

(3) **JOINT.** Military operations involving more than one service.

(4) **COMBINED.** Military operations involving the armed services of more than one allied nation.

b.   <u>Operational Design</u>

(1) Center of Gravity: This concept derives from the idea that an armed combatant, whether a warring nation or an alliance, an army in the field, or one of its subordinate formations, is a complex organism whose effective operation

depends not merely on the performance of each of its component parts, but also on the smoothness with which these components interact and the will of the commander. As with any complex organism, some of the components are more vital than others to the smooth and reliable operations of the whole. If these are damaged or destroyed, their loss unbalances the entire structure, producing a cascading deterioration in cohesion and effectiveness which may result in complete failure, and which will invariable leave the force vulnerable to further damage. Clausewitz defined the idea as "the hub of all power and movement, on which everything depends."

       (2) Line of Operation: The directional orientation of a force in relation to the enemy. Lines of operational connect the force with its base of operation on the one hand and its operational objective on the other. Normally a campaign or major operation will have a single line of operation, although multiple lines of operation in a single campaign are not uncommon. Classical theory makes special note of the relationship between opposing lines of operations. A force is said to be operating on interior lines when its operations diverge from a central point and when it is therefore close to separate enemy forces than the latter are to each other. Interior lines benefit a weaker force by allowing it to shift the main effort laterally more rapidly than the enemy, or due to the successful conduct of the defense.

       (3) Culminating Point: That point in any offensive operation where the strength of the attacker no longer significantly exceeds that of the defender, and beyond which continued offensive operations risk overextension, counterattack, and defeat. In operational theory, this point is called the culminating point. The art of attack at all levels is to achieve decisive objectives before the culminating point is reached. Conversely, the art of defense is to hasten the offensive when it arrives. Culminating points may occur because movement of supplies cannot keep pace with the attack or because lines of communication are under attack by partisans or other forces such as airborne or air mobile units capable of attacking rear area assets.

    c.   <u>Forms of Maneuver</u>. (FM 100-5, pp. 101-106). For map references, see pamphlet from Avery Publishing Group—The West Point Military History series.

       (1) **FRONTAL ATTACK** – An offensive action that strikes the enemy across a broad front and over the most direct approaches. Pickett's Charge, depicted on Map 37b of the Civil War Atlas, is an example of a frontal attack.

       (2) **PENETRATION** – An offensive action that breaks through the enemy on a narrow front and seizes deep objectives to destroy the coherence of his defense. Map 5c in the back of Chapter 5 of <u>The Dawn of Modern Warfare</u> depicts Marlborough's penetration of the French line at the Battle of Blenheim.

       (3) **ENVELOPMENT** – An offensive action that passes around or over enemy defenses to seize objectives on his flank or rear. Jackson's flank march and his subsequent attack at

Chancellorsville, shown on Map 28 of the <u>Civil War Atlas</u>, is an example of an envelopment.

>   (4) **TURNING MOVEMENT** - An envelopment that forces the enemy to abandon his position, divert major forces and fight in two directions simultaneously. An attacker who conducts a turning movement usually attempts to avoid the defense entirely, seeking instead to secure terrain deep in the enemy's rear and along his line of communication. Map 26 of the <u>Civil War Atlas</u> shows the turning movement conducted by Hooker at the opening of the Chancellorsville Campaign.

>   (5) **INFILTRATION** – The covert movement of all or part of the attacking force through enemy lines to a favorable position in their rear.

> d.   <u>Types of Offensive Operations</u> (FM 100-5, ch. 6)

>   (1) **MOVEMENT TO CONTACT** - An offensive action whose purpose is to gain or reestablish contact with the enemy. The movement of the Grand Armee through the Thuringian Forest Campaign, shown on Maps 27 and 28 of the <u>Napoleonic Atlas</u>, is an excellent example of a movement to contact.

>   (2) **HASTY ATTACK** – A planned offensive action made without pause in the forward momentum of the force upon initial contact with the enemy. A hasty attack was conducted by Henry Heth's division against Union infantry and cavalry situated west of Gettysburg on 1 July 1863. It is described on pages 156-157 of the Civil War text and depicted on Map 35a of the accompanying atlas.

>   (3) **DELIBERATE ATTACK** – A thoroughly planned and coordinated offensive action whose purpose is to initiate the forward momentum of friendly forces in contact with a prepared enemy. Soult's corps conducted a deliberate attack at the Battle of Austerlitz. It is shown on Map 23 in the <u>Napoleonic Atlas</u>.

>   (4) **EXPLOITATION** – An offensive action the purpose of which is to prevent the enemy from reconstituting his defense or conducting an orderly withdrawal. The operation s conducted by the Army of Italy after the crossing of the Po River in 1796 is an example of exploitation. It is depicted on Map 4 of the <u>Napoleonic Atlas</u>.

>   (5) **PURSUIT** – An offensive action the purpose of which is to intercept and annihilate a retreating enemy which has lost its ability to react effectively. The actions of the Grand Armee following the Battle of Jena, shown on Map 32 of the <u>Napoleonic Atlas</u>, are excellent examples.

> e.   <u>Types Defensive Operations</u> (FM 100-5, ch. 8-9)

>   (1) **MOBILE DEFENSE** – A defense that employs a combination of offensive, defensive, and delaying action to defeat the enemy attack. Robert E. Lee's conduct of the Chancellorsville Campaign, depicted on Maps 26-31 of the <u>Civil</u>

War Atlas, is an example of a mobile defense at the operational level of war.

(2) **AREA DEFENSE** – A defense which is conducted to deny the enemy access to specific terrain for a specified time. The fortifications at West Point are representative of an area defense. Their mission: do not allow the west point of the Hudson River to fall into British hands.

f.   Retrograde Operations (FM 100-05, ch. 10)

(1) **DELAY** – A retrograde operation whose purpose is to gain time for friendly forces to reestablish the defense, cover a defending or withdrawing unit, protect a friendly unit's flank, or to participate in an economy of force effort. The 1st Cavalry Division and the I Corps of the Army of the Potomac fought a delay on the hills west of Gettysburg on the morning of 1 July 1863. It is shown on Maps 35a and 35b of the Civil War Atlas.

(2) **WITHDRAWAL** – A retrograde operation the purpose of which is to remove subordinate units from combat, adjust defensive positions, or relocate the entire force. After the Battle of Gettysburg, Lee's Army of Northern Virginia conducted a withdrawal. It is shown on Maps 38a and 38b of the Civil War Atlas.

(3) **RETIREMENT** – A rearward movement away from the enemy by a force not in contact. The actions of the Russian Army prior to the Battle of Austerlitz, described in The Wars of Napoleon, pp. 49-50, and on Map 20 of the Napoleonic Atlas, constitute a retirement.

(4) **RETREAT** – Though it is not officially recognized by U.S. Army doctrine, the term "retreat" is often used generically in literature to describe any movement of a unit away from the enemy. The term generally implies that the movement is forced by the enemy and is often characterized by a high degree of disorder.

g.   Main and Supporting Attacks

(1) **MAIN ATTACK** – An offensive action constituting the commander's principal effort to achieve his purpose. Soult's corps conducted the main attack at Austerlitz. It is shown on Map 22 of the Napoleonic Atlas.

(2) **SUPPORTING ATTACK** – An offensive actions, separate from the main attack, intended by the commander to facilitate the success of the main attack. Common purposes of a supporting attack can include deception, fixing the enemy in position, and seizing key terrain. Lannes' corps conducted the supporting attack at Austerlitz (Map 22).

7.   Terms

a.   **CAMPAIGN** – A series of related military operations intended to accomplish a common objective, usually within a given space and time.

b. **COMBAT POWER** – A unit's fighting ability. Combat power is an abstraction that represents one's judgment of a unit's fighting ability considering size and weaponry, but also espirit, leadership, training, discipline, and other relevant subjective qualities. Because these are not constant factors, a unit's combat power is not constant. Combat power is significant only in relation to a specific enemy; therefore, the degree to which a unit's combat power is superior to that of the enemy can be increased by the manner of employment, such as achieving surprise, attacking a flank, or exploiting the advantages of terrain.

c. **GUERRILLA WARFARE** – Military and paramilitary operations conducted in hostile territory by irregular and primarily indigenous forces.

d. **INSURGENCY** – An organized movement aimed at the overthrow of a constituted government through use of subversion and armed conflict.

e. **INTELLIGENCE** – The product resulting from the collection, evaluation and analysis of all available information about opposing forces or nations.

f. **INTERIOR LINES** – The ability to reinforce one's separated units faster than one's opponent, due to central position, superior mobility or both, relative to the enemy. Robert E. Lee utilized interior lines at the tactical level in his conduct of the Battle of Antietam, depicted on Map 14 of the <u>Civil War Atlas</u>.

g. **LIMITED WAR** – A war prosecuted by a belligerent who voluntarily exercises restraints on means, objective, geographical area, or time.

h. **LINES OF COMMUNICATION** – The land, sea and/or air routes that connect a military force with its base of operations and along which logistical support is provided.

i. **LOGISTICS** – The provision, movement and maintenance of all services and resources necessary to sustain military forces.

j. **NATIONAL OBJECTIVES** – Those fundamental aims, goals, or purposes of a nation – as opposed to the means for seeking these ends – towards which a policy is directed and efforts and resources of the nation (or alliance) are applied.

k. **NATIONAL POLICY** – A broad course of action or statements of guidance adopted by the government (or alliance) at a national level in pursuit of national objectives.

l. **RESERVE** – A combat element intentionally withheld form action by the commander so as to be available for commitment at the decisive moment. The decisive moment can be one anticipated in the commander's plan or one imposed by enemy action.

m.   **STRATEGIC CONSUMPTION** – The loss of available combat strength due to diversions and irreplaceable casualties imposed by the expansion of one's base of operations. Examples of diversions include guarding one's line of communication as one advances and garrisoning key positions in one's rear.

n.   **SUPPORTING DISTANCE** – The distance by which two or more forces can be separated while retaining the ability to reinforce each other before anyone can be defeated individually. Supporting distance is estimated on the basis of terrain, relative mobility, and relative strength.

o.   **TOTAL WAR** – A war conducted by a belligerent in which few restraints on means, objective, geographic area, or time are exercised and in which the involvement of all resources of the society are normally committed.

"HOW TO GET THE MOST OUT OF A SEMINAR FORMAT"

by Dr. Bradley J. Meyer

Written for this course by Dr. Meyer.

The seminar discussion is one of the most powerful teaching tools available. It has a number of advantages. First, discussion is an active rather than a passive form of learning. In a well-run discussion, students do not simply "absorb" material, as in a lecture. They react to what is being said: they agree or disagree, they come up with something to add to the discussion, they express a point of view in their own words. They continually compare and integrate their own knowledge with that of others. Sometimes, they come up with ideas that are new to themselves or to others.

Preparing for the discussion is also an exercise in active learning. Typically, a reading assignment constitutes the base of knowledge upon which the discussion will be built. While knowledge derived from work or life experience can often be worked into a seminar discussion, and this is an advantage of the discussion format, in an academic situation, a reading assignment will normally form the basis of the discussion.

Reading itself is a form of active learning. The words on the page are clues to the writer's meaning, but each reader must make his or her own sense out of them. Normally, in a well-organized seminar, students will already have a topic for discussion in mind as they do the assigned reading, so that even before the discussion group meets, they begin relating the reading material to the discussion topic. Then again, for most people, reading is the most time-effective way of acquiring information, much more efficient than hearing a lecture or watching a video presentation. The typical seminar will cover a lot of ground, simply in terms of processing information efficiently.

Reading is a powerful learning tool, but a good seminar discussion will enhance the payoff from time spent in reading. If a group of 8 to 10 people all read the same material, they will likely come away with 8 or 10 interpretations of that material. If they then spend an hour or two attempting to reconcile those interpretations, chances are good each person will gain a clearer understanding of the issues at hand. If nothing else, each discussion participant hears how other people have interpreted; the material, and this helps to fill in some of the blanks and blind spots that everyone has. By arguing about and discussing the issue at hand, discussion participants sort out the evidence that speaks for and against a given point of view.

This brings us to the most important advantage of the seminar: it promotes synthesis. Synthesis, brining the factors that bear on a complex problem into an ordered whole, is the ultimate goal of most education in the humanities. Discussion helps the students make sense of the assigned material. All members of the discussion group, and not just the teacher, can help each other come to terms with the material. In a good

discussion, everyone comes away with a better grasp of the issues.

Finally, a good seminar is one of the most enjoyable forms of learning. Everyone can make a contribution to the group effort, and everyone should. Generally speaking, people like being able to say something in class, to throw in their two cents worth, rather than simply to listen while someone talks to them. A good discussion is lively and it helps keep the interest of the class in the subject matter high.

HOW TO RUN A SEMINAR DISCUSSION

From the instructor's point of view, running a good discussion is an exercise in backwards engineering. The instructor first synthesizes material bearing on the discussion topic. Then the instructor assigns to the students that portion of the material which allowed him or her to achieve that synthesis, together with a discussion topic to focus the student's attention. The students read the material in light of the discussion topic, work the matter over in their heads, and come to class, not necessarily knowing all the answers, but at least ready to discuss the question. The instructor guides the class discussion, generally in light of some prearranged plan. At the end of the discussion, hopefully, a body of insight and knowledge the instructor alone had possessed is now the common property of all.

The role of the discussion leader might be compared to the helmsman on a ship. The discussion leader chooses the destination the discussion will aim for. This goal is based on the course objectives and the discussion leader's own synthesis of the material. With an objective in mind, the discussion leader sets the initial course of the discussion, through selection of readings (in some educational settings) and through selection of the discussion topic, which the students keep in mind as thy do the readings. The discussion leader generally helps get the discussion moving, and stands ready to restart it if it gets stalled. Having chosen an objective and set a course, the discussion leader applies rudder corrections if the discussion strays too far off course. But the steering mechanism is somewhat loose: the discussion leader expects a somewhat meandering course across the bay, and realizes that to a great extent a discussion has a life of its own – so long as the discussion leader allows the discussion to occur.

Once a general objective for the discussion has been assigned, the instructor surveys the material that bears on the topic, attempting to achieve a synthesis of the subject. Once the instructor has come to a general understanding of the problem suggested by the topic, the instructor assigns to the students those materials from which the synthesis was achieved.

Note that the instructor has already done the students a service, by preselecting the materials the students will read to achieve a synthesis through the discussion process. It might be possible to send the students into the library with a learning objective and have the students research the topic themselves. The students would then come to their own synthesis based upon

their own research—if they had the necessary research skills (a major "if" at certain levels of education). But this would take more time. The instructor can do the selection and sorting for the students in advance. A discussion seminar can cover more ground than the students could on their own—more learning can take place.

Generally speaking, once the instructor has achieved a synthesis, there is no need to worry that the students will be able to "get it." In the seminar format, the students will have a lot of help in "getting it." First, the materials they will read are preselected, so they don't have to read through a lot of superfluous material. Second, the students have a discussion topic to focus their inquiry. Third, the discussion format allows the instructor to "jump start" the students to a higher level of understanding than they could achieve on their own, at least in the amount of time available for the course.

A well-chosen discussion topic, provided to the students before they do the reading, can be great assistance in dealing with a mass of information presented in the reading. Basically, the discussion topic will ask the question which the discussion will attempt to answer. All of the assigned reading will be relevant (hopefully), at least in terms of providing necessary background, but only small amount, perhaps scattered in several places, will actually answer the discussion topic.

When the actual discussion arrives, the goal is to have a lively discussion that stays on the topic and arrives at some kind of conclusion. The student should talk more to each other than to the instructor. The discussion leader should not talk to the discussion group for any length of time, should not deliver a lecture, impromptu or otherwise. The discussion is not a lecture. Neither should the instructor ask a series of questions of the students, which they answer. The discussion is not a recitation. (Neither should everyone sit around and star at each other.)

Discussable questions are the discussion leader's stock in trade. A discussable question is one that is open-ended enough to form the basis for a portion of the discussion, but at the same time is based on the discussion topic and the reading. Obviously, a discussable question does not have a short definite answer: "1862" or "Abraham Lincoln." A discussable question is something like this: "How would different political groups in the North react to Lincoln's Emancipation Proclamation?" Such a question does not lend itself to short, simple answers, but to longer, more complex answers. Discussable questions that have two sides to them are particularly prized by the discussion leader: they get discussions going. They get arguments going (always good for the liveliness of the discussion) that force people to answer objectives and present their point of view to others. Discussable questions that demand an answer to unanswerable questions can sometime be quite useful: "Did Lincoln issue the Emancipation Proclamation to free the slaves or to save the Unit?"

Drawing up, in advance, an outline of a discussion, just as one would draw up an outline of a lecture or a paper, is an

excellent idea. The discussion leader should ask: "What is the ultimate objective of this discussion, what understandings should be reached, and what is the best way to proceed towards the objective? What are the intermediate understandings that have to be reached? What critical points have to be brought out? What is the evidence for these critical points? In other words, a discussion can be "gamed out," just as an essay writer or a lecturer games out what his audience needs to know, and in what order they need to know it.

All of these considerations give the discussion leader a rudder for controlling the discussion. If the discussion has exhausted a given sub-topic and needs to go in a certain direction, the discussion leader can throw out an introduction to a whole area of intermediate consideration, according to the pre-arranged plan. On the other hand, very often the discussion will tend to move on from an issue before it has been well enough explored. Now is the time for the discussion leader to throw out a specific, focused question about the issue. Now is the time to ask specific questions about the evidence for a given point of view. These tactics help to ensure that an important subsidiary point is fully discussed before the group moves on to something else.

Frequently, as a discussion gets going, four or five major issues will be thrown out by the discussants within the first five minutes. There are, after all, only so many things that can be said about a given discussion topic, based on a given set of readings. Each of those four or vice areas is a potential lead into a major area of discussion. The discussion leader can come back to some of them 20 or 30 minutes down the road. But if the discussion leader has not "gamed out" the course of discussion, the major issues thrown out by the students probably will not be recognized for what they are.

In many ways the only difference between the discussion leader and any ordinary member of the discussion group is that the discussion leader has more authority than the other members of the discussion group, and it is generally easier from the discussion leader to get "into" the discussion than for anyone else. One thing this means is that the discussion group generally will look to the discussion leader to get the group back on track if it gets off the topic. Discussion is a spontaneous, open-ended form. One aspect of this is that even the most "high-powered" groups can spiral off into meaningless drivel in about nine seconds flat. In such cases, experienced discussion groups will automatically look to the discussion leader to restore order.

A very powerful means of steering a discussion is to have a comment, or a new line of inquiry "ready to go," when the discussion bogs down, as all discussion will form time to time. If everyone is wondering what to say, particularly if a particular point has been "talked out," the group will generally seize the new line of attack and run with it.

All the techniques (and reasons) for steering a discussion are available to the students as well as to the instructor. Members of a long-standing discussion group will gradually learn

to be better discussants, which is an important skill in many professions. Humanity makes may of its decisions through discussions—and—arguments—and it is important for many people to be known as someone who makes comments that are relevant to the discussion, as opposed to irrelevant, and perhaps even a reputation for saying things that are conclusive. Perhaps most importantly, the most serious mistakes are often made when argument and discussion have not taken place, and as a result no one knows what decisions truly mean and what is at stake.

SOME PRACTICAL ASPECTS OF LEADING A DISCUSSION

No matter how many people are in the room, only about four or five will be in discussion at any time. This seems to be an empirical fact. In a large group, the more articulate and informed, or those most determined to be heard, will tend to dominate the discussion. It follows that, for optimal learning, discussion groups need to be small. Four of five people probably are too small: then everyone needs to be in the discussion all the time. A group of about 8 or 10 seems to work well: that way, it is relatively easy for an individual to get into the discussion, but everyone doesn't have to be in it all the time. In groups larger than this, it becomes harder for an individual to get into the discussion. Not being able to get a word in edgewise can be frustrating.

Groups where the members know each other outside of a formal classroom setting are more likely to discuss freely in class. If there is a free and easy interchange around the table before class starts, it is more likely discussion will come easily. It follows that discussion leaders should encourage students to get to know each other outside the formal classroom setting, even if this just means having introductions around the table before class starts. Obviously, it also helps if discussants are all more or less at the same knowledge level.

People who say too much, and who say it in ways that do not contribute to the discussion, can be one of the biggest problems a discussion leader faces. Generally, if the discussion leader is area of a problem, everyone else is as well. People who try to dominate a discussion for their own ends, whether for the sheer pleasure of hearing themselves talk, or because they have an ax to grind, typically are not subtle about it. The discussion group won't like this phenomena, and group pressure is one of the most effective ways of bringing this problem under control.

CONCLUSION

As a pedagogical tool, the discussion can be an important part of a quality educational program. Just as with any pedagogical tool, there are a number of techniques which can enhance the success of the experience. How to run a discussion is rarely taught. Although it is apparent to most that a good lecture involves a good deal of preparation and technique, most people probably think that a good discussion just happens. The approach outlined above has worked well for the author of this piece, and he hopes that it will be of interest and benefit to others.