Introduction

While critiquing northern and southern generalship in the American Civil War, the distinguished historian, T. Harry Williams, claimed that the war was not just a struggle of men and material but also "a war of ideas."[1] He was referring not only to the political or social ideologies then being contested between the northern and southern states but especially to the military theories and beliefs that guided the decisions of the leading generals on each side. Williams claimed that Union generals Ulysses S. Grant and William T. Sherman adjusted their ideas of warfare to meet the strategic and operational demands of the war, while Robert E. Lee failed to adapt from his limited, Jominian, prewar conceptions. In the last few decades, historians have begun to apply Williams' assertion to other wars, which were, for the officers who directed the combat operations, just as much wars of ideas.

When such ideas are widely agreed upon in an army and codified in some way, either formally or informally, they become *military doctrine* – the officially sanctioned ideas and methods that are to govern combat operations.[2] These core beliefs should influence the army's force structure, training, armament, battle plans, and tactics. In turn, doctrine must remain in harmony with the changing conditions of the

[1] See T. Harry Williams, "The Military Leadership of North and South," in *Why the North Won the Civil War*, ed. David H. Donald (Baton Rouge: Louisiana State University Press, 1960; reprint, New York: Simon & Schuster, 1996), 48.

[2] The U.S. Army currently states that doctrine elucidates the "fundamental principles by which military forces guide their actions in support of national objectives." HQ Department of the Army, *FM 100–5 Operations*, Washington, D.C.: GPO, 14 June 1993, glossary-3.

battlefield – particularly, developments in weaponry, limitations in training, logistical constraints, strength of the enemy force, and even terrain and climate. One need look no further than the standard interpretation of generalship in the First World War, especially during the first three years of the conflict, to see that ideas of warfare, whether or not formally codified, matter a great deal and that they must develop to meet the changing conditions of the industrial battlefield.

Historians of the Great War, especially those who have studied the European and Dominion forces, have begun to examine the extent to which ideas, at various levels, influenced the way armies, corps, divisions, and other units fought. These studies have also investigated the nature and extent of doctrinal and operational adaptation and innovation. For example, historians of the British Expeditionary Force (BEF), such as Tim Travers, Robin Prior, Trevor Wilson, and Gary Sheffield, have discovered that although Field Marshal Douglas Haig, the BEF commander-in-chief, may have failed to make important adjustments to British doctrine during the war, many subordinate commanders, such as those of field armies, corps, and divisions, made significant changes to their combat style in the latter half of the war.[3] Having examined the doctrinal pronouncements, attack plans, and operations reports of various British combat organizations, these historians conclude that although Haig offered few solutions to the tactical problems of the Western Front, some of the BEF's field armies managed by the end of 1917 to have developed more effective, though not bloodless, methods of attack. Some historians have claimed that even more impressive innovations occurred at the corps level of command.[4]

[3] See Tim Travers, *The Killing Ground: The British Army, the Western Front and the Emergence of Modern Warfare, 1900–1918* (London: Unwin Hyman, 1987), and *How the War Was Won: Command and Technology in the British Army on the Western Front, 1917–1918* (London: Routledge, 1992); Robin Prior and Trevor Wilson, *Command on the Western Front: The Military Career of Sir Henry Rawlinson, 1914–1918* (Oxford: Blackwell, 1992), and *Passchendaele: The Untold Story* (New Haven, Conn.: Yale University Press, 1996); Gary Sheffield, *Forgotten Victory* (London: Headline, 2001); and Geoffrey Powell, *Plumer: The Soldier's General* (London: Leo Cooper, 1990).

[4] For corps-level studies, see Shane Schreiber, *Shock Army of the British Empire: The Canadian Corps in the Last 100 Days of the Great War* (Westport, Conn.: Praeger, 1997); Daniel G. Dancocks, *Spearhead to Victory: Canada and the Great War* (Edmonton: Hurtig, 1987); and C. E. W. Bean, *The Official History of Australia in the War of 1914–1918* (Sydney: University of Queensland Press, 1942), vols. 5 and 6. For the accounts of two corps commanders, see Arthur W. Currie, *Canadian Corps Operations During the Year 1918* (Ottawa: Department of Militia and Defence, 1919); and John Monash, *The Australian Victories in France in 1918* (Sydney: Angus and Robertson, 1936; reprint, London: Imperial War Museum, 1993).

Taken together, these investigations have led to a more complex and more accurate understanding of what was happening in the huge combat forces along the Western Front. They have demonstrated that although some senior generals may have learned little and retained painfully anachronistic ideas of warfare, other officers adapted not only their ideas of war but also the kinds of battles they tried to fight. At times, lessons appear to have been learned and then forgotten, or misapplied, especially as the character of the fighting began to change throughout 1918. But, ultimately, this development was significant enough that certain senior generals and even entire levels of command – such as Haig and the British General Headquarters (GHQ) – may have become increasingly irrelevant at the *operational* level as the field armies, corps, and divisions waged battles according to their own ideas in the final year of the war. Such conclusions have moved the historiographical debate beyond the simple good–bad dichotomy that formerly dominated Great War histories.

These studies provide useful models for how to examine the relationship among command, doctrine, and operational adaptation in military forces, but, as of now, the American Expeditionary Forces (AEF) have not been subjected to this new, more detailed form of analysis. One reason for this is the relative lack of academic studies of any kind on the AEF, especially in comparison with the other major armies of the Great War. Although historians have examined both America's role in the war and the war's effect on America, few operational histories of the AEF's major campaigns have been written. For example, there is no scholarly study of the strategically important Aisne-Marne Offensive, although more than 300,000 Americans took part. Only one historian has written a book on the battle of St. Mihiel, the largest American battle to date when it was fought, and that work is based primarily on published sources. There are just two studies of the massive Meuse-Argonne Offensive, even though more than one million AEF soldiers participated in the forty-seven–day battle that led to 117,000 AEF casualties – certainly ranking it to this day as one of the greatest military campaigns ever fought by American forces.[5]

[5] The only scholarly study of the Aisne-Marne Offensive is Douglas V. Johnson and Rolfe L. Hillman's book on the fighting of the 1st and 2nd Divisions near Soissons. The actions of the other six divisions that took part in the campaign in July and August have been neglected. See Johnson and Hillman, *Soissons, 1918* (College Station: Texas A&M University Press, 1999). The sole book on the St. Mihiel Offensive is James H. Hallas, *Squandered Victory: The American Army at St. Mihiel* (Westport, Conn.: Praeger, 1995). The Meuse-Argonne Offensive is covered by Paul Braim's short but critical monograph, *The Test of Battle: The American Expeditionary Forces in the Meuse-Argonne Campaign* (Newark, Del.: University of Delaware Press, 1987); and Frederick Palmer's early work, *Our Greatest Battle* (New York: Dodd, Mead, 1919).

In lieu of sufficient campaign studies, the historiography of the AEF consists largely of the memoirs of American generals and enlisted men, some excellent biographies of a few senior officers, and general accounts of the entire American war effort. For the first fifty years after the armistice, Pershing's official version of the AEF's prowess dominated the field.[6] Then, in the late 1960s, the works of Edward M. Coffman and Harvey A. DeWeerd began to question aspects of Pershing's overly generous portrayal of American doctrine and operations.[7] Beginning in the late 1970s, a wave of revisionism began to erode what remained of the favorable interpretation begun half a century before by Pershing. A number of books, articles, and chapters by Allan R. Millett, James W. Rainey, Timothy K. Nenninger, Paul F. Braim, Donald Smythe, and David F. Trask identified what scholars more familiar with contemporary Allied impressions of the AEF already suspected – that the American army in France was not the "powerful and smooth-running machine" Pershing and others claimed it to be.[8]

The revisionists claim that the AEF was often inadequately trained, poorly supplied, and inconsistently led. Many of their assessments of AEF doctrine, training, and combat performance are particularly severe. Rainey attacks all three areas when he writes, "In having to grope its way to victory [due to poor training], the AEF succeeded not because of imaginative operations and tactics nor because of qualitative superiority in open warfare, but rather by smothering German machine guns with

[6] See Pershing's positive *Preliminary Report* (19 November 1918) and the more substantial *Final Report* (Paris: GHQ, September 1919), both in U.S. Department of the Army, Historical Division, *United States Army in the World War 1917–1919* (Washington, D.C.: U.S. GPO, 1948; reprint, Center for Military History, 1990), vol. 12., pp. 2–71 (hereafter *USAWW*, 12: 2–71). For other generally favorable interpretations of the AEF and its operations, see Shipley Thomas, *The History of the A.E.F.* (New York: Doran, 1920); and Arthur Page, *Our 110 Days Fighting* (Garden City, N.Y.: Doubleday, 1920). After a number of former AEF generals published memoirs, Pershing put a capstone on this favorable interpretation with his own account, *My Experiences in the World War* (New York: Frederick A. Stokes, 1931), for which he won a Pulitzer Prize. Laurence Stallings' popular account, *The Doughboys: The Story of the AEF, 1917–1918* (New York: Harper & Row, 1963), stands in this tradition. Even as late as 1977, Frank E. Vandiver included no significant criticism of AEF operational effectiveness or of Pershing's doctrinal and operational leadership in his two-volume biography of Pershing. See *Black Jack: The Life and Times of John J. Pershing* (College Station: Texas A&M University Press, 1977).

[7] See Coffman, *The War to End All Wars: The American Military Experience in World War I* (New York: Oxford University Press, 1968); and DeWeerd, *President Wilson Fights His War: World War I and the American Intervention* (New York: Macmillan, 1968).

[8] Pershing, *Final Report*, *USAWW*, 12: 44.

American flesh."[9] More or less, the other revisionists make similar accusations, and they provide ample evidence to support their assertions. The conclusion of the revisionists is clear: AEF combat forces were relatively ineffective, even by Great War standards.[10]

However, most of these studies, both traditional and revisionist, have been long on conclusions and short on the kind of detailed operational analysis that would move the debate away from the simple good–bad dichotomy that has come to dominate it. To be fair, the revisionist histories have typically been examinations of general officers, grand strategy, or single offensives. Many of the most important criticisms of AEF operations have been presented in short articles and chapters. Those studies generally have been done well, but none included any detailed examination of different combat organizations fighting for the duration of the war; none even attempted it. In fact, no systematic examination of AEF doctrine, training, and combat operations exists. Despite this, those who closely read the literature on the AEF will notice that each revisionist qualifies his criticism of American forces with a general statement claiming that they were improving when the war ended.[11] Although this glimmer of improvement has been mentioned repeatedly, it rarely has been demonstrated or discussed in any detail. The scholarship of the AEF as a combat force has thus remained mired in a simplistic good–bad dichotomy wrapped in a problematical discourse of "combat effectiveness."

[9] James W. Rainey, "The Questionable Training of the AEF in World War I," *Parameters: Journal of the US Army War College* 22 (Winter 1992–93): 100. Also see Rainey, "Ambivalent Warfare: The Tactical Doctrine of the AEF in World War I," *Parameters: Journal of the US Army War College* 13 (September 1983): 34–46.

[10] See David Trask, *The AEF and Coalition Warmaking, 1917–1918* (Lawrence: University Press of Kansas, 1993), 175; Donald Smythe, *Pershing: General of the Armies* (Bloomington: Indiana University Press, 1986), 217; Paul Braim, *The Test of Battle: The American Expeditionary Forces in the Meuse-Argonne Campaign* (Newark, Del.: University of Delaware Press, 1987), 143, 153; Allan R. Millett, *The General: Robert L. Bullard and Officership in the United States Army, 1881–1925* (Westport, Conn.: Greenwood Press, 1975), 411; and Timothy K. Nenninger, "Tactical Dysfunction in the AEF, 1917–1918," *Military Affairs* 51 (October 1987): 177–81, and "American Military Effectiveness in the First World War," in *Military Effectiveness,* Volume I: *The First World War*, eds. Allan R. Millett and Williamson Murray (Boston: Allen and Unwin, 1988), 116–56.

[11] See Trask, *Coalition Warmaking*, 175; Nenninger, "Tactical Dysfunction in the AEF, 1917–1918," *Military Affairs* 51 (October 1987): 181; Millett, "Over Where? The AEF and the American Strategy for Victory, 1917–1918," in *Against All Enemies: Interpretations of American Military History from Colonial Times to the Present*, eds. Kenneth J. Hagan and William R. Roberts (New York: Greenwood Press, 1986), 251; and "Cantigny, 28–31 May 1918," in *America's First Battles, 1776–1965*, eds. Charles E. Heller and William A. Stofft (Lawrence: University Press of Kansas, 1986), 181.

It is surprising that little research has been done and even less history written on how the AEF planned and conducted its battles; what it learned about modern combat in those battles; and how it adapted its doctrine, tactics, and other operational methods during the course of the war. Such a study would have to present detailed analysis of the training programs, attack plans, and operational reports that show how AEF units hoped to fight, how they actually fought, and why they fought as they did. Until this is done, our understanding of the American military experience in the Great War is incomplete.

This work attempts to accomplish this task. It examines AEF training and operations in detail, but its focus is primarily on ideas and methods and the changes in both during the war. Was the U.S. Army as doctrinally unprepared for modern industrialized combat as the revisionists have claimed? What was the link among prewar doctrine, official AEF doctrine, and the doctrine actually used within the combat divisions to attack the enemy? Did the AEF adapt its doctrine and methods during the war? If there was improvement, as even most revisionists have stated, in what ways did this manifest itself; and where did the learning and adaptation occur first: at AEF GHQ, the headquarters (HQ) of the American First Army, the various army corps, or the combat divisions? How relevant were Pershing and the AEF GHQ in 1918? What impact did they have on American combat operations? Finally, how did the U.S. Army assimilate these lessons after the war? These are the questions addressed in this study.

In short, this work exposes and examines a war of ideas waged *within* the AEF between those who adhered to the traditional, human-centered ideas of the prewar army and those who increasingly appreciated the modern, industrial ideas more prevalent in the European armies. The former set of ideas – based on infantry manpower, the rifle and bayonet, simple attack plans, the maximization of maneuver, and the hope of decisive operational and even strategic results – was summed up in the phrase "open warfare." The latter set of ideas – based on the integration of the latest weaponry, the use of meticulously prepared attack plans, the maximization of firepower, and the methodical attack of specific enemy units to achieve more modest operational results – was often called "trench warfare." With a few notable exceptions, American officers in 1917 were committed to the ideal of open warfare, but interaction with veteran Allied officers and their own experiences in the front lines in 1918 gave rise to an appreciation of the ideas and methods associated with the competing doctrine, trench warfare. Although this inquiry examines the way a number

of combat organizations fought throughout the war, it is *not* intended to determine whether those units and soldiers were "good" or "bad." Rather, it discusses their strengths and weaknesses, what they learned, and, ultimately, how they used what they learned.

For a number of reasons, this investigation focuses on selected AEF combat divisions. American units engaged in offensive combat for about six months, but the various army corps exercised combat command for just about half that time, whereas the First Army did so for only about two months. Although some AEF divisions engaged in combat for only a few weeks, the most experienced division commands spent much more time directly opposing the enemy than any army corps or field army. This longer exposure, as well as the greater intensity of the experience, suggests that the division commands had the best opportunity to recognize the significant adjustments that needed to be made to AEF attack doctrine and operational methods. Also, as the largest combat organizations that retained command and control of all its subordinate units, the division commands had the necessary continuity to implement necessary modifications.[12]

Although this study confirms many of the revisionists' criticisms, it also shows that many American officers and men did a lot of learning and adapting. This was true, to various extents, of even some senior officers, a fact neglected in most histories of the AEF. Yet, learning and adaptation were even more common at lower levels. In particular, many officers in the most active American divisions learned to maneuver and communicate on the modern battlefield and, perhaps most important, to employ massive amounts of firepower in set-piece attacks to ensure successful advances at a minimal if not small cost in lives. To be sure, in certain units and in the corps, army, and GHQ staffs, some senior officers retained ideas that negatively affected combat operations. In some instances, different problems – administrative, logistical, and personal – inhibited the successful implementation of new ideas and methods that were often learned at great cost on the battlefield. But, even in those units in which the division commander remained committed to obsolete concepts, there are signs that subordinate officers – and often the men themselves – significantly adapted their methods of fighting, especially to maximize the use of

[12] Only minor changes were made to division organizations during the war, such as the temporary addition of a regiment for a special operation. The corps and field armies were composed of many different divisions that rotated in and out of their commands during operations.

firepower. As operational ideas changed, so did the way American units fought on the battlefield, and often with increased success. The stunning aspect of the AEF's experience is not that commanders and junior officers made strategic, operational, and tactical mistakes; that some units struggled to accomplish the missions given them; or that men got lost or straggled; but rather that so many inexperienced officers and men (at all levels) and such new units (of all sizes) managed to continue fighting, learning, and often succeeding throughout their days, weeks, and months of horrific combat in a foreign land.

In 1957, I. B. Holley first published his extraordinary study of how the U.S. Army struggled to develop the air weapon before and during the First World War, not so much due to a lack of ideas but rather to the lack of codification and acceptance of those ideas in the form of doctrine.[13] In 1917–1918, the AEF also struggled to align its ideas and its weapons, but its challenge was almost the opposite of the problem identified by Holley. If weapons-acquisition officers need to "translate ideas into weapons," combat officers immediately before and during battle are tasked with translating weapons into ideas – attack plans. During the First World War, American officers had to overcome the impediment of a somewhat unclear and in many ways impractical set of ideas, typically called *open warfare*, that threatened to force them to rely on certain traditional weapons and to employ emerging weaponry in ways that did not maximize their effectiveness. The challenge for those combat leaders was to take the instruments of war at hand and to develop pragmatic ideas to govern the use of that weaponry so as to inflict the greatest harm on the enemy at the smallest cost to one's own force. This study shows how four combat divisions met this challenge of "ideas and weapons" and, along the way, developed their own AEF way of war.

The investigation begins in Chapter 1 with a discussion of the prewar U.S. Army, its efforts to prepare itself for combat in 1917 and early 1918, and the reaction to combat of General John J. Pershing and other senior American officers at GHQ. The U.S. Army and the AEF had a number of opportunities to ensure that they were materially, organizationally, and intellectually ready for the Western Front, and although they made important strides, they did not succeed uniformly – especially in the intellectual arena – in effecting the kind of transformation required by the

[13] See I. B. Holley, Jr., *Ideas and Weapons* (New Haven, Conn.: Yale University Press, 1957; reprint, Washington, D.C.: GPO, 1997), 18.

modern, industrialized battlefield. It remained for the combat divisions to make up the difference.

The subsequent eight chapters describe and analyze the organization, training, and combat operations of four of the AEF's most active divisions. Two of them, the 1st and the 2nd, were labeled Regular Army divisions (formed by gathering existing Regular Army regiments); one, the 26th, was a National Guard division (formed of existing Guard regiments); and the fourth, the 77th, was a National Army division (formed of newly created regiments and filled with draftees). The actual differences between such kinds of divisions were often overstated by some senior AEF officers, but that alone warranted examining at least one of each kind. I selected these divisions not because they were considered the best of their category (at least one of them was not) but rather because they were the first of their kind to arrive in Europe and thus became, at least by some standards, the most experienced. Chapters 2 and 3 cover the 1st Division, Chapters 4 and 5 discuss the 26th Division, Chapters 6 and 7 examine the 2nd Division, and Chapters 8 and 9 analyze the 77th Division. Chapter 10 offers some concluding comments comparing the experiences of each division and the differences among the divisions and the senior commanders and staff officers at GHQ. The work closes with a short discussion of the legacy of the Great War on the U.S. Army.

AEF divisions were not simply new, larger units. They were forced to wage war with new and emerging technologies, such as machine guns, automatic rifles, grenade launchers, trench mortars, rapid-fire artillery, tanks, and aircraft. Although the AEF senior leadership often provided official guidelines for how AEF units were supposed to fight, the approved doctrine did not always provide realistic solutions to the problems and challenges of the battlefield. It was there, in the trenches, where the men in the combat divisions tested the approved doctrine. Forced with the realities of success or failure, victory or defeat, and, ultimately, life or death, divisional officers were forced to discern between good and bad doctrine, between the useful and the harmful, and sometimes between the possible and the impossible. When battlefield experience proved that aspects of doctrine were unsuitable or inadequate, they had to develop answers and make the changes. The question is, how much and in what ways did they adapt and innovate? The following chapters examine the successes and failures of those efforts.

1

Doctrine, Dogma, and Development in the AEF

While the major powers struggled for mastery along the Western Front during the first three years of the Great War, the United States had a unique opportunity to ready itself for possible belligerency. Yet, when Congress declared war in April 1917, the entire country, and especially the U.S. Army, was unprepared for war in Europe. For a host of reasons, the Army made few significant changes to its official combat doctrine, despite accurate reports of fighting in Europe that warned of practically revolutionary changes on the battlefield. After the American declaration of war, the Army had a second chance to prepare itself for combat on the Western Front because no American unit did any significant fighting for the next thirteen months. Although the U.S. Army and the AEF made enormous strides before the armistice in November 1918, particularly in organization and logistics, many senior leaders resisted making the intellectual adjustments necessary to effect the kind of fundamental doctrinal changes demanded by the modern battlefields in France. Senior leaders did modify official combat doctrine – but they did so belatedly, slowly, and incompletely.

The U.S. Army, 1914–1917

The extent of the U.S. Army's lack of preparedness for the First World War would come as no surprise to those familiar with the basic American attitudes toward military forces and budgets from 1800 to 1917. Furthermore, throughout its period of neutrality, 1914–1917, the U.S. Army showed little sense of urgency and made few changes that improved its