



(Photo by Sgt. 1st Class Michel Sauret)

A team of soldiers from the 450th Engineer Company, the 350th Engineer Company, and the 374th Engineer Company moves through concealing smoke 6 May 2012 to enter and clear a building during the Sapper Stakes competition at Fort McCoy, Wis.

Preparing Soldiers for Uncertainty

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There is no doubt that new technologies, emerging tactical techniques and capabilities, geopolitical and strategic trends, and the character of contemporary conflict affect our understanding of our

profession considerably. Yet, war's enduring nature and the commonly accepted principles of war come from venerable, even ancient, sources, particularly the classic texts of Thucydides and Carl von Clausewitz. Both

of these time-honored luminaries of military theory can shed light on an element of warfare that the Army must confront as it prepares for current and future challenges: uncertainty.

The Realm of Uncertainty

Uncertainty is a factor in everything military forces must do as the executors of national will. The effects of uncertainty—fear, confusion, and friction—are particularly evident in combat. Our strategic, operational, and tactical leaders recognize the pervasive presence of uncertainty. They acknowledge that war always has existed within its sphere, as expressed in the familiar words of Clausewitz: “War is the realm of uncertainty; three-quarters of the factors on which action in war is based are wrapped in a fog of greater or lesser uncertainty.”¹

Army leaders know they must prepare forces to face uncertainty across the range of military operations. This article discusses how to accomplish this preparation so that Army forces will be able to prevail in armed conflict. Preparation for combat must include rigorous education and self-development, combined with training soldiers to achieve unmatched lethality at the unit level.

Thucydides’ tome on the Peloponnesian War does not discuss uncertainty explicitly. However, the concept is woven throughout the work: in the unforeseen death of Pericles by plague and the changed character of the Athenian regime evident in the Melian Dialogue and the Sicily expedition, for example.²

In *On War*, Clausewitz is more explicit in his treatment of uncertainty. In discussing the human nature of war, he writes, “Although our intellect always longs for clarity and certainty, our nature often finds uncertainty fascinating.”³ Throughout his text, Clausewitz shows that war is the most uncertain of human endeavors.⁴ In many ways, recent discussions concerning complexity in military operations could be considered discussions of the fog, friction, and chance inherent in war.⁵ Put another way, the idea of *complexity* is a way to acknowledge the uncertainty inherent in any human activity, and war is the most dangerous and violent activity possible.

War is the most dangerous human activity not only because it involves life and death, but as Clausewitz observes,

[It] is not the action of a living force upon a lifeless mass ... but always the collision of two

living forces ... so long as I have not overthrown my opponent, I am bound to fear he will overthrow me. Thus I am not in control: he dictates to me as much as I dictate to him.⁶

In this excerpt, Clausewitz is discussing how physical force, and the fear of an adversary’s physical force, leads to uncertainty. Any soldier inculcated in the U.S. Army’s “seize, retain, and exploit the initiative” culture should consider the Prussian sage’s point.⁷ This nonlinear, dynamic interaction creates a course of conflict that is not “the mere sequence of intentions and actions of each opponent, but the pattern or shape generated by mutually hostile intentions and simultaneously consequential actions.”⁸

In other words, war is a clash of wills between two thinking enemies. The advantage of a weapon system or a tactic is quickly countered by an opposing weapon or tactic developed by the enemy as this clash plays out at all levels of war until the belligerents can come to a resolution through annihilation or exhaustion.⁹

The Expertise Needed to Ensure Readiness

The Army’s ability to train men and women for war is inherently tied to the budget of the United States, and today the Nation is once again seeing shrinking budgets that will affect how the Army prepares formations. The decrease in money for training means the Army needs to be creative and deliberate in what it trains and to what standard. One thing is certain: soldiers need an understanding of uncertainty and how to mitigate it. The Army can support its soldiers by ensuring their training allows them to develop expertise in three primary areas:

- ◆ The history of warfare
- ◆ Adapting to uncertainty
- ◆ The use of weapon systems and equipment

From the formulaic training approach the Army used during the Cold War to the modern ad hoc amalgam of training the Army uses for counterinsurgency and stability operations, uncertainty has waxed and waned as an element of preparing troops for war. Training and educating for uncertainty in war should be a key theme of leader development.

Expertise in the history of warfare. Studying the history of warfare does not mean requiring the reading of a commander’s favorite book from when

he or she was a lieutenant, though that could be a start. Instead, Army leaders and soldiers should take a deliberate, disciplined approach to self-development; this aspect of education must receive as much leader emphasis as maintenance, situational training lanes, and gunnery. Much has been written on deliberate self-study, including the classic article “Use and Abuse of Military History” by Sir Michael Howard.¹⁰ Howard recommends three rules:

First, study in *width*. He [the historian] must observe the way in which warfare has developed over a long historical period ... Next he must study in *depth*. He should take a single campaign and explore it thoroughly ... until the tidy outlines dissolve and he catches a glimpse of the confusion and horror of the real experience ... And lastly, he must study in *context*. Campaigns and battles are not like games of chess or football matches, conducted in total detachment from their environment according to strictly defined rules [italics added for emphasis].¹¹

Warfare must be understood in its historical, social, cultural, economic, human, moral, political, and psychological contexts because “the roots of victory and defeat often have to be sought far from the battlefield.”¹² Failure to study wars within their context leads to a superficial view of war, with lessons and conclusions divorced from their proper environment.

The disciplined study of the history of warfare develops important critical thinking skills that help military professionals deal with the uncertainty of war and the challenge of institutional change. As Williamson Murray points out, history offers “military professionals an understanding of how to think about intractable problems, how to grapple with uncertainty, and how to prepare throughout their careers for the positions of responsibility that they must inevitably assume.”¹³

Moreover, according to Paul Van Riper, the vicarious experiences provided through the study of military history allow “practitioners of warfare to see familiar patterns of activity and to develop more quickly potential solutions to tactical and operational problems.”¹⁴ This is precisely why soldiers

need to study war, its theory, and its military institutions carefully and critically.¹⁵

A deep, broad, and contextualized understanding of history provides the requisite perspective to understand and evaluate the theory and the nature of war. An example of a self-study program that includes a military history emphasis can be found in the “Maneuver Self-Study Program” developed at Fort Benning, Georgia. This program supplements professional military education with a well-developed course that can help leaders on their personal journey toward a broader, deeper, and more contextual understanding of war and its theories.¹⁶

Expertise in adapting to uncertainty. Properly establishing a defense is important and should be trained. However, the ability to adapt a plan to meet a new crisis or capitalize on an unforeseen gain is even more important. As Williamson Murray observes, “adaptation demands constant, unceasing change because war itself never remains static but involves the complexities thrown up by humans involved in their attempt to survive.”¹⁷ As leaders study war and reflect on their own experiences in combat, they likely will conclude that situations in which other leaders had to make rapid decisions in the face of conflicting reports or loss of communications with a higher headquarters were more common than a perfectly executed defense or attack.

One way to prepare leaders for combat is to develop scenarios in which friction and uncertainty are the cornerstones of the exercise. This can be accomplished easily by introducing the following elements: imperfect information, rushed timelines, conflicting reports, rapid changes in operations, loss of key leadership, sleep deprivation, ethical decisions, and maintenance and logistical issues. Units and leaders should be evaluated and judged on their ability to operate effectively in these situations. Following execution, trainers should conduct intense after action reviews to discuss the exercises. Questions developed in advance to stimulate reflection by participants will greatly enhance evaluation. Evaluators should avoid using outdated checklists that merely make grading easier. The evaluations need to be as carefully designed as the exercises so the benefits of training can be enhanced.

Expertise in weapon systems and equipment. In their seminal work, “Distributed Manoeuvre:

21st Century Offensive Tactics,” Australians Justin Kelly and Mike Brennan posit that war can be viewed as a dialectic struggle between the offense and defense.¹⁸ They describe how as soon as one force gains an advantage, the other quickly counters it. They believe that since detection technology has greatly enhanced the effectiveness of the offense, the defense has countered with traditional countermeasures such as dispersion and decentralized operations to operate below the detection threshold. To regain the upper hand against this type of defense, the offense needs to decentralize operations as well.

For the U.S. Army, training lethal units that can effectively shoot, move, and communicate in varied environments is critical to our ability to meet this latest evolution in the offense versus defense fight. The Army certainly has spent years perfecting an approach to lethality and effectiveness but in the process has lost sight of fundamentals. Units should train on much more than the standard gunnery tables. These are scientific and formulaic but fail to account for uncertainty on the battlefield. Training should require smaller elements to react to unfolding events in multiple environments and quickly gain operational or

firepower dominance while limiting civilian casualties in the operational area. The current decisive action rotations slotted for Army training centers certainly are moving in this direction.

Leader Development Goals

None of these approaches to increasing soldiers’ knowledge and preparedness for uncertainty will work without a way to evaluate their effectiveness. Each element should be evaluated as a part of normal leader development and training activities. As part of counseling noncommissioned and commissioned officers, the study of warfare should play a part in educational goals. When a rater writes leader evaluations, those goals should be addressed, and the rater should determine if they were met. Similarly, as smaller units improve their ability to conduct decentralized operations, unit leaders must ascertain the failures, successes, and lessons of training. Following training events at all levels, leaders should drive home the lessons of fighting and adapting in an uncertain environment.

Conclusion

The Army frequently gives lip service to the complexity of environments in which it has battled

during the last decade, while predicting environments that are more complex in the future. However, to ensure soldiers are prepared for such a future, more than lip service is needed. The Army must leverage the lessons of the past. As Huba Wass de Czege writes, “The business of war has never been simple and those that tried in the past to reduce its practice to mere formulas were defeated.”¹⁹

The Army needs to find a balance with the training of tasks and the education of warfare. It



(Photo by Ruediger Hess, Visual Information Specialist)

U.S. Army soldiers with 6th Infantry Regiment, 2nd Brigade Combat Team, 1st Armored Division, conduct virtual convoy training 8 February 2008 in Baumholder, Germany.

should ensure that Army leaders—including the many without combat experience—are prepared by training environments that reflect the uncertainty inherent in warfare. By creating the right

mix of education and training, with uncertainty incorporated into the mix, the Army will be prepared when the time comes to fight and win the Nation's wars. ■

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Notes

1. Carl von Clausewitz, *On War*, ed. and trans. Michael Howard and Peter Paret (New York: Alfred A. Knopf, 1993), 117.

2. Thucydides, *The Landmark Thucydides: A Comprehensive Guide to the Peloponnesian War*, ed. Robert B. Strassler (New York: Free Press, 1996), 374-376. To find an example of Thucydides' treatment of uncertainty, read about the failed actions of Nicias in an attempt to thwart the Sicily Expedition.

3. Clausewitz, 97.

4. Alan Beyerchen, "Clausewitz, Nonlinearity, and the Unpredictability of War," *International Security*, 17, no. 3 (Winter 1992-1993): 59-90, <http://www.jstor.org/stable/2539130?origin=JSTOR-pdf> (accessed 29 October 2014). Beyerchen provides an excellent analysis of Clausewitz and nonlinearity.

5. U.S. Army Training and Doctrine Command (TRADOC) Pamphlet 525-3-1, *The U.S. Army Operating Concept: Win in a Complex World* (Fort Eustis, VA: TRADOC, 2014), <http://www.tradoc.army.mil/tpubs/pamndx.htm> (accessed 29 October 2014). This pamphlet provides an example of a formal discussion of complexity and the need for Army forces to prepare.

6. Clausewitz, 86.

7. Army Doctrine Publication (ADP) 3-0, *Unified Land Operations* (Washington, D.C.: U.S. Government Printing Office, October 2011), 1.

8. Beyerchen, 67.

9. Gordon A. Craig, "Delbrück: The Military Historian," in *Makers of Modern Strategy from Machiavelli to the Nuclear Age*, Peter Paret, ed. (Princeton: Princeton University Press, 1986), 341-343.

10. Michael Howard, "The Use and Abuse of Military History," *Royal United Service Institute Journal*, 107 (February 1962), 13-14.

11. *Ibid.*

12. *Ibid.*

13. Williamson Murray, "Thoughts on Military History and the Profession of Arms," in *The Past as Prologue: The Importance of History to the Military Profession*, eds. Williamson Murray and Richard Hart Sinnreich (New York: Cambridge University Press, 2006), 92.

14. Paul K. Van Riper, "The Relevance of History to the Military Profession," in *The Past as Prologue: The Importance of History to the Military Profession*, eds. Murray and Sinnreich.

15. Peter Paret, "The History of War," *Daedalus* (Spring 1971), 381-386.

16. "The Maneuver Self-Study Program" (also called the Maneuver Leader's Self-Study Program) is available online at www.benning.army.mil/mssp (accessed 29 October 2014).

17. Williamson Murray, *Military Adaptation in War: With Fear of Change* (New York: Cambridge University Press, 2011), 310.

18. Justin Kelly and Mike Brennan, "Distributed Manoeuvre: 21st Century Offensive Tactics," *Australian Land Warfare Studies Centre Working Paper No. 134* (Australia: Commonwealth of Australia, 2009).

19. Huba Wass de Cezege, "How to Change an Army," *Military Review* (November 1984): 34.