

Doctrine for Asymmetric Warfare

ANY DISCUSSION of doctrine and asymmetry must begin by acknowledging the tension inherent between the role of doctrine and the nature of asymmetry in warfare. Doctrine should succinctly express the collective wisdom about how U.S. Armed Forces conduct military operations. In 1923, historian J.F.C. Fuller wrote that “the central idea of an army is known as its doctrine, which to be sound must be principles of war, and which to be effective must be elastic enough to admit of mutation in accordance with change in circumstance. In its ultimate relationship to the human understanding this central idea or doctrine is nothing else than common sense—that is, action adapted to circumstance.”¹

While asymmetric warfare encompasses a wide scope of theory, experience, conjecture, and definition, the implicit premise is that asymmetric warfare deals with unknowns, with surprise in terms of ends, ways, and means. The more dissimilar the opponent, the more difficult it is to anticipate his actions. If we knew in advance how an opponent planned to exploit our dissimilarities, we could develop specific doctrine to counter his actions. Against asymmetric opponents, doctrine should provide a way to think about asymmetry and an operational philosophy that would take asymmetry fully into account.

One way to look at asymmetric warfare is to see it as a classic action-reaction-counteraction cycle. Our enemies study our doctrine and try to counter it. Any competent enemy will do the unexpected, if he believes it will work. When we understand the asymmetry, we counter it, and so forth. For example, if a potential opponent has biological weapons and the United States does not, our preparation occurs across a technological, doctrinal, and operational range in terms of force protection, development of

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antidotes, and the ability to attack or defeat the enemy’s delivery means, civil support, and so on. Such preparation serves to deter the use of biological weapons, because the opponent’s original asymmetric advantage has been reduced.

Unfortunately, uncertainty is inseparable from the nature of warfare, and asymmetry increases uncertainty. Those who expect doctrine and tactics, techniques, and procedures (TTP) to provide solutions and checklists for action are soon disabused of that notion during actual operations. If and when the enemy surprises us with a capability, our response is necessarily ad hoc and less effective. Depending on our preconceptions and ability to adapt, the advantage an opponent enjoys might persist. Doctrine must prepare the military force with a mindset to deal with uncertainty quickly and effectively. The Japanese navy’s Long Lance torpedo illustrates our failure to deal with an asymmetric threat.

Japan’s Long Lance Torpedo

In the years between World War I and World War II, the U.S. and Japanese navies pursued different technical and tactical solutions to naval surface combat. The U.S. Navy focused on very long-range daylight gunnery, supported by seaplane spotters and sophisticated analog computers.² For the computers to calculate a firing solution, the firing

ship had to maintain a steady course to allow the computer to “settle down” and provide accurate data to the turrets.

The Japanese Navy developed the Type 93 Long Lance torpedo that carried a large warhead and could travel 20,000 yards or more at speeds of up to 45 knots.³ The Japanese had an ideal fire-and-forget system. In consequence, the Japanese trained to fight at night, with radically maneuvering destroyers and cruisers that fired torpedoes.

For more than 2 years after the U.S. Navy encountered the Long Lance in early 1942, it did not appreciate the weapon’s capabilities. The two navies had proceeded down different asymmetric paths, and U.S. torpedo development had many shortcomings. U.S. torpedoes were quite slow, carried a smaller warhead, had a range of less than 10,000 yards, and often failed to explode even when striking a target. In consequence, the U.S. Navy projected its poor capabilities onto those of the opponent’s and refused to believe that the Japanese could deploy a superior torpedo. Eventually, U.S. air power, radar-directed gunfire, and other tactical adaptations restored some balance, but throughout the war, the Japanese torpedo baffled Navy planners. The U.S. Navy suffered an asymmetric technological and tactical surprise. Because we did not anticipate the weapon and, indeed, could not accept that the Japanese had it, we had no easy answers, and it took years to adapt.

Developing U.S. Doctrine

To get beyond the tension inherent between asymmetry and doctrine, our focus is on two observations about asymmetry that to many of our potential opponents we are highly relevant to the development of U.S. doctrine. The first is the requirement to understand that to many of our potential opponents we appear to be as asymmetric as they appear to be to us. To the al-Qaeda fighter, cowering in a cave in a remote part of Afghanistan, fuel air explosives, dropped with deadly precision from aircraft miles away and thousands of feet up, directed by laser designators wielded by highly trained and stealthy special operation forces (SOF), is as asymmetric to him as his tactics are to us. The second point is that doctrine cannot predict the nature and form of asymmetric conflicts, but it can forecast the necessary traits and body of conceptual knowledge necessary to cope with a chaotic asymmetric operational environment.

To understand the role of doctrine, we must distinguish between doctrine and TTP. Most people us-

ing the term doctrine are referring to the whole body of doctrine and fail to separate out each component’s specific role. Defining each component’s role is a seemingly minor distinction, but it is important to understanding since each component plays

Examples of asymmetry and adaptation to it can be found in insurgency warfare and the development of counterinsurgency forces and doctrine. At a tactical level, we can see the effects of the machinegun, accurate indirect artillery, and barbed wire during World War I. We can study the development of storm tactics and the armor with which to counter them. We can analyze U.S. air attacks on the Serbs in Kosovo and appreciate the Serbs’ deception and camouflage tactics.

a different part in how the military operates. More germane is that each component has a slightly different role with respect to asymmetry, and each has a different cyclic rate in terms of its development and useful life.

Effective doctrine explains how we expect to fight and operate based on past experience and a best guess of what lies ahead. Doctrine—

- Provides the link between research, theory, history, experimentation, and practice.
- Encapsulates a body of knowledge and experience so it can be applied.
- Provides common understanding and a common language, which allows us to articulate clearly and succinctly what Army forces should accomplish.

The narrow definition of doctrine is “fundamental principles by which the military forces or elements thereof guide their actions in support of national objectives. It is authoritative but requires judgment in application.”⁴ To distinguish between the broad concept, including all four components, and the more narrow definition, we can italicize the latter.

As Fuller noted, Army doctrine should provide an operational concept, a philosophy of how the Army operates.⁵ In doing so, doctrine must reconcile operational requirements with the force’s perceived strengths. Armies operate best when capitalizing on demonstrated capabilities and asymmetric strengths. History contains many examples of military failure occasioned by attempts to match an enemy’s style of warfare despite friendly forces being ill-suited to the challenge.

Tactics. Tactics deals with how units are employed during combat.⁶ The actual application of



A Japanese Type 93 torpedo fired from a destroyer blew away the bow of the heavy cruiser USS *Minneapolis* on 30 November 1942. Only the crew's high level of training kept the ship afloat.

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tactics is highly circumstantial and is both science and art. U.S. Army Field Manual (FM) 3-90, *Tactics*, states, “The science of tactics encompasses the understanding of those military aspects of tactics—capabilities, techniques, and procedures—that can be measured and codified. The art of tactics consists of three interrelated aspects: the creative and flexible array of means to accomplish assigned missions; decisionmaking under conditions of uncertainty when faced with an intelligent enemy; and understanding the human dimension—the effects of combat on soldiers. The tactician invokes the art of tactics to solve tactical problems within his commander’s intent by choosing from interrelated options, such as forms of maneuver, tactical mission tasks, and arrangement and choice of control measures.”⁷⁷ Note, in particular, the description of the art of tactics—“decisionmaking under conditions of uncertainty when faced with an intelligent enemy”—for this is almost a direct link between tactics and asymmetry.⁸

Tactics vary constantly with the situation. There is no playbook of tactical solutions; the tactics manual only offers a menu from which to choose. Tactics are employed against an asymmetric opponent in the course of combat, but there can be no set of tactics checklists for asymmetric warfare, since each application is unique. Tactics are whatever we do against an asymmetric opponent when we arrange forces to counter that opponent. What differentiates tactics against an asymmetric opponent is that we might not have ever used that particular combination of options before, or we might have to incorporate new and novel options to counter asymmetry. When confronted by a situation, leaders must choose from a variety of possible solutions and adapt their solution to circumstances at the point of engagement.

Techniques and procedures. Techniques are the general, detailed methods troops and commanders use to perform assigned missions and functions, specifically methods of using equipment and personnel. Procedures are standard and detailed courses of action that describe how to perform tasks. Techniques and procedures, the lowest level of the broad term doctrine, are internal to the force.

They are specialized to particular types of units based on organization, equipment, and environment.⁹ This is the standard operating procedures (SOP) level of warfare, or as the Marines refer to it, the “technical” level of war. Techniques and procedures are a standard of operating instilled through training.

The adage that forces “fight as they train” is applicable. Armies cannot afford to make everything up as they go. Of necessity we apply existing techniques and procedures against asymmetric opponents, and with some adaptation, they work. In other cases, if there are no existing techniques and procedures, and innovative combinations of existing techniques and procedures will not work, we develop new techniques and procedures to integrate into existing ones to solve a unique problem. If it appears the situation that prompted the change might recur, we must tell other forces about the solution so they do not have to learn from bitter experience. One would believe that U.S. Army soldiers in Afghanistan are still adapting and applying the drills and



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SOPs they learned before they deployed.

Every competent military force adapts. Units modify techniques and procedures constantly according to circumstance and knowledge gained through experience. This is certainly not new or unique to dealing with dissimilar opponents. When confronted with anti-handling devices on mines and other booby traps in Italy in World War II, the Army developed procedures for clearing and marking areas as well as specific techniques for disarming the devices. Similarly, Marines and soldiers developed specialized drills for eliminating Japanese caves and underground fortifications during the war in the Pacific. Making changes to techniques and procedures that will be effective across the force requires experimentation, training, and dissemination. These actions are part of the adaptive nature of combat. Adaptation is critical to military success, since warfare, whether asymmetric or not, deals with uncertainty.

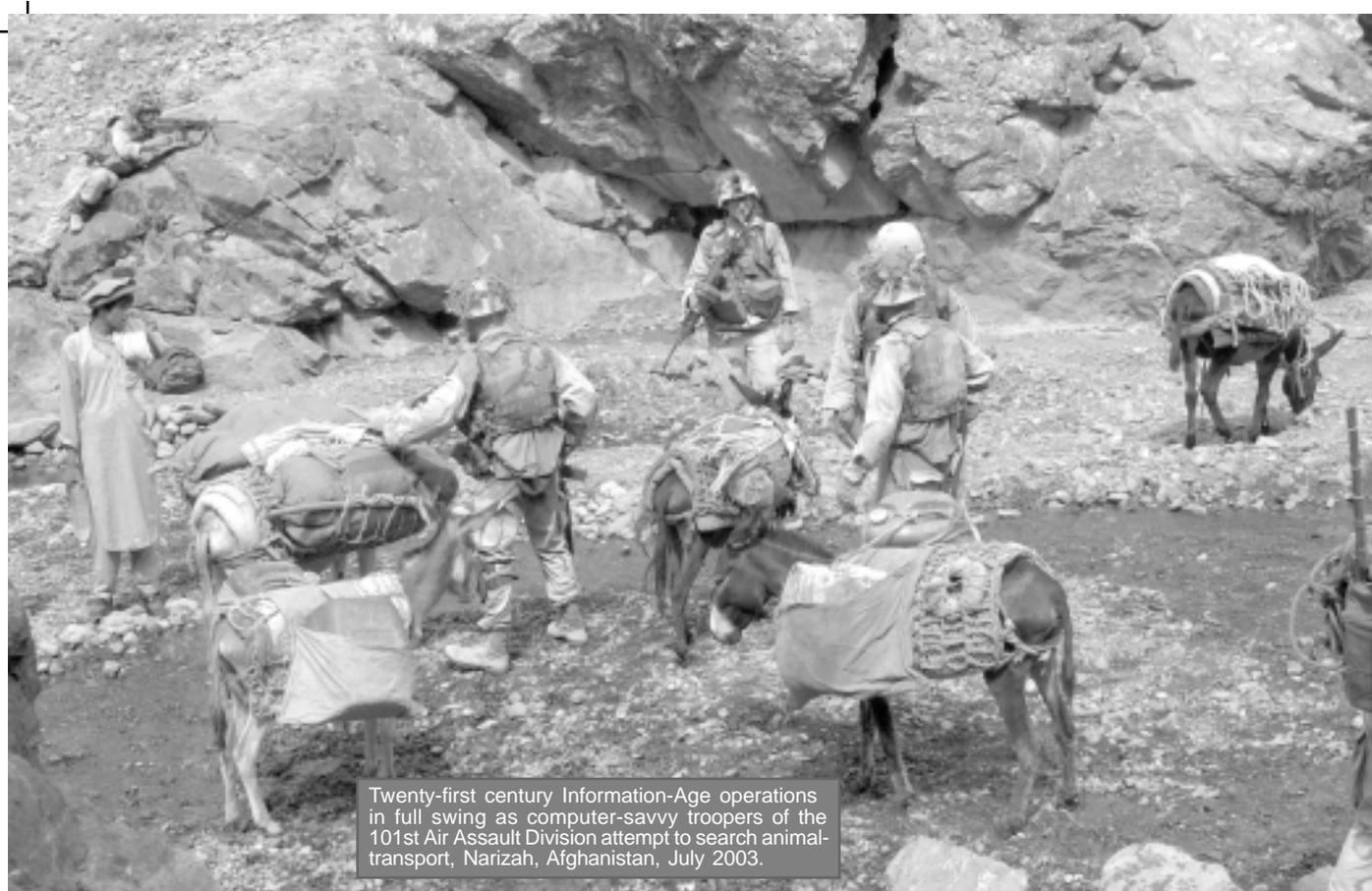
Uncertainty and the Unexpected

German military theorist Carl von Clausewitz noted that uncertainty is fundamental to warfare.¹⁰ To some greater or lesser degree, uncertainty might

be lessened as a function of improved command and control and intelligence, but as events demonstrate in Afghanistan and indeed in every conflict in which America has fought, it cannot be eliminated. Uncertainty is an enduring facet of warfare and arises from—

- A lack of intelligence about enemy intentions, such as whether or not Saddam Hussein's intent was to attack Saudi Arabia.
- The timing, location, or even the existence of a plan of attack, such as the German Ardennes Offensive.
- The effectiveness or even existence of a new weapon, such as the Type 93 Torpedo.
- The development of a new form of warfare, such as the blitzkrieg.

Some would argue that uncertainty, as a function of asymmetry, has increased with the spread of technology and the juxtaposition of conflicting aims, not only between nation-states, but also between nonstate actors. Certainly evidence exists that the potential for asymmetric operations increases as a function of the number of potential conflicts and combinations of opponents, technical means, cultural



Twenty-first century Information-Age operations in full swing as computer-savvy troopers of the 101st Air Assault Division attempt to search animal-transport, Narizah, Afghanistan, July 2003.

We have assimilated and adopted ideas from Jomini, Clausewitz, Fuller, and others who explain the phenomena of combat. Added to this collection of principles and classical theory are things like battlefield operating systems and battlespace. But, have we really examined the nature of 21st-century operations and the theoretical implications? To what extent is current frustration with asymmetric opponents and operations the product of industrial-age theory attempting to direct Information-Age operations?

perceptions, and values. Potential opponents understand that picking a conventional fight with U.S. forces is tantamount to suicide. As the potential for asymmetry increases, so does the level of uncertainty and the potential for tactical, operational, and strategic surprise.

Asymmetry is really nothing more than taking the level of uncertainty, or surprise, to a new level that involves novel ways, means, or even ends. From a doctrinal perspective, our response is the same, whether the enemy's asymmetry is a low-level tactical innovation or a completely novel strategic approach. We must be astute enough to recognize that something has changed and then be flexible enough to create an effective response. Doctrine must facilitate this.

Dealing with the unexpected requires rapid adjustment to the actual situation. To the degree that doctrine becomes overly proscriptive, it becomes irrelevant. Worse, it instills in the service a penchant for proceeding by the book whether warranted by circumstances or not. World War II Chief of Naval Operations Admiral Ernest King warned against this in 1940 when he said, "There will be neither time

nor opportunity to do more than prescribe the several tasks of the several subordinates. . . . If they are reluctant to act because they are accustomed to detailed orders and instructions—if they are not habituated to think, to judge, to decide and to act for themselves. . . , we shall be in sorry case when the time of active operations arrives."¹¹ Doctrine must embrace a philosophy of initiative and creative thinking to counter uncertainty. The more asymmetric the opponent, the more important this is. Training must complement a philosophy of operations that emphasizes uncertainty. Training doctrine must stress soldiers and leaders by putting them in unfamiliar circumstances and forcing them to think creatively.

To remain relevant, doctrine must recognize the elements of uncertainty and the unexpected. Of course, doctrine cannot predict the unexpected, yet it must go further than banalities. Doctrine must offer the educational foundation and the tool set required to comprehend and effect successful operations, not in spite of but because of their increasing asymmetric nature. Imparting the tool set is a function of training, education, and self-study. Applying the tools is a function of leadership. Army doctrine

should embody a philosophy of operations that recognizes uncertainty as a fundamental aspect of warfare. Doctrine must illustrate the adaptive nature of a thinking, willful opponent and stress the absence of prescription in doctrine. But, doctrine cannot stop there.

Initiative and Adaptation

An enduring lesson that doctrine must emphasize is that warfare is about adaptation when confronting asymmetry. Examples of asymmetry and adaptation to it can be found in insurgency warfare and the development of counterinsurgency forces and doctrine. At a tactical level, we can see the effects of the machinegun, accurate indirect artillery, and barbed wire during World War I. We can study the development of storm tactics and the armor with which to counter them. We can analyze U.S. air attacks on the Serbs in Kosovo and appreciate the Serbs' deception and camouflage tactics.

The Army's experience at the height of the Indian wars is illustrative. The plains Indians were nomadic tribes who employed guerrilla tactics against Army units. The Indians' skill and mobility allowed them to strike swiftly and elude pursuit. Army units lacked the mobility and intelligence to force the Indians into a set-piece engagement where Federal forces could apply superior firepower. General George Crook studied the relative strengths of opposing forces and concluded that the Indians lost their mobility in winter because they could not move far from their camps. By substituting harder mules for horses, Crook could operate over extended distances in winter and, thus, was able to attack the Indians in their remote winter camps. With their camps destroyed, the warrior bands had little choice but to move to the reservations or starve.¹²

Crook's solution was not a case of developing exotic technology to solve a military problem. What was critical to success was the conscious selection from the available tools to fit the situation. Crook recognized that during the "campaigning season" the Indians had an asymmetric advantage that the U.S. Army could not easily overcome. He countered by recognizing that the Indians had a corresponding weakness during the winter. He developed an asymmetric approach that the Indians, in turn, could not counter. The means selected emphasized relative strengths and complementary means to protect weakness. Crook did not rewrite Army doctrine; he



Australian soldiers gassed by the German Army await medical attention in France, circa 1917.

Military history provides numerous examples of the failure to exploit advantages gained through asymmetry. The British use of tanks at Cambrai in 1917, the German use of chlorine gas in 1915 at Second Ypres; the Union failure at the Crater at Petersburg in 1864; and our inability to couple our asymmetric mobility through helicopters in Vietnam to a corresponding strategy. Such case studies involve the application of asymmetric means that failed to achieve operational or strategic success.

adapted his forces to execute doctrine in new ways. We must demand this kind of creative thinking and initiative from our leaders.

As we write doctrine for an era of asymmetry, we must recognize the necessity of countering the asymmetry that potential and actual adversaries practice, and we must adapt our asymmetric capabilities to capitalize on things to which the enemy cannot easily respond. This is important because the U.S. military has an immense array of asymmetric capabilities, which are worthless if we cannot apply them effectively.

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application of asymmetric means that failed to achieve operational or strategic success. While military experts might debate details, for purposes

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of measuring doctrine, we must understand that asymmetric action could have second- and third-order effects that superficial study might not reveal. These and other examples also emphasize the rapidity of adaptation and the fleeting opportunity for exploitation that might follow.

Characteristics of Effective Doctrine

Effective doctrine in an era of increasing asymmetry must have the following characteristics:

□ Doctrine must have an operational concept that includes more than high-intensity conventional warfare. In an era of conventional American superiority, opponents are unlikely to try to match our strengths and fight symmetrically. However, this is only an advantage as long as we maintain the capability. If we delete a capability, then we must replace it with something that can counter any similar enemy capability, or we will be left with an area of vulnerability.

□ Doctrinal philosophy must emphasize the forecasting, vice predictive, nature of doctrine. As the Army's doctrine producers, we must forecast future operations. Like a weather forecast, ours should be a reasonably accurate assessment in the near term, less so over extended time. We must provide an articulate, succinct discussion of why things happen in combat (theoretical, historical, and empirical), so leaders and soldiers can understand the forecast's basis.

□ All doctrine has to emphasize creativity and preparedness to deal with an adaptive, cunning, and typically asymmetric enemy. Doing so requires stating the problem and identifying the best available remedy—disciplined leader initiative from the highest to the lowest levels of command.

□ Doctrine must educate the Army to the fact that military actions often have second- and third-order effects (the law of unintended consequences).

Opportunity for unintended consequences increases with uncertainty and, in some linear fashion, with asymmetry. Army doctrine must treat asymmetry as a two-sided street. In military capabilities, U.S. forces might be the most asymmetric military force in history, if one enumerates specific capabilities and then seeks their equivalent in other armed forces around the globe. Doctrine must emphasize U.S. strengths and how to capitalize on them, applying them asymmetrically.

□ Doctrine must include a system able to rapidly reassess current TTP against emerging threats, capture innovative solutions to new tactical problems, and promulgate new TTP to the field. The Center for Army Lessons Learned (CALL) already has something that does this fairly well. CALL actively and regularly collects lessons learned in the form of new and modified TTP and produces and disseminates reports that capture new TTP. We need to support this effort and improve its already superb ability to get the word out quickly.

Promulgating New Doctrine

Where do we stand right now in terms of Army doctrine for operations against increasingly asymmetric opponents? The June 2001 version of FM 3-0, *Operations*, as the Army's keystone doctrine, sets the stage for more specific doctrine.¹³ The manual, which differs from its predecessors in that it is written from the perspective of dominant U.S. power, recognizes that U.S. dominance stimulates asymmetric assaults on U.S. forces and interests. The manual offers an operational concept constructed around offensive, defensive, and stability and support operations. This focus is quite distinct from the strong focus on warfighting in earlier manuals.¹⁴ The manual emphasizes subordinate initiative and the potential for advanced technology to complement individual initiative. The manual also initiates exploration of operational concepts such as noncontiguous operations that might reinforce U.S. asymmetric strengths. Thus far, we believe, the manual has successfully anticipated the environment and types of operations occurring in Afghanistan and elsewhere. Where the next operations manual might need emphasis lies in the presentation and understanding of second- and third-order effects associated with asymmetric land operations, and that should be predicated on a thorough review of military theory.

Field Manual 6-0, *Command and Control*, now awaiting approval, should advance the climate of subordinate initiative even as the technical means of control improves.¹⁵ The manual's fundamental premise is mission command defined as "the conduct of military operations through decentralized execution based upon mission orders for effective mis-

sion accomplishment. Successful mission command results from subordinate leaders at all echelons exercising disciplined initiative within the commander's intent to accomplish missions. It requires an atmosphere of trust and mutual understanding."¹⁶ Field Manual 6-0 and FM 3-90 stress creative thought in applying current TTP to new situations, and they highlight that some situations will require entirely new TTP for effective solutions.¹⁷ While this might suitably frame the doctrinal premise for leadership adapted to increasing asymmetry, it does not by itself guarantee that training and operations reflect the concept. That remains a collective challenge for the Army.

Having a body of doctrine suited to the contemporary operating environment is not sufficient. Where we need to improve is in promulgating new doctrine in the field and in the Army's educational centers. Electronic publishing and Internet distribution can make doctrine available faster than ever, but they cannot get individual users to read and study it. A humanistic program of education, professional development, and assimilation is still necessary.

When considering the implications for increasingly asymmetric operations, we need to initiate a comprehensive review of the basic theories that underpin doctrine. Today's doctrine traces its antecedents back to the study of military operations in the aftermath of the great European wars, particularly the Napoleonic Wars and World War I. We have assimilated and adopted ideas from Jomini, Clausewitz, Fuller, and others who explain the phenomena of combat. Added to this collection of principles and classical theory are things like battlefield operating

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systems and battlespace. But, have we really examined the nature of 21st-century operations and the theoretical implications? To what extent is current frustration with asymmetric opponents and operations the product of Industrial-Age theory attempting to direct Information-Age operations? Are there indications that older doctrinal concepts are becoming invalid? This is not to decry and expunge all current military theory and concept, since much might still be valid. But, we cannot be certain until we undertake a comprehensive study of current operational theorems and recent operational experience. What we cannot afford is to be drastically wrong or to engage with a doctrine that has no valid answers for asymmetric challenges. In an era of asymmetry—

- Doctrine must create flexibility of thought and action by stressing the creative application of force.

- Doctrine must be predicated on uncertainty and not tied to prescriptive solutions to problems.

- Doctrine must be constantly reviewed at all levels to ensure we retain the useful concepts and throw out those rendered useless by opponents.

- Doctrine must capitalize on our asymmetric advantages. **MR**

NOTES

1. J.F.C. Fuller, *The Foundations of the Science of War* (Fort Leavenworth, KS: U.S. Army Command and General Staff College Press, 1993), 254. Reprinted from the original 1926 edition.

2. The development of Navy gunnery computers allowed the U.S. Army Air Corps to perfect the famous Norden bombsight and provided some of the stimulus for electronic computers developed later in World War II.

3. For more information about the Type 93 61-centimeter (24-inch) diameter torpedo, see Department of the Navy, U.S. Navy Historical Center, on-line at <www.history.navy.mil/photos/events/wwii-pac/guadlcnl/guadlcnl.htm>. See also *Joint Forces Quarterly*, on-line at <www.dtic.mil/doctrine/jel/jfq_pubs/2120.pdf>. For comparative performance figures see table on-line at <www.microworks.net/pacific/battles/java_sea.htm>.

4. U.S. Joint Publication 1-02, *Department of Defense (DOD) Dictionary of Military and Associated Terms*, on-line at <www.dtic.mil/doctrine/jel/new_pubs/jp1_02.pdf>.

5. Examples from recent Army manuals include "active defense" (FM 100-5, *Operations* [Washington, DC: Government Printing Office (GPO), 1976]); "AirLand Battle" (FM 100-5, *Operations* [Washington, DC: GPO, 1982]); "full-dimensional operations" (FM 3-90, *Tactics* [Washington, DC: GPO, 1993]); and "full-spectrum operations" (FM 3-90, *Tactics* [Washington, DC: GPO, 2001]).

6. FM 3-0, par. 2-12.

7. FM 3-90, *Tactics* (Washington, DC: GPO, 4 July 2001), pars. 1-12 and 1-13.

8. *Ibid.*

9. *Ibid.*, par. 1-13.

10. The actual passage reads, "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" (Carl von Clausewitz, *On War*, Book Two, *On the Nature of War*, chap. 6).

11. Admiral Ernest King quoted in FM 6-0, *Command and Control*, DRAG ed. (Fort Leavenworth, KS: Combined Arms Doctrine Directorate). At the time he made the statement in 1940, King was a battleship force commander. He became Commander in Chief of the Atlantic Fleet before President Franklin D. Roosevelt appointed him Chief of Naval Operations. The actual quote is from Thomas B. Buell, *Master of Sea Power: A Biography of Admiral Ernest J. King* (Boston: Little, Brown, 1980).

12. History of the Army in the Indian Wars, U.S. Army Center of Military History, on-line at <www.army.mil/cmh-pg/books/AMH/AMH-14.htm>. See also Indian war campaign summary, U.S. Army Center of Military History, on-line at <www.army.mil/cmh-pg/reference/iwcomp.htm>.

13. FM 3-0.

14. See the FM 100-5 manuals.

15. FM 6-0.

16. FM 6-0, GI-5.

17. FM 6-0 and FM 3-90.

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