

# Hybrid Warfare and Challenges

By FRANK G. HOFFMAN



Library of Congress (Brady-Handy Photograph Collection)



Matthews Kiebel

Above: Corinthian helmet, circa 500 BCE

Left: Colonel John S. Mosby, C.S.A., "The Gray Ghost"

The U.S. military faces an era of enormous complexity. This complexity has been extended by globalization, the proliferation of advanced technology, violent transnational extremists, and resurgent powers. America's vaunted military might stand atop all others but is tested in many ways. Trying to understand the possible perturbations the future poses to our interests is a daunting challenge. But, as usual, a familiarity with history is our best aid to interpretation. In particular, that great and timeless illuminator of conflict, chance, and human nature—Thucydides—is as relevant and revealing as ever.

In his classic history, Thucydides detailed the savage 27-year conflict between Sparta and Athens. Sparta was the overwhelming land power of its day, and its hoplites were drilled to perfection. The Athenians, led by Pericles, were the supreme maritime power, supported by a walled capital, a fleet of powerful triremes, and tributary allies. The Spartan leader, Archidamius, warned his kinsmen about Athens' relative power, but the Spartans and their supporters would not heed their king. In 431 BCE, the Spartans marched through Attica and ravaged the Athenian country estates and surrounding farms. They encamped and awaited the Athenian heralds

and army for what they hoped would be a decisive battle and a short war.<sup>1</sup>

The scarlet-clad Spartans learned the first lesson of military history—the *enemy gets a vote*. The Athenians elected to remain behind their walls and fight a protracted campaign that played to their strengths and worked against their enemies. Thucydides' ponderous tome on the carnage of the Peloponnesian War is an extended history of the operational adaptation of each side as they strove to gain a sustainable advantage over their enemy. These key lessons are, as he intended, a valuable "possession for all time."

In the midst of an ongoing inter-Service roles and missions review, and an upcoming defense review, these lessons need to be underlined. As we begin to debate the scale and shape of the Armed Forces, an acute appreciation of history's hard-earned lessons will remain useful. Tomorrow's enemies will still get a vote, and they will remain as cunning and elusive as today's foes. They may be more lethal and more implacable. We should plan accordingly.

One should normally eschew simplistic metanarratives, especially in dynamic and nonlinear times. However, the evolving character of conflict that we currently face is best characterized by *convergence*. This includes the convergence of the physical and psychological, the kinetic and nonkinetic, and combatants and noncombatants. So, too, we see the convergence of military force and the interagency community, of states and nonstate actors, and of the capabilities they are armed with. Of greatest relevance are the converging modes of war. What once might have been distinct operational types or categorizations among terrorism and conventional, criminal, and irregular warfare have less utility today.

## Current Strategic Thinking

The 2005 National Defense Strategy (NDS) was noteworthy for its expanded understanding of modern threats. Instead of the his-

Lieutenant Colonel Frank G. Hoffman, USMCR (Ret.), is a Research Fellow in the Center for Emerging Threats and Opportunities at the Marine Corps Combat Development Command.

torical emphasis on conventional state-based threats, the strategy defined a broadening range of challenges including traditional, irregular, terrorist, and disruptive threats. The strategy outlined the relative probability of these threats and acknowledged America's increased vulnerability to less conventional methods of conflict. The strategy even noted that the Department of Defense (DOD) was "over invested" in the traditional mode of warfare and needed to shift resources and attention to other challengers.

While civil and intrastate conflicts have always had a higher frequency, their strategic impact and operational effects had little impact on Western military forces, and especially U.S. forces, which focused on the significantly more challenging nature of state-based threats and high-intensity conventional warfighting. This focus is partly responsible for America's overwhelming military superiority today, measured in terms of conventional capability and its ability to project power globally. This investment priority and American force capabilities will have to change, however, as new environmental conditions influence both the frequency and character of conflict.

Subsequent to the strategy's articulation, a number of U.S. and foreign analysts complimented DOD strategists for moving beyond a myopic preoccupation with conventional war. But these analysts have also identified an increased blurring of war forms, rather than the conveniently distinct categorizations found in the NDS. Yet the strategy itself did suggest that the most complex challengers of the future could seek synergies from the simultaneous application of multiple modes of war. The NDS explicitly admitted that the challenger categories could and would overlap and that "recent experience indicates . . . the most dangerous circumstances arise when we face a complex of challenges. Finally, in the future, the most capable opponents may seek to combine truly disruptive capacity with traditional, irregular, or catastrophic forms of warfare."<sup>22</sup>

This matches the views of many military analysts, who have suggested that future conflict will be *multi-modal* or *multi-variant* rather than a simple black or white characterization of one form of warfare. Thus, many analysts are calling for greater attention to more blurring and blending of war forms in combinations

of increasing frequency and lethality. This construct is most frequently described as "hybrid warfare," in which the adversary will most likely present unique combinational or *hybrid* threats specifically targeting U.S. vulnerabilities. Instead of separate challengers with fundamentally different approaches (conventional, irregular, or terrorist), we can expect to face competitors who will employ *all* forms of war and tactics, perhaps simultaneously. Criminal activity may also be considered part of this problem, as it either further destabilizes local government or abets the insurgent or irregular warrior by providing resources. This could involve smuggling, narcoterrorism, illicit transfers of advanced munitions or weapons, or the exploitation of urban gang networks.

A number of analysts have highlighted this blurring of lines between modes of war. They suggest that our greatest challenge in the future will not come from a state that selects one approach but from states or groups that select from the whole menu of tactics and technologies and blend them in innovative ways to meet their own strategic culture, geography, and aims. As Michael Evans of the Australian Defence Academy wrote well before the last Quadrennial Defense Review, "The possibility of continuous sporadic armed conflict, its engagements blurred together in time and

*the 2005 National Defense Strategy was noteworthy for its expanded understanding of modern threats*

U.S. Army (Curtis G. Hargrave)



101<sup>st</sup> Airborne Division Soldiers fire missile at building in Mosul, Iraq, in which Uday and Qusay Hussein barricaded themselves, July 2003

space, waged on several levels by a large array of national and sub-national forces, means that war is likely to transcend neat divisions into distinct categories.”<sup>3</sup>

Numerous scholars are now acknowledging the mixing likely in future conflicts. Colin Gray has admitted the one feature that “we can predict with confidence is that there is going to be a blurring, a further blurring, of warfare categories.”<sup>4</sup> British and Australian officers have moved ahead and begun the hard work of drawing out implications and the desired countercapabilities required to effectively operate against hybrid threats. The British have gone past American doctrine writers and already incorporated hybrid threats within their construct for irregular war.<sup>5</sup> Australian military analysts remain on the front lines of inquiry in this area.<sup>6</sup>

Theorists responsible for some of the most cutting edge thinking in alternative modes of war and associated organizational implications continue to explore the blurring of conflict types. John Arquilla, an expert in irregular warfare, has concluded that “[n]etworks have even shown a capacity to wage war toe-to-toe against nation-states—with some success. . . . The range of choices available to networks thus covers an entire spectrum of conflict, posing the prospect of a significant blurring of the lines between insurgency, terror, and war.”<sup>7</sup>

Some research has been done on civil wars as hybrid conflicts. Other research focuses on the nature of the societies involved. But hybrid wars are much more than just conflicts between states and other armed groups. It is the application of the various forms of conflict that best distinguishes hybrid threats or conflicts. This is especially true since hybrid wars can be conducted by both states and a variety of nonstate actors. Hybrid threats incorporate a full range of modes of warfare, including conventional capabilities, irregular tactics and formations, terrorist acts that include indiscriminate violence and coercion, and criminal disorder. These multi-modal activities can be conducted by separate units, or even by the same unit, but are generally operationally and tactically directed and coordinated within the main battlespace to achieve synergistic effects in the physical *and* psychological dimensions of conflict. The effects can be gained at all levels of war. Thus, the compression of the levels of war is complicated by a simultaneous convergence of modes. The novelty of this combination and the innovative adaptations of existing systems

by the hybrid threat is a further complexity. As one insightful student of war noted:

*Hybrid forces can effectively incorporate technologically advanced systems into their force structure and strategy, and use these systems in ways that are beyond the intended employment parameters. Operationally, hybrid military forces are superior to Western forces within their limited operational spectrum.*<sup>8</sup>

Hybrid wars are not new, but they are different. In this kind of warfare, forces become blurred into the same force or are applied in the same battlespace. The combination of irregular and conventional force capabilities, either operationally or tactically integrated, is quite challenging, but historically it is not necessarily a unique phenomenon.<sup>9</sup> The British faced a hybrid threat at the turn of the last century when the Boers employed Mauser rifles and

---

### *the compression of the levels of war is complicated by a simultaneous convergence of modes*

---

Krupp field guns and outranged their red-clad adversary. Ultimately, the British adapted and ran down the Boer commandos. The fierce defense of Grozny by the Chechens is another potential hybrid case study. But both were bloody and protracted conflicts that arguably required more military resources and greater combat capabilities than classical counterinsurgencies and Field Manual 3–24, *Counterinsurgency*, would suggest.

### **Compound Wars**

Historians have noted that many if not most wars are characterized by both regular and irregular operations. When a significant degree of strategic coordination between separate regular and irregular forces in conflicts occurs, they can be considered “compound wars.” Compound wars are those major wars that had significant regular and irregular components fighting simultaneously under unified direction.<sup>10</sup> The complementary effects of compound warfare are generated by its ability to exploit the advantages of each kind of force and increase the nature of the threat posed by each kind of force. The irregular force attacks weak areas, compelling a conventional opponent to disperse his security forces. The conventional

force generally induces the adversary to concentrate for defense or to achieve critical mass for decisive offensive operations.

One can see this in the American Revolution, when George Washington’s more conventional troops stood as a force in being for much of the war, while the South Carolina campaign was characterized by militia and some irregular combat.<sup>11</sup> The Napoleonic era is frequently viewed in terms of its massive armies marching back and forth across Europe. But the French invasion of Spain turned into a quagmire, with British regulars contesting Napoleon’s control of the major cities, while the Spanish guerrillas successfully harassed his lines of communication. Here again, strategic coordination was achieved, but overall in different battlespaces.<sup>12</sup> Likewise, the American Civil War is framed by famous battles at Chancellorsville, Gettysburg, Vicksburg, and Antietam. Yet partisan warfare and famous units like John Mosby’s 43<sup>rd</sup> Virginia Cavalry provided less conventional capabilities as an economy of force operation.<sup>13</sup> T.E. Lawrence’s role as an advisor to the Arab revolt against the Ottomans is another classic case of compound war, which materially assisted General Edmund Allenby’s thrusts with the British Expeditionary Force against Jerusalem and Damascus. But here again, Lawrence’s raiders did not fight alongside the British; they were strategically directed by the British and supplied with advisors, arms, and gold only.<sup>14</sup>

Vietnam is another classic case of the strategic synergy created by compound wars, posing the irregular tactics of the Viet Cong with the more conventional capabilities of the North Vietnamese army.<sup>15</sup> The ambiguity between conventional and unconventional approaches vexed military planners for several years. Even long afterward, Americans debated what kind of war they actually fought and lost.<sup>16</sup>

### **Hybrid Wars**

As difficult as compound wars have been, the operational fusion of conventional and irregular capabilities in hybrid conflicts may be even more complicated. Compound wars offered synergy and combinations at the strategic level, but not the complexity, fusion, and simultaneity we anticipate at the operational and even tactical levels in wars where one or both sides is blending and fusing the full range of methods and modes of conflict into the battlespace. Irregular forces in cases of compound wars operated largely as a distraction or economy of force measure in a separate theater or adjacent operating area includ-

ing the rear echelon. Because it is based on operationally separate forces, the compound concept did not capture the merger or blurring modes of war identified in past case studies such as Hizballah in the second Lebanon war of 2006 or future projections.

Thus, the future does not portend a suite of distinct challengers into separate boxes of a matrix chart. Traditional conflict will still pose the most dangerous form of human conflict, especially in scale. With increasing probability, however, we will face adversaries who blur and blend the different methods or modes of warfare. The most distinctive change in the character of modern war is the blurred or blended nature of combat. We do not face a widening number of distinct challenges but their *convergence* into hybrid wars.

These hybrid wars blend the lethality of state conflict with the fanatical and protracted fervor of irregular warfare. In such conflicts, future adversaries (states, state-sponsored groups, or self-funded actors) will exploit access to modern military capabilities, including encrypted command systems, man-portable air-to-surface missiles, and other modern lethal systems, as well as promote protracted insurgencies that employ ambushes, improvised explosive devices (IEDs), and coercive assassinations. This could include states blending high-tech capabilities such as antisatellite weapons with terrorism and cyber warfare directed against financial targets.

Hybrid challenges are not limited to non-state actors. States can shift their conventional units to irregular formations and adopt new tactics as Iraq's *fedayeen* did in 2003. Evidence from open sources suggests that several powers in the Middle East are modifying their forces to exploit this more complex and diffused mode of conflict. We may find it increasingly perplexing to characterize states as essentially traditional forces, or nonstate actors as inherently irregular. Future challenges will present a more complex array of alternative structures and strategies as seen in the battle between Israel and Hizballah in 2006. The latter effectively fused militia forces with highly trained fighters and antitank guided missile teams into the battle. Hizballah clearly demonstrated the ability of nonstate actors to study and deconstruct the vulnerabilities of Western-style militaries and devise appropriate countermeasures.

The lessons learned from this confrontation are already cross-pollinating with other states and nonstate actors. With or without state sponsorship, the lethality and capability

## The Second Lebanon War, 2006

In many details, the amorphous Hizballah is representative of the rising hybrid threat. The 34-day battle in southern Lebanon revealed some weaknesses in the posture of the Israel Defense Forces (IDF)—but it has implications for American defense planners, too. Mixing an organized political movement with decentralized cells employing adaptive tactics in ungoverned zones, Hizballah showed that it could inflict as well as take punishment. Its highly disciplined, well-trained distributed cells contested ground against a modern conventional force using an admixture of guerrilla tactics and technology in densely packed urban centers. Hizballah, like Islamic extremist defenders in the battles in Fallujah in Iraq during April and November of 2004, skillfully exploited the urban terrain to create ambushes and evade detection and to hold strong defensive fortifications in close proximity to noncombatants.<sup>1</sup>

In the field, Israeli troops grudgingly admitted that the Hizballah defenders were tenacious and skilled.<sup>2</sup> The organized resistance was several orders of magnitude more difficult than counterterrorism operations in the West Bank and Gaza Strip. More importantly, the degree of training, fire discipline, and lethal technology demonstrated by Hizballah were much higher.

Tactical combinations and novel applications of technology by the defenders were noteworthy. In particular, the antitank guided missile systems employed by Hizballah against IDF armor and defensive positions, coupled with decentralized tactics, were a surprise. At the battle of Wadi Salouqi, a column of Israeli tanks was stopped in its tracks with telling precision.<sup>3</sup> Hizballah's antitank weapons include the Russian-made RPG-29, Russian AT-13 Metis, and AT-14 Kornet, which has a range of 3 miles. The IDF found the AT-13 and AT-14 formidable against their first line Merkava Mark IV tank. A total of 18 Merkavas were damaged, and it is estimated that antitank guided missiles accounted for 40 percent of IDF fatalities. Here we see the blurring of conventional systems with irregular forces and nontraditional tactics.



as unconfirmed reports that they managed to decrypt IDF radio traffic. The defenders also seemed to have advanced surveillance systems and very advanced night vision equipment. Hizballah's use of C802 antiship cruise missiles against an Israeli missile ship represents another sample of what "hybrid warfare" might look like, which is certainly relevant to naval analysts as well.

Perhaps Hizballah's unique capability is its inventory of 14,000 rockets. Many of these are relatively inaccurate older models, but thanks to Iranian or Syrian support, they possess a number of missile systems that can reach deep into Israel. They were used both to terrorize the civilian population and to attack Israel's military infrastructure. Hizballah managed to fire over 4,100 rockets into Israel between July 12 and August 13, culminating with 250 rockets on the final day, the highest total of the war. Most of these were short range and inaccurate, but they achieved strategic effects both in the physical domain, by forcing Israel to evacuate tens of thousands of citizens, and in the media, by demonstrating their ability to lash back at the region's most potent military.

Ralph Peters, who visited Lebanon during the fighting, observed that Hizballah displayed impressive flexibility, relying on the ability of cellular units to combine rapidly for specific operations or, when cut off, to operate independently after falling in on prepositioned stockpiles of weapons and ammunition. Hizballah's combat cells were a hybrid of guerrillas and regular troops—a form of opponent that U.S. forces are apt to encounter with increasing frequency.<sup>5</sup>

<sup>1</sup> Andrew Exum, *Hizballah at War: A Military Assessment*, Policy Focus #63 (Washington, DC: Washington Institute for Near East Policy, December 2006), 9–11.

<sup>2</sup> Matthew Stannard, "Hezbollah wages new generation of warfare," *San Francisco Chronicle*, August 6, 2006; Jonathan Finer, "Israeli Soldiers Find a Tenacious Foe in Hezbollah," *The Washington Post*, August 8, 2006, 1.

<sup>3</sup> Judith Palmer Harik, *Transnational Actors in Contemporary Conflicts: Hizballah and its 2006 War with Israel* (Cambridge: Harvard University Press, March 2007), 14; Exum, 9–14.

<sup>4</sup> Exum, 5; see also Harik, 19–20.

<sup>5</sup> Ralph Peters, "Lessons from Lebanon: The New Model Terrorist Army," *Armed Forces Journal International* (October 2006), 39.



of organized groups are increasing, while the incentives for states to exploit nontraditional modes of war are on the rise. This will require that we modify our mindsets with respect to the relative frequency and threats of future conflict. Irregular tactics and protracted forms of conflict are often castigated as tactics of the weak, employed by nonstate actors who do not have the means to do anything else. Instead of weakness, future opponents may exploit such means because of their effectiveness, and they may come to be seen as *tactics of the smart and nimble*. The future may find further evidence that hybrid threats are truly effective against large, ponderous, and hierarchical organizations that are mentally or doctrinally rigid.

Some analysts in Israel have all too quickly dismissed the unique character of Hizballah. These analysts blithely focus inward on the failings of the political and military leadership.<sup>17</sup> This is a fatal disease for military planners, one that can only benefit future Hizballahs. As Winston Churchill so aptly put it, “However absorbed a commander may be in the elaboration of his own thoughts, it is sometimes necessary to take the enemy into account.” So, too, must military historians and serious efforts to extract lessons from current history. Russell Glenn, a retired U.S. Army officer now with RAND, conducted an objective evaluation and concluded that the second Lebanon conflict was inherently heterogeneous and that attempts to focus on purely conventional solutions were futile. Moreover, as both Ralph Peters and I concluded earlier, this conflict is not an anomaly, but a harbinger of the future. As Glenn summed up in *All Glory Is*

*Fleeting*, “Twenty-first century conflict has thus far been typified by what might be termed as *hybrid wars*.”<sup>18</sup>

### Implications

The rise of hybrid warfare does not represent the end of traditional or conventional warfare. But it does present a complicating factor for defense planning in the 21<sup>st</sup> century. The implications could be significant. John Arquilla of the Naval Postgraduate School has noted, “While history provides some useful examples to stimulate strategic thought about such problems, coping with networks that can fight in so many different ways—sparking myriad, hybrid forms of conflict—is going to require some innovative thinking.”<sup>19</sup>

We are just beginning this thinking. Any force prepared to address hybrid threats would have to be built upon a solid professional

---

*hybrid wars blend the lethality of state conflict with the fanatical and protracted fervor of irregular warfare*

---

military foundation, but it would also place a premium on the cognitive skills needed to recognize or quickly adapt to the unknown.<sup>20</sup> We may have to redouble our efforts to revise our operational art. We have mastered operational design for conventional warfare, and recently reinvigorated our understanding of counter-insurgency campaigns. It is not clear how we adapt our campaign planning to combina-

tions of the two. What is the center of gravity in such conflicts, and does it invalidate our emphasis on whole-of-government approaches and lines of operations?

Success in hybrid wars also requires small unit leaders with decisionmaking skills and tactical cunning to respond to the unknown—and the equipment sets to react or adapt faster than tomorrow’s foe. Organizational learning and adaptation would be at a premium, as would extensive investment in diverse educational experiences.<sup>21</sup> What institutional mechanisms do we need to be more adaptive, and what impediments does our centralized—if not sclerotic—Defense Department generate that must be jettisoned?

The greatest implications will involve force protection, as the proliferation of IEDs suggests. Our enemies will focus on winning the mobility-counter-mobility challenge to limit our freedom of action and separate us from close proximity to the civilian population. The ability of hybrid challenges to exploit the range and precision of various types of missiles, mortar rounds, and mines will increase over time and impede our plans. Our freedom of action and ability to isolate future opponents from civilian populations are suspect.

The exploitation of modern information technology will also enhance the learning cycle of potential irregular enemies, improving their ability to transfer lessons learned and techniques from one theater to another. This accelerated learning cycle has already been seen in Iraq and Afghanistan, as insurgents appeared to acquire and effectively employ tactical techniques or adapt novel detonation devices found on the Internet or observed from a different source. These opponents will remain elusive, operate in an extremely distributed manner, and reflect a high degree of opportunistic learning.

The U.S. military and indeed the armed forces of the West must adapt as well. As one Australian officer put it, unless we adapt to today’s protean adversary and the merging modes of human conflict, “we are destined to maintain and upgrade our high-end, industrial age square pegs and be condemned for trying to force them into contemporary and increasingly complex round holes.”<sup>22</sup>

DOD recognizes the need for fresh thinking and has begun exploring the nature of this mixed challenge. An ongoing research project, including a series of joint wargaming exercises, has been initiated by the Office of the Secretary of Defense. U.S. Joint Forces Command is exploring the implications as well, and the

Marines aid displaced Iraqi civilians near An Nasiriyah during Operation Iraqi Freedom, March 2003



U.S. Marine Corps (Mace M. Glatz)

Marines are doing the same. But the challenge affects all the Services, not just ground forces. Hizballah's use of long-range missiles, armed unmanned aerial vehicles, and antiship cruise missiles should be a warning to the whole joint community. The maritime Services understand this and reflected the new challenge in the national maritime strategy: "Conflicts are increasingly characterized by a hybrid blend of traditional and irregular tactics, decentralized planning and execution, and non-state actors, using both simple and sophisticated technologies in innovative ways."<sup>23</sup>

Tomorrow's conflicts will not be easily categorized into conventional or irregular. The emerging character of conflict is more complicated than that. A binary choice of big and conventional versus small or irregular is too simplistic. The United States cannot imagine all future threats as state-based and completely conventional, nor should it assume that state-based conflict has passed into history's dustbin. Many have made that mistake before. State-based conflict is less likely, but it is not extinct. But neither should we assume that all state-based warfare will be entirely conventional. As this article suggests, the future poses combinations and mergers of the various methods available to our antagonists.

Numerous security analysts have acknowledged the blurring of lines between modes of war.<sup>24</sup> Hybrid challengers have passed from a concept to a reality, thanks to Hizballah. A growing number of analysts in Washington realize that the debate about preparing for counterinsurgency or stability operations versus big wars is a false argument. Such a debate leads to erroneous conclusions about future demands for the joint warfighting community. Scholars at the Naval War College in Newport, Rhode Island, and at King's College, London, endorsed the concept.<sup>25</sup> Max Boot concluded his lengthy study of war and technology with the observation that

*The boundaries between "regular" and "irregular" warfare are blurring. Even non-state groups are increasingly gaining access to the kinds of weapons that were once the exclusive preserve of states. And even states will increasingly turn to unconventional strategies to blunt the impact of American power.*<sup>26</sup>

This should widen our lens about the future joint operating environment. Yet our focus remains on an outmoded and dated

bifurcation of war forms, and this orientation overlooks the most likely and potentially the most dangerous of combinations. One pair of respected strategists has concluded that "hybrid warfare will be a defining feature of the future security environment."<sup>27</sup> If true, we face a wider and more difficult range of threats than many in the Pentagon are thinking about. As today's Spartans, we will have to take the enemy's plans into consideration and adapt into a more multidimensional or joint force as Sparta ultimately did.

Today's strategists need to remember the frustrated Spartans outside Athens' long wall and remember the bloody success of the British, Russians, and Israelis in their long wars against hybrid threats—and prepare accordingly. **JFQ**

#### NOTES

<sup>1</sup> Robert B. Strassler, ed., *The Landmark Thucydides: A Comprehensive Guide to the Peloponnesian War* (New York: Free Press, 1996).

<sup>2</sup> National Defense Strategy (Washington, DC: U.S. Department of Defense, 2005), 4.

<sup>3</sup> Michael Evans, "From Kadesh to Kandahar: Military Theory and the Future of War," *Naval War College Review* (Summer 2003), 136.

<sup>4</sup> Colin S. Gray, *Another Bloody Century: Future Warfare* (London: Weidenfeld & Nicolson, 2006).

<sup>5</sup> *Countering Irregular Activity Within a Comprehensive Approach*, Joint Doctrine Note 2/07, United Kingdom, March 2007, 1–15.

<sup>6</sup> Michael G. Krause, "Square Pegs for Round Holes?" Australian Army, Australian Land Warfare Studies Centre, Working Paper No. 132, June 2007.

<sup>7</sup> John Arquilla, "The End of War As We Knew It," *Third World Quarterly* 28, no. 2 (March 2007), 369.

<sup>8</sup> William J. Nemeth, USMC, *Future War and Chechnya: A Case for Hybrid Warfare* (Monterey, CA: Naval Postgraduate School, June 2002).

<sup>9</sup> James N. Mattis and Frank Hoffman, "Future Warfare: The Rise of Hybrid Warfare," *U.S. Naval Institute Proceedings* (November 2005), 30–32; F.G. Hoffman, "How the Marines Are Preparing for Hybrid Wars," *Armed Forces Journal International* (April 2006); and F.G. Hoffman, "Preparing for Hybrid Wars," *Marine Corps Gazette*, March 2007; Frank Hoffman, *Conflict in the 21<sup>st</sup> Century: The Rise of Hybrid Warfare* (Arlington, VA: Potomac Institute for Policy Studies, December 2007).

<sup>10</sup> Thomas Huber, *Compound Wars: The Fatal Knot* (Fort Leavenworth, KS: Command and General Staff College, 1996).

<sup>11</sup> John Grenier, *First Way of War: American War Making on the Frontier* (New York: Cambridge University Press, 2005); Terry Golway, *Washington's*

*General: Nathanael Green and the Triumph of the American Revolution* (New York: Henry Holt, 2005).

<sup>12</sup> Charles J. Esdaile, *Fighting Napoleon, Guerrillas, Bandits and Adventurers in Spain 1808–1814* (New Haven: Yale University Press, 2004), 154–155.

<sup>13</sup> Jeffrey D. Wert, *Mosby's Rangers* (New York: Simon & Schuster, 1991).

<sup>14</sup> B.H. Liddell Hart, *Lawrence of Arabia* (New York: De Capo, 1989).

<sup>15</sup> Harold G. Moore and Joseph L. Galloway, *They Were Soldiers Once . . . and Young: Ia Drang—The Battle That Changed the War in Vietnam* (New York: Random House, 1992).

<sup>16</sup> The best source on the war is Andrew F. Krepinevich, *The Army in Vietnam* (Baltimore: Johns Hopkins University Press, 1986).

<sup>17</sup> Avi Kober, "The Israel Defense Forces in the Second Lebanon War: Why the Poor Performance," *Journal of Strategic Studies* (February 2008), 3–40.

<sup>18</sup> Russell W. Glenn, *All Glory Is Fleeting: Insights from the Second Lebanon War* (Santa Monica, CA: RAND, 2008), 73.

<sup>19</sup> Arquilla, 369.

<sup>20</sup> David C. Gompert, *Heads We Win: The Cognitive Side of Counterinsurgency (COIN)* (Santa Monica, CA: RAND, Counterinsurgency Study Occasional Paper 1, 2007).

<sup>21</sup> Michael Evans, *From the Long Peace to the Long War* (Canberra: Australian Defence College, 2007). See also David Betz, "A Real Revolution in Military Affairs," paper delivered at the Marine Corps Training and Education Command Conference, "Pedagogy for the Long War," October 29–31, 2007, Quantico, VA.

<sup>22</sup> Krause, v; David Betz, "Redesigning Land Forces for Wars Amongst the People," *Contemporary Security Policy* 28, no. 2 (August 2007), 221–243.

<sup>23</sup> General James T. Conway, USMC, Admiral Gary Roughead, USN, and Admiral Thad W. Allen, USCG, *A Cooperative Strategy for 21<sup>st</sup>-Century Seapower* (Washington, DC: October 2007).

<sup>24</sup> Thomas G. Mahnken, "Modern War," in *The Impenetrable Fog of War: Reflections on Modern Warfare and Strategic Surprise*, ed. Patrick M. Cronin (Westport, CT: Praeger Security International, 2006), 15–24.

<sup>25</sup> Mackubin T. Owens, "Reflections on Future War," *Naval War College Review* (Winter 2007); Colonel John J. McCuen, "Hybrid Wars," *Military Review* (April-May 2008), 107–113.

<sup>26</sup> Max Boot, *War Made New: Technology, Warfare, and the Course of History, 1500 to Today* (New York: Random House, 2006), 472.

<sup>27</sup> Michèle A. Flournoy and Shawn Brimley, "The Defense Inheritance: Challenges and Choices for the Next Pentagon Team," *Washington Quarterly* (Autumn 2008), 63. For additional background, see Greg Grant, "Hybrid Wars," *Government Executive* (May 2008); and Matthew Rusling, "For the Military, A Future of Hybrid Wars," *National Defense* (September 2008).