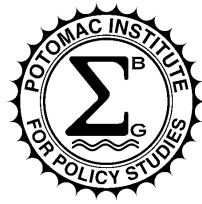


CONFLICT IN THE
21ST CENTURY:
THE RISE OF HYBRID WARS



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Potomac Institute for Policy Studies
Arlington, Virginia
December 2007

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FOREWORD

There has been much discussion and writing over the past decade about the evolution of modern warfare in the post Cold-war world. Several have claimed that we were in the midst of a “Revolution in Warfare.” Frank Hoffman takes this discussion to a new and much more mature level by recognizing that we are entering a time when multiple types of warfare will be used simultaneously by flexible and sophisticated adversaries who understand that successful conflict takes on a variety of forms that are designed to fit one’s goals at that particular time. Mr. Hoffman calls these “Hybrid Wars.”

Frank Hoffman notes that it is too simplistic to merely classify conflict as “Big and Conventional” versus “Small or Irregular.” Today’s enemies, and tomorrow’s, will employ combinations of warfare types. Non-state actors may mostly employ irregular forms of warfare, but will clearly support, encourage, and participate in conventional conflict if it serves their ends. Similarly, nation-states may well engage in irregular conflict in addition to conventional types of warfare to achieve their goals. Clearly the United States must be prepared for the full spectrum of conflict from all fronts and realize that preparing our forces for only selected types of conflict will be a recipe for defeat.

It is important to note that this work is being evaluated by the U.S. Marine Corps (USMC) in its ongoing long-range strategic planning and experimentation activities. It has been presented to senior officials at the Office of the Secretary of Defense (OSD) policy level, to policy leaders in the Department of Homeland Security (DHS), to the Intelligence Community, to the Defense Advanced Research Projects Agency (DARPA) and the Office of Naval Research (ONR), and to major military educational institutions including the U.S. National War College, the Naval and Army War Colleges, and the British Joint Command and Staff College.

Frank Hoffman’s paper on Hybrid Wars is a masterpiece of enlightened thinking on conflict in our time. It should be required reading for all students and practitioners of modern warfare.



Michael S. Swetnam
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EXECUTIVE SUMMARY

There are a broadening number of challenges facing the United States, as the National Defense Strategy (NDS) noted in 2005. These include traditional, irregular, terrorist and disruptive threats or challengers. This has created a unique planning dilemma for today's military planners, raising a choice between preparing for states with conventional capabilities or the more likely scenario of non-state actors employing asymmetric or irregular tactics. However, these may no longer be separate threats or modes of war. Several strategists have identified an increased merging or blurring of conflict and war forms. The potential for types of conflict that blur the distinction between war and peace, and combatants and non-combatants, appear to be on the rise. Indeed, the NDS itself suggested that the most complex challengers of the future may seek synergies and greater impact by combining multiple modes of war.

As this paper reveals, future contingencies will more likely present unique combinational or *hybrid* threats that are specifically designed to target 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 well, as it either further destabilizes local government or abets the insurgent or irregular warrior by providing resources, or by undermining the host state and its legitimacy.

It is not just that conventional warfare or interstate conflict is on the decline, there is a fusion of war forms emerging, one that blurs regular and irregular warfare. This emerging understanding is reflected in the recently released national maritime strategy.

Conflicts are increasingly characterized by a hybrid blend of traditional and irregular tactics, decentralized planning and execution, and non-state actors," the strategy states, "using both simple and sophisticated technologies in innovative ways.¹

¹ General James T. Conway, USMC, Admiral Gary Roughead, USN and Admiral Thad W. Allen, USCG, *A Cooperative Strategy For Maritime Security*, Washington, D.C., October 2007.

Hybrid threats incorporate a full range of different modes of warfare including conventional capabilities, irregular tactics and formations, terrorist acts including indiscriminate violence and coercion, and criminal disorder. Hybrid Wars can be conducted by both states and a variety of non-state actors. 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.

At the strategic level, many wars have had regular and irregular components. However, in most conflicts, these components occurred in different theaters or in distinctly different formations. In Hybrid Wars, these forces become blurred into the same force in the same battlespace. While they are operationally integrated and tactically fused, the irregular component of the force attempts to become operationally decisive rather than just protract the conflict, provoke overreactions or extend the costs of security for the defender.

We may find it increasingly perplexing to characterize states as essentially traditional forces, or non-state actors as inherently irregular. Future challenges will present a more complex array of alternative structures and strategies, as seen in the summer of 2006 in the battle between Israel and Hezbollah. Hezbollah clearly demonstrated the ability of non-state 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 non-state actors. With or without state sponsorship, the lethality and capability of organized groups is 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. It will also require a rethinking of priorities in defense spending, and serious reflection about the role of technology in our strategic culture.

The National Defense Strategy and the 2006 Quadrennial Defense Review (QDR) quite properly recognized that future challengers will avoid our overwhelming military strengths and seek alternative paths. OSD's senior civilian policy makers sought to shift the Department's capability investments to meet these challengers. The Pentagon's strategy and QDR expands the U.S. military's mission set beyond its

preference for fighting conventional forces. We can no longer focus just on *battles* against preferred enemies, vice *campaigns* against thinking opponents.

Hybrid Warfare presents a mode of conflict that severely challenges America's conventional military thinking.² It targets the strategic cultural weaknesses of the American Way of Battle quite effectively. Its chief characteristics—convergence and combinations—occur in several modes. The convergence of various types of conflict will present us with a complex puzzle until the necessary adaptation occurs intellectually and institutionally. This form of conflict challenges longstanding American conceptions about warfighting, and will continue to thwart the West's core interests and world order over the next generation.

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 21st Century. The implications could be significant, but will have to be carefully thought through. The historical foundation for much of our understanding about war requires fresh and creative approaches if we are going to draw out the correct implications. As Dr. 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—*sparkling myriad, hybrid forms of conflict*—is going to require some innovative thinking."³

This paper lays out some distinct areas in which innovative thinking, rigorous experimentation, and constant adaptation are required. These include changes in our approach to operational art, command and control, leadership development, force structure, and training and education.

We believe that the Marine Corps is particularly well suited for this security environment because of its legacy, its expeditionary culture and its approach to warfighting. The Marine Corps has proven to be an innovative organization, and its fundamental warfighting doctrine and its core competencies provide it with the foundation to effectively counter,

² Credit for the first use of the term can be given to Robert G. Walker, "Spec Fi: The U.S. Marine Corps and Special Operations," unpublished Master's Thesis, Monterrey, CA; Naval Post Graduate School, December 1998. Walker described the Marine Expeditionary Unit as "a hybrid force for Hybrid Wars."

³ John Arquilla, "The end of war as we knew it: Insurgency, counterinsurgency and lessons from the forgotten history of early terror networks," *Third World Quarterly*, March 2007, p. 369.

if not thrive, against hybrid challengers. The Marine Corps should exploit its well-founded legacy of warfighting excellence, expeditionary ethos, and institutional agility for this new era.

Because of their perceived success, hybrid challengers will not be a passing fad nor will they remain focused on low tech applications. Future opponents will be dedicated, learn rapidly and adapt quickly to more efficient modes of killing. The ongoing Long War underscores their capacity for incorporating new tactics, techniques and procedures. This diffusion will continue. We can no longer overlook our own vulnerabilities or underestimate the imaginations of our antagonists. In a world of Hybrid Wars, the price for complacency grows steep. This monograph seeks to accelerate our own learning and corresponding institutional adaptation.

INTRODUCTION

*The state on state conflicts of the 20th century are being replaced by Hybrid Wars and asymmetric contests in which there is no clear-cut distinction between soldiers and civilians and between organised violence, terror, crime and war.*⁴

The tragic events of September 11, 2001 did not change everything, but they did emphatically punctuate the end of one era of war and awaken us to the dawning of a new one. This new era presents policy makers and military planners with its own method of conflict, one that has made conventional thinkers uncomfortable. This kind of war, as Mao suggested long ago, has several constituent components, and overwhelming military power by itself is insufficient to serve our strategic interests. Regardless of unfounded speculation in some corners, this does not eliminate the utility of the timeless Clausewitz or some 15 centuries of recorded military history before Westphalia. Quite the contrary, the Prussian theorist recognized that every age has its own conception of war. While globalization has made war more dangerous, it remains undeniably consistent with Clausewitz's broad theory.⁵ Today's emerging paradigm is reflected by the likes of Osama Bin Laden and our experiences in both Afghanistan and Iraq. These experiences should give pause to strategy makers. Complacency about today's security challenges is unwarranted and highly dangerous.

The so called "unipolar moment" and a spate of unilateral triumphalism went up in smoke on 9/11. Wishful thinking and delusional discussions about the changing nature of human conflict were the principal victims of 9/11, reinforced by subsequent events in Iraq. Rather than Fukuyama's "End of History," our security is challenged by

⁴ Alan Dupont, "Transformation or Stagnation? Rethinking Australia's Defence," *Australian Security in the 21st Century Lecture*, Parliament House, Canberra, November 13, 2002. Accessed at www.mrcltd.org.au/uploaded_documents/ACF30D.doc on November 18, 2007.

⁵ Antulio J. Echevarria, II, "Globalization and the Nature of War," Carlisle, PA: Strategic Studies Institute, Army War College, March 2003. See also Antulio J. Echevarria, II, *Clausewitz and Contemporary War*, New York, NY: Oxford University Press, 2007.

a violent reaction generated as a side product of globalization. This reaction is abetted or exploited by the fervently fanatic and faith-based factions within the Middle East.

The future portends an even more lethal strain of perturbation. Other analysts like Dr. Bruce Hoffman point out that Iraq's insurgents and jihadist foreign fighters will benefit from their education in Iraq and Afghanistan, and will soon return home or to alternative battlespaces with greater motivation, lethal skills and credibility.⁶ Their Darwinian evolution against America's vaunted military has refined their methods and emboldened their plans, while the clash within Islam continues unabated if not accelerated by America's well intentioned, but poorly executed efforts. So our danger mounts, while the West remains unprepared to provide security against a stateless entity that deliberately targets its weaknesses and refuses to play to its conventional military strength. Others, including large states with interests inimical to our own, will learn from this experience.

Western military thinkers have been reluctant and thus slow to address the implications of the increasingly blurred character of modern wars. Many are inclined to look past the uncomfortable and ambiguous nature of today's generational challenge, and long for traditional opponents who will array themselves in properly uniformed formations and fight the wars we prefer to fight. We have been slow to accept the trend lines that go back as far as Beirut in 1983 and recognize that the most frequent form of war is now "amongst the people," and we have been very slow in shaping our institutional tool set.⁷

For more than two decades, most of us overlooked these trends. Only a few talked of post-Westphalian, non-trinitarian or post-Clausewitzian eras.⁸ The American military oriented on its preferred view of its professional scope, at the operational level, and worked to embrace the Information Age. However, much of that effort tried to perfect an

⁶ Statement of Dr. Bruce Hoffman, testimony presented to the HASC Subcommittee on Terrorism, Unconventional Threats and Capabilities on February 16, 2006. Accessed at www.rand.org/pubs/testimonies/CT255/.

⁷ Rupert Smith, *The Utility of Force: The Art of War in the Modern World*, New York, NY: Knopf, 2007.

⁸ The most notable being Martin Van Creveld, *The Transformation of War*, New York, NY: Free Press, 1991.

increasingly infrequent if not outmoded form of war, and made Industrial Age warfare more precise, more predictable and more pristine. We maximized efficiency and the application of ever more modern forms of technology. But we had focused on the wrong set of strategic drivers and indicators. Visions of “unblinking eyes” and information superiority, stand-off attacks and ever faster sensor-to-shooter links drove the defense agenda and the transformation programs of the Department of Defense for more than a decade.⁹

While all of these technologies were beneficial, they were not properly assessed in relation to the ongoing social and political context in which they were to be applied. In effect, we had misidentified the true Revolution in Military Affairs, as Sir Lawrence Freedman has noted. We could not eliminate the “fog of war” with America’s information dominance and magically create a new, long *Pax Americana*. We overlooked what really constituted a threat to our national security interests in key regions of the world, due to an enthusiastic embrace of an idealized and outdated version of warfare, and an under-appreciation of the mobilizing impact of Information Age tools when used to foment disorder and promote hate.

The latest U.S. National Defense Strategy (NDS), published in early 2005, reflects some improved thinking. This white paper explicitly identifies a range of emerging threats and identifies irregular challengers as an increasingly salient problem. It begins to shift American thinking and investments away from merely “fighting and winning the nation’s wars” against its preferred conventional enemies to a range of wars against a wider set of enemies—expanding beyond the traditional to incorporate three other threats or challengers—the irregular, the catastrophic terrorist and the disruptive threat, which seeks to usurp American hegemony and power by displacing it via breakthrough technologies.

The authors of the Pentagon’s 2006 Quadrennial Defense Review (QDR) can also take a bow. The report recognized the shift, concluding, “In the post-September 11 world, irregular warfare has emerged as the dominant form of warfare confronting the United

⁹ See Frederick W. Kagan, *Finding the Target: The Transformation of American Military Policy*, New York, NY: Encounter Books, 2006.

States.”¹⁰ The QDR argued that fighting the Long War against terrorism, providing forces for rotational requirements to protracted conflicts, and increasing the capacity of future partners would be the basis for sizing and shaping the military. This policy shift is significant as it begins to broaden the scope of the combat developers inside each Service to sharpen our focus on this increasingly likely form of warfare.

This paper suggests that we still have a ways to go. Instead of the four distinct challengers presented in a two by two matrix chart (known as the Quad chart in the Pentagon) found in the new NDS, future scenarios will more likely present unique combinations and deliberate synergies that are specifically designed to target Western societies in general and American vulnerabilities in particular. The defense strategy created the impression that our portfolio of capabilities would be measured against four distinct kinds of challengers using different approaches. Our take on the future suggests that future adversaries are smarter than that and will rarely limit themselves to a single tool in their tool kit. Conventional, irregular and catastrophic terrorist challenges will not be distinct styles; they will all be present in some form. The blurring of modes of war, the blurring of who fights, and what technologies are brought to bear, produces a wide range of variety and complexity that we call *Hybrid Warfare*.¹¹

Hybrid Wars can be conducted by both states and a variety of non-state actors. *Hybrid Wars incorporate a range of different modes of warfare, including conventional capabilities, irregular tactics and formations, terrorist acts including 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.

¹⁰ Report of the Quadrennial Defense Review, Washington D.C., March 2006, p. 36.

¹¹ In addition to its first public use by General Mattis at the Defense Forum sponsored by the Naval Institute and Marine Corps Association on September 8, 2005, the concept has been presented by LtGen James N. Mattis USMC and Frank Hoffman, “Future Warfare: The Rise of Hybrid Warfare,” *Naval Institute Proceedings*, November 2005, pp. 30-32; F. G. Hoffman. “Complex Irregular War: The Next Revolution in Military Affairs,” *Orbis*, Summer 2006, pp. 413-430; 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.

This paper captures the progress and insights of a long-term research project undertaken by the Marine Corps that has already yielded innovative approaches to this emerging challenge. In addition to reviewing the literature and analyses that brought us up to this point in time, the paper provides implications for the defense community at large to consider.

Complicating the problem, the battlespace in tomorrow's Hybrid Wars will take place in complex terrain, most likely the burgeoning cities of the developing world. The hybrid challenger realizes that complex terrain affords defenders a number of advantages that offset our conventional superiority. Recent combat operations suggest a shift towards what can be called *contested zones*.¹² These zones include the dense urban jungles and the congested littorals where the majority of the world's population and economic activity is centered.¹³ Engaging American forces in the "contested zone" with a range of crude yet effective asymmetric approaches is intended to draw out conflicts, protract their duration and costs, and sap American will. This will come as no news to the veterans of Operation Al Fajr in Fallujah.

As seen in Kosovo, Afghanistan, and Iraq, irregular adversaries are adopting tactics and modes of operations to offset our firepower and advantages in intelligence collection, surveillance and reconnaissance. Today, dense urban terrain provides similar safe-havens to the urban guerrilla or terrorist where the density of population, transportation networks, public services and infrastructure, and structures gives him multiple avenues of escape and the ability to hide while planning and rehearsing operations. The density of the urban complex provides sufficient cover and "noise" to mask the adversary's preparation and attack position. We have to take urban encounters seriously, "categorizing urban operations as too difficult and costly must come to an end" as it could become a self-fulfilling prophecy.¹⁴

Clearly future opponents will avoid fighting the American Way of War, where we optimize our Industrial Age mass or Information Age

¹² Robert E. Schmidle and F. G. Hoffman, "Commanding the Contested Zones," *Proceedings*, September 2004.

¹³ Ralph Peters, "Our Soldiers, Their Cities," *Parameters*, Spring 1996, pp. 43-50.

¹⁴ Vincent J. Goulding, Jr., "Back to the Future with Asymmetric Warfare," *Parameters*, Winter 2000-01, pp. 21-30.

prominence and our preferred rule sets of war. The likeliest opponents on future battlefields accept no rules. Their principal approach will be to avoid predictability and seek advantage in unexpected ways and ruthless modes of attack. We can expect to see a lot of tactical plagiarism, with our opponent learning from us, coupled with wild cards or hybrid adaptation where our adversary has learned how to use high technology in unique and unanticipated ways.

We will also face primitive forms of warfare and criminal activity that long ago were proscribed by Western society. Future enemies will seek their own degree of “shock and awe” with crude barbarity (with video) rather than precision weaponry. What we ironically call “irregular” warfare will become increasingly familiar, but with greater velocity and greater lethality than in the past in part due to the diffusion of advanced military technology. In this paper, we have identified the potentially most dangerous and the increasingly most likely form of conflict as Hybrid Warfare. This form of conflict will challenge longstanding American conceptions about war, and its conventionally oriented force structure and investment patterns. This blurring character of conflict will continue to test and thwart the West’s security interests and world order over the next generation.

ORIGINS AND DEVELOPMENT OF HYBRID WARFARE

*In warfare and non-military warfare, which is primarily national and supra-national, there is no territory which cannot be surpassed; there is no means which cannot be used in the war; and there is no territory and method which cannot be used in combination.*¹⁵

The ongoing conflicts in Iraq and Afghanistan reinforce General Krulak's famous forecast about future conflicts. He predicted that future conflicts would be unlike the large-scale mechanized sweeps of Operation Desert Storm, but more like the "Stepchild of Chechnya."¹⁶ The Chechens employed swarming tactics inside their own cities to thwart Russian domination.¹⁷ That model did not resonate with the mainstream national security community at the time, nor did the evidence from a number of other experiences in Beirut, Mogadishu, or Sarajevo. But now the Long War and the Pentagon's belated interest in stability operations, irregular wars, and counterinsurgency have accelerated a debate about the future character of conflict and the allocation of resources within the U.S. national security architecture.

As part of the Center for Emerging Threats and Opportunities' (CETO) ongoing "Changing Character of Conflict" research program, we examined a number of projected models and postulated paradigm changes regarding future conflict. Proposals for "non-trinitarian" wars, 4th Generation Warfare, and Compound Wars were prominent in the literature at the time this project commenced. Others have described current conflicts as "New Wars," noting supposedly unique characteristics, in particular extensive refugee flows, sexual violence, and transnational criminal aspects underpinning recent wars.¹⁸ This section

¹⁵ Qiao Liang and Wang Xiangsui, *Unrestricted Warfare*, Beijing: PLA Literature and Arts Publishing House, 1999.

¹⁶ "[O]ur enemies will not allow us to fight the son of Desert Storm, but they will try to draw us into the stepchild of Chechnya." Robert Holzer, "Krulak Warns of Over-Reliance on Technology," *Defense News*, October 7, 1996, p. 4.

¹⁷ Timothy L. Thomas, "The Battle of Grozny: Deadly Classroom in Urban Combat," *Parameters*, Summer 1999, pp. 87-102; Anatol Lieven, *Chechnya, Tombstone of Russian Power*, New Haven, CT: Yale University Press, 1998, pp. 102-140.

¹⁸ The term is usually attributed to Mary Kaldor, *New and Old Wars: Organized Violence in a Global Era*, Cambridge, UK: Polity, 1999; and more recently, Herfried Munkler, *The New Wars*, Malden, MA: Polity Press, 2005, pp. 5-31.

briefly describes a number of theories examined as part of this project and the underlying rationale for developing and refining CETO's own Hybrid Warfare construct.

Fourth Generation Warfare

We examined the concept of Fourth Generation Warfare (4GW) that appears to be very prophetic.¹⁹ The theory poses significant historical shifts in warfare since 1648. Initially it was dismissed as “elegant irrelevance,” but it is now difficult to dismiss the reality of 4GW.²⁰ Proponents of this theory accurately identified the blurring nature of future conflict, especially the blurring of war and peace, as well as that between combatants and noncombatants. The core of the concept is that the weakening of the state as an organizing and governing mechanism results in the rise of non-state actors willing and able to challenge the legitimacy of the state. The role of political will and internal social disintegration is central to the construct. The 4GW actor uses a range of conventional and unconventional means, including terrorism and information, to undermine the will of the existing state, to de-legitimize it, and to stimulate an internal social breakdown.²¹ The theory is sophisticated but also elusive. Its advocates have been accused of ignoring the history of irregular warfare, a record that is about as long as military history itself.

The theory has numerous advocates, who place emphasis on political will, legitimacy, and culture. Their 4GW adversary exploits societies, adopts an amorphous structure, and utilizes mass mobilization techniques. The novelty of the concept has been challenged. The 4GW notion raised by T. X. Hammes that “superior political will when properly employed can defeat greater economic and military power” was not mysterious to George Washington or to the Continental Congress. Neither was protracted conflict, social and political networks, diasporas, and ideological fervor lost on Michael Collins and the Irish rebels in the period after World War I.

¹⁹ William S. Lind, Keith Nightengale, John Schmitt and Gary I. Wilson, “The Changing Face of War: Into the Fourth Generation,” *Marine Corps Gazette*, November, 2001.

²⁰ Kenneth F. McKenzie, “Elegant Irrelevance: Fourth Generation Warfare,” *Parameters*, Autumn, 1993, pp. 51-60.

²¹ On this point see William S. Lind, “The will doesn’t triumph,” in Terriff, Karp, and Karp, eds., *Global Insurgency and the Future of Armed Conflict*, New York, NY: Routledge Press, 2007, pp. 101-104.

Some prominent historians have been critical of this approach. Dr. Antulio Echevarria finds that “the model of 4GW ... is based on poor history and only obscures what other historians, theorists, and analysts already have worked long and hard to clarify.” His assessment is echoed by others. Professor Lawrence Freedman of King’s College London has noted “...the theory of 4GW suffers from poor use of history and lack of intellectual rigor.”²² We noted the objections to the historical framework, and concluded that the fourth generation framework hides more than it reveals. The Roman era, the Crusades, Europe’s reformation period, or Britain’s imperial history, which is the basis for Callwell’s treatise *Small Wars*, all contain elements of what is now considered fourth generation warfare. Likewise, historians have to wonder why the Philippine insurgency at the turn of the century, the Marine’s Small Wars era, and T.E. Lawrence’s campaign that occurred during the purported Second Generation, are not relevant as case studies.²³

Thus, not surprisingly, British, Israeli and Australian analysts take issue with the concept. Professor Ron Thornton believes the concept’s formulation risks excluding a huge corpus of valuable knowledge. Avi Kober finds it “incoherent and eclectic,” and Mike Evans contends that instead of distinct historical generations and the emergence of something entirely new, we need a rigorous evaluation of the apparent merging of existing forms of conflict.²⁴ That said, the debate stirred up by the theory has been useful as it forced the profession to examine itself, today’s prevailing conventional orthodoxy, and the tendency in the United States to ignore irregular warfare.

Whether this really is something entirely new, “visible and distinctly different from the forms of war that preceded it,” has emerged as challengeable. What has occurred is simply part of war’s evolution, a shift in degree rather than kind, and a return to older and horrific cases. 4GW advocates do not deny the existence of irregular warfare

²² Antulio J. Echevarria II, “Deconstructing the Theory of Fourth-Generation War,” *Contemporary Security Policy*, August 2005, pp. 11-20; Lawrence Freedman, “War Evolves into the Fourth Generation,” *Contemporary Security Policy*, August 2005, pp. 1-10.

²³ For further assessment, see the concluding chapter in Terry Terriff, Aaron Karp and Regina Karp, eds., *Global Insurgency and the Future of Armed Conflict: Debating fourth-generation warfare*, *Op. Cit.*

²⁴ See Rod Thornton, “Fourth Generation: A ‘new form of warfare?’” p. 87; Avi Kober, “The end of Israeli omnipotence?” pp. 147-159; and Mike Evans “Elegant irrelevance revisited: A critique of Fourth Generation Warfare,” p. 72 in Terriff, Karp and Karp, *Global Insurgency*, *Op Cit.*

techniques and the return to medieval warfare. But they do tend to overlook Clausewitz, who noted that war is “more than a chameleon,” with continuous adaptation in character in every age. Very little in what is described as fundamentally different in the 4GW literature is all that inconsistent with a Clausewitzian understanding of war as a contest of human wills.²⁵ The emphasis on impacting one’s political cohesion or will was a fundamental aspect of Clausewitz’s canon, but the idea of achieving this indirectly rather than via the fielded military forces of the opponent has merit, as does the increasingly blurring character of conflict. While it lacks prescriptions, the 4GW school is certainly relevant.

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.²⁶ The complementary effects of compound warfare are generated by its ability to exploit the advantages of each kind of force, and by its ability to increase the nature of the threat posed by each kind of force. The irregular force attacks weak areas, and forces 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 where Washington’s more conventional force stood as a “force in being” for much of the war, while the South Carolina campaign was characterized by militia and some irregular combat.²⁷ 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

²⁵ Carl von Clausewitz, *On War*, Michael Howard and Peter Paret, eds. and trans., Princeton, NJ: Princeton University Press, 1976, p. 77. See also Christopher Daase, “Clausewitz and Small Wars,” in Hew Strachan and Andreas Herberg-Rothe, eds., *Clausewitz in the Twenty-First Century*, New York, NY: Oxford University Press, 2007.

²⁶ Thomas Huber, *Compound Wars: The Fatal Knot*, Fort Leavenworth, KS: Command and General Staff College, 1996.

²⁷ John Grenier, *First Way of War: American War Making on the Frontier*, Cambridge University Press, 2005; Terry Golway, *Washington’s General: Nathanael Green and the Triumph of the American Revolution*, New York, NY: Henry Holt, 2005.

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.²⁸ Likewise, the American Civil War is framed by famous battles at Chancellorsville, Gettysburg, Vicksburg, and Antietam. Yet, partisan warfare and famous units like Mosby's 43rd Virginia cavalry provided less conventional capabilities as an economy of force operation.²⁹ T. E. Lawrence's role as an advisor to the Arab Revolt against the Ottomans is another classic case of Compound War that materially assisted General 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.³⁰

Vietnam is another classic case of the strategic synergy created by compound wars, juxtaposing the irregular tactics of the Viet Cong with the more conventional capabilities of the North Vietnamese Army.³¹ The ambiguity between conventional and unconventional approaches vexed military planners for several years. Even years afterwards, Americans debated what kind of war they actually fought and lost.³²

Upon detailed examination of the case studies presented, this theory did not hold up to its own definition in that we could identify only cases of strategic coordination rather than Huber's claim that forces fought alongside each other. When militia and irregular forces were ever employed with regular forces, as at Cowpens under Morgan's direction, the irregular forces were not employed as such but merely as second-rate conventional forces. This theory offered synergy and combinations at the strategic level, but not the complexity, fusion and simultaneity we foresaw at the operational and even tactical level. Irregular forces in these cases operated largely as a distraction or economy of force measure, in a separate theater or adjacent operating area, including the rear echelon. Because it is based on operationally separate forces, the

²⁸ Charles J. Esdaile, *Fighting Napoleon, Guerrillas, Bandits and Adventurers in Spain 1808-1814*, New Haven, CT: Yale University Press, 2004, pp. 154-155.

²⁹ Jeffrey D. Wert, *Mosby's Rangers*, New York, NY: Simon & Schuster, 1991.

³⁰ B. H. Liddell Hart, *Lawrence of Arabia*, New York, NY: Da Capo Press, 1989.

³¹ Harold G. Moore and Joseph L. Galloway, *We Were Soldiers Once...and Young: Ia Drang—The Battle That Changed the War in Vietnam*, New York, NY: Random House, 1992.

³² The best source on the war is Andrew F. Krepinevich, *The Army in Vietnam*, Baltimore, MD: Johns Hopkins University Press, 1986.

compound concept did not capture the merger or blurring modes of war we had identified in recent case studies or our projections.

Unrestricted Warfare

A pair of Chinese Colonels are notorious for their conception of Unrestricted Warfare—or “war beyond limits.”³³ This pair of Chinese political officers caused quite a stir by suggesting an immoral and potentially violent mutation in human conflict, one that was beyond the pale of most Western military scholars or practitioners. But a closer reading of their text reveals a lot of useful and even obvious conclusions. Well ahead of their time, the authors recognized the potential implications of globalization. Their conception of unrestricted warfare is really best translated as war “beyond limits,” and this translation serves to expand not just the forms that warfare takes, but the boundaries of the domains or dimensions of warfare that most Western military officers might hold.

The two Colonels did not suggest that war was without moral restraints or beyond any limits at all. They sought to expand the definition and understanding of *war beyond just its traditional military domain*. Like many insightful security analysts in Europe and the United States, Colonels Qiao and Wang also understood the strains that the conventional nation-state was under due to globalization. In their words:

The great fusion of technologies is impelling the domains of politics, economics, the military, culture, diplomacy, and religion to overlap each other. The connection points are ready, and the trend towards the merging of the various domains is very clear. All of these things are rendering more and more obsolete the idea of confining warfare to the military domain and of using the number of casualties as a means of the intensity of a war.³⁴

Their concept, which they overstated as “a completely new method of warfare” was titled “modified combined war that goes beyond limits” [*“pian zheng shi chao xian zube zhan”*]. This concept exploits the benefits of “combinations” in types of organizations and among the various domains of national power. While in the past, the Great Captains were masters of combinations, these were all achieved within the military

³³ Liang, *Unrestricted Warfare*.

³⁴ *Ibid.*, p. 162.

domain. In *Unrestricted Warfare*, future Great Captains must master the ability to “combine” all of the resources of war at their disposal and use them as means to prosecute the war. These resources must include information warfare, financial warfare, trade warfare, and other entirely new forms of war. These distinctions do not appear startling today, given our current efforts to harness all instruments of national power in Iraq. But the idea that “warfare is no longer an activity confined only to the military sphere,” remains outside the orthodoxy of Western military thinking even now.³⁵

In terms of the “beyond-limits” thinking, the authors noted that the United States is already effective at “supra-domain combinations,” or the combining of battlefields, or what American analysts call instruments of power. Their text highlights the U.S. mastery of supra-domain combinations against Iraq during Desert Storm by establishing a large coalition, by political actions at the United Nations (UN), by our sweeping military campaign, and the subsequent decade of pressure by the U.S. military coupled with economic sanctions.

Essential Principles

The authors generated a list of new principles appropriate to “beyond-limits combined war.” These include Omni-directionality, Synchrony, and Asymmetry.³⁶ These are defined below:

Omni-directionality – requires that commanders observe a potential battlefield without mental preconditions or blind spots. The designing of plans, employment measures, and combinations must make use of all war resources which can be mobilized. The commander is enjoined to make no distinction between what is or is not the battlefield. All the traditional domains, (ground, seas, air, and outer space) as well as politics, economics, culture, and moral factors are to be considered battlefields.

Synchrony – enjoins on commanders to link the disaggregated nature of multiple battlefields in different domains with consideration of the temporal dimension. In other words, “conducting actions in different spaces in the same period of time” to achieve desired effects. Instead of phases, with the accumulated results of multiple battles,

³⁵ *Ibid.*, p. 190.

³⁶ *Ibid.*, pp. 204-216.

strategic results can now be attained rapidly by simultaneous action or at designated times.

Asymmetry – here the authors recognized that asymmetry manifests itself to some extent in every aspect of warfare. However, asymmetry has been sought in operational terms within traditional military dimensions. In war beyond limits, the spectrum for overlooking the normal rules is much wider.

This concept poses an expansion of thinking about what constitutes war, one that challenges our conventional thinking. The authors rightly identified a number of implications of this concept, including the fact that Western military officers would have difficulty grasping the scope and nature of such a war. As other American authors have now noted, the U.S. focus on the operational level of war was essentially a preoccupation with battles, not the broader nature of war.³⁷ War “beyond limits,” on the other hand:

...will impose demands which will mean that most of the warriors will be inadequately prepared, or will feel as though they are in the dark: the war will be fought and won in a war beyond the battlefield; the struggle for victory will take place on a battlefield beyond the battlefield.³⁸

A pair of Air Force scholars reinforced our own understanding of this conception of future warfare with their discussion of “combinational warfare” based on their interpretation of Chinese strategic thinking.³⁹ Of course, supra-domain operations are also suggested by American strategists as well, including Yale Professor Paul Bracken, who has written about forms of economic warfare that exploit modern computer networks, banking systems and information operations.⁴⁰

Related to this discussion is the Chinese strategic concept of *shashou jiang* or *shashoujian* most often translated as “Assassin’s Mace.” This

³⁷ Antulio J. Echevarria, II, “Towards an American Way of War,” Carlisle, PA: Army War College, Strategic Studies Institute, March 2004.

³⁸ *Unrestricted Warfare*, p. 153.

³⁹ James Callard and Peter Faber, “An Emerging Synthesis for a New Way of War: Combinational Warfare and Future Innovation,” *Georgetown Journal of International Affairs*, Winter/Spring 2002, pp. 61-68.

⁴⁰ Paul Bracken, “Financial Warfare,” *E-Notes*, Philadelphia, PA: Foreign Policy Research Institute, September 2007.

concept relates to a perceived emphasis on advanced weapons and methods to attack identified vulnerabilities in Western military operations by Chinese military research and developmental efforts. U.S. government reports emphasize the development of these purportedly nefarious weapons and methods.⁴¹ Within the Chinese literature, these systems and modes are usually described as the People's Liberation Army's (PLA) trump card to Western military superiority and a necessary response for an inferior force to defeat a superior military power. A number of information warfare and missile development programs have been described as potential Assassin's Mace projects within the PLA. However, most of the PLA literature on this topic focuses on mimicking or offsetting the so-called American "Revolution in Military Affairs" and the exploitation of information technology.

The 2005 National Defense Strategy

Our development of a new warfighting construct to deal with emerging threats was significantly influenced by the publication of the inaugural National Defense Strategy in March 2005. The strategy broadens the scope of military planners to think past traditional threats that conveniently array themselves in open terrain for attack by America's preferred mode of precise stand-off warfare. The NDS acknowledged that America's military predominance influences the behavior of its enemies, and that our preeminence forces adversaries away from *traditional* forms of warfare. Instead these potential adversaries shift from opposing us conventionally and prepare more nontraditional or asymmetric capabilities and methods.

The NDS goes on to frame and define an array of *traditional*, *irregular*, *catastrophic*, and *disruptive* capabilities and methods that could threaten U.S. interests:

- ***Traditional*** challenges are posed by states employing recognized military capabilities and forces in well-understood forms of military competition and conflict.

⁴¹ See the Department of Defense Annual Report to Congress, Military Power of the People's Republic of China, 2006. Additionally, for a deep cultural exploration of this strategic concept see Jason E. Bruzdinski, "Demystifying *Shashoujian*: China's "Assassin's Mace" Concept," in Larry Wortzel and Andrew Scobell, eds., *Civil-Military Change in China*, Carlisle, PA: Army War College, 2004, pp. 309-364.

- **Irregular** challenges come from those employing “unconventional” methods to counter the *traditional* advantages of stronger opponents.
- **Catastrophic** challenges involve the acquisition, possession, and use of weapons of mass destruction (WMD) or methods producing WMD-like effects.
- **Disruptive** challenges may come from adversaries who develop and use breakthrough technologies to negate current U.S. advantages in key operational domains.⁴²

We found enormous value in the NDS and its commendable approach. The clearest benefits of this framework were highest at the strategic level. The wider set of challenges allowed OSD to examine its investment portfolio to preserve America’s current competitive advantage in conventional operations while also enhancing capabilities in Irregular war, deflecting acts against catastrophic terrorism, and avoiding strategic surprise in the Science and Technology arena.

But operationally, the NDS and the four challenges prospect did not satisfy our understanding of the kinds of threats the Marine Corps would face in the future, and it did not match our assessment of the ongoing merger or blurring of modes of war. The interpretation given to the NDS as the QDR was developed reinforced this assessment, as QDR implementation efforts continued to create very distinct and separate threats. This occurred despite the notion that the challenger categories could and would overlap, and the explicit statement in the NDS that:

[R]ecent experience indicates that 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.⁴³

Despite the useful framework set forth in the QDR, tomorrow’s conflicts will not be easily categorized into simple classifications of conventional or irregular wars. In fact, some of today’s best thinking acknowledges the blurring of lines between modes of war. Our greatest challenge will not come from a state that selects one approach, but from

⁴² Donald Rumsfeld, *The National Defense Strategy of the United States of America*, Washington, D.C., March 2005, pp. 2-4.

⁴³ *Ibid.*, p. 4.

states or groups that select from the whole menu of tactics and technologies to meet its own strategic culture and geography. As Dr. Mike Evans, now of the Australian Defence Academy, wrote well before the QDR:

The possibility of continuous sporadic armed conflict, its engagements blurred together in time and 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.⁴⁴

Many other analysts have captured these trends, with Russian, Australian, and American authors talking about “multi-modal” and “multi-variants” forms of war. But Dr. Evans was exceptionally insightful, noting:

....that British, French and Russian defense experts now speak of the rise of multi-variant warfare. They speak of a spectrum of conflict marked by unrestrained Mad Max wars in which symmetric and asymmetric wars merge and in which Microsoft coexists with machetes and stealth technology is met by suicide bombers.⁴⁵

Other Australian scholars pointed out the increasingly complex nature of the operating environment, particularly the presence of large numbers of civilians, dense urban environments and complex information activities. The Australian warfighting concept paper *Complex Warfighting* was material to our thinking at the time.⁴⁶ The Australian Army’s capstone concept was very forward looking, and captured the complexity of the terrain in future conflicts in terms of physical terrain, human terrain and informational terrain. This concept also captured the diffusion or blurring of conflict types, combatants/noncombatants, and war/peacetime. It also highlighted the

⁴⁴ Michael Evans, “From Kadesh to Kandahar: Military Theory and the Future of War,” *Naval War College Review*, Summer 2003, p. 136. In addition to Dr. Evans, Dr. Steve Blank, a research fellow at the Army’s Strategic Studies Institute, has followed these same trends. See Stephen Blank, “The War That Dare Not Speak its Name,” *Journal of International Security Affairs*, Spring 2005.

⁴⁵ Evans, “From Kadesh to Kandahar,” p. 140.

⁴⁶ Australian Army, *Complex Warfighting*, Future Land Warfare Branch, 2004. This paper was approved in 2005 as the Australian Army’s official Future Land Operational Concept. The principal author of this paper was LtCol David Kilcullen, Australian Army (now retired) who gave invaluable assistance.

implications of the “virtual theatres” of conflict that have developed from global communications technology.

American insights were also solicited, and the netwar concepts regarding new adversary organizational models were thoroughly reviewed and absorbed into our thinking.⁴⁷ Dr. Richard Harknett argued for an increasingly multidimensional character of war, but also greater lethality, based on “the combination of existing and new forms of organization with existing and new forms of destructive capability.”⁴⁸ Harknett shares Evans’ concerns for unique combinations, or as the latter put it, “a world of asymmetric and ethnopolitical warfare—in which machetes and Microsoft merge, and apocalyptic millenarians wearing Reeboks and Raybans dream of acquiring weapons of mass destruction.”⁴⁹

Hybrid Threats and Challengers

Thus, we have to conclude that the future does not portend a suite of distinct challengers with alternative or different methods but their convergence into multi-modal or Hybrid Wars. “Hybrid Wars” blend the lethality of state conflict with the fanatical and protracted fervor of irregular warfare. The term “Hybrid” captures both their organization and their means. Organizationally, they may have a hierarchical political structure, coupled with decentralized cells or networked tactical units. Their means will also be hybrid in form and application. 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, like anti-satellite weapons, with terrorism and cyber-warfare directed against financial targets. Conflicts will include hybrid organizations like Hezbollah and Hamas, employing a diverse set of capabilities. Additionally, states can shift their conventional units to irregular formations and adopt new tactics, as Iraq’s *Fedayeen* did in 2003.

In such conflicts we will face major states capable of supporting covert and indirect means of attack, as well as Thomas Friedman’s

⁴⁷ John Arquilla and David Ronfeldt, eds., *In Athena’s Camp: Preparing for Conflict in the Information Age*, Santa Monica, CA: RAND, 1997.

⁴⁸ Quoted in Blank, p. 32.

⁴⁹ Michael Evans, “From Kadesh to Kandahar,” p. 136.

“super-empowered” fanatics capable of highly lethal attacks undercutting the sinews of global order.⁵⁰ Cunning savagery, continuous improvisation and rampant organizational adaptation will mark this form of warfare. Such wars will not be conventional, low in intensity or short—and as General Rupert Smith notes in *The Utility of Force*, these conflicts can be timeless.⁵¹

These Hybrid Wars are polymorphous by their nature as are their antagonists.⁵² Hybrid Wars can be conducted by both states and a variety of non-state actors. *Hybrid Wars incorporate a range of different modes of warfare including conventional capabilities, irregular tactics and formations, terrorist acts including 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. The effects can be gained at all levels of war.

At the strategic level, many wars have had regular and irregular components. However, in most conflicts, these components occurred in different theaters or in distinctly different formations. In Hybrid Wars, these forces become blurred into the same force in the same battlespace. While they are operationally integrated and tactically fused, the irregular component of the force attempts to become operationally decisive rather than just protract the conflict, provoke overreactions or extend the costs of security for the defender.

Unlike in Maoist or compound wars, the purpose of the multi-modal approach is not to facilitate the progression of the opposition force through phases nor is it to help set up a conventional force for decisive battle. Hybrid opponents, in contrast, seek victory by the fusion of irregular tactics and the most lethal means available in order to attack and attain their political objectives. The disruptive component of Hybrid Wars does not come from high-end or revolutionary technology but from criminality. Criminal activity is used to sustain the hybrid force or to facilitate the disorder and disruption of the target nation. The goal may include protracted conflicts with a greatly diffused set of force

⁵⁰ “Super-empowered individuals” is from Thomas L. Friedman, *The Lexus and the Olive Tree: Understanding Globalization*, New York, NY: Anchor Books, 1999, pp. 14-15.

⁵¹ Rupert Smith, *The Utility of Force*, p. 8. General Smith noted “our conflicts tend to be timeless, even unending.”

⁵² Christopher Coker, “Cultural Ruthlessness and the War Against Terror,” *Australian Army Journal*, Vol. III, No. 1, 2006 p. 148.

capabilities to wear down resistance, or the actual defeat of a conventionally-oriented government.

This concept draws upon many schools of thought. From the 4GW school, it uses the concept of the blurring nature of conflict and the loss of the State's monopoly of violence. The concepts of omnidimensionality and combinations were crucial ideas adopted from Chinese analysts. From John Arquilla and T.X. Hammes we took in the power of networks. From the proponents of Compound Wars, the concept absorbs the synergistic benefit of mixing conventional and unconventional capabilities, but at lower and more integrated levels. From the Australian experts, we have accepted the growing complexity and disaggregated nature of the operational environment, as well as the opportunistic nature of future adversaries.

Since our initial research, we have gained new insights from a variety of sources, but none more critical than terrorism expert John Robb, whose Open Source Warfare concept points out the increasingly vulnerable nature of modern urban complexes.⁵³ Equally critical have been insights from Georgetown University professor Bruce Hoffman whose work on terrorism and insurgency has been highly influential over the past several decades, especially on the rising importance of urban insurgency. He has identified the growing tendency of insurgents today to adopt conventional means of greater and greater lethality as part of something he called "stand off insurgency." In such insurgencies, the insurgent exploits modern means including the IED, advanced munitions, unmanned aerial vehicles (UAVs) and even precision guided missiles to gain greater stand off against conventional counterinsurgent forces.⁵⁴ From both British and American Army theorists we have incorporated the role that criminal behavior, smuggling and narcotics play within today's conflict.⁵⁵

⁵³ John Robb espouses Open Source Warfare which aptly captures the entrepreneurial element of today's enemies. John Robb, *Brave New War: The Next Stage of Terrorism and the End of Globalization*, Hoboken, NJ: Wiley, 2007.

⁵⁴ Bruce Hoffman, "The 'Cult of the Insurgent': its tactical and strategic implications," *Australian Journal of International Affairs*, Vol. 61, Issue 3, September 2007, pp. 312–329.

⁵⁵ Lieutenant Colonel Andrew Ross, Royal Marines, "Joint Concept for Disorder, Insurgency, Criminality and Terrorism, J-DICT," Presentation to the Marine Irregular Warfare II Conference, Quantico, VA, July 6, 2005.

Subsequent Supporting Research

Subsequent to the development of this concept and its publication in 2005, a number of authors and analysts have come to the same conclusions. OSD strategists who worked on the QDR regret not having fully documented and explored the Hybrid Warfare phenomena that they believed to pose the most significant threat to U.S. interests in the future.⁵⁶ OSD policy makers are in the process of extrapolating from the last major defense review, and are now gauging the importance of future conflicts in terms of complex irregular wars or hybrid conflicts.⁵⁷

Key scholars are also acknowledging the blending or blurring character of future conflicts. The most historically astute of strategic observers have admitted that while the future is hard to predict, there are clear tendencies and trends that mark tomorrow's path. Professor Colin Gray, of the University of Bristol, has grudgingly admitted that with regard to future conflict in this century, that the one feature "we can predict with confidence is that there is going to be a blurring, a further blurring, of warfare categories."⁵⁸

The American intelligence community has devoted some effort into studying the concept. Numerous studies have been initiated to study the nature of "disruptive challenges" in particular, with CETO asked to provide briefings and insights into these projects. The Director of National Intelligence's long-range conflict team assessed the potential complexity and synergy of hybrid approaches, and published a well received paper about disruptive approaches. Other analysts continue to study the Chinese concept of "unrestricted warfare."⁵⁹ Chinese strategists continue to evolve in their study of future conflict, and adopted their People's War thinking to incorporate both low and high

⁵⁶ Nathan Freier, "Strategic Competition & Resistance in the 21st Century: Irregular, Catastrophic, Traditional, & Hybrid Challenges in Context," Carlisle, PA: Army War College, 2007, p. 96.

⁵⁷ Dr. Thomas Mahnken, paper delivered to the International Institute for Strategic Studies, Global Strategy Review, Geneva Switzerland, September 6, 2007.

⁵⁸ Colin S. Gray, *Another Bloody Century: Future Warfare*, London, UK: Weidenfeld & Nicolson, 2006.

⁵⁹ Daniel Flynn, *The Changing Character of Conflict—Disrupting the American Way of War (U)*, Langley, VA: NIC 2007; Mathew J. Burrows, "Intelligence Community Perspective On the Maturing URW Threat," in Ronald Luman, ed., *Proceedings of the 2007 Unrestricted Warfare Symposium*, Johns Hopkins University/Applied Physics Lab, 2007.

tech, and have extended the concept and the battlespace into the civilian and non-military realm.⁶⁰ These developments bear watching.

British and Australian officers have moved ahead and begun the hard work of drawing out implications and the desired counter-capabilities required to effectively operate against hybrid threats. The British have gone past American and Marine concept writers and already incorporated hybrid threats within their construct for irregular war.⁶¹ Australian security analysts continue to be on the front lines of inquiry in this area.⁶²

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. Dr. John Arquilla, an expert in irregular warfare tactics and networked forms of organization, has concluded that:

Networks 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.⁶³

Other American and international scholars at the Naval War College in Newport, RI and at King's College London have endorsed and extended the concept.⁶⁴ Max Boot, an Olin Fellow at the Council of Foreign Relations, recently 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

⁶⁰ See Pen Guangqian and Yao Youzhi, eds., *The Science of Military Strategy* (English version), Beijing: Military Science Publishing House, 2005, p. 117.

⁶¹ Rear Admiral Chris Parry, *Countering Irregular Activity Within A Comprehensive Approach*, Joint Doctrine Note 2/07, United Kingdom, March 2007, p. 1-15.

⁶² Brigadier Michael G. Krause, "Square Pegs for Round Holes?," Australian Army, Australian Land Warfare Studies Centre, *Working Paper No. 132*, June 2007.

⁶³ Arquilla, "The end of war as we knew it," p. 369.

⁶⁴ Mackubin Thomas Owens, "Reflections on Future War," *Naval War College Review*, Forthcoming; David Betz, "A Real Revolution in Military Affairs: Online Continuous Learning for the Operational Warfighter," paper delivered at the Marine Training and Education Command Conference, Pedagogy for the Long War, October 29-31, 2007.

unconventional strategies to blunt the impact of American power.⁶⁵

To conclude this chapter, tomorrow's conflicts will not be easily categorized into simple classifications of conventional or irregular. Numerous security analysts have acknowledged the blurring of lines between modes of war. Conventional and irregular forces, combatants and noncombatants, and even the physical/kinetic and virtual dimensions of conflict are blurring. As Dr. Mike Evans has recently noted in his overview of future conflict:

Armed conflict also began to reflect a bewildering mixture of modes—conventional and unconventional activity merged—while many combatants simultaneously employed modern Kalashnikov assault rifles, pre-modern machetes and post-modern cellular phones in their operations.⁶⁶

⁶⁵ Max Boot, *War Made New: Technology, Warfare, and the Course of History, 1500 to Today*, New York, NY: Random House, 2006, p. 472.

⁶⁶ Michael Evans, "From the Long Peace to the Long War: Armed Conflict and Military Education and Training in the 21st Century," Australian Defence College, Occasional Paper No. 1, 2007, p. 6.

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HEZBOLLAH AS PROTOTYPE

“This war will be studied in all military academies in the world as a new kind of war which requires new and unprecedented definitions of how to fight it and how to win it.”⁶⁷

We explored a number of historical precedents to illuminate the nature of modern hybrid challengers. The Irish insurgents of 1919-1920 were initially reviewed, as they exploited some conventional or militia units, with terrorism and intelligence penetration operations. They conducted flying columns in the country, urban operations at home and abroad, and leveraged their own Diasporas in England and the United States. We also studied the capabilities of the Mujahideen in Afghanistan in the 1980s, and the experiences of the Chechen rebels in their contest against Russian domination was also explored in some detail.⁶⁸

We also looked at the Balkans experience of the post-Yugoslavia era. This period led to postulations about “new wars” among European theorists. But while the shift from ideology to identity was noted, we did not find much that was truly novel in the so-called “new wars.” In all cases, we found conventional and irregular tactics, terrorism, as well as criminal activity. However, we did not find the multi-dimensionality, operational integration or the exploitation of the information domain to the degree we see today or expect tomorrow. These cases represent—at best—first generation Hybrid Warriors or the earliest prototypes.

Next we began studying current operations in the Middle East. This phase took on a new direction during the Summer 2006 war between Israel and Hezbollah. This is the clearest example of a modern Hybrid challenger. Hezbollah, led by Hassan Nassrallah, demonstrated a number of state-like military capabilities, including thousands of short and intermediate-range rockets and missiles. This case demonstrates the ability of nonstate actors to study and deconstruct the vulnerabilities of

⁶⁷ As quoted by Molly Moore, “Israelis Confront ‘New Kind of War,’” *The Washington Post*, August 9, 2006, p. A11.

⁶⁸ Steve Coll, *Ghost Wars: The Secret History of the CIA, Afghanistan, and Bin Laden, from the Soviet Invasion to September 10, 2001*, New York, NY: Penguin, 2004. On the Chechens see Anatoly S. Kulikov, “The First Battle of Grozny,” in Russell Glenn, ed., *Capital Preservation: Preparing for Urban Operations in the Twenty-first Century*, Santa Monica, CA: RAND, 2001. For a comparative assessment, see Olga Olikier, *Russia’s Chechen Wars 1994-2000: Lessons from Urban Combat*, Santa Monica, CA: RAND, 1998.

Western style militaries. Hezbollah, abetted by the adoption of erroneous strategic concepts and some intelligence filters by Israeli officials, devised and implemented appropriate operational and tactical measures for its security objectives. These tactics and the technologies supporting them surprised many, which compounded the shock effect and tilted the battle of perceptions towards Hezbollah. The constant action-reaction cycle of technological advances is age old, but it appears it needs to be relearned the hard way.⁶⁹

Our research program was not alone in pointing to the relevancy of this short and incomplete clash of wills.⁷⁰ A number of analysts seized on the same issues, concluding that “Hezbollah’s relative success against Israel in the summer of 2006 is an important case study, worth analyzing in greater detail.”⁷¹

We agreed that this case study is important and definitely worthy of detailed analysis. The amorphous Hezbollah is representative of the rising hybrid threat. This battle in southern Lebanon reveals significant weaknesses in the posture of the Israeli defense force—but it has implications for American defense planners too. Mixing an organized political movement with decentralized cells employing adaptive tactics in ungoverned zones, Hezbollah showed that it could inflict as well as take punishment. Its highly disciplined, well trained, distributed cells contested ground and wills against a modern conventional force using an admixture of guerrilla tactics and technology in densely packed urban centers.

Hezbollah, like jihadist 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 build strong defensive fortifications in close proximity to noncombatants.⁷²

⁶⁹ Guy Ben-Ari, “Technological Surprise and Technological Failure in the Current Lebanon Crisis,” Commentary, Center for Strategic and International Studies, Washington, D.C., July 25, 2006.

⁷⁰ Frank Hoffman, “Hezbollah and Hybrid Wars: U.S. Should Take Hard Lesson from Lebanon,” *Defense News*, August 14, 2006, p. 52.

⁷¹ Ariel Cohen, “Knowing the Enemy: How to Cope with Global Jihad,” *Policy Review*, No. 145, October/November 2007, p. 43. Accessed at www.hoover.org/publications/policyreview/10162676.html.

⁷² Andrew Exum, “Hizballah at War: A Military Assessment,” Washington, D.C.: Washington Institute for Near East Policy, *Policy Focus #63*, December 2006, pp. 9-11. On the battles for Fallujah, see Francis “Bing” West, *No True Glory: A Front Line Account of the Battle for Fallujah*, New York, NY: Bantam, 2005.

In the field, Israeli troops grudgingly admitted that the Hezbollah defenders were tenacious and skilled.⁷³ They were “maddeningly elusive” and deliberately blended into the civilian population and infrastructure. The organized resistance was several orders of magnitude more difficult than their counter-terrorism operations in the West Bank and Gaza strip. The degree of training, fire discipline and technological advancement were much higher. “You can tell Hezbollah has been trained in guerrilla fighting by a real army,” observed one experienced Israeli Defense Forces (IDF) Captain.⁷⁴

The implications are not relevant only to ground forces. Hezbollah’s use of C802 anti-ship cruise missiles and volleys of rockets represents a sample of what “Hybrid Warfare” might look like, which is certainly relevant to naval and airpower analysts as well.⁷⁵

Tactical combinations and novel applications of technology by the defenders were noteworthy. In particular, the anti-armor missile systems employed by Hezbollah, against IDF armor and defensive positions, coupled with decentralized tactics were a surprise. At the battle of Wadi Salouqi a column of Israeli tanks were stopped in their tracks by Hezbollah employing Russian anti-armor missiles with telling precision.⁷⁶ Hezbollah’s anti-tank weapons include the Russian made RPG-29, a powerful variation on a standard rocket-propelled grenade, the Russian AT-13 *Metis*, which has a range of one mile; and the Russian-built AT-14 *Kornet*, which has a range of three miles and thermal sights for tracking the heat signatures of tanks. The IDF found the AT-13 and AT-14 to be formidable against their first line Merkava Mark IV tank. A total of 18 Merkavas were damaged, and it is estimated that ATGMs accounted for 40 percent of the IDF’s fatalities.

Hezbollah even managed to launch a few armed UAVs that required the IDF to adapt in order to detect them. These included either the

⁷³ Matthew B. Stannard, “Hezbollah wages new generation of warfare,” *San Francisco Chronicle*, August 6, 2006; Jonathan Finer, “Israeli Soldiers Find a Tenacious Foe in Hezbollah,” *Washington Post*, August 8, 2006, p. 1.

⁷⁴ Captain Hanoch Daub quoted in Greg Myre, “Israel’s Wounded Describe Surprisingly Fierce, Well-Organized and Elusive Enemy,” *New York Times*, August 12, 2006, p. A5.

⁷⁵ Matt Hilburn, “Hezbollah’s Surprise,” *Seapower*, September 2006, pp. 10-12.

⁷⁶ Judith Palmer Harik, *Transnational Actors in Contemporary Conflicts: Hizbullah and its 2006 War with Israel*, Cambridge, MA: Harvard University, Program on Humanitarian Policy and Conflict Research, March 2007, p. 14; Exum, pp. 9-14.

Iranian Mirsad-1 or Ababil-3 Swallow.⁷⁷ One source reports that more than two dozen of these systems may remain in Hezbollah's possession. These concern Israeli strategists given their GPS-based navigational system, 450-kilometer range, and 50 kg explosive carrying capacity.⁷⁸ There is evidence that Hezbollah invested in signals intelligence and monitored IDF cell phone calls for some time, as well as unconfirmed reports that they managed to de-encrypt IDF radio frequency hopping radio traffic based on an algorithm-based system similar to SINCGARS.⁷⁹

The battle for perception dominance was just as critical as the strategic strike competition and the gritty defense of the villages of southern Lebanon. Hezbollah's strategic and operational level information operations were impressive.

Not until this war have networks actually projected in real time the grim reality of the battlefield pictures of advancing or retreating Israeli troops in southern Lebanon, homes and villages being destroyed during bombing runs, old people wandering aimlessly through the debris, some tailed by children hugging tattered dolls, Israeli airplanes attacking Beirut airport, Hezbollah rockets striking northern Israel and Haifa—all conveyed live as though the world had a front row seat on the blood and gore of modern warfare.⁸⁰

Claims about a victory for Nasrallah are a bit dubious in strictly military terms. He later admitted that had he known that Israel would react the way it did, he would not have authorized the initial attack and kidnapping of Israeli soldiers. But one thing is certain, the IDF's credibility has been weakened and Hezbollah arguably came out of the conflict stronger in ideological appeal. Israel failed to rout the Iranian-backed force, and may have lost the strategic battle of perceptions. Hezbollah was able to exploit the political effects of their limited tactical successes, magnified by the media. They lost a significant portion if not

⁷⁷ Anthony Cordesman, "Preliminary Lesson of Israeli-Hezbollah War," Washington, D.C.: Center for Strategic and International Studies, August 17, 2006, p. 16.

⁷⁸ *Ibid.*, p. 5. See also Harik, pp. 19-20.

⁷⁹ Mohamad Bazzi, "Hezbollah cracked the code," *Newsday.com*, September 18, 2006. Accessed at www.newsday.com/news/nationworld/world/ny-wocode184896831sep18,0,4008301818.story?coll=ny-worldnews-print.

⁸⁰ Marvin Kalb, "The Israeli-Hezbollah War of 2006: The Media as a Weapon in Asymmetrical Conflict," Faculty Research Working Paper RWP07-012, John F. Kennedy School of Government, Harvard University, February 2007, p. 4.

all of their operational strike capability in short order, and consumed an equally large proportion of their rocket arsenal. Israel did inflict large losses on the most dedicated and trained portion of the militia's ground force. Most estimates suggest a range of between 500 and 600 guerrilla fighters were killed in the contest. Israeli losses were a quarter of that, partly by relying on high levels of air and artillery support. The IDF launched nearly 19,000 sorties, which delivered almost 20,000 bombs and 2,000 missiles against almost 7,000 targets. In addition, nearly 125,000 artillery and heavy mortar shells were expended. But the IDF's intelligence was clearly faulty, as was their conventional fighting readiness and logistics.⁸¹

Hezbollah's real advantage lay not in technology but in having the luxury of being able to prepare the terrain and their tactics for a single recognized enemy. They operated as decentralized cells and their training and tenacity paid off. They proved willing to engage the IDF in prepared close encounters, and were willing to absorb great punishment to inflict a cost. Their Katushyas and Kornet missiles extracted a price for Israel's intervention. Hezbollah managed to fire over 4,100 rockets into Israel between 12 July and 13 August, 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 in both the physical domain and in the media by forcing the evacuation of many towns in the northern sector of Israel. Retired Army officer Ralph Peters, who visited Lebanon during the fighting, observed that Hezbollah:

...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 pre-positioned stockpiles of weapons and ammunition. Hezbollah'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.*⁸² (emphasis added)

Peters is on the money, as usual. Organizations like Hamas are already emulating Hezbollah. According to *Jane's Defence Weekly*, Hamas

⁸¹ For an early take on the conflict see David Makovsky and Jeffrey White, "Lessons and Implications of the Israel-Hizballah War: A Preliminary Assessment," Washington Institute for Near East Policy, *Policy Focus* #60, October 2006.

⁸² Ralph Peters, "Lessons from Lebanon: The new model terrorist army," *Armed Forces Journal International*, October 2006, p. 39; Thom Shanker, "A New Enemy Gains on the U.S.," *New York Times*, July 30, 2006, p. B1.

has just taken delivery of a supply of AT-5 anti-armor missile systems as well as some SA-7s.⁸³ Hamas surprised many with the launching of an upgraded Katushya in mid-October 2007 as well. Perhaps Stand Off Insurgency is evolving and cross pollinating as well. Postings on Hamas' websites suggest that they are an active learning organization, with observations about Hezbollah's perceived success. The Israeli Institute for Counter Terrorism translated some of these observations about Hezbollah's operations, noting:

Hizbullah's uniqueness compared to other military organizations using guerrilla tactics is that they are the first resistance movement with traditional army capabilities, within the framework of guerrilla war, and it is the first armed unorganized splinter movement which has strategic weapons.⁸⁴

Of course, Hezbollah benefits from arms and training expertise supplied by Tehran, and perhaps others. This should not be used to discount the threat, and it may actually say a good deal about the relative costs of efforts to intervene in Iran that require using ground forces.⁸⁵

Emulation is not limited to transnational organizations. Syria reportedly finds Hezbollah's success worth studying. Purportedly, it is now investing extensively in tactical missiles and in training its commando division in urban and guerrilla tactics.⁸⁶ According to Israeli sources, Syria has established additional commando forces as well. "Syria saw the difficulty the IDF had during the fighting inside the southern Lebanese villages and now the military there wants to draw us - in the event of a war - into battles in built-up areas where they think they will have the upper hand," according to an IDF officer.

The U.S. military would do well to study this prototype of an effective hybrid adversary as Ralph Peters and others have suggested. The IDF attempted a number of American conceptual approaches with little success, which does not bode well for U.S. efforts to laminate technological programs and preferred operational paradigms. This was not simply a guerrilla war with traditional tactics, but a "concocted mix,

⁸³ Alon Ben-David, " Hamas Boosts Its Weapon Stocks," *Jane's Defence Weekly*, October 23, 2006, p. 16.

⁸⁴ Jonathan Figchel, " Hamas and the Hizbullah experience," Institute for Counter-Terrorism. Accessed at www.ict.org.il/apage/6957.php.

⁸⁵ An observation made by Cordesman, "Preliminary Lessons of Israeli-Hezbollah War," p. 23.

⁸⁶ The Jerusalem Post website, "Israel Officials Warn of "Unprecedented" Military Buildup by Syria," April 13, 2007.

Lebanonized from several models of warfare.”⁸⁷ The limitations of existing Western or American doctrine and operating concepts for techno-centric solutions and Stand Off Warfare are quite evident. New concepts and operational art modifications are undoubtedly necessary for this emerging threat.⁸⁸

It is possible to make too much out of Hezbollah’s strength, and fail to note that Israel was a party to this contest too. It is the interaction of the policies and capabilities of the two adversaries, reflected in Clausewitz’s famous duel analogy, which ultimately measures strategic and operational effectiveness. The Winograd Commission reported a number of shortcomings at the political and military levels during the war. Its interim report was a detailed post-mortem on the decision making process and the civil-military interaction throughout the contest. The Commission found flaws in the process, information content, information flow and resulting decisions at the strategic level. That body found that the decision to respond immediately with military air power and artillery was not based on a comprehensive strategic plan or even a thoroughly vetted military plan.⁸⁹

Hezbollah affirms an emerging trend and underscores potential dangers. Highly disciplined, well trained, distributed cells can contest modern conventional forces with an admixture of guerrilla tactics and technology in densely packed urban centers. This case offers a useful live laboratory to future antagonists who will study “how a small-scale jihadist organization managed to face down, through innovative use of guerrilla tactics and advanced weaponry, one of the strongest and most experienced conventional armies in the world.”⁹⁰

Western concepts such as “shock and awe” and Diffused Warfare do not appear to be effective against such threats, and their relevance against any challenger remains suspect.⁹¹ If we can objectively study this

⁸⁷ Elias Hanna, “Lessons Learned from the Recent War in Lebanon,” *Military Review*, September-October 2007, p. 86; Daniel Byman and Steven Simon, “The No-Win Zone: An After-Action Report from Lebanon,” *National Interest*, November/December 2006, pp. 55-61.

⁸⁸ Ron Tiras, “Breaking the Amoeba’s Bones,” *Strategic Assessment*, Vol. 9, No. 3, November 2006; Ron Tiras, *The Limitations of Standoff Firepower-Based Operations*, Memoranda No. 89, March 2007.

⁸⁹ See the Winograd Commission’s partial report summary provided by the Council on Foreign Relations at www.cfr.org/publication/13228/.

⁹⁰ Harik, *Transnational Actors in Contemporary Conflicts*, p. 20.

⁹¹ Yedidia Groll-Yaari and Haim Assa, *Diffused Warfare: The Concept of Virtual Mass*, Tel Aviv, Israel: Yediot Aharonot Press, 2007.

conflict, both Israeli and American planners may find it a blessing in disguise.⁹²

⁹² Bill Powers, "When War is a Blessing," *American Thinker*, October 30, 2007. Accessed at www.americanthinker.com/2007/10/when_war_is_a_blessing.html.

IMPLICATIONS

[C]onventional, twentieth-century military doctrines aimed at wars against nation-states and industrial-era mass armies are effectively dead. Even the best traditional militaries, such as the U.S. and Israeli armies, face formidable difficulties when confronted with irregular, well-motivated, and foreign-supported forces, which enjoy media battlefield advantages. The Israel-Hezbollah conflict was not so much a defeat of Israel as it was a defeat of the old-style warfare by the new.⁹³

The rise of Hybrid Warfare *does not* represent the defeat or the replacement of “the old-style warfare” or conventional warfare by the new. But it does present a complicating factor for defense planning in the 21st Century. Future adversaries will not offer up “tactics of the weak” and operate in distant mountain retreats. They will exploit the tactics of the smart and agile, presenting greater reach and lethality. They may attempt to operate within heavily populated cities, and use the networks of an urban metropolis to maneuver within as well as to sustain themselves. Their operations may seek to defeat the host government or U.S. forces directly and not merely protract a conflict without seeking a decision. States may apply these techniques in order to deter or deny U.S. forces the ability to intervene successfully, rather than employ an anti-access strategy. In any event, they will seek to disrupt our freedom of action, drive up the costs of any American intervention, and finally, deny us our objectives.

The operational implications could be significant, but will have to be carefully thought through. The historical foundation for much of our understanding about war requires fresh and creative approaches if we are going to draw out the correct implications. As one of the nation’s leading scholars in irregular conflict 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—*sparkling myriad, hybrid forms of conflict*—is going to require some innovative thinking.”⁹⁴

⁹³ Cohen, p. 53.

⁹⁴ Arquilla, “The end of war as we knew it,” p. 369.

We will never begin the journey without letting loose of the conservative blinders and the cultural boundaries that constrain innovative thinking. The strategist Ralph Peters has warned we need to prepare for “governments and organizations willing to wage war in spheres now forbidden or still unimagined.”⁹⁵ We, as a nation, remain intellectually and institutionally unprepared for the mutation of war beyond conventional approaches. However, organizationally we have made some progress. Some of the innovative thinking has begun at the strategic level in Washington, D.C. The establishment of the Department of Homeland Security (DHS) and the planning scenarios it has developed, along with efforts to better secure the nation’s critical infrastructure from man-made attack or penetration, are required if Hybrid Warfare evolves as projected in this paper. Much more still needs to be done, as the days when distance and oceans could protect us are now history.

But the focus of this paper is on the mid-range time period, and is oriented on projected Defense missions at the operational and tactical levels. The greatest impediment to successfully adapting America’s national security architecture and enhancing its readiness for more trans-dimensional or multi-modal adversaries is cultural. America’s military culture sees its professional role and status as inextricably linked to traditional modes of war and to maintaining its conventional superiority. Recognition of past history is useful, but it should not blind the national security community to the rising threat of hybrid antagonists. Future contingencies against hybrid challengers *will* engage vital and core U.S. security interests and *will not* be wars of choice.⁹⁶

It is profoundly ironic that America’s military culture has such difficulty with irregular approaches. Viewed over our entire history, so called irregular wars are the historical tradition of the U.S. military, despite the more traditional focus of the post-World War II military. An admixture of European conventional forces supplemented by unconventional auxiliaries characterized conflicts in North America

⁹⁵ Ralph Peters, *Wars of Blood and Faith: The Conflicts That Will Shape the Twenty-First Century*, Mechanicsburg, PA: Stackpole, 2007, p. 3.

⁹⁶ Jeffrey Record, “The American Way of War: Cultural Barriers to Successful Counterinsurgency,” Washington, D.C., CATO Institute, *Policy Analysis*. No. 577, September 1, 2006.

before 1776. General Braddock's debacle on the road to Fort Duquesne was undoubtedly instructive to the colonials who would later seek independence. George Washington's subsequent success as a general owes much to the employment of irregular forces in the American Revolution, most notably in the Carolinas.⁹⁷

Despite its more conventional Civil War experience, the U.S. Army readily adapted to the nature of combating native American Indians on the Plains.⁹⁸ This experience served the U.S. Army well in the Philippine insurgency, despite a lack of formal doctrine.⁹⁹ Much of this experience was absorbed and reapplied by the Army and Marines in the inter-war era. Post-war occupations after World War II, and work in Africa, Central and Latin America as well as Southeast Asia followed.¹⁰⁰

However, over the past half-century, American military doctrine and culture has narrowed its perspective about the spectrum of war. Seeking to define and mark out its professional jurisdiction, the U.S. military has sought to maximize its expertise and professionalism within the more conventional confines of state versus state conflict.¹⁰¹ But the U.S. armed forces cannot just focus on the wars it prefers; it must advance the security interests of the country and it appears likely that it will have to do so within a broader conception of war that goes beyond a Westphalian model and conventional operations. In the words of one strategic analyst, "...we must relearn what modern war is, we must look

⁹⁷ On the southern campaign of 1781 see Don Higginbotham, *The War of American Independence: Military Attitudes, Policies, and Practice 1763-1789*, Boston, MA: Northeastern University Press, 1983, pp. 352-388; Russell F. Weigley, *The American Way of War: A History of the United States Military Strategy and Policy*, Bloomington, IN: Indiana University Press, 1973, pp. 18-39.

⁹⁸ Robert M. Utley, *Frontiersmen in Blue: The U.S. Army and the Indian, 1848-1865*, New York, NY: Macmillan, 1967; Andrew J. Birtle, *U.S. Army Counterinsurgency and Contingency Operations Doctrine, 1860-1941*, Washington, D.C.: U.S. Army Center of Military History, 1998.

⁹⁹ The definitive study of this conflict is Brian M. Linn, *The U.S. Army and Counterinsurgency in the Philippine War, 1899-1902*, Chapel Hill, NC: University of North Carolina Press, 1989. See also Max Boot, *Savage Wars of Peace, Small Wars and the Rise of American Power*, New York, NY: Basic Books, 2002, pp. 99-128.

¹⁰⁰ Allan R. Millett, *Semper Fidelis: The History of the United States Marine Corps*, New York, NY: Macmillan, 1991, pp. 258-265; Boot, *Savage Wars of Peace*, pp. 156-180, 231-252.

¹⁰¹ Conrad C. Crane, *Avoiding Vietnam: The U.S. Army's Response to Defeat in Southeast Asia*, Carlisle, PA: Army War College, Strategic Studies Institute, February 2003.

beyond our own borders and avoid ethnocentric and triumphalist solutions based on technological prowess alone.”¹⁰²

Force Planning

There are many calls today for increased specialization or bifurcation of the U.S. military to improve its ability to conduct non-traditional missions, especially post-conflict stability and reconstruction tasks. This could be a mistake. Hybrid Wars do not allow us the luxury of building single mission forces, unless the armed forces are going to become significantly larger. We do not have the luxury of building separate agencies for each block of a Three Block War world. As Sir Michael Howard once stated at an International Institute for Strategic Studies conference, “In today’s confrontations, warfighting and peacekeeping cannot be separated. They melt into one another, and the conduct of each determines the success of the other.”¹⁰³

To this we can add, reconstruction, international aid, information operations and anything else pertinent to stability operations. These are not successive stages or phases of an operation; they converge in time and space. Military forces will have to be prepared to conduct such operations, with or without aid from civilian agencies with relevant skills, in very arduous conditions. Arguably, much of the work load falls within the realm of military government that has been historically assigned to the jurisdiction of the armed services.¹⁰⁴

Undoubtedly there are unique enablers (such as civil affairs or information operations) that are not adequately sized or shaped for today’s demand. The proper integration of these enablers into general purpose forces should be our first priority. For Marines, this would represent a modest investment with a large payoff, giving them a modern day synthesis of their expeditionary culture with special aptitudes that the “Soldiers of the Sea” have lacked for some time. In effect, they need to establish a balance between their potent Cold War conventional combat capability and their Small Wars legacy.

¹⁰² Blank, “The War That Dare Not Speak its Name,” p. 31.

¹⁰³ Michael Howard, “A Long War?,” *Survival*, Vol. 48, Issue 4, Winter 2006-07, p. 7.

¹⁰⁴ Nadia Schadlow, “War and the Art of Governance,” *Parameters*, Autumn 2003, pp. 85-94.

Some new tools in the kit bag will suffice to achieve this synthesis and exploit their well deserved reputation for disciplined force application and expeditionary readiness. This new balance should retain the Corps' historical role as the nation's shock troops especially in urban and littoral environments, but also prepare the Marines for more protracted and subtle missions instead of maritime patrolling or brief raids. A robust and integrated combined arms team capable of adapting their mode of operations and tailoring their forces against potent adversaries is needed. This will require military forces that are not merely "general purpose" but professional *multi-purpose* units with flexibility and credible combat power.¹⁰⁵

Intelligence

The implications for the intelligence community may be the most profound of all, and are beyond the scope of a monograph. A separate examination of this challenge should be undertaken to ensure that future commanders have the requisite insights into adaptive enemies and intelligence processes that exploit available information and can obtain the necessary fusion of data from a wider variety of non-traditional sources.¹⁰⁶

Interagency Approach

Because of the convergence of missions into one battlespace, it is axiomatic to most national security analysts today that future challenges in this century mandate a better ability to fuse all instruments of national power. Our respective leaders now refer to this as a fully "Joined Up" or "Whole of Government" approach. Some organizational initiatives have been undertaken, but the U.S. government is simply not organized to engage in nation building or what might be better termed contested state building. American investments have focused on the Pentagon and have not been extended to the non-military tools of the nation's arsenal. Yet, there is an emerging consensus on the need to increase the ability of

¹⁰⁵ David Betz, "Redesigning Land Forces for Wars Amongst the People," *Contemporary Security Policy*, 28:2, August 2007, pp. 221-243.

¹⁰⁶ G.I. Wilson, John P. Sullivan, and Hal Kempfer, "The Changing Nature of Warfare Requires New Intelligence-Gathering Techniques," in Louise I. Gerdes, ed., *Espionage and Intelligence Gathering*, Farmington Hills, MI: Greenhaven Press, 2004.

the non-military instruments of government to be brought to bear to improve the governance, infrastructure, judiciary, commercial and financial foundation, and law enforcement functions within failed states. This will require personnel increases in non-military departments to staff new interagency organizations and to build capacity to operate effectively in under-governed areas.¹⁰⁷ Forward deployed and crisis response forces like the Marines will need to be able to conduct these operations for some time before interagency capabilities can be surged forward, or until such time as the security sector is reformed so that civilian agencies and relief organizations can operate without undue risk.

Organizational Culture/Ethos

Because of its institutional legacy of operational excellence, continuous evolution, and tactical improvisation, the Marines are well suited for this coming age. They will have to extend their efforts and refine their procedures and culture to a degree. They must be capable of shaping themselves to work in civil military task forces, and conduct multiple missions simultaneously. As a premier force-in-readiness, they have historically worked at short-notice “transition” operations, transitioning from peace to crisis response, from ship to shore, and between the blocks of the Three Block War.

A force prepared for this environment would have to possess a unique set of expeditionary characteristics. Its preparedness for close quarters battle would be high, as would its readiness for protecting and controlling a large number of noncombatants in densely populated cities. This force would have to be prepared for protean opponents or known adversaries employing unpredicted tactics or asymmetric technologies. The Corps will need to improve its long-range anticipatory intelligence, as well as its research base into future threats and adversary reasoning. The Marines could also improve its red teaming assets at both its combat development center, and task its

¹⁰⁷ Stephen D. Krasner and Carlos Pascual, “Addressing State Failure,” *Foreign Affairs*, Vol. 84, No. 4, July/August 2005, pp. 153-163.

experimentation program to design and test potential irregular and disruptive approaches.¹⁰⁸

Doctrine

There has been a belated renaissance in filling in the doctrinal holes left after Vietnam. Writing Service and Joint concepts and doctrine in Irregular Warfare is now a cottage industry. But these efforts still fail to come to grips with the speed of adaptation by our enemies, and too frequently fail to incorporate the most important changes in the security environment that are impacted by *who* we are in conflict with, *how* they are organized, the merging modes of conflict that reflect *how* they fight, and *why* they are fighting.¹⁰⁹

The Marines already have a doctrinal foundation that reflects a solid grounding in the ever changing character of war and that can be applied to non-traditional conditions. They have the doctrinal basis and organizational flexibility to excel in hybrid conflict. Maneuver Warfare, at least as originally articulated by John Boyd, represents an approach that is as valid in guerrilla operations as it is in high intensity wars of mechanized maneuver.¹¹⁰ Because of their grasp of the various modes that warfare can adopt, the Marines have been at the cutting edge of much of the irregular warfare effort within the U.S. military.¹¹¹

Training and Education

Forces that are capable of fighting against hybrid threats will require appropriate training and education. In fact, education may be the long pole in the tent for enhanced readiness. The cognitive demands for this blurred context are extremely high, as it requires an inordinate degree of

¹⁰⁸ Gregory Fontenot, "Seeing Red: Creating a Red-Team Capability for the Blue Force," *Military Review*, September-October 2005, pp. 4-8.

¹⁰⁹ David J. Kilcullen, "Counter-insurgency Redux," *Survival*, Winter 2006-2007; F. G. Hoffman, "Neo-Classical Counter-insurgency?" *Parameters*, Summer 2006, pp. 71-87; and Colin H. Kahl, "COIN of the Realm: Is There a Future for Counterinsurgency?" *Foreign Affairs*, November/December 2007, pp. 169-176.

¹¹⁰ For a detailed exploration of the intellectual underpinnings of Colonel Boyd, see Frans P.B. Osinga, *Science, Strategy and War: The Strategy Theory of John Boyd*, New York, NY: Routledge, 2007, pp. 128-233.

¹¹¹ F. G. Hoffman, "How the Marines are Preparing for Hybrid Wars," *Armed Forces Journal International*, April 2006.

mental agility and a tolerance for ambiguity. Any force prepared to address hybrid threats would have to be built upon a solid professional military foundation, but it would also place a premium on the cognitive skills to recognize or quickly adapt to the unknown.¹¹²

Success in Hybrid Wars also requires small unit leaders with decision-making 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.¹¹³

At the individual level, we need to determine the “sweet spot” to which all Marines must be educated, trained and equipped for them to operate successfully and seamlessly in a complex battlespace with hybrid threats. With their historically global role, the Marines have never had the luxury of focusing on a single opponent, nor do they today have the luxury of deciding to focus on a single quadrant in the Pentagon’s threat matrix either. In short, they need to develop *Hybrid Warriors* capable of seamlessly operating and winning on any type of battlespace, with the proper mix of education and training to enable every Marine to recognize, adapt to and defeat threats not yet known. The Marine Corps has already taken actions to expand its close combat training programs, and is exploring numerous other initiatives.

Operational Planning/Campaign Design

Success will also require new interagency doctrine and new procedures for incorporating military and non-military programs and activities into a seamless whole. The deliberate integration of kinetic and non-kinetic effects is required, as is the discriminate application of force. It requires altered methods of operational art and campaign design. Current military planning remains far too linear (as practiced), and has not yet intellectually incorporated the multidimensional modes

¹¹² David C. Gompert, *Heads We Win: The Cognitive Side of Counterinsurgency (COIN)*, Santa Monica, CA: RAND, Counterinsurgency Study Occasional Paper 1, 2007.

¹¹³ Michael Evans, “From the Long Peace to the Long War.” See also David Betz, “A Real Revolution in Military Affairs: Online Continuous Learning for the Operational Warfighter,” paper delivered at the Marine Corps Training and Education Command Conference, Pedagogy for the Long War, October 29-31, 2007, Quantico, VA.

of influence essential to combating Hybrid Wars.¹¹⁴ This will also require new organizational models to deploy interagency planning teams to Coalition commands for operational planning. Defeating the hybrid adversary will require alterations in how military and national security organizations think about strategy and how leaders are educated. It will require commanders throughout the military that can work across organizational boundaries, with coalition members, international organizations, and non-military agencies of government. It will also require changes in the way military organizations acquire and exploit intelligence, and how they leverage, but more importantly, *share* information in their command and control systems. As U.S. forces have found in Iraq, the degree of fusion of intelligence from both military and non-military sources such as law enforcement is critical. It will continue to be so.

Hybrid Wars also require a degree of understanding that must be acquired by a security community imbued with a deep understanding of the historical and cultural context that has generated the conflict from the beginning. This will require an ability to outreach to different sources of expertise, and new ways of fusing diverse insights and perspectives into multi-dimensional campaigns. The planning process and conceptual failures that led to the post-conflict debacle in Iraq are hopefully instructive. Thus, calls for culture-centric warfare should have great resonance in any military challenged by the changing character of warfare.¹¹⁵

Dueling Narratives

Another implication is the need to incorporate what may be the most significant change in the character of modern conflict, the exploitation of modern media to reach out to wide masses and mobilize them to support one's cause. We need to learn how to engage in this

¹¹⁴ The campaign design chapter in the Army/Marine Corps Counterinsurgency manual reflects an enormous step forward, Marine Corps Warfighting Publication 3.33.5 (Field Manual [FM] 3-24 in the U.S. Army), *Counterinsurgency*, Washington, D.C.: Headquarters, Department of the Army, December 2006, pp. 4-1 to 4-9.

¹¹⁵ Robert H. Scales, "Culture-Centric Warfare," *Naval Institute Proceedings*, September 2004, pp. 32-36.

expanding portion of the battlespace, to in effect “maneuver against the mind” of both our opponents and the general population.

T. E. Lawrence was a very early theorist in unconventional war, as well as a pragmatic practitioner. He noted that the cognitive domain is a major consideration in such conflicts. The salience of the cognitive element of modern conflict is clearly rising. In the future, winning “hearts and minds” or what John MacKinlay calls the virtual dimension, may be the most dominant portion of the battlespace. This dimension of the battlespace is being expanded to a more global scale thanks to the ubiquitous nature of modern communication techniques.

While the U.S. military has a demonstrated capacity to use technology and computer software, its performance in Iraq suggests it failed to master the opportunities presented by the Information Age. At the strategic level, the American government has not excelled at employing information effectively in today’s Long War against Islamist extremism.¹¹⁶ Some of this can be attributed to a mis-conceptualization of the information dimension or battlespace centered on technology and computer networks instead of human software or culture.

Today, many small groups have mastered “armed theater” and promoted “propaganda of the deed” to arouse support and foment discord on a global scale. There are a plethora of outlets now in the Middle East and an exponentially growing number of websites and bloggers promoting a radical vision. These outlets constantly bombard audiences with pictures, videos, DVDs, and sermons. Ironically, in Iraq and in the Long War we are facing a fundamentalist movement that is exploiting very modern and Western technologies to reestablish an anti-Western social and political system.

¹¹⁶ Secretary of Defense Robert M. Gates, Landon Lecture, Kansas State University, November 26, 2007. Accessed at www.defenselink.mil/speeches/speech.aspx?speechid=1199. Mr. Gates appropriately observed that, “public relations was invented in the United States, yet we are miserable at communicating to the rest of the world what we are about as a society and a culture, about freedom and democracy, about our policies and our goals. It is just plain embarrassing that al-Qaeda is better at communicating its message on the internet than America. As one foreign diplomat asked a couple of years ago, ‘How has one man in a cave managed to out-communicate the world’s greatest communication society?’ Speed, agility, and cultural relevance are not terms that come readily to mind when discussing U.S. strategic communications.”

The evolving character of communications today is altering the patterns of popular mobilization, including both the means of participation and the ends for which wars are fought. It is enabling the recruiting, training, and motivating of individuals. “Today’s mobilization may not be producing masses of soldiers, sweeping across the European continent,” like a modern *Grand Armee* but it has produced a globally distributed uprising with the speed and fervor of a French column in battle. This has profound implications for human conflict in this century, as Dr. Cronin has perceptively warned, “Western nations will persist in ignoring the fundamental changes in popular mobilization at their peril.”¹¹⁷

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 in Afghanistan, as insurgents appeared to acquire and effectively employ tactical techniques or adapt novel detonation devices they found on the internet or that they observed from a different source. These opponents will continue to remain elusive, operate in an extremely distributed manner, and reflect a high degree of opportunistic learning. To conclude this section, the ideological aspects of irregular warfare will continue to influence the conduct of operations in novel ways. We must ultimately learn to maneuver in the virtual dimension to achieve a positional advantage in the population’s collective mind. We must be as effective and precise with our mental munitions as we are with artillery and close air support.¹¹⁸

We have to recognize that *perception* matters more than results in the physical battlefield. The Secretary of Defense was perfectly correct in an October 2007 speech when he stated that “Success will be less a matter of imposing one’s will and more a function of shaping behavior of friends, adversaries and most importantly, the people in between.”¹¹⁹

¹¹⁷ Audrey Kurth Cronin, “Cyber-Mobilization: The New *Levée en Masse*,” *Parameters*, Summer 2006, pp. 77-87.

¹¹⁸ John MacKinlay, “Defeating Complex Insurgency: Beyond Iraq and Afghanistan” *Whitehall Paper Number 64*, RUSI: London, 2005.

¹¹⁹ David S. Cloud, “Gates Says Military Faces More Unconventional Wars,” *New York Times*, October 11, 2007.

Clearly future opponents will avoid fighting the American Way of War, where we optimize our Industrial Age mass or Information Age prominence and our preferred rule sets. The likeliest opponents on future battlefields accept no rules. Their principal approach will be to avoid predictability and seek advantage in unexpected ways and ruthless modes of attack. Future enemies will seek their own degree of “shock and awe” with crude barbarity (with video) rather than precision weaponry. What we ironically and perhaps erroneously call “irregular” warfare will become normal, but with greater velocity and lethality than ever before.¹²⁰

¹²⁰ Barak Salmoni, “The Fallacy of Irregular Warfare,” *RUSI Journal*, Vol. 152, Issue 4, August 2007, pp. 18-24.

CONCLUSION

Increasingly, the dominant mode of conflict in the world will not be force-on-force military engagements guided by traditional principles of warfare. Increasingly, “conflict” will be something vaguer, more interdisciplinary, more to do with psychology and identity than military forces. To be very clear: The form warfare takes could still extend into state-on-state conflict, but it could also include terrorism, insurgency, information war, and much else.¹²¹

Good theory should offer three components. The first is a descriptive element, which historically or empirically explains past and present phenomena. Next, a predictive element that projects trends objectively or offers the ability to anticipate future occurrences. Finally, it should present some prescriptive advice to guide policy in the future.¹²² This Hybrid War construct is built upon historical experience and ongoing patterns, and we hope that the publication of this paper will further our understanding of the emergence of the latest manifested changes in the character of war. We especially hope that the necessary prescriptions to thwart the success of hybrid challengers are aggressively investigated and refined in the future.

American illusions about our relative invulnerability and a military bias towards conventional battles were the principal victims of 9/11 and the subsequent war in Iraq. Kaplan’s “Coming Anarchy” has arrived with full force, along with the culture and identity-based divisions of Huntington’s “fault line” wars.¹²³ But the new “anarchy” has a sense of purpose, and its faith-fueled fanaticism is inflamed by a global reach abetted by the connectivity of a global economy and information infrastructure. Today’s security is being challenged by a violent and seemingly irrational force. But it is a politically organized reaction to globalization, and the alienation and fragmentation it fosters. It is not irrational, and it should not be underestimated.

¹²¹ Michael J. Mazarr, “Extremism, Terror and the Future of Conflict,” *Policy Review*, online. Accessed at www.policyreview.org/000/mazarr.html. David J. Kilcullen, “New Paradigms for 21st Century Conflict,” Department of State *eJournal*, June 2007. Accessed at <http://usinfo.state.gov/journals/itps/0507/ijpe/kilcullen.htm>.

¹²² I am indebted to Dr. Mackubin T. Owens for his guidance in the past and this particular point.

¹²³ Robert Kaplan, *The Coming Anarchy: Shattering the Dreams of the Post Cold War*, New York, NY: Vintage, 2001.

The West remains unprepared to provide security against a political or ideological opponent who does not share or suffer from our intellectual or institutional boundaries. We face an enemy that deliberately targets our weaknesses and never plays to our military strength.¹²⁴ This evolving enemy has not made Clausewitz irrelevant, quite the contrary.¹²⁵ Even the world's foremost Clausewitzian scholar has concluded, "*future warfare must be assumed to encompass both regular and irregular combat.*"¹²⁶ This will occur, not as distinct threats or wars or even battles, but as a multi-modal form of war.

Al Qaeda and associated movements have evolved in response to the coalition that has taken up the challenge of countering them. Their Darwinian evolution against America's military has refined their methods and emboldened their plans, while the clash within Islam continues unabated. 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."¹²⁷

The U.S. military is beginning to identify effective counter-measures against irregular and hybrid threats. Too much emphasis has been placed on laminating old case studies from Colonial era wars and rural Maoist insurgencies against today's more lethal threats. There is much to learn from history but it rarely repeats itself, and as the new Army/Marine counterinsurgency manual correctly states, "You cannot fight former Saddamists and Islamic extremists the same way you would have fought the Viet Cong, Moros, or Tupamaros."¹²⁸

Some clear progress is being made. In the Army's call for full spectrum "pentathletes," and in cutting-edge doctrine and education

¹²⁴ Thomas X. Hammes, "4th Generation Warfare: Our enemy plays to their strengths," *Armed Forces Journal International*, November 2004, p. 40. See also Thomas X. Hammes, *The Sling and Stone: On War in the 21st Century*, St. Paul, MN: Zenith Press, 2004.

¹²⁵ See Antulio J. Echevarria II, "Clausewitz and the Nature of the War on Terror," pp. 196-218, in Strachan and Herberg-Rothe, eds., *Clausewitz in the Twenty-first Century*, *Op. Cit.*

¹²⁶ Colin S. Gray, *Another Bloody Century*, p. 252.

¹²⁷ Krause, p. v.

¹²⁸ Counterinsurgency FM 3-24, p. 1.

efforts at Fort Leavenworth, one sees great progress. The Marines have built upon their superb educational system to ensure their graduates have the mental wherewithal to thrive in ambiguous contingencies. Their efforts to incorporate cultural intelligence and language training, as well as its Distributed Operations and Combat Hunter tactics, are equally relevant. Persistent contact with local populations to establish security and actionable intelligence, and persistent pressure against an elusive cellular adversary can only be achieved with highly trained forces prepared to “find and fix and finish” nimble guerrillas. The IDF went in a different direction in Lebanon in 2006 but was far from successful, which provides a warning to the Pentagon about what to expect in future contingencies and how to adapt its transformation agenda.

The future cannot be captured with a simple binary choice. 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 can not imagine all future threats as state-based and completely conventional, nor should we assume that state-based conflict has passed into history’s dustbin. There are many who have made that mistake before, and have been consistently proven badly mistaken. State-based conflict is less likely but it is certainly not extinct. But neither should we assume all state-based warfare is entirely conventional. As the thrust of this paper has suggested, the future poses combinations and mergers of the various methods available to our antagonists.

Tomorrow’s conflicts will not be easily categorized into simple classifications of conventional or irregular. Numerous security analysts have acknowledged the blurring of lines among modes of war. Conventional and irregular forces, combatants and noncombatants, and even the physical/kinetic and virtual dimensions of conflict are blurring.

The National Defense Strategy and the 2006 QDR quite properly recognized that future challengers will avoid our overwhelming military strengths and seek alternative paths. OSD’s senior civilian policy makers sought to shift the Department’s capability investments to meet these challengers. The Pentagon’s strategy and QDR expands the U.S. military’s mission set outside of its comfort zone and beyond its preference for fighting conventional forces. We can no longer focus just

on *battles* against preferred enemies, vice *campaigns* versus thinking opponents.

We may find it increasingly impossible to characterize states as essentially traditional forces, or non-state actors as inherently irregular. Future challenges will present a more complex array of alternative structures and strategies. We will most likely face hybrid challengers capable of conducting Hybrid Wars. *Hybrid Wars can be waged by states or political groups, and incorporate a range of different modes of warfare including conventional capabilities, irregular tactics and formations, terrorist acts including indiscriminate violence and coercion, and criminal disorder.* Hybrid Warfare presents a mode of conflict that severely challenges America's conventional military thinking and our operational framework and doctrine. It targets the strategic cultural weaknesses of the American Way of Battle quite effectively. Its chief characteristics—convergence and combinations—occurs in several modes. The convergence of various types of conflict will present us with a complex puzzle until the necessary adaptation occur intellectually and institutionally. This form of conflict challenges longstanding American conceptions about warfighting, and will continue to thwart the West's core interests and world order over the next generation.

Hezbollah clearly demonstrates the ability of non-state actors to study and deconstruct the vulnerabilities of Western style militaries, and devise countermeasures. The lessons learned from this confrontation are already cross-pollinating with other states and non-state actors. With or without state sponsorship, the lethality and capability of organized groups is 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. It will also require a rethinking of priorities in defense spending, and serious reflection about the role of technology in our strategic culture. An outside perspective from a professor of modern conflict summed up his assessment of current thinking by concluding that "Our tendency to want to believe that there must be technological solutions to our problems has proven to be the costliest and most self-

defeating mental habit of Western armed forces since the cult of the offensive in the First World War.”¹²⁹

Because of their perceived success, hybrid challengers will not be a passing fad nor will they remain low tech warriors. Future opponents are dedicated, learn rapidly and adapt quickly to more efficient modes of killing. We can no longer overlook our own vulnerabilities as societies, focus on preferred capability sets, or underestimate the imaginations of our antagonists. In a world of Hybrid Wars, the price for mental rigidity or complacency only grows steeper.

The future poses a more diverse set of challengers, with a more varied set of approaches than the past. In Hybrid Wars, the adversary will exploit the modern technologies of a global economy, and present us with asymmetric modes of operations and unanticipated tactics. They will exploit military systems in novel ways, potentially with state or conventional force combat power. They will not remain static or subject to predictive analysis, but will continuously evolve and exploit the diffusion of innovative tactics, techniques and procedures that offer the greatest return on investment. This assessment suggests an increasingly complex environment for future irregular conflicts that will require institutional adaptation and significantly more attention than it receives today.

¹²⁹ David Betz, “A Real Revolution in Military Affairs,” p. 2.

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ACRONYMS

4GW	Fourth Generation Warfare
ATGM	Anti-Tank Guided Missile
CETO	Center for Emerging Threats and Opportunities
CIA	Central Intelligence Agency
COIN	Counterinsurgency
DARPA	Defense Advanced Research Projects Agency
DHS	Department of Homeland Security
FM	Field Manual
GPS	Global Positioning System
HASC	House Armed Services Committee
IDF	Israeli Defense Forces
IED	Improvised Explosive Device
NDS	National Defense Strategy
ONR	Office of Naval Research
OSD	Office of the Secretary Defense
PLA	Chinese People's Liberation Army
QDR	Quadrennial Defense Review
SINCGARS	Single Channel Ground and Airborne Radio System
UAV	Unmanned Aerial Vehicles
UN	United Nations
URW	Unrestricted Warfare
US	United States
USCG	United States Coast Guard
USMC	United States Marine Corps
USN	United States Navy
WMD	Weapons of Mass Destruction

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