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## The Past and Present as Prologue: *Future Warfare through the Lens of Contemporary Conflicts*

By Robert H. Scales



Center for a  
New American  
Security



## Acknowledgements

Many of the ideas contained in this monograph are borrowed from a rich circle of friends and colleagues who have helped sharpen my thoughts and open my eyes to contemporary warfare. I would like to acknowledge three serving officers who offered me both access to the theater of war and extraordinary insight from observing them in action. First among these is General David Petraeus, a soldier-scholar whose patient counsel, honest criticism and demonstrated performance in the field have given me a first hand perspective into how wars in the future are likely to be fought. Likewise, this work synthesizes many hours of conversation with my mentor and friend General James Mattis, one of the truly great creative minds serving in uniform today. Finally, a special thanks to Major General Mike Repass, who allowed me to visit his green berets in Afghanistan and tutored me on how to do nation building the right way. Many within the defense intellectual community have assisted me in refining my thoughts. Frank Hoffman from Marine Corps University and Williamson Murray are two of the nation's great authorities on the conduct of war and their views can be seen in these pages. I owe a particular debt to LTG Paul van Riper (USMC Retired) and Colonel Robert Killebrew (U S Army Retired). These men have been my source for intellectual inspiration for over a decade. We co-authored several works together. I've resurrected many of our ideas and restated them in this monograph. Both men read my manuscript and their criticisms have made it infinitely better. I owe a special debt to Michele Flournoy, John Nagl and James Miller, who gave me the privilege of using the Center for a New American Security as a platform to express my thoughts on future warfare. Finally I would like to acknowledge the extraordinary cohort of young men and women in uniform whose performance in Afghanistan and Iraq has set the standard for adaptability, courage, resilience, sacrifice, skill at arms and empathy not likely to be matched for a generation or more to come.

### Cover Image

06/10/2006 - Iraqi army and emergency services unit leadership gather around a layout of their objectives during a final run through of Operation Fox in Kirkuk, Iraq, May 10, 2006. The operation is a city-wide lock-down and sweep through the Taza Industrial Zone south of Kirkuk involving nearly 600 Iraqi army soldiers and policemen.

*U.S. Navy photo by Journalist 1st Class Jeremy L. Wood. (Released.)*

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# The Past and Present as Prologue: *Future Warfare through the Lens of Contemporary Conflicts*

## About the Author

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## EXECUTIVE SUMMARY

**E**ight years of war have given the U.S. military an unparalleled opportunity to translate real war experience into a vision of how conflicts will be fought in the future. Getting a vision of the future more right than wrong depends on the military's ability to sift through experiences gathered from combat to discern those that will endure. This monograph seeks to do just that.

A key premise of this paper is that the United States' emerging national security strategy is right in postulating a future conflict environment dominated by irregular wars. For brevity, the paper concentrates on a few characteristics of future irregular wars that are likely to endure. For clarity, it parses the vision into the three classic levels of war; strategic, operational, and tactical. And for credibility, it concentrates on the ground dimension for two reasons: because Afghanistan and Iraq, like all irregular wars, are being fought principally on the ground and because the author's past intellectual endeavors and expertise have been in that dimension.

**Strategic**

The United States will not and must not fight the long war alone. Thus, the central tenet of tomorrow's national military strategy will be to assist allies, coalition partners, and the governments of threatened states to resist aggression. This strategic imperative will demand that the ground services strengthen their abilities to assist, train, and advise foreign armies. In the past, the military services have tried to accomplish the advisory mission with pickup teams made up of ad hoc units, often utilizing reservists and contractors or organizations assembled in haste from a pool of soldiers and leaders taken at random from the force.

The proper long-term solution is to take a "skin in the game" approach by assigning the "train, advise, and assist" function to regular army and marine units in a fashion similar to how this is done today in the special operations community. Tightly bonded close combat squads, platoons, and companies who train and then fight with their indigenous charges provide the surest guarantee that the force will fight competently.

The army and marine corps must be compelled to devote the human and cognitive resources sufficient to meet the requirements for imbedding the advisory function inside their respective

institutions. Success in building such a capacity will depend on changing the culture inside the ground services such that the advisory function becomes career enhancing. The United States must develop leaders, officers, and senior noncommissioned officers (NCOs) from the regular army and marine corps whose superb education in language and cultural studies prepares them to perform as advisors.

### **Operational**

The new high ground for operational forces will be to capture the perceptions of populations, not to seize terrain. On tomorrow's battlefields, the kinetic battle will serve to feed the narrative of opinion. Operations will be planned to dominate

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*“The new high ground for operational forces will be to capture the perceptions of populations, not to seize terrain.”*

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the information battle. Ground operations will have to account for and will attempt to shape the opinions of the enemy, the host population, the American people, and the global media.

An irregular-warfare mindset among leaders at all levels subordinates the kinetic to the non-kinetic fight. The commander's intent and the assumed end state in mission planning must be driven principally by the effect that the operation will have on the perceptions of the affected population, U.S. soldiers, the American people, and the enemy. Putting perception first in irregular wars will require a new generation of soldiers and leaders exquisitely skilled in the narrative arts. The ground services in particular must alter their doctrine to

shift the balance between perception operations and operational maneuver such that the former serves to amplify the latter.

The United States will not be able to compete with an enemy practiced in winning the global battle for perception unless we are able to streamline our decision making processes to be first with the truth in the global marketplace of information. Future leaders must become comfortable with subordinates who are aggressive and confident in dealing with the media. Most importantly, U.S. professional military educational institutions and career reward systems must be reformed to educate future leaders in marketing, public policy, and the communicative arts such that they are able to feed the narrative with logic and language that is compelling, truthful, and clear.

### **Tactical**

The collective actions of small ground units, squads, and platoons will provide the kinetic and non-kinetic means for feeding the operational narrative. The American military must improve the effectiveness and survivability of its small units if they are to dominate the tactical battle with minimum casualties. Achieving small-unit dominance will demand a quantum leap in how tactical units are equipped, trained, led, and prepared emotionally, psychologically, and intellectually for the challenge.

The principal object of reform at the tactical level of war must be to improve the ability of small units to perform and survive when operating among the people against an adaptive and diabolical enemy. The technological challenge is to provide mounted and dismounted small units greater protection in the close fight while remaining effective. First priority must be to provide small units with a protective constellation of unmanned aerial vehicles overhead to allow small unit leaders to look “over the hill” and to connect them with other units on the battlefield. Experience in contemporary

irregular wars proves the value of infantry, particularly infantry mounted in light, fast, and agile armored fighting vehicles. The expansion and improvement of America's infantry force must be job one as the military resets, reequips, and reorganizes after Iraq.

Irregular wars fought in distant, inhospitable and expansive places will require small units that are carefully selected, superbly trained, and tightly bonded. Like a good wine, the creation of superb small units takes time and care. To be sure, the U.S. ground forces are the best in the world. Yet, we cannot hope to fight a long war at an acceptable cost in life unless today's high-performing small units become as dominant on the ground in the future as the air and sea services are dominant in their respective domains today.







### FOREWORD

In the fall of 2007 I asked General David Petraeus to allow me to visit his command for the purpose of looking at the future of war through the lens of the war in Iraq. In October 2008, I returned to the theater for an extended visit to ground forces in Afghanistan and Iraq. I had written two books on future warfare, and Petraeus and I both thought at the time that years of combat, in all likelihood, offered enough experiential data from which to hypothesize a course for the future of warfare. During my two visits, I observed what Petraeus considered units whose materiel, methods, doctrine, and tactics might serve as models for what is to come. I spent subsequent months trying to put my observations about the influence of Afghanistan and Iraq on future war into perspective, and I am convinced that the experience of the seven years of war since September 11, 2001 cannot be ignored.

This report seeks to place Afghanistan and Iraq into the broader perspective of contemporary history. I will argue that today's wars represent the latest data points of a continuum of experience in the next phase of conflict. This new epoch of wars in the "American era" has fundamentally changed how America has fought its wars since the end of the industrial age and will shape how we fight our wars for a generation or more to come.

As an historian, I am particularly aware of the consequences and risks inherent in the use of contemporary history to divine the future. Michael Howard, the eminent scholar and military strategist, once observed that the purpose of future gazing in war is not to get it right but to avoid getting it terribly wrong. He expressed a truism that soldiers understand through practical experience: war is the most complex and unpredictable of all human enterprises. And because war is a high

stakes game, soldiers tend to be reluctant to adapt immediately to the future. Getting it wrong costs lives, and catastrophic failure often threatens the state's survival.

## THE QUEST FOR GROUND TRUTH

Today, the art of predicting the course of war is made far more difficult by a quickening of the rate of change among those variables most likely to influence conflict—such as technology, domestic politics, and international events—juxtaposed with a slowing of militaries’ capacity to build weapons and structures to accommodate change. Thus, soldiers today must cast further and further out to stay ahead. The further out the future event horizon, the more indistinct the view and the more likely soldiers are to get it terribly wrong.

While the past is most likely to provide a reliable indicator of the future during times of relative continuity, the historical record is less useful when looking across periods of radical shifts in the variables of war. Soldiers experienced in the wars of the agricultural age failed to understand the impact of the first “precision revolution” that introduced the machine gun, quick-firing artillery, and the small-bore rifle—not to mention mines, barbed wire, and poison gas at the beginning of the industrial age of warfare. A similar epochal shift occurred between the total war experience of World War II and the contemporary era of postindustrial limited conflicts. Thus, we must be very careful in assuming that the large, total war experience of the first half of the last century has anything useful to tell us when applied to the present and immediate future.

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*“What one sees in war is too often eclipsed by what one believes.”*

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Soldiers preparing to fight a big war often reject small wars as potential harbingers of new forms of warfare, principally because they assume that

distant wars fought against seemingly primitive enemies are not worthy of study. Had Europeans watched and understood the consequences of the slaughter brought on by industrial-age weapons during the Russo-Japanese War, perhaps they would have been less willing to sacrifice the manhood of a generation in the Great War. By 1914, the British Army had forgotten the punishment meted out by small bands of Boer farmers armed with modern Mauser rifles and a few long-range “Long Tom” rifled pieces during the war in South Africa. Hezbollah fighters armed with modern precision anti-tank missiles could well be teaching us the same lesson more than a century on.

Those military leaders who get it right more often than not have practical experiences in battles that mimic, to some degree, what is to come. The intellectual thought leaders from the German Army who fathered blitzkrieg after the First World War had their defining moment during open warfare against the Russians in battles such as the Riga campaign in 1917. Conversely, those who tend to get it wrong often form their opinions on battlefields that lead to conceptual dead ends. The most influential French and British prophets of the “methodical battle” all looked to the future through the lens of bloody trench warfare on the Western front. It is also instructive to note that the operational and tactical genius that produced blitzkrieg among the German general staff also blinded them to the inevitable dangers of operational hubris: overconfidence that operational success must inevitably lead to strategic success, a condition that in the end translated into strategic overreach and defeat in both world wars. Likewise, the genius that led to the Great Wheel operational maneuver in Desert Storm created a similar sense of hubris that masked the subsequent strategic failure that left Saddam Hussein in power.

What one sees in war is too often eclipsed by what one believes. The humiliating loss to Germany in 1871 convinced the French military that failure in

that war was due to a loss of *élan*, or fighting spirit. Theorists such as Ardant du Picq and Ferdinand Foch fervently believed that future wars would be won by a spirited push of bayonets rather than a higher density of machine guns and artillery. In the United States, it took the tragedy of Pearl Harbor to give carrier admirals ascendancy over battleship admirals. A fervent belief in the adage that the “bombers will always get through” tragically delayed the development of long-range fighter aircraft capable of escorting bomber formations over Germany in 1944.

Soldiers who get it more wrong than right almost always misread or underestimate the human component of war. All too often they go to war expecting a short, glorious campaign; everyone expects to be home by Christmas. All too often, generals raised in a techno-centric culture neglect the intangibles in war: will, intent, familiarity with the environment, a non-Western enthusiasm to sacrifice, and the ability to adapt.

In an attempt to get it more right than wrong, this report attempts to anticipate the future only through observations of actual events by examining what soldiers call “ground truth.” Because the contemporary record is richest in evidence from ground conflict, most of the insights in this paper will address principally that dimension. Failure to address air, sea, and space warfare does not imply that future wars will be fought only on the ground. Future wars may well involve great sea and air battles, but my observations of contemporary warfare have been almost exclusively from a soldier’s perspective. I will leave other more qualified observers to comment on what contemporary wars tell us about the future of warfare in other domains.

## UNDERSTANDING AMERICA’S ENEMIES

The risk associated with using the past to predict the future is, sadly, mitigated by the fact that the laboratory of contemporary warfare is so rich in evidence. A compelling and relevant vein of evidence comes from contemporary conflicts fought since the end of World War II, what I have termed the “American era” of war—a period of limited wars in which the strategic ends for the United States are constricted by the means, measured in blood and treasure, available to fight them. This era is often characterized by a clash between a Western-style military and an irregular force. These conflicts have been irregular wars, not just insurgencies. Regular warfare is best explained as conventional “peer versus peer” conflicts between Western machine-style forces employing air, sea, space, and ground systems; irregular warfare involves a less-capable enemy that uses “asymmetric” means to win against a technologically superior conventional foe.

The United States has demonstrated a poor track record during the American era of anticipating who future enemies will be. Usually, we are surprised by the time, place, duration, and intensity of future conflicts. No one in the early Truman administration expected a war in Korea. No one in the Joint Chiefs during the Eisenhower administration would have forecast 58,000 dead in Vietnam. Saddam’s invasion of Kuwait caught nearly everyone inside the Beltway by surprise. Yet, virtually all of the enemies encountered during the 60 years of periodic conflict in the American era share something of a common provenance. From Lin Pao to Ho Chi Minh to Osama bin Laden, our enemies have demonstrated a consistent pattern of strategic intent as well as operational and tactical behavior. None of them have sought to conquer American territory. Instead, they have sought to keep the United States at a distance to allow them to pursue some form of regional hegemony without



interference. Their intent has not been to win in battle so much as to avoid losing. They have sought to kill Americans not as a means to an end, but as an end in itself. Ho Chi Minh got it right when he said prophetically, “they will kill many of us. We will kill a few of them but they will tire of it first.”<sup>1</sup>

This strategic intent has shaped our enemy’s operational and tactical methods. Since the end of World War II, none have succeeded in challenging the United States in a conventional fight. They willingly cede command of the air, sea, and space (although often not of cyberspace and the global media). They retire to dig in, disperse, and

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*“Since the end of World War II, none have succeeded in challenging the United States in a conventional fight.”*

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hide in the distant, dangerous, and inhospitable “contested zones” where we are least able to bring to bear our overwhelming technological advantage and most likely to suffer casualties: on the ground. Often in the American era our enemies suffered terribly to learn how to fight us. Several failed attempts at symmetric warfare convinced them to avoid massed, conventional open warfare whenever possible. Four blitzkrieg-style Arab-Israeli wars (1948, 1956, 1967, 1973) ended well for the Israelis and badly for the Arabs; five American wars (Panama, 1989; Desert Storm, 1991; Kosovo, 1999; Afghanistan, 2002; and the

march to Baghdad, 2003) conclusively proved the dominance of American techno-centric warfare. In contrast, whenever many of these same antagonists chose to fight Western armies using irregular warfare methods, the outcomes reversed: against the United States in Afghanistan, Iraq, Korea, Somalia, and Vietnam; against the French in Algeria and Indochina; twice against the Israelis in Lebanon; and against the Soviets in Afghanistan.

While eschewing conventional warfare tactics, this new style of enemy has learned to embrace conventional warfare technologies and direct them toward winning irregular conflicts. This phenomenon is nothing new. At the turn of the last century, Boer insurgents leveraged the first precision revolution in warfare to arm themselves with modern German small-bore rifles firing smokeless powder and quick-firing, long-ranging artillery and machine guns. They stopped the British cold at places such as Colenso and Spion Kop. Similarly, the Chinese and Vietnamese accomplished most of their killing using the most modern version of traditional weapons such as the AK-47, 122mm rockets, and mortars.

Thus, it should have come as no surprise to the Israeli Defense Forces that Hezbollah would take a page out of this book to leverage the second precision revolution to kill Israeli Cold War-era fighting vehicles using very sophisticated long-range precision anti-tank missiles. Enemies in the American era do not require large numbers of these weapons. They need just enough precision to kill enough armored systems to cause the intruder to lose heart and “tire of it first.” This enemy’s command and control system is immersed in the global commercial information network through the Internet and media, and thus is very difficult to take down by firepower alone. The new enemy uses primitive and austere conditions as a shield and protects

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<sup>1</sup> Robert Scates. *Yellow Smoke: The Future of Land Warfare for America's Military* (New York: Rowman and Littlefield, 2003): 43.

vulnerable centers of gravity from attack by their diffuse nature and location in distant and unapproachable places.

This enemy seeks to maneuver under aerial dominance by reducing the effectiveness of aircraft orbiting overhead. He buys just enough anti-aircraft defense, in the form of shoulder-fired missiles and small anti-aircraft guns, to force air cover higher so that pilots are unable to detect small, discrete forces maneuvering below. Aerial effectiveness is reduced further when the irregular force disperses, digs in, and hides among the population. The irregular force capitalizes on the media's ubiquitous presence by showcasing the inevitable incidents of collateral damage that attend air operations conducted in urban areas. This enemy's strategic objective is psychological rather than physical. He seeks to create a sense of imbalance in the minds of the electorate by making the cost appear not worth the investment, particularly in terms of human life.

Today, this corollary to the classic doctrine of irregular warfare is suitable for and preferred by an assortment of healthy conventional states, rogue states, and transnational entities. It appears to work for enemies at many places along the spectrum of warfare, from pre-insurgency in places such as the Philippines to full-blown insurgencies in Afghanistan and Iraq to something approaching conventional war in Lebanon.

### **The Lessons of Contemporary Warfare: Strategic, Operational, Tactical**

This monograph accepts the premise that the shape and character of the American era of war will persist for a generation or more to come. If this premise is correct, the strategic, operational and tactical imperatives outlined below will endure over time.

**Strategic:** The United States will not and must not fight the long war alone. Thus, the central tenet of tomorrow's national military strategy will be to assist allies, coalition partners, and the governments of threatened states to resist aggression. This strategic imperative will demand that the ground services strengthen their abilities to assist, train, and advise foreign armies.

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**Operational:** The new high ground for operational forces will be to capture the perceptions of populations, not to seize terrain. On tomorrow's battlefields, the kinetic battle will serve to feed the narrative of opinion. Operations will be planned to dominate the information battle. Ground operations will have to account for and will attempt to shape the opinions of the enemy, the host population, the American people, and the global media.

**Tactical:** The collective actions of small ground units, squads, platoons, and companies will provide the kinetic and non-kinetic means for feeding the operational narrative. The American military must improve the effectiveness and survivability of its small units if they are to dominate the tactical battle with minimum casualties. Achieving small-unit dominance will demand a quantum leap in how tactical units are equipped; trained; led; and prepared emotionally, psychologically, and intellectually for the challenge.

## STRATEGIC LESSONS: CULTIVATING WILLING (AND COMPETENT) PARTNERS

Today's headlines reinforce the truism that the American people have little patience for long and costly wars. In the American era, we tend to fight short wars well and long wars poorly. The enemy knows this and thus seeks to develop a strategy that makes our wars as long and costly as possible. His greatest advantage is the quantity of willing souls that he can put in the field to defeat us. Every president since Harry Truman has learned that, in irregular warfare, technology is a poor substitute for "boots on the ground." Our past attempts to "lift the fog of war" using sensor technologies have

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*"In the American era, we  
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always been trumped by an enemy who learns how to restore the fog faster than we can lift it. Our attempts to find more effective ways to kill the enemy on the battlefield have been trumped by his willingness to die, and to put forward civilians to die, in greater numbers. The bottom line is that, in irregular wars fought for limited ends with limited means, numbers count. In future wars, we must find the means to offset our inherent numerical disadvantage on the battlefield without breaking the manpower bank. The only practical means of increasing the density of boots on the ground is to find partners willing to join us.

Every administration in the American era sought to bring soldiers to the fight from foreign places. These efforts inevitably came up short; from a strategic perspective, the failure to enlist support from other nations arguably became our most

vulnerable and exploitable strategic center of gravity. In every case, the United States did the heavy lifting, and in virtually every case the difference between defeat and victory was measured in the small number of foreign soldiers ready to join us in battle. Korea was a United Nations war in name only; aside from Koreans, Americans comprised more than 90 percent of those fighting and dying. Willing allies were few in Vietnam, and our efforts to "Vietnamize" the war became a manpower foot-race that, in the end, only the North Vietnamese could win. Through diplomatic efforts, the first Bush administration managed to assemble a coalition of 27 allied nations for Desert Storm. But again, the United States assumed the overwhelming burden, a fact that would have had an enormous strategic impact on the battlefield had the campaign lasted much longer or had it carried the fight to Baghdad.

In Afghanistan and Iraq today, our ability to sustain the fight continues to be our greatest strategic vulnerability. In a strange twist of irony, for the first time since the summer of 1863 the number of ground soldiers available is determining American policy rather than policy determining how many troops are necessary. The lesson for the future is clear. As a matter of national importance, the U.S. military must find the means to increase its effectiveness on the battlefield by increasing the density of soldiers available to fight. There are three options. The first option is to increase the size of our combat forces. The Obama administration is willing to do that by its policy to increase the size of the army and Marine Corps. Yet, absent a return to the draft, this policy is necessary but insufficient, given the cost of recruiting and retaining quality soldiers and the shrinking pool of available candidates for service. The second option is to build a willing coalition of capable partners before the conflict begins. The third option is to strengthen our forces' capability to very quickly build a competent fighting force using willing manpower from a threatened indigenous nation.



Only options two and three are viable over the long term. However, a change in policy from going it alone to joining a viable, politically legitimate coalition cannot occur without a fundamental change in how this nation prepares for war in the future. The realities of contemporary wars have already begun to alter our strategic approach to a strategy that seeks to buttress a system of strong states that can resist the global threat posed by irregular enemies. As a consequence, over time the United States must return to a more traditional supporting role in partnership with nations threatened by ideological attack. It must build into its military structure the ability to fit coalition partners into the fabric of its fighting power, and it must develop the skills to advise, train, and equip (and if necessary, create from whole cloth) effective fighting forces from nations threatened by the sort of enemies described above.

In the future, the instruments that proved useful in the Cold War—collective defense, regional alliances for progress, and economic development—will remain central to countering traditional threats and confronting our enemies. Future U.S. defense strategy must reorient toward a patient, nuanced, and longer-term policy of reinforcing our allies and containing the threat. Combat forces will still be prepared to deploy to remote areas on short notice, but some proportion of the force will be focused on forward engagement over the long term, with an enduring U.S. military commitment as advisors, trainers, and suppliers in threatened regions.

American military power in the emerging security environment of the 21st century must develop the capability to support weaker states when education, health, and economic development can make headway against violent and reactionary insurgencies. U.S. forces must also be able to defeat insurgencies at the earliest possible stages before they can directly challenge the wellbeing of coalition partners by insurgency or direct attack. This newly emerging imperative to join and support

coalitions of willing and capable states will have significant implications for our military, with special emphasis on land forces. This change in strategy is already receiving broad acceptance. As Islamic extremists become more radical and their conduct more horrifying, America's potential coalition partners are more engaged than ever in operations in the field, most notably in Afghanistan. This trend will continue as the nature of the challenge becomes ever more apparent.

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*“Future wars will demand ground structures that are robust and sustainable enough to fight extended campaigns.”*

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The nature of wars in the American era virtually guarantees that current and future land forces will bear the brunt of operational missions. Contemporary experience has convinced all land components—the army, marine corps, and special operations forces (SOF)—that their various missions have become intermingled to the extent that they can never again be viewed as separate and distinct. As the military service most forward engaged during the Cold War, the army was most affected by the decision to home-base most combat forces and to rapidly deploy them overseas in crisis through “lily pad” bases. To be sure, early arrival in a threatened region is still necessary to halt aggression. However, national interests important enough for immediate intercession are likely to be contested by opponents who have learned, in Afghanistan and Iraq, that the United States can best be defeated by prolonging every conflict. Thus, future wars will demand ground structures that are robust and sustainable enough to fight extended campaigns.

To support allied efforts to build regional security, the army and marine corps must expand to accommodate greater U.S. government support to new coalition partners. This could take the form of support to expanded, more capable U.S. embassies worldwide and more permanently based overseas advisory capabilities (similar to the structure of military advisory and assistance groups) in threatened states around the world. In consequence, total army structure must be organized to support not only direct combat missions, but also missions to train, advise, and equip host country armies on a long-term basis.<sup>2</sup>

To this end, the army and marine corps have a long tradition of supporting coalitions. During the Cold War, they proved remarkably competent in the complex tasks necessary to stitch together coalitions by building, often from whole cloth, effective indigenous armies in such remote places as El Salvador, Greece, Korea, Vietnam, and now in Iraq. Sadly, the unique skills required to perform coalition building have rarely been valued or rewarded within the services. Today's soldiers and marines would prefer to be recognized as operators rather than advisors. This must change. If our success in coalition building will depend on our ability to create and improve partner armies, then we must select, promote, and put into positions of authority those who can do so. We must cultivate, amplify, research, and inculcate these skills in educational institutions reserved specifically for that purpose. The army and marine corps should create "universal foreign area officers," which would not be a specialty but rather a service-wide system of reward for excellence in the ability of individual officers and selected NCOs to perform these unique tasks. No officer should be allowed beyond the grade of lieutenant colonel without demonstrating a working knowledge of a language spoken in a region potentially threatening to U.S. interests.

The army and marine corps must be reshaped to some degree to perform the function of coalition building and to train, advise, and assist the militaries of host nations seeking to rid themselves of irregular and insurgent threats. How this function will be built into the military forces of the future is a critical challenge. Some have suggested that the train, advise, and assist challenge can best be solved by creating an "advisory corps," essentially a separate army major command made up of several advisory brigades whose sole function would be to build militaries within threatened states from scratch.<sup>3</sup>

The bow wave of enthusiasm within Congress and Washington think tanks for an advisory corps has begun to grow substantially. The advisory corps solution is a bad idea for many reasons. First, our ground forces are already too small, and the thought of further dividing them into another non-combat command would only serve to put more pressure on our already overstretched combat forces. Such an organization would not be a close combat force per se, but essentially a force optimized for constabulary duties such as assistance to military advisory groups around the world. Such ideas are fine until the bullets start to fly. General Douglas MacArthur had two such division-sized constabulary forces in Japan prior to the Korean War. Neither was intended for real combat. By August 1950, both were ill-equipped materially and psychologically for the trauma of stopping the North Korean invasion; the ultimate cost of putting constabulary soldiers on the front lines was tragic.

Second, creating a separate corps would absolve the total army of its obligation to reshape itself to fight irregular wars by allowing it to fence off a portion of its strength—probably principally using reserves—to do the advisory mission,

<sup>2</sup> Robert Scales and Robert Killebrew, "The Coalition of Enlightened States," *Naval Institute Proceedings* (January, 2007): 18.

<sup>3</sup> John Nagl, "Institutionalizing Adaptation: It's Time for a Permanent Army Advisory Corps," CNAS, June 2007.

leaving the rest of the service to concentrate on the conventional kinetic warfare tasks of fire and maneuver. During the Cold War, this was the fate of similar culturally divergent organizations such as civil affairs and psychological operations and, for too long, special operations. The truth is that the advisory mission is simply too important to be relegated to a forgotten corner. The challenge is not one of organization, but of individual service culture. The army and marine corps can only be induced to change their cultures when officers in both services perceive assignments to advisory duty as career enhancing. In the years ahead, service culture must be changed such that the “best and brightest” regular line officers are educated, trained, and selected for advisory duty. They should be sent to the best graduate schools for at least two years to learn the languages and cultures of threatened regions, and should be expected to remain abroad on duties with military advisory groups for years without fear of losing out on promotion opportunities. Then these officers (and selected NCOs) would return to their regular combat units in the field. We will be able to mark success when an officer trained and experienced as an advisor is selected by the president to be chairman of the Joint Chiefs of Staff.

During the early days of the Cold War, Congress enacted the Lodge Act, which was intended to bring into the service émigrés native to countries from behind the Iron Curtain. Sadly, history has forgotten that the act proved to be enormously successful. Foreign-born soldiers formed the soul of the 10th Special Forces Group in Europe during the Cold War. After the abortive Bay of Pigs operation, Cuban émigrés found their way into American ground units and served with great distinction. We will not be able to meet the demands of the future unless Congress enacts something analogous to the Lodge Act. We must open enlistments to young men and women native to threatened regions of the world. After five years

of honorable service, they (and their immediate families) should be given full citizenship. We have much to learn from the Cold War.

Third, experience in Afghanistan and Iraq suggests that combat experienced regular army and special forces units are actually best suited for training indigenous armies. Recent experience in Afghanistan supports the contention that building militaries with fighting units is far more effective than relying on an advisory corps. Without exception, Afghan units trained by ad hoc advisor teams do not fight very well. Those trained by special forces “A” teams are orders of magnitude more competent in the field. The difference is due in large measure to the fact that special forces teams are tightly bonded, combat-experienced veterans willing to put “skin in the game.” These teams stay

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*“We must open enlistments  
to young men and women  
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with their charges from recruitment through the training cycle. Then, they take them to war sharing privation and extreme danger with their newly formed Afghan allies.

The skin in the game approach is what differentiates training from advising. The Afghans have witnessed centuries of outsiders who appear periodically to train them and then disappear when the shooting starts. Advisors build trust by their willingness to fight and die with their charges. The heat of combat gives the advisors a chance to refine fighting skills by personal example and to determine which leaders have the tactical right stuff to lead men in battle. The bottom line is that the



band of brothers approach applies to our allies as well as to ourselves. The crucible of combat steels those who willingly share risk and is the most powerful ingredient in forming and sustaining morale and fighting prowess.

One observation from four trips to Afghanistan and Iraq is a remarkable convergence of functions among the army, marine corps, and SOF brought about shared experiences in these wars. To be sure, differences remain, necessarily driven by unique service cultures. Yet the experiences of Afghanistan and Iraq have buried the days when land operations were divided into autarkic army-marine-SOF sectors. The two dominant ground services must continue efforts to build doctrine and battle command for seamless integration. Whatever service roles and missions say, the marines have become, in effect, another essential ground force and will remain so. The corps should play a proportionate role in the establishment of advisory groups, in advising and training allied forces, and in other functions as they arise.

Over the past five years, we have witnessed a remarkable trickle down of special forces operating methods to army and marine close combat units. This phenomenon puts to rest the notion that only a very few can perform the most challenging missions. Given the time and resources, regular soldiers can be transformed to perform many of the missions formerly reserved for special forces. Conventional line units will always lack some particular skills and competences acquired by SOFs. Yet, recent advances in the human, cultural, behavioral, and cognitive sciences offer the opportunity to elevate the fighting skills of individual soldiers and small units to a degree of competence unheralded in the history of warfare.

The expansion of SOF should continue at a pace consistent with the training and equipping of these forces. In the future, however, service leaders must work strenuously to ensure that both SOF

and conventional-force doctrines complement one another, and that combat lessons from Afghanistan and Iraq are absorbed to ensure that command and control mechanisms are designed to guarantee unity of effort and accountability. Conventional “line” units in the army and marine corps will become more involved in the training and advising of foreign militaries. SOFs should complement conventional forces with area skills and parallel training plans for indigenous or tribal populations. As the United States tailors its forces for future war, operations by conventional forces and SOFs must inevitably move closer together to produce seamless operations.

### OPERATIONAL LESSONS: FEEDING THE NARRATIVE

The object of conventional operational maneuver is to exploit the advantages of firepower in order to avoid the strong extremities of the enemy's force and to strike at his brain with the intent of collapsing his operational centers of gravity, usually defined as enemy headquarters. The collapse of the enemy commander's ability to control his units in the field causes a collapse of will and a psychological and emotional meltdown among those in power that inevitably results in the collapse of the state. During Desert Storm, General Colin Powell was thinking about the link between operational success, the defeat of the Republican Guard, and cutting off the head of the strategic snake (figuratively speaking). It worked then, and it worked momentarily on the march to Baghdad because the snake had a head: Saddam and his henchmen. Success at the tactical level, winning a succession of battles, allowed for the achievement of operational success. Victory followed. However, on the march to Baghdad in 2003, the enemy redefined war at the operational level.

The insurgency snake has no head. Or perhaps it is more accurate to say it has many heads, each Medusa-like, with the capacity to re-grow after decapitation. In the new war that began shortly after the capture of Baghdad, the operational level seemed to disappear. Suddenly tactical successes no longer guaranteed strategic success because there was no operational tissue connecting them. Soldiers did well in places such as Najaf and Fallujah. They killed the enemy in profusion, but strategic ends continually slipped further away with each perceived success.

Speed of movement and destructiveness are no longer guarantors of success in today's wars. The clock has stalled. Nearly 4,000 dead Americans testify to the truism that violence is still an ingredient in this war. But the connection between tactical and

strategic success is no longer direct and immediate. Something else is impeding the translation of one to the other. Some new source of friction keeps killing from being enough.

Through an often painful process of trial and error, the practice of operational command within the American military has changed from waving hands across the big arrows on the map in Desert Storm to shaping the narrative through the art of intimate persuasion. In a sense, Thomas Jefferson has gotten what he wanted: enterprise done by governments to please the will of the people. He just did not realize that the people of this century, in effect the target population, would define the enterprise in terms far removed from life, liberty, and the pursuit of happiness.

Petraeus shapes the narrative by examining his combat commanders' tactical plans for their potential effects on four audiences: the Iraqis, the enemy, the Arab community, and the American people. He considers whether the perceptual consequences of the operations would properly feed his intended outcome and what the four audiences would think if it failed. The contrast between his approach and the Desert Storm briefings, in which General Norman Schwarzkopf's hand waved across the arrows on a big map, suggests that the operational context of tomorrow's wars has changed fundamentally. In the blitzkrieg era, Western militaries learned to harness the power of tanks, aircraft and the radio to achieve what soldiers call "kinetic effects," that is, the effect of weapons delivering explosive power. Today, the operational level of war is defined by two opponents who are both trying to capture and control the narrative. The winning side would be the one best able to translate tactical actions, kinetic and non-kinetic, into the most convincing story of the conflict in progress. Petraeus' four audiences, rather than the enemy's operational brain, should be the focus of future operations. The internal combustion engine and the wireless of the industrial era of warfare

have given way to the microchip and television camera as the primary instruments for achieving operational success.

Thus, the technological means for winning at the operational level of war had leveled the playing field. The enemy has as good (or perhaps even better) access to the global information network as Western powers. Our technological skill in broadcasting information is matched by the enemy's ability to create distrust within sympathetic cultures concerning our intentions. The enemy's unique skill at manipulating the narrative creates uncertainty and discomfort among the Iraqis, the American population, and our allies.

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*“The enemy has as good access to the global information network as Western powers.”*

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The surest proof that the operational level of war has changed in Iraq is the shift by traditional operational commanders at division and brigade levels from conventional tenets of operational maneuver to feeding the narrative. Each commander interviewed for this study reinforced the difference between wars of movement and wars fought among the people. Every headquarters in Iraq possessed an expansive information operations cell, often staffed with mainstream Iraqi civilian and American media. Before Petraeus arrived, Washington would often decide whether a tactical action captured on tape would find its way to the global media. Today, the task of lifting the fog of war does not depend on the ability to observe the enemy's actions, but on the ability to be first with the information. The interval from observation of a tactical incident to broadcast to

the global network has accelerated from days or weeks to hours, and in some cases, minutes.

Operational-level commanders now consider “walking the beat” to be a required means of feeding the narrative. Major General Rick Lynch, commander of the 3rd Infantry Division, took such a walk in a village south of Baghdad in November 2007. As he strolled along, Lynch occasionally embraced village leaders promoted to Sons of Iraq militia commanders. In very public displays he at once congratulated and cajoled them to improve local security and hunt down what was left of al Qaeda in their neighborhoods. The payback would be radios, trucks, and money to pay new recruits. Lynch's subordinate commanders were anxious to show how well they interacted with these most unmilitary-looking soldiers, dressed in the ubiquitous track suits and carrying Kalashnikovs.

If perception is the end, the means to achieve that end is discourse with those whom we seek to influence. In contemporary irregular conflicts, there are competing and perhaps even warring narratives. Each seeks to sway, through discourse, a very broad and eclectic audience. In an age in which this stream of discourse cannot be easily deflected, the narrative that leads to the fulfillment of the population's will is given credence through the perception that battlefield successes (or failures) can be interpreted as signposts pointing toward the side most likely to achieve victory or defeat.

The narrative battle is not an even match. We may have truth on our side, but the enemy has the advantage of proximity, cultural affinity with the people, and a freedom to dramatize the brutalities of today's irregular conflicts from their perspective. Populations will inevitably receive evidence through a series of social, cultural, and ethnic filters. We see humanitarian relief to Iraqis in distress as a satisfying part of our narrative. Al Qaeda sees it as a very dangerous intrusion that must be curtailed by extreme violence if necessary. One

event, using two separate cultural filters, can feed two dueling narratives. Violence influences the narrative, but in a different way. On television we see soldiers blown to bits by an exploding roadside bomb and are as horrified as the narrator. Others see the same violent image filtered through a different cultural lens and agree with the narrator of the righteousness of the outcome. Conversely, when we see optical or infrared video feeds from fighter aircraft or aerial drones showing the destruction of enemy insurgents the reaction is not horror but righteousness.

Tactical action viewed from the perspective of the narrative often has outcomes at odds with a view from the blitzkrieg-era perspective. For example, an infantry platoon may destroy a particularly troublesome enemy terrorist cell that is using a mosque as its base by first calling for a precision bombing mission, followed by an assault to kill or capture those remaining alive inside. However, the narrative may turn against this tactical action when an enemy team arrives shortly after the assault to remove weapons and explosives from the scene and distribute bloody Korans to suggest that the target was actually young men at prayer. Of course, most of the population in the immediate vicinity of the attack would realize that the whole thing was an al Qaeda setup. They would also be perfectly glad that the enemy cell is gone. Yet, the weight of evidence, when transmitted and interpreted through the cultural lens across the entire population, is not favorable to our version of the narrative.

To gain operational advantage on a future battlefield, we must develop the means to translate tactical actions into lasting strategic ends through the use of our own operational amplifiers that feed the narrative stream. The first amplifier is truth. The enemy's narrative cannot compete with ours as long as we are not afraid to tell the truth, trusting that the asymmetry of truth-telling inherent

in a democracy at war must eventually favor our side to a decisive degree. When done right, speed of truthfulness is analogous to being the first unit to reach the objective. We cannot pause long enough to spin the truth through our cultural filters. The purpose of getting the truth out first should not be to impress our political ideology or methods on the population, but to present ourselves as the only practical alternative for restoring civility to a war-ravaged society. Even among alien populations such as the Sunnis in Iraq, the truth broadcast repeatedly and witnessed firsthand in places such as Anbar can turn the course of the narrative stream and increase its acceptance among the local population. Of course, among groups like the Sunnis this is a fragile task, usually done only when an enemy such as al Qaeda alienates the people through very public and horrific excesses against its own people.

The second narrative amplifier is speed. The truth, even when compelling, dilutes over time. The American command has done a credible job of accelerating the speed of messaging to the media recently by streamlining clearance processes. Media technology in the hands of close combat units is the surest guarantee of speed. Video technologies have become so inexpensive that the U.S. command should equip every small unit on patrol with helmet-mounted cameras linked to a central collection point. American reporters embedded with close combat units have become a common sight in Afghanistan and Iraq. In the future, we must begin to embed media from host countries as well. Native-speaking witnesses can be harsh in their criticisms, but their messages have great power when they chronicle far more horrific—and common—actions by the enemy.

The third amplifier is clarity. A “whole of government” approach to fighting an irregular war is a good idea, as long as too many hands are not on the throttle. The Department of Defense often sees an event in somewhat different contexts than the



Department of State or the Central Intelligence Agency. Too often the facts become too stilted and prescriptive when filtered through an overly bureaucratic and layered process. The greatest credibility comes from young leaders and soldiers who tell their own stories. Even if not terribly articulate, a young infantryman's breathless description of a firefight is far more believable than the same story sanitized and filtered by a general.

The fourth narrative amplifier is the offensive. Soldiers take great pride in their will to close with the enemy on the battlefield, but they tend to be less aggressive when closing with the enemy on the global media stage. Our fear of being wrong often allows the enemy to be first when he has no concern about being right. Commanders in Iraq

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*“In the future, the kinetic  
fight must support  
the narrative.”*

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today have learned to question first reports but show latitude for second reports. Again, video images of firefights and other incidents tend to confirm second reports. Some senior commanders are still reluctant to release sources and means of observation. The Cold War is over. It is better to give the enemy a hint of the power of our sources and means than to allow him to get away with a lie that can easily be refuted.

Field Manual 3.0, *Operations*, is the army's latest effort to codify doctrine for warfare at the operational level. It is the first manual to place information superiority as one of the centerpieces of success on today's battlefield. Yet, the manual treats the subject principally as an organizational and management challenge. It fails to place into

context the absolute centrality of the narrative in planning for and executing future warfare. The inference is that the information campaign should support the kinetic phase of an operation. In fact, global media attention on any war that the United States contemplates reverses this tenet: in the future, the kinetic fight must support the narrative.

Contrasting the first and second battles of Fallujah provides an interesting example of the real war consequences of narratives preceding kinetics. Prior to the marines' first attempt to take the city in April 2004, the enemy occupied the Fallujah General Hospital—located in the extreme northwest corner of the city, near the Euphrates River bridges where the Blackwater contractors were hanged by Sunni insurgents. The hospital director provided safe passage for the media to the hospital and immediately started spouting false stories about the “atrocities” being committed by the marines. As the battle progressed, the hospital filled with dead and wounded. The media fed the narrative to the enemy's advantage, and soon the global outcry over the carnage became so overwhelming that administration pressure forced a premature termination that benefited the enemy. The hospital became the first objective to be taken by the marines prior to the second battle in November. The media never made it into the hospital this time, and the public was denied images of civilian suffering in the city. Sadly, the total cost in life would have been less had the marines pushed through the city in April.

Consideration of the narrative's influence on a coming campaign must be the most important factor for determining whether or not the effort will succeed—or whether it should be conducted at all. History would have played out differently if President Lyndon Johnson and the Joint Chiefs had understood the impact of the global media's coverage of the Vietnam War on a Petraeus-like concept of key audiences. General William Westmoreland's

early search and destroy strategy prior to the Tet Offensive was the proper course of action for destroying Viet Cong and North Vietnamese Army main force units efficiently in large numbers. Yet, the psychological impact of our soldiers burning villages created a “David and Goliath” perspective that made subsequent images of Tet all the more debilitating to the psyche of the American people. Media images can be just as important as traditional factors such as logistics, command and control, intelligence, fire, and maneuver. Most critical will be the enemy’s psychological strength and his potential to adapt his narrative to overcome battlefield reverses.

Thus, today’s challenge is to develop another generation of soldiers equally skilled in the narrative arts. Skill at feeding the narrative is no longer a contributor to achieving strategic success in irregular war. It is in fact the principle determinant, and the psychological center of gravity, for shaping the perceptions and influencing the will of the population. The “area of operations” concept has given way to a narrative stream defined by the global media. While the narrative stream is neutral, who occupies and exploits it is not. In the end, “ground truth” or actual battlefield conditions will prevail. In this new American era of warfare, however, the art of feeding the operational narrative requires skill in maneuvering across the expanse of human perception rather than an expanse of territory.

### THE TACTICAL DILEMMA

A popular phrase in today’s conflicts is that “tactical actions have strategic consequences.” In other words, the narrative is fed through the aggregation of individual tactical engagements with the people. These engagements are filtered and amplified through the perceptual lens of Petraeus’ four audiences. When a soldier standing guard at a checkpoint accidentally killed an Italian journalist’s driver, a key coalition partner was induced to depart. Stupid actions by a small group of prison guards, filtered through the harsh lens of the global narrative, cost the United States dearly in international support and legitimacy.

Advisories understand the strategic consequences of tactical engagements and seek to exploit them. When Hezbollah fighters ambushed and destroyed Israeli heavy tanks at Wadi Saluki and Bint Jbeil, the global moral effect of these engagements surrendered the psychological high ground to Hezbollah. They understood that tactical engagements in this new era are the surest and most visible means of feeding the operational narrative. Their intent was to kill until the Israelis tired of it first. Numbers would be small, but the global psychological consequences of these two engagements would be incalculable. The lesson is clear: our enemies understand that the United States’ most vulnerable center of gravity is dead Americans, and in wars in the American era, the richest place to kill Americans is on the ground in small batches at the tactical level of war.

Hezbollah was not the first to understand how to feed the narrative with dead soldiers—and how to exploit this American vulnerability. In Korea, the Chinese relied on nocturnal “human wave” attacks to kill our soldiers. After two years of this punishment, the U.S. Army withdrew behind a bunkered fortress that stretched 110 miles across the peninsula and relied on massive firepower to keep the enemy at bay. The result was a dramatic decrease

in casualties, but the price was the forfeiture of combat effectiveness and the loss of the tactical initiative. After three years of war in Vietnam, the pattern repeated. Losses to enemy ambushes and mines caused the American command to substantially withdraw most maneuver units inside protected firebases and engage with massive doses of firepower. After the Six-Day War in 1967, the Israelis chose to reduce the cost of keeping the Egyptians at bay by constructing an elaborate string of fortresses on the east bank of the Suez. Over the next six years, guerrilla actions declined,

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*“Time is the enemy’s  
greatest ally.”*

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but so too did Israeli awareness of Egyptian preparations to assault across the canal in great force. Without question, a more exposed and aggressive operational approach to canal defense would have considerably reduced the cost of the 1973 war, if not precluding or preempting it entirely.

Until the arrival of Petraeus as commander in Iraq, spiking casualties from improvised explosive devices (IEDs) and suicide bombings induced a similar pattern of reaction as American forces withdrew inside contemporary versions of Vietnam-era firebases (forward operating bases) to reduce casualties. Soldiers increasingly moved about the countryside sequestered inside vehicles larded with layers of armor to reduce the killing power of IEDs. In effect, these tactical withdrawals too often had the effect of substantially ceding control of critical areas and populations to the enemy. The price paid for protection was too high. We see the same pattern now repeating in Afghanistan. The Taliban’s strategic intent is to isolate coalition forces inside Kabul and Kandahar while simultaneously isolating these cities from rural populations.

Hence the tactical dilemma: In every war in the American era that has lasted too long, ground forces have faced two unacceptable alternatives: fight the enemy on his terms in a relatively even fight and suffer unacceptable casualties, or seek protection at the cost of losing the narrative battle for the allegiance of the people. This dilemma is made all the more challenging by the fact that ground combat is fought in a very complex medium. The vagaries of terrain, the closeness of the enemy, and his ability to hide among the population prevent a single-point, stealth-like solution often pursued in warfare fought in other mediums such as air, sea, and space. Technology alone will not solve the problem; a soldier can only carry so much technology in his rucksack. Improving a soldier’s ability to be successful and to survive in the small-unit fight will demand an artful melding of human and material factors. Better weapons and equipment must be matched with improvements in the way in which soldiers and marines are educated, trained, and led.

In this vein, the surest means of winning against an irregular enemy at the tactical level is to defeat him before the shooting starts. Time is the enemy’s greatest ally. All irregular enemies are particularly vulnerable to defeat during the formative period of gestation. The deployment of a company of the 1st Battalion, 63rd Armor from bases in Germany to Bashur Airfield in the Kurdish area of Iraq in 2003 provides an intriguing preview of how quickly a force might be sped to a region to forestall an irregular conflict before it gains traction. The force was small, only five Abrams tanks and five Bradley fighting vehicles. But subsequent war games and experiments conducted using a larger force of C-130 and C-17 aircraft carrying lighter, more transportable fighting vehicles seem to validate the idea that light mounted forces — delivered very quickly directly into the midst of an enemy enclave — might provide just enough combat power to impede the formation of an insurgency

by violating its sanctuary, killing or capturing its leadership, and collapsing its fighting strength in a single preemptive and decisive aerial maneuver. Events following the march to Baghdad in 2003 might have followed a different course had a division-sized force assaulted by air directly into Baghdad International Airport on the opening day of the war. Such an assault would have turned an operational advance into a strategic *coup de main*, collapsing the leadership of Iraq immediately and interrupting the metamorphosis of the Fedeyeen Saddam into an organized insurgency.

In irregular warfare, operational speed on the ground is as important as operational velocity in the air. The 2004 operational maneuver by ground of the 2nd Battalion, 23rd Infantry, a Stryker-equipped battalion—from Mosul to al Kut, a distance of 380 kilometers in slightly more than 24 hours—testifies to the need to maintain very mobile operational forces capable of coming to the aid of isolated outposts and firebases very quickly before the enemy can mass against them. The task of operational reinforcement and relief becomes very difficult in Afghanistan and Iraq, where distances are vast and road networks very poor. Thus, a mounted force in an irregular war must possess extraordinary reach by air and ground. The Cold War norms for operational velocity of about 50 kilometers per day must be extended when necessary to about 400 kilometers or more in irregular conflicts.

Experience in Iraq after the fall of Baghdad suggests that agility in irregular warfare is as important as operational speed. Forces must possess the ability to move very quickly from linear warfare against conventional enemies to distributed operations against an enemy who chooses to continue the fight as insurgents. Because the enemy is already in place and only needs to change his fighting methods, the counterinsurgent force cannot afford the luxury of changing out conventional for unconventional units once engaged

in combat. Thus, all units in place must be sufficiently flexible to perform both missions and to change from one to the other seamlessly and very quickly.

Cold War doctrine was premised on the need to deny the enemy control of the key terrain. This imperative to gain “positional advantage” by seizing points of terrain also shaped every aspect of ground force doctrine, training, and materiel development. Key terrain is still an important tenet in irregular warfare, but it is now defined differently. At times, points of terrain can be objectives worth fighting for: an insurgent hideout, a bomb-making factory, perhaps a significant cache hiding weapons or propaganda materials. But, if the past and present are prologue, tomorrow’s conflicts will be fought among the people. Thus, the focus on point objectives is giving way to the need to control populations and the areas that they inhabit. Moving from point objectives to area control causes the ground force to fight on a distributed, dispersed battlefield. As the enemy spreads out to contest the countryside or urban areas, we must follow him there. Yet, the challenge in distributed warfare is to do more than just spread out. In fact, as units disperse, they change their patterns of maneuver and behavior. They are forced through dispersion to forfeit their traditional advantages of mass, operational speed, and the ability to concentrate killing power quickly. As a force distributes it must therefore still retain the ability to increase tactical speed, agility, and lethality in order to coalesce very quickly and at a moment’s notice.

The transition from linear to distributed operations implies a change in the character of the mission from destroying the enemy’s forces through fire and maneuver to shaping the narrative and influencing the perceptions of the population. Contact with the people necessitates that irregular wars be infantry intensive. Irregular warfare requires every variety of infantry: light and foot-mobile as well as mounted, vehicle-borne,



and special operating. The army cannot win the battle of perceptions and influence by looking out the vision blocks of armored vehicles. The most intimate means of maintaining contact with the population is on foot. We have learned in Iraq that contact must be measured against the dangers of unnecessarily exposing soldiers to enemy ambushes and roadside bombs. Body armor offers some protection for dismounted soldiers, but weight is a problem. In World War II, Korea, and Vietnam, the soldier's load averaged about 40 pounds. Some infantry units today carry as much as 100 pounds or more on their backs, most of it body armor. Dismounted soldiers are most likely to become fatigued and to suffer from heat stroke in the stifling Iraqi heat. In the future, an unblinking eye will not be of much use unless a dismounted soldier can watch the enemy's actions through his own personal data device linked to unmanned aerial vehicles (UAVs) orbiting overhead. Yet, soldier awareness is affected by his limited access to the web, which is in turn limited by the soldier's access to portable power. A squad of ten soldiers in Iraq uses an average of 22 pounds of batteries per day, giving them only about three days of autonomous activity before having to return to base.

Over the past two years in particular, anecdotal evidence from Afghanistan and Iraq suggests that investments made recently to better equip dismounted small units are saving lives. In World War II and Vietnam, an individual infantryman cost (in today's dollars) about \$1,900 to equip. The "ratio" of killed to wounded in small-unit action in both wars was about 1 to 3.40: in other words, a soldier shot in the close fight stood a one chance in three of dying from his wounds. About two infantrymen out of every thousand died from enemy action. Dismounted soldier investments made by the army and marine corps in

Afghanistan and Iraq have increased to \$17,000. The killed-to-wounded ratio is now about one in nine, and the casualty rate has decreased to less than one-third of a percent per thousand. The bottom line is clear: a small investment in body armor, sensors, communications, and weapons for the dismounted soldier has saved many lives. Greater investment in individual soldier technology can save many more.

Absent a technological breakthrough in self-protection, it seems unlikely that tomorrow's dismounted soldiers will be able to overwhelmingly best the enemy in dismounted-to-dismounted combat. The only means of lengthening the odds will be to engage enemy foot soldiers from fighting vehicles. In wars in the American era, a soldier fighting from a vehicle of any sort increases his chance of survival by about an order of magnitude. Most soldiers accept the value of this proposition in conventional wars, but tend to believe that armored warfare is less suited for irregular wars. Actually, a quick look at history supports the view that mounted systems have proven invaluable in irregular wars. The British Army successfully employed armored cars during their occupation of Mesopotamia in the 1920s. Mechanized "mobile groups" consisting of armor-protected columns of truck-borne infantry provided the French with an operational maneuver force capable of responding to the wide-ranging massed attacks of the Viet Minh. Beginning in 1982, the Israeli Defense Forces adapted their Cold War armored formations for operations in Lebanon and in stability operations against Hamas. U.S. use of mounted maneuver began at the beginning of the American era in Korea and continued through Vietnam and all wars subsequently fought in the Middle East. The Soviet use of armored formations in their successful second assault in Chechnya in 1999 is well known. The

danger of fighting too light against a determined enemy is well documented in Mark Bowen's *Black Hawk Down*; a UN armored column was unable to reach U.S. Rangers and special operating soldiers in time to prevent the loss of 18 men isolated and surrounded in the back streets of Mogadishu.<sup>4</sup>

Unfortunately, Cold War armored materiel is optimized for wars on a European, not an irregular, battlefield. In Afghanistan and Iraq, mounted soldiers find it difficult to maintain intimate contact with the population when driving about sequestered in steel boxes, unable to see or be seen by the population. Seventy-ton tanks put down too heavy and intrusive a footprint in places where a lighter touch is needed. These systems are too road-bound and often cannot cross third-world bridges or negotiate labyrinthine alleys and narrow streets of pre-industrial urban complexes. Cold War armored systems designed for massive, head-on, armor-versus-armor engagements are not optimally suited to deliver the discrete doses of combat power necessary for fighting against insurgents hiding among the innocent. Cold War armored formations cannot move rapidly over great distances, a necessary requirement when fighting insurgents scattered across vast expanses of hostile territory. Very heavy formations require prodigious quantities of fuel, ammunition, and spare parts—all of which must be supplied to “distributed” and remote fighting formations with great difficulty across a lengthy and vulnerable logistical tether.

As the Israelis learned painfully in Lebanon, dismounted enemies can approach close to tank columns winding through defiles and narrow city streets and get close enough to engage static tanks in their vulnerable flanks and rear. Most importantly, a dismounted enemy hidden in cities or in mountain defiles can draw mounted infantry out of their fighting vehicles and engage them in the open, where the fight becomes even. Thus, the shift

from the Cold War to irregular warfare demands a fundamental shift in offensive warfighting imperatives, from a tank force optimized to kill enemy tanks to an infantry force optimized to kill infantry. The defensive imperatives have shifted as well: from defeating enemy tanks to protecting armored formations from an aggressive dismounted enemy armed with anti-tank guided missiles.

Irregular war demands that mounted tactical units, squads, and platoons operate dispersed over long periods and wide expanses of territory. Only mounted infantry can rely on the protection and carrying capacity of their vehicles to stay for long periods in the field. In the future, small mounted tactical units disaggregated into sections of one or two vehicles will be able to connect with the local

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*“While the profile of these units may be small, their lethality will be overwhelming.”*

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population very quickly while presenting a low and unobtrusive operational profile. While the profile of these units may be small, their lethality will be overwhelming. Immediate access to distant sources of killing power, as well as the ability to observe and engage from a rich layer of organic aerial unmanned platforms, will deny the enemy the element of surprise. The potential of Cold War mounted systems to expand control of territory occurred during the formative period of combat in Iraq. The 1st Battalion, 23rd Infantry from Fort Lewis was the first Stryker Brigade Combat Team (BCT) on the ground in Iraq. It assumed responsibility for the region around Mosul as the Sunni

<sup>4</sup> Mark Bowen, *Black Hawk Down: A Study of Modern War* ([CITY] Atlantic Monthly Press, 1999).

insurgency began to form and gain strength from the early fall of 2003 to the fall of the next year. During that period, the brigade managed to successfully control a battlespace of about 65 by 75 square kilometers—much of it urban, with a total population of almost 750,000. This is an area about four times greater than that habitually assigned to heavy combat brigades, and six times greater than a light infantry brigade's area of operations. The Stryker BCT succeeded in controlling such an expanse because of its ability to divide into relatively self-contained and self-sufficient small units of about company size able to operate with very limited outside support for protracted periods of about one week or more.

When asked for his or her insights into how to solve the tactical dilemma, virtually every senior operational commander in Iraq answered consistently and unequivocally: soldiers should not have to die to gain information about the enemy. Thus, the most important task for the future should be to avoid surprise by being able to see the enemy first. The nature of irregular war has exacerbated the challenge of finding the enemy. The enormity of the battlefield, the enemy's propensity to hide among the people in urban areas, and his understanding of the benefits of collateral damage require that on tomorrow's battlefield the enemy must not just be perceived—he must be watched and tracked reliably in real time. Today, a commander gets only incidental glimpses of the enemy—much like a stop-action television image limited in time and area. In the future, he must gain the perceptual high ground by expanding his view such that he is able to move from a stop action to a continuous, uninterrupted “streaming video” image of the battlefield. He must be able to see the expanse that encompasses the entire breadth and depth of his operational domain such that the enemy has nowhere to hide.

The U.S. Army has made progress in its ability to see the enemy. Task Force Odin, a manned/

unmanned aviation brigade stationed at Balad Airfield in Iraq, offers the promise of such a capability. Odin is an ad hoc organization made up of active and reserve soldiers supported by contractors. The unit brings together cutting-edge sensors mounted aboard fixed-wing intelligence-gathering aircraft and long-endurance UAVs. The “brain” of the brigade is an enormously complex intelligence fusion center that is capable of sifting through sensor data with enough granularity to detect individual enemy activity in near real time. However, the view provided by Task Force Odin's aerial systems is limited in time (a few hours) and space (a few square kilometers), at an exorbitant cost. Commanders require the ability to stare at the enemy rather than glance at him. A staring capability would give commanders the ability to detect patterns of behavior. An “unblinking eye” over the battlespace would allow commanders to predict the enemy's behavior by watching, over time, his tempo and cycle of operating.

Armed with such information, a commander would be able to anticipate what the enemy will do next. Experience supports the contention that, to be fully effective, control of the positioning, duration, and distribution of information from the unblinking eye must be decentralized to ground tactical commanders at the lowest level. When soldiers are in contact, a tactical commander should be able to observe the action very closely to intuit the most intimate of the enemy's thoughts and actions. He should also have a broad, complete, and uninterrupted macro view of his area of operations, such that the enemy would find it very difficult to hide or approach his position without detection. Such a capability should be sufficiently mobile and flexible to allow a tactical commander to employ it with a minimal burden on transport and logistics. It must also belong to him and him alone. A small-unit leader's greatest desire is to see the enemy from over the hill. This task can best be done bloodlessly using unmanned aerial eyes such

as robots and unmanned vehicles or by manned systems able to remain hidden from enemy observation. It is not enough to be able to see an enemy over the hill unless he can be engaged before he moves. Thus, speed of decision making and delivery are both essential for the task.

To decisively win the very close fight in a future war will demand changes in the very essence of how these battles are fought. The cost of the close fight can best be reduced by finding and fixing the enemy with surrogates using unmanned aerial and ground robotic vehicles employed to replace real soldiers. These virtual scouts will rob the enemy of surprise and allow friendly forces to choose the time and circumstances of the close fight. Surrogates effectively allow the prospect that every engagement becomes an ambush. Experience in Iraq also supports the hypothesis that the presence of surrogates changes the enemy's behavior in the close fight. In the second battle of Fallujah, marine commanders reported that the sight and sound of aerial vehicles orbiting overhead created a sense of uncertainty among the enemy. They tended to move away from advantageous fighting positions inside buildings for fear of being discovered and engaged by these unfamiliar and threatening devices. As long as aerial vehicles were overhead, the enemy remained isolated from his buddies and leaders, fearing that exposure might mean death.

An unfortunate consequence of urban fighting is that the deadly zone (the distance that separates two forces locked in a firefight) decreases from about 2,400 meters in open terrain to 50 meters or less in cities. All too often in Iraq and elsewhere, the imperative to clear urban areas in which innocent civilians are present demands that a small unit must close well within the deadly zone against a hidden and prepared enemy. Inside the deadly zone, the "exchange ratio," or the relative cost of an engagement between friendly and enemy forces, no longer favors one side or the other and the fight becomes a fair one. This occurs because infantry

small units must dismount and cross the deadly zone on foot. At close range, the enemy's weapons, small arms, mortars, and explosive devices are as deadly as ours.

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*"At close range, the enemy's weapons...are as deadly as ours."*

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The contrast of massive armored formations attacking across open desert in Desert Storm and the march to Baghdad with solitary vehicles picking their way through the urban areas of Afghanistan, Iraq, and Lebanon highlights the dramatic shift in styles of maneuver imposed by the character of irregular warfare. The tyranny of complex terrain not only diminishes the mass and velocity of conventional maneuver but fundamentally changes how maneuver is done. Armored forces can still gain positional advantage over an enemy buried inside cities, but the process must be more deliberate and attended with a more intimate knowledge of his location, disposition, fighting strength, and will. Maneuver in close urban terrain demands fighting systems properly "sized" for cities. They must be small and very agile, and their weight must be light enough to negotiate third-world bridges. Mounted forces in irregular war must be able to maneuver in very tight places. Israeli Merkava tanks, with their wide stances and very long and protruding main guns, were at a disadvantage when forced to enter villages occupied by Hezbollah infantry. Fighting vehicles must possess unprecedented visibility even when crews are buttoned up. Urban maneuver demands frequent shifts from mounted to dismounted movement. Soldiers must not lose protection, connection, and situational awareness after the vehicle ramp comes down.



Soldiers from the 4th Battalion, 9th Infantry equipped with Strykers demonstrate how effectively soldiers can modify their tactical procedures in order to get close to the enemy while remaining protected and effective. Instead of dismounting at an assault position, they exploit the relative silence of the Stryker to approach right up to the enemy's defenses. In effect, their vehicles become silent mobile fighting positions (the soldiers refer to them as "mother ships") that provide a protected moving bunker, a mobile command post, and a mobile rally point between phases of a tactical operation. Ideally, the crew is able to maintain constant observation of the enemy while on the move using streaming video from UAVs orbiting overhead. Given the right circumstances, the infantry squad jumps from the rear ramp directly into the enemy's lap, and the fight only lasts a few seconds.

If most soldiers die within the deadly zone, we must find the means to keep infantry outside the zone whenever possible and to destroy as many enemy infantry as possible with precise, discrete, and immediately available killing power. Soldiers in Afghanistan and Iraq possess some ability to kill from a distance, but the most effective killing power comes from sources outside of the small unit, usually aerial firepower provided by close air support from the air force's fixed wing assets or army attack helicopters and artillery. The problem with today's distant fire support is that soldiers must get close to observe the effects of the fire. All too often, the lethal zones created by the bursting effects of aerial fires are so wide that soldiers who have fixed the enemy must first withdraw to safe distances before the fires can begin; that often becomes the signal for the enemy to leave as well.

Soldiers in Iraq have a saying that the object of delivering fires is "to kill more enemies than you make." Killing power indiscriminately applied will

shape the narrative to the enemy's advantage if it harms innocents, particularly if the destruction is captured by the media. Cold War-era firepower systems are designed to deliver masses of artillery and bombs across wide areas with little ability to limit collateral damage. Hezbollah's skillful portrayal of Israeli air strikes inside Lebanon greatly harmed Israel's image abroad and greatly limited the effectiveness of Israel's aerial assault against Hezbollah targets. Without question, experiences such as these demonstrate that irregular wars will demand a shift in how fires are delivered; from massive area fires to fires that are precise, discrete, immediate, and able to be delivered very close to soldiers in contact. Experience on the march to Baghdad strongly supports the conclusion, however, that the capacity to mass effects will remain essential for full-spectrum operations. The optimal solution will be to find a means to deliver an increased volume of precise distant fires quickly when the enemy suddenly appears in mass. Area fire is too indiscriminate, slow, and consumes too much weight and bulk. Tomorrow's massed effects must come from shells and bombs that are precise and cheap enough to increase the relative lethality of massing fires by many orders of magnitude.

Irregular enemies learned very early that rear-area soldiers were often the easiest to attack. In Afghanistan and Iraq, the lines of communications are long, poorly protected, and vulnerable to attack by ambush, snipers, and roadside bombs. The roads are also very crowded. Even when not engaged in large-scale maneuver, Cold War materiel employed by conventional mounted units in Iraq consumes enormous quantities of food, fuel, water, ammunition, and spare parts. Irregular wars of the future will demand that the vulnerable logistical tether that ties the isolated tactical units with their sources of supply be shrunk, if not eliminated. Small units cannot disaggregate

<sup>5</sup> S. L. A. Marshall, *Men Against Fire* (New York: William Morrow, 1953): 42-43.

into platoons or squads for sustained periods without greatly reducing dependence on external sources of supply. The need to deliver ammunition, spare parts, fuel, and water exposes support soldiers to the tender mercies of the enemy along the line of communications. Tomorrow's infantry must be able to fight supported by a much smaller and much less vulnerable logistical tether. The only sure way to eliminate these logistical vulnerabilities would be to supply the close fight predominantly by air. An aerial line of communication is only possible if the equipment and the supplies needed to maintain it can be delivered continuously, and if the appetite for resupply is sufficiently constrained to stay within the lifting limits of available aircraft. Today in Afghanistan and Iraq, no mounted fighting system can be completely supported from the air and the enemy knows it. That is why the enemy too often attempts to attack supply soldiers along the ground lines of communications.

Often in today's conflicts we tend to ignore the human dimension in war. This tendency to focus on physical rather than human science has a very long history. No sooner had soldiers crossed the bloody Norman beaches than they ran into Germans defending behind hedgerows. The Germans dug in behind these dense walls of foliage with a clear field of fire from one hedgerow to the next. American soldiers were trained to listen for orders from their leaders, scan to the next hedgerow and shoot any German who showed his head. The Germans had developed other habits after four years on the Eastern Front. As soon as someone spotted the Americans, they opened fire in what appeared to be an indiscriminate pattern. In the dark they talked and shouted incessantly, oblivious to the enemy only a few yards away. This "team chatter" was a very effective means of dispelling personal anxiety. A soldier's greatest fear is to die alone separated from his comrades. Noise steels him and gives him assurance that his buddies,

although they can not be seen in the darkness, are only an elbow's length away. The Germans later testified that the sound of comrades sustained them more than the sound of their weapons. The fundamental character of war has not changed. Experience in all recent wars tells us that soldiers are far more effective if they can maintain voice and visual contact with their buddies.<sup>5</sup>

In Iraq, narrow streets and dark alleys have replaced hedgerows, but the need for soldiers to maintain contact with their buddies and immediate leaders has not changed. The experience of the soldiers from the 4th Battalion, 9th Infantry strongly supports the contention that the ability to "see" and "talk" to maintain contact virtually over the network increases individual fighting prowess and soldier confidence enormously. Yet, for reasons that only the vagaries of the army's acquisition system can explain, after seven years of war too many soldiers in Afghanistan and Iraq still must rely on hand and arm signals to maintain small-unit cohesion in the close fight—just like their great grandfathers did in the Norman hedgerows.

Successful tactical, close combat engagements are the essential components for achieving success at the operational and strategic level. Skill at arms, cohesion, mental toughness, leadership, and the tactical "right stuff" within squads, platoons, and companies determine the success of close combat engagements. Close combat is brutal and intimate, and killing close is the essence of what it means to be an infantryman, tanker, or cavalryman. Others on the battlefield, such as pilots and artillerymen, kill—but at a distance. Killing, to them, is detached, antiseptic. After a mission, a pilot may feel remorse at the realization that the bomb he dropped at some distant target killed someone, but a close combat soldier sees his target die. He watches the life drain out of an enemy who chances across his sights. To be sure, other soldiers may occasionally stumble upon the enemy. These are incidental fighters, occasional victims of war who

die in ambushes, roadside bombings, and assassinations. Only a close combat soldier, however, goes out every day with the intention of taking another human life in face-to-face intimate combat.

Dominance in the close tactical fight depends on creating world-class small units, superbly selected, trained, and psychologically inoculated to endure the stress inherent in the act of intimate killing. Small-unit leaders, sergeants, and lieutenants must be found, nurtured, and taught to make life-or-death decisions in the heat of the close fight. Think of a tactical, small-unit version of the navy's Top Gun or the air force's Red Flag exercises, in which small-unit leaders and their soldiers would have the luxury harnessing training technology to get better bloodlessly.

The lesson from recent wars is that serving as a close combat soldier is far more difficult and hazardous than serving in any other military specialty. The act of intimate killing takes a toll on even the most emotionally hardened close combat soldier. Likewise, humping a 150-pound rucksack in 120-degree heat takes a toll on the fittest body. Bureaucratic institutions and personnel polices at

careers before the stress of close combat scars them emotionally and physically. Small units should be staffed with greater numbers and higher ratios of leaders to followers to compensate for the inevitable attrition that comes from the tactical fight.

History teaches the same lesson over and over. Mature, intelligent, well-led, trained, and motivated soldiers are far more effective in the close fight and far less likely to die. More pay, greater numbers, and less combat stress should allow an all-volunteer military to select and promote those who demonstrate the tactical right stuff. Only the best and brightest among all of those brought into the military should be allowed to join this elite band of brothers.

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*“Pay scales should be changed such that they are compensated for risk as well as skills.”*

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the Defense Department must be changed to reflect the unique requirements for making world-class tactical fighters. Pay scales should be changed such that they are compensated for risk as well as skills. They should be allowed to retire earlier in their

### WILL THE PAST AND PRESENT BE PROLOGUE?

Armies tend to become reflective as wars wear down. By the third or fourth year of a conflict, amateurs become professionals. The Darwinian process of self-selection culls those who are not able to meet the harsh standards set by the gods of war. The seeds of blitzkrieg were sown immediately after World War I when General Hans von Seeckt formed 57 committees and subcommittees to study a like number of aspects from the previous war. The result was the German tactical regulation “Leadership in Battle,” which became the centerpiece for the beginning of machine-age warfare. In 1982, approximately the same period after Vietnam, the American Army codified the doctrine “AirLand Battle,” which witnessed the culmination of machine-age warfare doctrine. Armies change the way in which they fight very reluctantly—not because soldiers are by nature risk averse, but because the cost of failure is potentially so great. It is no surprise, therefore, to witness a similar renaissance in military thought beginning to emerge (very cautiously) from the wars in Afghanistan and Iraq.

Consensus among veterans of these wars solidly supports the contention that irregular wars will be with us for a generation or more to come. The enemy will not change his spots because he has found through experimentation in the martial laboratory of real war a style of irregular warfare that works. No state with the warfighting capability to match that of the United States is anywhere on the horizon. China is worrisome to be sure, but if the past is prologue the People’s Liberation Army (PLA) will in all likelihood continue to develop patterns of irregular warfare not dissimilar to those that they refined in Korea, Manchuria, and elsewhere in the last century. Should the PLA decide to mimic the United States and develop a techno-centric approach to future war, the signs of such a seismic methodological shift will be evident

for all to see and we will have time to respond. Iran might threaten the use of nuclear weapons in the region. Yet, a close look at Iranian operational method in their war against Iraq in the 1980s and their subsequent stewardship of Hezbollah suggest that any attempt at nuclear intimidation will be cloaked in methods of irregular warfare similar to those that all of our antagonists have practiced during the American era.

The army and marine corps, like the Germans after WWI and the United States after Vietnam, are searching for ways to defeat irregular enemies at lower cost in human life at the strategic, operational, and tactical level of war. Yesterday’s soldiers would not comprehend how vital the task of coalition building will be to our ability to succeed on tomorrow’s battlefields. Nor would they have been comfortable accepting the truism that the narrative stream flows downhill, driven by the gravitational pull of the global media. The American people will continue to lower the bar of acceptance for casualties in war. Because the vast majority of combat deaths are suffered by those who fight closest to the enemy, we have the responsibility as a nation to continue to produce extraordinarily skilled combat soldiers and superbly bonded and led small units while doing all that is necessary to reduce the probability of their demise. Saving soldiers is a strategic as well as a human imperative. As long as the nation’s leaders believe that putting soldiers into harm’s way needlessly risks their lives, they will resist doing so. The consequences of such restraint may well in a future war convince the enemy to threaten and brutalize in the hope that we will not intervene. As a national priority, we must commit to creating tactical small units as dominant in irregular ground combat as our air, sea, and space services are dominant in their respective domains. Only then will the United States have the power to prevail on the future battlefield with the confidence that no soldier or marine will die because he or she was not given every advantage that this nation can provide.





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