# ASYMMETRY AND U.S. MILITARY STRATEGY: DEFINITION, BACKGROUND, AND STRATEGIC CONCEPTS

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| **Abstract**<br>This report gives a simple and comprehensive definition of strategic asymmetry reflecting the need for military doctrine which transcends today's specific issues. The authors assess the strategic situation of the United States in terms of positive and negative asymmetry and offer five strategic concepts as part of the response to asymmetry: maximum conceptual and organizational adaptability, focused intelligence, minimal vulnerability, full spectrum precision, and an integrated homeland security strategy | |
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# FOREWORD

Following the May 2000 Army-Marine Warfighter Talks, the Army resolved to develop an Army-Marine Corps view of a strategy for combating asymmetric threats. The U.S. Army Strategic Studies Institute, in turn, set about defining asymmetry within the context of military doctrine, assessing the implications of asymmetric military capabilities, and suggesting strategic concepts for countering asymmetric threats.

This special report is the result of that tasking. In it, Dr. Steven Metz and Dr. Douglas Johnson recommend a definition of strategic asymmetry that is both simple and comprehensive, reflecting the need for military doctrine that transcends the specific issues of today. They then assess the strategic situation of the United States in terms of both positive asymmetry—that which gives U.S. forces an advantage over opponents—and negative asymmetry that might be used to counter U.S. forces. Finally, they offer five strategic concepts as part of the response to asymmetry: maximum conceptual and organizational adaptability, focused intelligence, minimal vulnerability, full spectrum precision, and an integrated homeland security strategy.

The Strategic Studies Institute is pleased to offer this special report as part of the ongoing refinement of the Army's understanding of the strategic benefits and challenges arising from asymmetry.

DOUGLAS C. LOVELACE, JR.
Director
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# ASYMMETRY AND U.S. MILITARY STRATEGY: DEFINITION, BACKGROUND, AND STRATEGIC CONCEPTS

## Introduction.

In war, there are always differences between the opponents. At times these are insignificant, passing disparities with no bearing on the outcome. At other times, the differences between opponents are important, placing one in a position of advantage, the other at a disadvantage. This is a very simple observation, but from it flows one of the pressing issues faced by the United States today: strategic asymmetry.

Strategic asymmetry is the use of some sort of difference to gain an advantage over an adversary. It is an idea as old as warfare itself, appearing under a number of guises. Among strategic theorists, Sun Tzu placed great stock in psychological and informational asymmetry, writing that:

> All warfare is based on deception. When confronted with an enemy one should offer the enemy a bait to lure him; feign disorder and strike him. When he concentrates, prepare against him; where he is strong. avoid him.[1]

In the middle of the 20th century, the British strategic theorist B.H. Liddell Hart advocated "the indirect approach" in strategy. The wisest strategy, he contended, avoids the enemy's strength and probes for weakness.[2] Edward Luttwak, who is one of the more astute contemporary strategic theorists, has extrapolated a general rule from it. Strategy, Luttwak contends, involves actual or possible armed conflict between thinking humans and thus is dominated by a "paradoxical logic" based on the "coming together and even the reversal of opposites."[3] What appears best, more effective, or most efficient, in other words, often is not.

Asymmetry is certainly not limited to strategic theory. Many of history's greatest generals also had an instinctive feel for it. Like the U.S. military in the Gulf War, the Mongols under Genghis Khan and his successors often used superior mobility, operational speed, intelligence, synchronization, training, and morale to crush enemies in lightning campaigns. When necessary, the Mongols used the superior technology of Chinese engineers to undertake successful sieges. Other conquerors, whether Romans, Europeans, Aztecs, or Zulus, brought superior technology, discipline, training, and leadership to the battlefield. Rebels in anti-colonial wars also relied on asymmetry, weaving guerrilla operations, protracted warfare, political warfare, and a willingness to sacrifice into Maoist "People's War," the Intifada, and the "Troubles" of Northern Ireland. Asymmetry is as old as warfare itself.

Throughout the Cold War, asymmetry was an important element of U.S. strategic thinking, but was seldom called by that name. Matching Soviet quantitative advantages in Europe with American and NATO qualitative superiority was integral to U.S. strategy. Other concepts such as Massive Retaliation of the 1950s or the Maritime Strategy of the 1980s elevated asymmetry to an even higher plane.[4] Beginning in the 1990s, thinking within the Department of Defense (DoD) began to shift with growing recognition of the potential for asymmetric *threats* to the United States. This was part of DOD's increasingly sophisticated understanding of the post-Cold War security environment. Since the global distribution of power was asymmetric, it followed that asymmetric strategies would be a natural evolution.

Explicit mention of asymmetry first appeared in Joint Doctrine in 1995.[5] The concept, though, was used in a very simplistic and limited sense. The doctrine defined asymmetric engagements as those between dissimilar forces, specifically air versus land, air versus sea, and so forth.[6] This very narrow concept of asymmetry had limited utility. The 1995 National Military Strategy approached the issue somewhat more broadly, listing terrorism, the use or

threatened use of weapons of mass destruction, and information warfare as asymmetric challenges. In 1997, the concept of asymmetric threat began to receive greater attention. The *Report of the Quadrennial Defense Review* (QDR) stated,

> U.S. dominance in the conventional military arena may encourage adversaries to use . . . asymmetric means to attack our forces and interests overseas and Americans at home.[7]

The National Defense Panel (NDP), a senior level group commissioned by Congress to provide an assessment of the long-term defense issues the United States faced, was even more explicit. The Panel's report stated:

> We can assume that our enemies and future adversaries have learned from the Gulf War. They are unlikely to confront us conventionally with mass armor formations, air superiority forces, and deep-water naval fleets of their own, all areas of overwhelming U.S. strength today. Instead, they may find new ways to attack our interests, our forces, and our citizens. They will look for ways to match their strengths against our weaknesses.[8]

The NDP specifically mentioned the danger from enemy actions that might cause greater than expected U.S. casualties, the use of weapons of mass destruction to delay or complicate U.S. access to a region and inflict casualties, attacks on U.S. electronic and computer-based information systems, the use of mines and missiles along straits and littorals, terrorism, and similar threats.

Following this, there was a flurry of activity to flesh out the meaning and implications of strategic asymmetry, particularly within the intelligence community and the Joint Staff.[9] The most important single study was the 1999 Joint Strategic Review, *Asymmetric Approaches to Warfare*. This provided a conceptual framework of asymmetric threats, and a number of recommendations. *Joint Vision 2010*, a 1995 document prepared by the Chairman that was to provide a conceptual template for the future development

of the U.S. armed forces, did not mention asymmetry but *Joint Vision 2020*, the follow-on document released in 2000, did, labeling asymmetric approaches like long range ballistic missiles "perhaps the most serious danger the United States faces in the immediate future."[10] Finally, the Secretary of Defense's Annual Report to Congress in 1998 and 1999 noted that U.S. dominance in the conventional military arena encourages adversaries to seek asymmetric means of attacking U.S. military forces, U.S. interests, and Americans. The 2000 Annual Report, while retaining the description of asymmetric threats used in the previous reports, dropped the word "asymmetric."

This treatment of asymmetry in official strategy documents indicates that the concept is an important one that, according to most experts, may grow even more significant. Yet the development of strategy and doctrine to both deal with asymmetric threats and take advantage of the U.S.' own asymmetric capabilities requires greater conceptual rigor. Phrased differently, asymmetry is *important* to strategy, but not *everything* is asymmetry. Strategic leaders and thinkers must be clear on what asymmetry *is* and what it *is not*. This special report seeks to help clarify this with an eye toward doctrinal clarity by suggesting a definition and conceptual foundation for thinking about strategic asymmetry. It will then provide an overview of the U.S. situation in terms of strategic asymmetry, and propose some strategic concepts dealing with asymmetry.

## Definition and Conceptual Foundation.

Clear thinking begins with simple yet comprehensive definitions. This way those involved can have some assurance that they are speaking of the same thing. While several definitions of strategic asymmetry have appeared in Department of Defense documents, most have simply codified the specific security problems or threats faced by the United States today or have reflected such an

"American-centrism" that their analytical use is limited. A 1998 report from the National Defense University, for instance, defined asymmetry as not "fighting fair."[11] Since fairness is subjective and fluid, definitions of this sort make little contribution to rigorous strategic thinking. Doctrine and strategic clarity demand a simple and comprehensive definition.

The 1999 Joint Strategy Review provided the broadest official treatment of asymmetry. It states:

> Asymmetric approaches are attempts to circumvent or undermine US strengths while exploiting US weaknesses using methods that differ significantly from the United States' expected method of operations. [Asymmetric approaches] generally seek a major psychological impact, such as shock or confusion that affects an opponent's initiative, freedom of action, or will. Asymmetric methods require an appreciation of an opponent's vulnerabilities. Asymmetric approaches often employ innovative, nontraditional tactics, weapons, or technologies, and can be applied at all levels of warfare—strategic, operational, and tactical—and across the spectrum of military operations.[12]

This definition expanded official thinking but has two shortcomings: it remains specific to the current strategic environment and American security situation; and it deals primarily with what might be called "negative" asymmetry—what an opponent might do to the United States—rather than giving equal weight to how the U.S. military might use asymmetry against its opponents.

A more general and complete definition of strategic asymmetry would be:

In the realm of military affairs and national security, asymmetry is acting, organizing, and thinking ***differently*** than opponents in order to maximize one's own advantages, exploit an opponent's weaknesses, attain the initiative, or gain greater freedom of action. It can be ***political-strategic, military-strategic, operational,*** or a ***combination*** of

these. It can entail different ***methods***, ***technologies***, ***values***, ***organizations***, ***time perspectives***, or some ***combination*** of these. It can be ***short-term*** or ***long-term***. It can be ***deliberate*** or ***by default***. It can be ***discrete*** or pursued in ***conjunction with*** symmetric approaches. It can have both ***psychological*** and ***physical*** dimensions.

While the key is the idea that significant *differences* of some kind exist, there are several elements of this definition that warrant elaboration.

*Dimensions of Asymmetry*. Strategic asymmetry can be positive or negative. Positive asymmetry entails using differences to gain an advantage. U.S. military strategy, for instance, places great value on superior training, leadership, and technology. This strategy seeks to both sustain this superiority and make use of it. Negative asymmetry is a difference that an opponent might use to take advantage of one's weaknesses or vulnerabilities. It is, in other words, a form of threat. Most of DOD's thinking about asymmetry focuses on its negative form.

Strategic asymmetry can also be short-term or long-term. As military history shows, many if not most types of strategic asymmetry are short-term. Sooner or later the enemy adjusts. In World War II, for instance, *blitzkrieg* succeeded for a year or two until the Soviets found ways to counter it. It took longer, but Third World governments and their militaries eventually found counters to Maoist People's War. The 1999 air campaign against Serbia suggests that enemies may find ways to counter the U.S. advantages in airpower by camouflage, dispersion, and dense but relatively unsophisticated air defense systems. Long-term asymmetry is rarer. The United States will probably be able to sustain its asymmetric advantage over certain types of enemies for a fairly long time, in large part because it is able and willing to devote more resources to maintaining military superiority than potential enemies are able and willing to devote to overcoming the American

advantage. Sustaining an asymmetric advantage, though, does require constant effort and adaptation: any military force that stands pat during a time of strategic change will decline in effectiveness.

Strategic asymmetry can be deliberate or by default. The United States is relatively rare in that its strategists actively think about asymmetry and how best to use it or control it. More often, antagonists in a conflict or war simply use what they have and do what they know how to do. That the outcome is asymmetric is more accidental than planned. For instance, when untrained military forces use irregular methods as when a combined force of French and Indians defeated the British General Edward Braddock near Fort Duquesne in 1775, or a group of American mountaineers defeated a loyalist force commanded by Major Patrick Ferguson at King's Mountain in 1780, victory came because the Indians or the American mountaineers fought in a way they understood, not because they analyzed the weakness of the somewhat more conventional Loyalist forces and designed ways to take advantage of them. In most anti-colonial wars or insurgencies the "less advanced" forces preferred to emulate the "advanced" ones. Mao held that guerrilla war was seldom decisive but should be used as a preface for large scale mobile war.[13] After all, it was not the Viet Cong that overthrew the government of South Vietnam, but a conventional combined arms force from North Vietnam. When countering asymmetric threats, understanding whether the asymmetry is deliberate or by default is important since an enemy using deliberate asymmetry is likely to make more adjustments and thus requires a more flexible strategy to counter.

Strategic asymmetry can be low risk or high risk. Some forms of asymmetry such as superior training or leadership are time tested. They may entail costs to develop and maintain, but seldom increase strategic or operational risk. The high cost of having a fully trained, equipped, ready force reduces risk even though it may not fully protect against all asymmetric actions as seen recently in Aden. In

another sense, that assault, though a tactical action of very limited investment and very high risk to those undertaking it, may have disproportionate consequences like removing the U.S. naval presence from that key port (and others as well). Other forms of asymmetry are experimental or untested, and thus entail significant risk. Terrorism, for instance, may be a low cost but high risk approach since it can generate a backlash against those who use it or steel rather than erode the resolve of the target. Just as most mutations in nature prove dysfunctional or, at best, insignificant, many forms of strategic asymmetry are acts of desperation that do not work or only work for a limited period of time.

Strategic asymmetry can be discrete or integrated with other, symmetric techniques. Generally only the most desperate antagonists in a conflict would rely solely on asymmetric methods. Those who are able integrate asymmetric and symmetric methods. As *Joint Vision 2020* notes, "our adversaries may pursue a combination of asymmetries, or the United States may face a number of adversaries who, in combination, create an asymmetric threat."[14] Generally, such integrated approaches are more powerful than strategies that rely solely on either symmetric or asymmetric methods.

Finally, asymmetry can be material or psychological. The two concepts are interrelated: a material asymmetric advantage often generates psychological advantages. But there have been states and militaries throughout history that were particularly adept at manipulating psychological asymmetry, often by propagating an image of fierceness. The Mongols, Assyrians, Aztecs, and Zulus are examples. These great conquerors found a combination of material and psychological asymmetry most effective. While they tended to be superior to their enemies in training, leadership and doctrine, the image of fierceness augmented this advantage. Often psychological asymmetry is cheaper than the material variant, but is harder to sustain.

*Levels of Asymmetry.* The most common form of asymmetry resides at the operational level of war. The history of warfare is replete with operational level asymmetry such as the German use of submarine warfare to counterbalance the British advantage in capital ships; urban operations to counterbalance a military force with superior mobility and long-range fires such as the battles for Stalingrad or Hue; guerrilla operations in an enemy's rear area as an adjunct to conventional operations; operational-level deception such as Operation BODY-GUARD, the deception plan to support the Allied invasion of Normandy; and, anti-access or counter-deployment techniques using missiles, mines, terrorism, and other weapons. Military-strategic asymmetry is an integrated military strategy based on asymmetry rather than using it as an adjunct to symmetric methods. Examples include Maoist People's War, blitzkrieg, and Massive Retaliation, the strategic concept created during the Eisenhower administration that stated that aggression by the Soviet Union would lead to an American strategic nuclear strike on the Soviet homeland. Political-strategic asymmetry is the use of nonmilitary means to gain a military advantage. For instance, attempts have been made in recent years to have certain forms of military technology banned, including information warfare. If this succeeds, it would be more of a hindrance on the United States, with its extensive capacity for information warfare, than for a less developed state. Similarly, one opponent in a conflict might be able to gain an advantage by painting themselves as a victim and gaining the "moral high ground." To some extent the North Vietnamese were able to do this against the United States. Slobodan Milosevic and Saddam Hussein both attempted it but failed. In any case, political-strategic asymmetry is likely to become increasingly significant as the information revolution and globalization link the world more closely and make states more susceptible to external political pressure.

*Forms of Asymmetry.* At least six forms of asymmetry are relevant in the realm of national security and warfare.

An asymmetry of method entails using different operational concepts or tactical doctrines than the enemy. Examples include guerrilla war and other kinds of nonlinear concepts. Many of the operational concepts that the Army anticipates using in the future such as advanced vertical envelopment with mobile, protected forces (as opposed to air assaults or air drops using simple foot-mobile infantry) would entail an asymmetry of operational concept.

Asymmetries of technology have been common in military history, particularly in wars that pitted an industrially advanced state against a backward one, such as Europe's imperial wars of the 19th and 20th centuries. While the Europeans brought a wide array of military advantages to bear in their colonial wars, Hillaire Belloc captured their enduring trust in technological asymmetry when he wrote, "Whatever happens, we have got the Maxim gun and they have not." This was not an empty claim. In conflicts where the lesser developed antagonist does not have the time or the ability to adapt to advanced technology, it can be decisive. The Maxim gun, for instance, was first used by Britain's colonial forces in the Matabele war in 1893-94. In one engagement, 50 soldiers fought off 5,000 Matabele warriors with just four Maxim guns. Clever enemies, though, tend to find counters to asymmetries of technology during protracted wars. Vietnam provides the clearest example of this.

Asymmetries of will are important when one antagonist sees its survival or vital interest at stake, and the other is protecting or promoting less-than-vital interests. This type of asymmetry, particularly relevant to the United States today, played a role in earlier conflicts in Vietnam, Somalia, and Iraq. An asymmetry of will leads the antagonist with the higher stake to be willing to bear greater costs, accept greater risk, and undertake actions which the less committed antagonist might eschew on moral or legal grounds. Asymmetries of will are most relevant at the level of grand strategy. At the operational and tactical level, the equivalent of an asymmetry of will is an asymmetry of

morale. This can be crucial, often even decisive since, as Napoleon held, "In war the moral is to the material as three to one." Asymmetries of will are closely related to normative asymmetries which come into play when a conflict involves antagonists with different ethical or legal standards. This becomes increasingly important in the contemporary security environment as the United States faces enemies willing to use terrorism, ethnic cleansing, human shields, and the like. In the long term such actions may be self-defeating since they alienate potential supporters, but they can generate desired results in the short term, particularly as they highlight any asymmetry of will.

Asymmetries of organization have also been important in the history of warfare. At times, organizational innovations gave great advantage to a state even when it did not have a technological advantage or any other kind. Examples include the Macedonian phalanx, the formations of Swiss pikemen which dominated European battlefields during the Renaissance, the "nation in arms" that helped French Revolutionaries stave off a number of professional European armies, the system of independent but mutually supporting corps created by Napoleon, and insurgent undergrounds. In the future, state militaries may face nonstate enemies organized as networks rather than hierarchies, again leading to organizational asymmetry.[15]

Finally, asymmetries of patience or time perspective can be significant. These are conceptually linked to an asymmetry of will, but more often operate in cross-cultural conflicts. Specifically, an asymmetry of time perspective may occur when one antagonist enters a war willing to see it continue for a long period of time while their opponent is only able to sustain their will for a short war. For a variety of reasons, the United States prefers the quick resolution of armed conflict. There is a sense on the part of American leaders that the congressional and public support for any use of force that does not involve vital national interest has a limited life span. Furthermore, many of the advanced

weapons and systems used by the U.S. military such as precision bombs and missiles are in limited supply. Restocking requires starting up dormant production lines. Because of America's global security commitments, involvement of the U.S. military in a protracted conflict might encourage other enemies to undertake aggression, believing U.S. resources are spread too thin. The U.S. advantage in strategic mobility may produce a "quick win" which is the preferred operational style. Knowing this preference and knowing or suspecting the limited American stockpile of precision weapons, an adversary might seek to extend a conflict. In addition to putting a strain on the "quick win" preference, if the weapons become blunter, collateral casualties will rise and the enemy may gain a position of some moral advantage. This means that the shorter a conflict involving the U.S. military, the greater the American advantage. Asymmetries of patience have a cultural component as well. Americans are instinctively impatient, seeking fast resolution of any problem. During the Vietnam War the point was often made that this stood in stark contrast to the "Asian" perspective on time with its greater patience and willingness to prevail in a conflict that lasts for years or decades. While sweeping cultural generalizations are fraught with danger, there is at least a kernel of truth in this one. Somewhere, the U.S. military is likely to face an enemy attempting to take advantage of an asymmetry of patience.

### The American Situation.

A number of things makes the United States potentially vulnerable to negative asymmetry. The American economy, society, national security organization, and infrastructure are all complex, creating many schisms and seams which an enemy might attack. American values, particularly respect for due process of law, adherence to the law of armed conflict, and the accompanying desire to minimize collateral damage and noncombatant casualties, can create strategic vulnerabilities or military risks. The openness of the

American political system and the need for consensus when using force slow the decisionmaking process. This also can create vulnerabilities and increase risk.

American military strategy, with its stress on global engagement, long-range power projection, advanced technology, cooperation with allies and coalition partners, and complex processes for force and doctrine development, likewise poses potential vulnerabilities. As the American military moves toward greater reliance on information superiority, as an example, the loss or compromise of that important capability could have serious operational and strategic effects including a loss of confidence. The fact that the United States is often engaged in actions that do not involve vital national interests, in obscure places, where success is hard to define establishes the conditions for an asymmetry of will. And elements of the American strategic culture, especially the lingering fear of "another Vietnam," a narrowly bounded notion of security which tends to create barriers between the military and other security organizations like the police, and the tendency to see war as episodic and abnormal, add further vulnerabilities.

Yet even given these potential vulnerabilities, the United States also has a number of strengths that prepare it to deal with asymmetric challenges and to take advantage of positive asymmetries. The U.S. military has some of the best personnel, leadership, equipment, and training in the world. No other military spends more time, money, and effort on assessing emerging threats and undertaking analysis and experimentation. In all operating environments, the U.S. military has clear superiority over any existing enemy. In the information operating environment, the U.S. military can *probably* attain and hold dominance (although this has not been proven). The U.S. military is unsurpassed in strategic agility due to its ability to project and sustain combat power around the world; it is more adept at joint and combined activities than any other major power. The geographic isolation of the United States from most areas of armed conflict is an advantage. In an even

broader sense, the wide web of partners and allies that the United States has built, the nation's scientific and technological base, its wealth, and, perhaps most of all, the cultural affinity for innovation, adaptability, and transformation all augment the ability to meet asymmetric challenges and make use of asymmetric advantages. The news, then, is both bad and good.

Traditionally, as American strategic thinkers have assessed the nation's vulnerability to asymmetric threats, they focused on operational level challenges. They gave their greatest attention to terrorism, particularly attacks against the American homeland; the use of complex terrain like urban areas; anti-access strategies using missiles and mines; and political activities designed to dissuade potential partners. These will pose serious problems in coming years, but are amenable to solutions that combine improved organization, operational concepts, doctrine, training, and technology. The military, DoD, and other agencies of the government have ongoing programs to explore and respond to all of these. Less attention has been given to other, equally feasible asymmetric challenges, especially protracted warfare, political constriction, and organizational asymmetry based on the emergence of networked enemies. In a sense, the United States is in the first stages of understanding asymmetry, of using its positive form and countering its negative form. Much work remains to be done.

### Strategic Concepts.

The operational concepts that form the basis of the Joint Vision—full spectrum dominance derived from dominant maneuver, precision engagement, focused logistics, and full dimensional protection—are designed to take advantage of positive asymmetry, but are also relevant to countering negative asymmetry. To best meet asymmetric challenges, though, the U.S. military should adopt and develop five strategic concepts that build on the Joint Vision operational

concepts. These could serve as the components or building blocks of a comprehensive strategy to make better use of positive asymmetry and counter negative asymmetry. As such they could also be integrated into the National Military Strategy and National Security Strategy.

*Maximum Conceptual and Organizational Adaptability.* Two characteristics of asymmetric threats are particularly important: American defense planners today cannot know precisely what sort of asymmetric threats will emerge and what types will prove effective; and, the effectiveness of asymmetric threats which do have an impact will sooner or later decline as the enemy adjusts. By maximizing conceptual and organizational adaptability and flexibility, the U.S. military can assure that it will rapidly counter emerging asymmetric threats, and speed the process by which an asymmetric threat becomes insignificant or ineffective. Phrased differently, in a time of strategic fluidity and asymmetry like the current one, the military that develops new concepts and organizations more quickly than its opponents has a decided advantage.

For the U.S. military, the process of adaptation and transformation must become both continuous and rapid. DoD and the Services must institutionalize ways to do this. Part of the solution involves shifting attitudes. Innovation and creativity must be nurtured and valued throughout both the uniformed and DoD civilian ranks. While iconoclasts and nonconformists should not rule the military, they should be valued, preserved and heard. Experimentation and research should focus on strategic and operational adaptability. For instance, experiments should be run to create new types of organizations for dealing with new types of enemies. If networked nonstate enemies become a major threat to American security, how quickly could the nation form an effective organization to deal with them? Probably not quickly at all but, with rigorous study and experimentation, this would be possible. In all likelihood, components of the future U.S. military must take

on some characteristics of networks if networked enemies are to be countered.

DoD experimentation should focus more on potential asymmetric challenges. Today the enemy in most Service and DoD experiments or wargames remains a traditional mechanized, state military which has invaded a neighboring state. While some asymmetric wargames have been conducted, they should form a greater proportion of the total. Rather than seeking to confirm or endorse existing transformation and modernization programs, joint wargames should a robust test of them. The red team in such wargames, whether composed of contractors, members of the military, or DoD civilians, should be encouraged to win, thus testing blue team organizations and concepts. At the National Training Center, the Army has learned the value to the blue team of defeat at the hands of a highly skilled red team. For some reason, this same process is seldom applied to strategic wargames. But to make this work, national political leaders, whether in DoD or Congress, must recognize that a blue team "defeat" in a wargame does not invalidate a transformation or modernization program, but simply provides a means of adjustment and refinement.

The process of focusing more analysis and experimentation on asymmetric challenges would be strengthened if it had an institutional focus. DoD should consider the creation of something like a center for the study of emerging threats closely linked to the Joint community, the combatant commands, and the Services but independent enough to be imbued with creativity and innovative thinking. This center should be tied to the Joint Experimentation Process at Joint Forces Command, the Pentagon's Office of Net Assessment, the Defense Intelligence Agency's futures programs, and the service experimentation programs, concept development centers, and battle labs. It should, in addition, have strong interagency and multinational connections.

At a somewhat different level, the U.S. military should prepare for asymmetric challenges by making modularity a central criterion in the force development process. This would apply to both systems and units. Versatility and agility are the touchstones. The Services and the Joint community should undertake extensive experimentation in the process of rapidly building task-specific organizations from the ground up. There is a sound base of experience and knowledge given the U.S. military's experiences at forming joint task forces. This simply needs to be driven further to explore how future task-specific organizations would build interagency and multinational ties. Modularity should also be a criterion for the development and procurement of systems. Multipurpose systems like the Blackhawk and HUMVEE set the stage for this. The logical follow-on would be mobility systems that could do an even wider array of tasks and be reconfigured according to the mission. This would give the Army an added degree of flexibility and better prepare it for asymmetric challenges. While multipurpose systems are seldom as effective as single purpose ones, in an age of strategic uncertainty where the single purpose that should be focused on is not clear, multipurpose systems might make the most sense (and could serve as a foundation for single purpose systems when or if the strategic environment becomes clearer).

*Focused Intelligence.* There is growing agreement in the defense and intelligence communities that U.S. intelligence efforts need to be at least partially refocused on nontraditional threats, including asymmetric ones. This will be most effective if the intelligence collection, analysis and dissemination process becomes increasingly inter-agency, breaking down divisions and barriers between the various components of the intelligence community. In addition, intelligence focused on asymmetric threats should make greater use of open sources—publicly available information appearing in print or electronic form.[16] As the 1999 *Joint Strategy Review* suggested, the United States should immediately undertake a multiagency, holistic

assessment of its vulnerability to asymmetric threats. The intelligence community should also be intimately involved in the process of maximizing adaptability and flexibility, particularly by strengthening the red teams in wargames and experimentation.

The *Joint Strategy Review* emphasizes the need for improved human intelligence (HUMINT) to counter asymmetric threats.[17] But while improved HUMINT could be useful, new technology for the collection, assessment, fusion, and dissemination of intelligence would also be helpful. Human intelligence has very finite limitations. Sources are not always available or reliable. Rather than relying solely on overhead imagery and signals intercepts, nanotechnology and robotics could be combined into new intelligence systems that surpass both past technical collection systems and HUMINT in some types of tasks. Defending against asymmetric challenges, then, demands bold new thinking on methods of intelligence collection.

*Minimal Vulnerability.* The Joint Vision concept of full dimensional protection applies as well to asymmetric threats. In the realm of force protection, current efforts, augmented by developments in robotics and nonlethal weapons, can help counter terrorism and other attempts to erode American will by causing casualties. Minimal vulnerability would also require resiliancy or nondependence on systems that are susceptible to attack. Single sources of anything, whether information systems, space assets, port facilities, or some other part of the logistics and support systems, invite asymmetric attacks. With some systems, redundancy may be so expensive that the risk of asymmetric attack is worth running but, hopefully, such cases will be rare. By the same token, all reasonable steps should be taken to avoid dependency on any one method of operation or system. For instance, if the U.S. military becomes so dependent on information superiority that it cannot function without it, asymmetric attacks against information systems could be devastating, perhaps even decisive. This implies that even as the U.S. military makes

greater use of digital technology, it should sustain some skill at older, low-tech methods. Even if one owns a computer, it is still useful to know how to perform mathematics with a pencil and paper.

Finding ways to project power against an enemy who employs an access denial strategy and to sustain projected forces without forward bases would be an important part of minimizing vulnerability. Since the campaigns of Ulysses Grant and William Sherman, the "American way of war" has called for the build-up of massive amounts of materiel and supplies in a theater of operations, and then the use of this material advantage to attain decisive victory through a strategy of annihilation. This is contingent on the enemy's absence of effective power projection to strike at the rear bases. In the American Civil War, the Confederacy simply did not have the force necessary to capture Union depots at places like City Point, Virginia. In the European theater of World War II, the English Channel, the Royal Air Force, and the Royal Navy kept the rear bases safe until adequate American forces were deployed. And, in the Gulf War, American military power protected the massive supply bases. But in a future where enemies often have some precision guided munitions and weapons of mass destruction (along with delivery systems), in-theater sanctuaries may not exist. Even air superiority and theater missile defense would be inadequate against a nuclear-armed enemy, since they cannot assure the sort of 100 percent effectiveness that is necessary. Given this, the future American military may confront an enemy using a counter-deployment strategy in which sabotage or precision guided munitions and ballistic missiles, whether with nuclear, biological, and chemical warheads or conventional ones, are used to attack U.S. bases and staging areas both in the United States and in a theater of operations, and threaten states that provide support, bases, staging areas, or overflight rights to the United States.

An enemy using a counter-deployment strategy would have to be met with a combination of long-range precision

strikes, special operations, theater air superiority, theater missile defense, focused logistics, strategic deception, information assurance, and anti-terrorism. The more that U.S. forces can limit the need for a lengthy build-up of forces, equipment, and supplies, the less risk posed by a counter-deployment strategy. As the 1997 National Defense Panel wrote,

> The days of the six-month build-up and secure, large, rear-area bases are almost certainly gone forever. WMD [weapons of mass destruction] will require us to increase dramatically the means to project lethal power from extended ranges.[18]

The capacity to deploy forces and resupply them from the continental United States directly into a theater of operations could prove invaluable, minimizing the chances that states in the theater of operations could be intimidated to the point that they deny the United States forward bases or staging areas.

An enemy using a counter-deployment strategy could be blunted in several interrelated ways. One would be through greater intra-theater mobility via lighter forces and systems such as high-speed, shallow draft sealift vessels. Another would be through use of what might be called "theater reconfiguration areas" rather than traditional fixed bases. Such theater reconfiguration areas could be located in remote areas of nations which agree to host them, with a landing strip as the only fixed part of the base. All of the other things needed to prepare equipment and troops for combat could be mobile, concentrating just before an inbound aerial convoy arrived and dispersing as soon as it left. The inventory of supplies at a theater reconfiguration area would be kept to a minimum, and replenished only as necessary. Repair and hospital facilities would also be mobile and dispersed. Theater reconfiguration areas could be protected by conventional concealment methods, electronic masking, and a laser-based missile and air-defense web combining ground-based fire platforms, long-loiter and quick-launch unmanned aerial vehicle

(UAV) fire platforms, and space-based sensor and fire platforms. Autonomous sentry systems which fall somewhere between a full-fledged robot and a 21st century mobile, smart mine could provide local security. Host-nation support would be kept to a minimum to protect operational security. To complicate targeting by enemies, several decoy theater reconfiguration areas could be set up in each country that allowed them. Such a "shell game" could provide effective deception and thus complicate any attempts to strike at the theater reconfiguration areas with missiles.

*Full Dimensional Precision.* The American military will remain vulnerable to normative and political asymmetries. The more that operations can limit collateral damage and reach a speedy resolution, the less likely these challenges will prove important. One way of doing that is with even greater, full dimensional precision. A component of this is *physical* precision—the ability to hit targets with great accuracy from great distances with precisely the desired physical effect. Physical precision derives from improved intelligence, guidance systems and, increasingly, from the ability to adjust or "tune" the effects of a particular weapon. A proposed electro-magnetic gun, for instance, could be adjusted from a non-lethal setting to an extremely lethal one.[19] But there is more to precision than simply hitting the right target. Military strategists and commanders must think in terms of *psychological* precision as well—shaping a military operation to attain the desired attitudes, beliefs, and perceptions on the part of both the enemy and other observers, whether noncombatants in the area of operations or global audiences. How might future militaries attain greater psychological precision? To some extent, technology can help. It is vital to have a very wide range of military capabilities—a "rheostatic" capability—to assure that an operation has the desired psychological affect. This suggests a growing need for effective nonlethal weapons, particularly when the psychological objective is to demonstrate the futility of opposition without killing so

many of the enemy or noncombatants that the enemy's will is steeled rather than broken or that public opposition is mobilized. Some advocates of nonlethal weapons go so far as to see them as the central element in future armed conflict.[20] While this is probably an overstatement, such weapons will be integral to psychological precision.

Different forms of psychotechnology might allow greater psychological precision. Conceivably, technology might be developed to give militaries the ability to alter the perceptions of targets, perhaps causing intense fear, calm, or whatever reaction was required. But any state with the capability and inclination to develop such technology should be extraordinarily careful because of the potential for violations of basic human rights. In the vast majority of cases, technology for psychological manipulation should be eschewed. Some state or organization unbounded by ethical and legal constraints, though, eventually may field an array of psychotechnology weapons. Then the United States will have to decide whether to respond in kind or seek other means of defense. The potential for a psychotechology arms race is real.

Technology, though, is only part of psychological precision. There is a vast body of psychological analysis, particularly dealing with anxiety and fear, not adequately integrated into military planning. When the goal is to create fear and anxiety or collapse the will of an enemy, the operation should be phased and shaped for maximum psychological impact. Successful militaries must take steps to assure that operational and strategic planning staffs are psychologically astute, whether by educating the planners themselves or using information technology to provide access to psychologists, cultural psychologists, and members of other cultures. They should undertake cross cultural psychological studies aimed at building data bases and models which can help guide operational planning.

*Integrated Homeland Security.* Modern technology and globalization have changed the nature of strategic

geography. The United States can no longer assume that conflict and warfare will only take place far from the homeland. Future enemies will have the means to strike at the American homeland, whether through missiles, information attacks, or terrorism. To defend against this, the United States needs to develop a robust and integrated homeland security strategy and organization. Many efforts are already underway in this arena. In particular, gains have been made in critical infrastructure protection and the military role in homeland defense. One of the big tasks for the future, though, is to continue to seal the seams between the array of agencies and organizations involved in homeland defense since these are the things that create vulnerabilities that an enemy might take advantage of.

Recommendations.

Ultimately, negative asymmetry can be mitigated, but not eliminated. That said, the United States is not on the verge of disaster. Existing U.S. military forces, organizations, technology, strategy, and doctrine can either deal with most asymmetric threats or be quickly modified to do so. The more adaptable, flexible, and strategically agile the U.S. military is, the better it will be prepared to deal with asymmetry. Positive asymmetry will continue to provide the U.S. military with advantages over most enemies. Even so, the U.S. military should continue to refine its understanding of asymmetric challenges. Specifically, it should:

- Adopt a more general and complete definition of asymmetry and use this as a foundation for doctrine.

- Integrate the five strategic concepts, *Maximum Adaptability and Flexibility*, *Focused Intelligence*, *Minimal Vulnerability*, *Full Dimensional Precision*, and *Integrated Homeland Security* into American national security strategy.

## ENDNOTES

1. Sun Tzu, *The Art of War*, Samuel B. Griffith, trans., London: Oxford University Press, 1971, pp. 66-67.

2. B. H. Liddell Hart, *Strategy*, 2d revised edition, New York: Signet, 1974.

3. Edward N. Luttwak, *Strategy: The Logic of War and Peace*, Cambridge, MA: Belknap, 1987, p. 5 and ff.

4. The most cogent expression of Massive Retaliation is in John Foster Dulles, "The Evolution of Foreign Policy," *Department of State Bulletin*, Vol. 30, January 25, 1962, pp. 107-10.

5. Joint Publication (herafter Joint Pub) 1, *Joint Warfare of the Armed Forces of the United States*, January 10, 1995, pp. IV-10 through IV-11.

6. The same discussion of symmetrical and asymmetrical actions is included in the *Joint Doctrine Encyclopedia*, July 16, 1997, pp. 668-670, and Joint Pub 3-0, *Doctrine for Joint Operations*, February 1, 1995, p. III-10.

7. Secretary of Defense William S. Cohen, *Report of the Quadrennial Defense Review*, May 1997, Section II.

8. *Transforming Defense: National Security in the 21st Century*, Report of the National Defense Panel, Washington, DC, December 1997, p. 11.

9. For instance, in 1998 CENTRA Technologies formed a blue ribbon panel on asymmetric warfare on a contract from the intelligence community. One workshop, held in December 1998, included Dr. John Hillen, Mr. Richard Kerr, Dr. Steven Metz, Admiral William Small, USN (Ret.), Professor Martin van Creveld, and Lt. General Paul Van Riper, USMC (Ret.). The project seems to have been dropped after this meeting.

10. *Joint Vision 2020*, Washington, DC: The Joint Staff, 2000, p. 5.

11. Institute for National Strategic Studies, *Engaging Power for Peace: The 1998 Strategic Assessment*, Washington, DC: National Defense University, 1998, chapter 11.

12. *Joint Strategy Review* 1999, Washington, DC: The Joint Staff, 1999, p. 2.

13. Mao Tse-Tung, "On Protracted War," in *Selected Works of Mao Tse-Tung*, Vol II, Peking: Foreign Languages Press, 1967, p. 172.

14. *Joint Vision 2020*, p. 5.

15. For elaboration on this idea, see Steven Metz, *Armed Conflict in the 21st Century: The Information Revolution and Post-Modern Warfare*, Carlisle: U.S. Army War College, Strategic Studies Institute, April 2000.

16. See Robert D. Steele, "Open Source Intelligence: What Is It? Why Is It Important to the Military?" reprinted at *http://www.oss.net/Proceedings/95Vol1/aab0aw.html*; and Robert D. Steele, *On Intelligence: Spies and Secrecy in an Open World*, Fairfax, VA: AFCEA International Press, 2000, pp. 105-126. Steele is one of the pioneers and most ardent advocates of open source intelligence.

17. *Joint Strategy Review* 1999, pp. 31-32.

18. *Transforming Defense: National Security in the 21st Century*, Report of the National Defense Panel, December 1997, p. 42.

19. U.S. Army Chief Scientist A. Michael Andrews, interviewed by Ron Laurenzo, *Defense Week*, November 29, 1999, p. 6.

20. For example, John B. Alexander, *Future War: Non-Lethal Weapons in Twenty-First Century Warfare*, New York: St. Martin's, 1999.

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