STRATEGIC COMPETITION AND RESISTANCE IN THE 21st CENTURY: IRREGULAR, CATASTROPHIC, TRADITIONAL, AND HYBRID CHALLENGES IN CONTEXT

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From May 2003 thru July 2004, the author served as a strategist in the Office of the Undersecretary of Defense for Policy where his primary responsibility included development of the National Defense Strategy (NDS 05). Terms like "NDS 05's framers," "working-level framers of NDS 05"or"those responsible for the development of NDS 05" are intended principally to connote the author and Mr. D. Burgess Laird. Together the author and Mr. Laird constituted the initial NDS 05 writing team and were responsible for the strategy's conceptual foundations. The strategy was completed under the direction of then Principal Director for Strategy Mr. Barry Pavel, then Deputy Assistant Secretary of Defense for Strategy Mr. Andy Hoehn, and the current Principal Deputy Undersecretary of Defense for Policy Christopher (Ryan) Henry. The author would like to thank Messrs. Henry, Hoehn, and Pavel for creating an environment conducive to critical thinking. The author is in debt to Mr. Laird, Dr. Douglas Macdonald, Dr. Douglas Johnson, Colonel Joseph Nunez, Ms. Amanda Dory, Ms. Leslie Hunter, and Ms. Kathleen Hicks for their thorough review and comment on this monograph.

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Comments pertaining to this report are invited and should be forwarded to: Director, Strategic Studies Institute, U.S. Army War College, 122 Forbes Ave, Carlisle, PA 17013-5244.

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FOREWORD

The 2005 *National Defense Strategy* (NDS 05) introduced the concept of the four challenges—traditional, irregular, catastrophic, and disruptive. However, since the strategy's publication in March 2005, little has emerged in the way of specific amplification of these concepts. Reference to the challenges is prolific in both formal and informal defense deliberations. Yet, there has always been some need for greater richness and granularity in their description and application in defense strategy and policymaking.

For three of the four challenges, the wait is over. This monograph describes the foundational substance of the traditional, irregular, and catastrophic challenges as they were conceived at the working-level during development of NDS 05. Lieutenant Colonel Nathan Freier, one of two working-level strategists responsible for conceptual development of NDS 05, examines these challenges and their implications in some detail. In the process, he also introduces what he terms the "hybrid norm"—the routine state of nature where key aspects of multiple challenges combine at once into complex hybrids.

Lieutenant Colonel Freier's focus on irregular, catastrophic, hybrid, and traditional challenges, while omitting a fuller description of disruptive challenges, is intentional. It stems from an early conclusion by NDS 05's working level framers that, while irregular-cum-catastrophic and hybrid resistance and friction were increasingly more likely and more dangerous than most prospective traditional challenges, the existence of substantial traditional capacity in some key regions continued to complicate U.S. strategic calculations.

The disruptive challenge, on the other hand, remained an important, but also a speculative line of strategic inquiry that was neither operative yet nor likely to be operative for some time.

The Strategic Studies Institute is pleased to publish this important and timely work. It will increase understanding of recent foundational changes in DoD's strategic orientation.

DOUGLAS C. LOVELACE, JR.
Director
Strategic Studies Institute

BIOGRAPHICAL SKETCH OF THE AUTHOR

NATHAN FREIER, a lieutenant colonel in the U.S. Army, is the Director of National Security Affairs at the Strategic Studies Institute (SSI). Prior to joining SSI, he served in the Office of the Secretary of Defense, where his principal responsibilities included development of the National Defense Strategy. Previously, he was an Army Fellow/Visiting Scholar at the University of Maryland's Center for International and Security Studies and a strategist with the Strategic Plans, Concepts and Doctrine Directorate, Department of the Army Staff in Washington, DC. From January 2005-July 2005, Lieutenant Colonel Freier served as a strategist in the Headquarters, Multi-National Force-Iraq. He continues to provide expert advice to a number of key actors in security and defense policymaking and analysis. Among his research interests and areas of expertise are national security strategy and policy development; irregular and catastrophic challenges; and strategic risk assessment. Lieutenant Colonel Freier is a graduate of the Army's Command and General Staff College and holds Masters' Degrees in International Relations and Politics from Troy State University and The Catholic University of America, respectively.

SUMMARY

After the attacks of September 11, 2001 (9/11), the war against Afghanistan's Taliban "government," and the fall of Baghdad, the Secretary of Defense chartered a comprehensive review of the "transformational" defense strategy outlined in the 2001 *Quadrennial Defense Review* (QDR 01). The review resulted in the 2005 *National Defense Strategy* (NDS 05). QDR 01's defense strategy was, in a number of respects, overcome by strategic circumstances. Thus, NDS 05 was a necessary and timely adjustment to changes in the strategic environment's foundational conditions.

NDS 05's development process gave birth to a novel description of the strategic environment—a view that is only imperfectly reflected in the Pentagon's now ubiquitous "quad chart" and its abridged description of the traditional, irregular, catastrophic, and disruptive challenges. The "quad" challenges and NDS 05's quite general description of the defense-specific response to them had a pronounced effect on the prevailing defense outlook and culture. This is particularly true with respect to the aperture used to examine the strategic environment and the lexicon employed to describe it.

Those who framed NDS 05 saw competition with and resistance to the United States as endemic, persistent, and increasingly irregular-cum-catastrophic or hybrid in character. They believed that widespread, defense-relevant resistance to the United States was a natural by-product of American primacy as well as a palpable devolution of the reach and effectiveness of some sovereign governments. In short, some discrete strategic challenges would arise from purposeful resistance—predictable systemic antibodies to singular American

superpower. Others would originate in environmental discontinuities triggered by globalization and the attendant dissolution of key aspects of effective sovereign control. Regardless of origin or purpose, however, most would be decidedly less traditional in their prevailing character, and all were certain to test American primacy in unique ways.

Particularly germane to NDS 05's working-level strategists was the rising likelihood and strategic impact of irregular-cum-catastrophic and hybrid challenges. In their view, these would threaten American interests more consequentially than any combination of likely traditional challenges. This view held that some opponents acted with others against the United States. Others acted alone according to their interests. Some shared the common goal of limiting American influence. Few, however, enjoyed a common vision for strategic outcomes.

Though uncoordinated and at times competing, all of these competitors and competitive forces would combine in their strategic effect. In still other instances, the environment itself—un- and under-governance, weak or failing political order, and, at times, even natural or human disaster, would inhibit successful pursuit of American objectives. Considering the range of prospective security challenges on the strategic horizon, it was clear that most would exhibit defense-relevant characteristics or have defense-relevant effects. However, few would be vulnerable to defense-specific solutions alone.

Contending with all of these forces required DoD to orient on fundamentally different strategic priorities than those dominating the first decade and a half of post-Cold War experience. Those developing NDS 05 believed that strategic costs and setbacks would

accumulate in real and profound ways if the United States failed to adjust. In short, failure to meaningfully account for changes in the environment would ultimately limit American freedom of action and fundamentally jeopardize American great power.

From the perspective of those developing NDS 05, it was increasingly clear that the United States was more likely to "die by a thousand cuts" than it was to succumb to a peer opponent in a sudden traditional military reversal. In this environment, DoD could no longer afford to limit its utility to military competition and conflict with traditional state rivals.

Instead, NDS 05's framers believed that the United States should be prepared to secure American position and interests in an environment marked by persistent irregular, catastrophic, and hybrid resistance and friction. Mounting evidence suggested that traditional American military superiority (transformed or not) was necessary but not sufficient for success in an environment rife with defense-relevant but not always defense-specific challenges.

NDS 05's working-level strategists believed that the United States was increasingly assuming strategic risk in areas where history had proven it most vulnerable. The United States was now operating inside a band of constant, unrelenting resistance and friction where a range of discrete competitors tried to limit U.S. influence through a variety of cost-imposing strategies. The United States had consistently demonstrated its enormous capacity to dispatch with military competitors on traditional battlefields. It had not, however, done so in the face of determined irregular resistance. Further still, if the United States was only just now at the front end of an extended period of active resistance and conflict, it was difficult to predict how it would fare

materially, politically, and psychologically over time. It was increasingly likely that the United States and its armed forces would confront an array of capable nonstate and state competitors under conditions of considerable strategic and operational ambiguity where success and failure are often very difficult to define.

In reality, the environment would never universally conform to the pre-conflict, war, and post-conflict model DoD had long pegged its relevance against. In DoD's prevailing, traditional worldview, it ramps up military capabilities, fights high-intensity combat engagements, and then cedes primary responsibility for final conflict resolution to other U.S. Government (USG) agencies. Now, however, DoD has become elemental to a constant whole-of-government effort to manage consequential competition and resistance perpetually. The important and timely articulation and socialization of the four challenges was meant to accommodate DoD's deliberate adjustment to this new reality.

Articulation of these challenges also was intended to change the decision space for senior defense policymakers and to force DoD as a whole to more thoughtfully consider its role in a world populated by unrelenting, disaggregated, defense-relevant challenges to American influence. Perpetual competition and friction in this world are often, at their core, nonmilitary in origin and character. While any single manifestation within it has defense-relevant components, very few are either exclusively or even primarily solvable through defense-specific means. This is particularly true to the extent that resistance and friction are more irregular, catastrophic, or hybrid in character.

This more complex challenge environment demands that American strategists nimbly apply the nation's diverse instruments of power in those combinations likeliest to render decisive, enduring outcomes. Clearly, this requires more than the DoD and its resources alone. Nonetheless, DoD was the first to recognize the increased scope and complexity of the environment's constituent hazards. Thus, it bears significant responsibility for translating the key implications of these hazards into concepts suitable for wider USG consumption. Likewise, DoD must itself adjust to the environment's unique demands and simultaneously lead more comprehensive government-wide change in this regard. It will be some time before the interagency adjusts to the new (or better understood) strategic reality. In the mean time, DoD must compensate for the wider American government's halting recognition of the environment's fundamental transformation and, at a minimum, help it correctly frame the most important security- and defense-relevant choices.

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> For as to the strength of body, the weakest has strength enough to kill the strongest, either by secret machination, or by confederacy with others, that are in the same danger with himself.
>
> Thomas Hobbes[1]

INTRODUCTION

In late 2003—after the attacks of September 11, 2001 (9/11), the war against Afghanistan's Taliban "government," and the fall of Baghdad, the Secretary of Defense chartered a comprehensive review and revision of the "transformational" defense strategy first outlined in the 2001 *Quadrennial Defense Review* (QDR 01).[2] QDR 01, though scarcely 2 years old, was overcome by events. In the wake of 9/11 and 3 years of persistent irregular conflict, the strategic ground shifted in Washington. The most influential defense and security policymakers revisited and changed their prevailing assumptions concerning the nature of threat and hazard in the international system.[3] A strategic course correction was essential. It was necessary both to respond effectively to the obvious terrorist challenge but more importantly, to focus the nation's principal national security institution against what was certainly an oncoming era of persistent irregular, catastrophic, and hybrid resistance and friction to American great power (see Figures 1 and 2).[4]

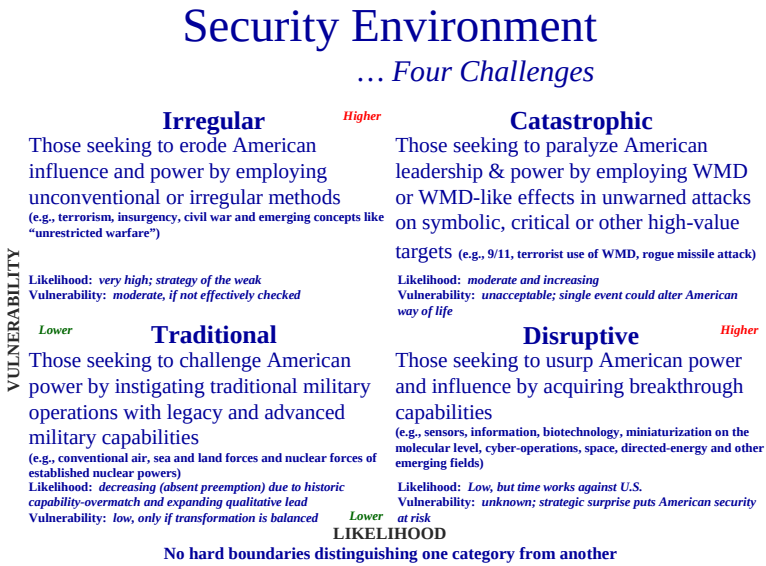

Figure 1. The "Quad Chart" Circa Spring 2004.[5]

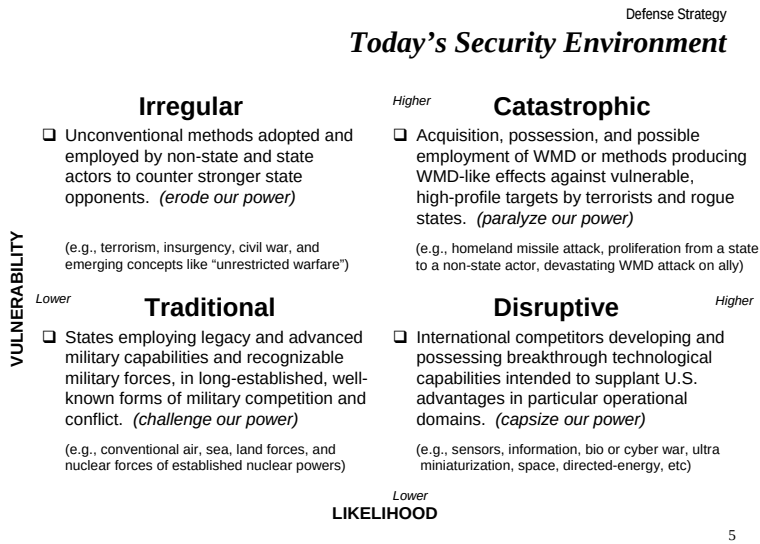

Figure 2. The "Quad Chart" Circa Fall 2004.[6]

By mid- to late 2003, direct challenges from extreme Islam and a violent Middle East were the most obvious manifestations of consequential environmental change. Indeed, by September 2001, it was already clear that the United States and various Islamic extremist groups would collide violently for the foreseeable future.[7] However, though the most compelling immediate challenges emanated from the War on Terror, contemporary terrorist and insurgent threats did not constitute by themselves the sum total of the gathering hazards certain to confront the United States over time. Even before 9/11, many concluded that the persistent threat from violent Islamists was only one of myriad challenges complicating the nation's strategic horizon.[8] Until 9/11 and in spite of this recognition, however, the American national security establishment failed to adjust its culture, structures, biases, and strategic orientation to the environment's already vast and mounting demands. Strategic complacency marked the 10 years spanning the fall of the Soviet Union and al-Qai'da's emergence as a consequential competitor. American success in the Cold War hardened the national security elite against meaningful and necessary change.[9]

The development phase of the 2005 *National Defense Strategy* (NDS 05) gave birth to a novel description of the strategic environment. This view is only imperfectly reflected by the oft-maligned and admittedly over-used Pentagon "quad chart" (for two early versions of the quad chart, see Figures 1 and 2).[10] NDS 05 was not a knee-jerk reaction to either the 9/11 attacks or the difficulties encountered in Iraq and Afghanistan. Rather, it was a carefully conceived and necessary change in strategic direction from the path outlined in QDR 01. Indeed, though not published until March 2005, the inaugural National Defense Strategy was largely complete by

January 2004.[11] Fourteen months of bureaucratic staffing passed before its publication.[12] Throughout this period, the strategy's abstract characterization of the environment's principal challenges and hazards remained largely uncontested by those in the national security bureaucracy exposed to it.[13]

Those responsible for developing NDS 05 at the working level concluded early on that the character of strategically significant security competition with and friction against the United States had changed fundamentally after the Cold War. Yet, in the intervening years, DoD failed to adequately reflect or account for this change in its strategic planning. DoD strategists further believed that the previous QDR, released in September 2001, did little to address this omission. Indeed, their intention that the new NDS rest on and proceed from a more robust rendering of competition with and resistance to the United States drove subsequent work on the strategy as it matured and as it was vetted across DoD.

Through NDS 05, DoD began to assess and appreciate on-going environmental change more realistically and judge the relative significance of that change for future defense policy. Unlike QDR 01, the 2005 strategy was not just a vehicle for articulating transformational policy aspirations. Instead, it was a mechanism for adapting DoD's culture to more effectively manage the defense-specific response to persistent resistance to American influence. To be sure, there is a great deal of truth to the argument, advanced by some critics, that NDS 05—like most post-Cold War defense-relevant public policy—is heavy on concept and light on detail. In spite of its obvious shortcomings, however, NDS 05 did have a pronounced effect on the prevailing defense culture, particularly with respect to the aperture used

to examine the environment and the lexicon employed to describe the environment's principal challenges.[14]

DEFENSE-RELEVANT CALCULATIONS IN THE POST-9/11 WORLD

The course of history between 9/11 and late 2003 provided a tragic but perversely necessary call to action for the American defense establishment. It laid the foundation for DoD's overdue adjustment to a security environment quite different from the one it was originally designed and postured to confront. As one of NDS 05's two principal working-level strategists, the author believed at the time that, without significant change in strategic perspective, complex 21st century challenges would overwhelm a defense department still adjusting to seismic shifts in the environment and its constituent hazards. NDS 05's framers made a simple and compelling argument—the character of the strategic environment's most meaningful security challenges shifted fundamentally after the fall of the Soviet Union. They concluded that the most consequential, defense-relevant challenges would be those exhibiting an irregular, catastrophic, and hybrid character; not those traditional military threats common to a previous era (See Figures 1 and 2 above).[15] QDR 01 clung to the latter (albeit under the guise of transformation) while NDS 05 moved decisively in the direction of the former. In short, unconventional forms of security and defense-relevant competition and resistance were fast supplanting traditional military challenges as dominant concerns for the DoD. Further still, while much of this competition and resistance might be purposeful and violent, a great deal of it would also be increasingly nonstate and nonmilitary in origin and character.

To those drafting NDS 05, strategic-level contests of an irregular and potentially catastrophic nature would be consistently more likely and over time increasingly more consequential than most traditional military challenges. They believed that irregular challenges represented one end of a single continuum with more dramatic and costly catastrophic challenges occupying the opposite extreme. In their view, these two challenges blurred as consummate irregular actors persistently sought to upgrade their capacity to inflict sudden paralysis on the United States to effect favorable strategic outcomes more rapidly. Likewise, both the combination of mounting irregular and catastrophic challenges as well as the continued existence of substantial traditional capability indicated that active challenges would often blend into complex hybrids. Not only would irregular and catastrophic challenges merge, but at times, they would also combine with or be underwritten by a state or state-like competitor's traditional military capacity. Clear throughout, however, was the idea that all consequential actors—state and nonstate—were moving away from traditional military rivalry as the principal forum for competition with the United States.

In the author's opinion, the defense establishment lost some important nuance and meaning associated with the challenges during subsequent policy debates. In short, the "quad chart" is simply not by itself an adequate description of the emerging strategic environment envisioned by NDS 05's framers at the outset. They had a more sophisticated concept of competition, resistance, and hazard in mind than that commonly communicated by or understood within the simple now familiar PowerPoint design. In true Washington fashion, defense consumers gave short

shrift to understanding the strategic-level implications of the four challenges. Instead, most instantly jumped to translating their impact on discrete budget and acquisition priorities.

The treatment herein proceeds from a working-level perspective. It aims to add more richness and substance to descriptions of irregular, catastrophic, and traditional challenges while, introducing the idea of hybrid challenges more explicitly. Along the way, the author intends to identify some key implications for future defense and security policy. For the reader, the obvious gap in this discussion is a fuller description of the disruptive challenge.[16] While the future disruptive challenge is an important line of inquiry, it is nonetheless beyond the scope of this analysis. Suffice it to say, those responsible for developing NDS 05 (and their DoD leadership) saw the disruptive challenge as prospective—even speculative—and, thus, worthy of prudent hedging. However, they did not consider it an imminent or active threat over the near- to mid-term.[17] Conversely, this monograph's emphasis on the relative rise of irregular, catastrophic, and hybrid challenges proceeds from the conclusion that these were all active, persistently evolving, and long under-appreciated in the defense community. To NDS 05's working-level strategists, this necessitated fundamental changes to DoD's strategic direction and trajectory.

The intent here is not to provide a comprehensive "sense of the defense bureaucracy" on NDS 05 in its final form. Nor, for that matter, do the arguments advanced here claim to necessarily reflect the perspectives of the most senior defense policymakers on either the strategy as published or its depiction of the strategic environment. The views presented here are, however, consistent with those of working-level strategists responsible for developing NDS 05. This monograph

only claims to represent their views on the strategy's conceptual foundations, particularly as they pertain to characterizations of the environment and its most pressing hazards. Admittedly, some of this is clearer both with the passage of time and some substantial physical separation from the daily crush of the defense bureaucracy.

Revolution in Military Affairs or Devolution in the Character and Origin of Strategic Competition?

In the fall of 2003, NDS 05's framers concluded that dynamic forces of global change were cultivating and unleashing a matrix of complex strategic challenges to the United States and its interests.[18] Further, they believed that the defense establishment was ill-suited to contend with most of these challenges effectively.[19] The opportunity to influence DoD's path in this regard came with NDS 05. Strategic conditions since 9/11 created an atmosphere within which defense strategists could reexamine de novo key changes in the character of defense-relevant competition and resistance. Between 9/11 and commencement of work on NDS 05, the strategic environment proved more complex than previously articulated or accounted for by DoD. Suddenly the United States exhibited extraordinary vulnerability to a range of unanticipated, unconventional politico-security challenges.[20] Some (like 9/11) were sudden and psychologically paralyzing. Others (like insurgencies in Iraq and Afghanistan) were more corrosive and degenerative in character; their cost and impact accumulating inexorably.

The time between September 2001 and early 2004 was a bellwether period for those charged with defense strategy development. The limits of American military power were increasingly apparent. This suggested,

even to traditional U.S. competitors, that there was value in irregular, catastrophic, and hybrid resistance. The key questions for the national security and defense establishments were manifold. Most significantly were changes in the dynamics of the strategic environment additive—new challenges added to old—or instead qualitative—new challenges replacing old? Further, had a revolution occurred in the character of competition and hazard in the international system? And if so, would irregular-cum-catastrophic and hybrid resistance and their associated costs stake more of a claim to strategic significance than all possible traditional challenges? Finally, would DoD's continued fixation on the tools and concepts of traditional conflict ultimately equate to dangerous underpreparedness for those forms of resistance and friction likeliest to stalk the United States for the foreseeable future?[21]

Those drafting NDS 05 believed that the answers to these questions were sufficiently clear to merit much greater attention in the new defense strategy. The strategic environment within which the United States would defend its people, interests, and position was changing qualitatively. Meaningful security-relevant competition with state and nonstate rivals of consequence was, by and large, migrating away from the traditional military domain. Thus, violent conflict would increasingly assume an irregular, catastrophic, or hybrid character. Finally, continued employment of 20th century convention to protect, exercise, and extend American influence would actually undermine the position and interests of the United States in the face of decidedly unconventional 21st century challenges. The world changed after the Cold War. As a result, the nature and form of competition with and resistance to the United States changed as well. According to Harlan K. Ulmann and James Wade, Jr:

> (F)aced with American military superiority in ships, tanks, aircraft, weapons, and most importantly, in competent fighting personnel, potential adversaries may try to change the terms of future conflict and make as irrelevant as possible these U.S. advantages. We proceed at our own risk if [we] dismiss this possibility.[22]

QDR 01's Short Half-Life: The Compelling Need for Strategic Reorientation.

Upfront, NDS 05's framers recognized that the strategic environment and its hazards were more complex than many appreciated. 9/11 proved that terrorists operating below the nuclear, biological, or chemical threshold could inflict catastrophic, paralyzing damage.[23] Further, the terrorist challenge itself proved remarkably resilient. It continued to survive, mutate, and assault western, and moderate Muslim interests worldwide.[24] Further still, hope for "rapid, decisive" victory in Iraq and Afghanistan was instead replaced by the reality of irregular conflicts of indeterminate length. Each threatened to devolve into disintegrative, intrastate war, as well as escalate horizontally across combustible regions.[25] North Korea effectively played the nuclear card by nimbly balancing its behavior between tepid accommodation and brinksmanship.[26] Pakistan's A. Q. Khan demonstrated the dark potential resident in nuclear entrepreneurship.[27] Meanwhile, a host of great and medium powers effectively balanced against the United States on key security issues—most notably Iraq. In doing so, these states also publicly demonstrated the apparent limits of American political influence.[28] In the Western Hemisphere, the rise of Venezuelan populism signaled the emergence of viable and potentially radical political challenges to historic American influence and leadership in Latin America.[29]

Worldwide, a palpable degeneration of functioning political order in some key regions became increasingly apparent. This both manifested itself in un- and undergovernance, as well as in increasing concern more generally about the durability of the already tenuous political order holding some strategically consequential states together.[30] Concerns about nuclear-armed North Korea or Pakistan, for example, only intensified when considered in the context of the fragile political arrangements keeping them intact.[31] Likewise, incipient, often radical, discontent with and resistance to the established governments of the Gulf Cooperation Council—especially when viewed in the context of an escalating Iraq insurgency and an increasingly assertive Shi'a Iran—implied that 45 percent of the world's proven oil reserves and 17 percent of its natural gas might be vulnerable to sudden, violent disruption.[32]

None of these gathering challenges tested American military dominance directly. Indeed, the nation's most direct security-relevant challengers chose effective alternatives to traditional military competition to effect strategic outcomes in their favor. American interests were under siege from myriad unconventional, indirect sources of resistance and friction. In response, traditional U.S. advantages were proving increasingly ineffective against them. The irregular employment of violence against the United States was common; the effective mobilization or manipulation of politics against U.S. interests by a variety of openly hostile, violent, benign, and at times friendly competitors even more so. In the face of this, the American defense establishment appeared chronically under-prepared for the demands of an environment defined by waves of unconventional defense-relevant challenges that were

increasingly invulnerable to defense-specific solutions. The United States was indeed a "hyperpower" as was suggested by a French official in 1999.[33] Yet, by 2003-04, alongside quite obvious traditional military advantages, the United States was also demonstrating real vulnerability to both alternative forms of competition and less deliberate systemic instability. Clever exploitation of this vulnerability was proving surprisingly effective at limiting American reach, influence, and freedom of action.[34]

Thus, by late 2003, defense strategists recognized that traditional conceptions of risk and hazard were insufficient for an objective understanding of the new security environment. This indicated that there was a critical need for a fundamental revision of the defense outlook and priorities promulgated in the first months of Donald Rumsfeld's tenure as Secretary of Defense. QDR 01 placed DoD on a strategic trajectory informed by classical realism. It implied that consequential politico-security competition emanated largely from states and would rest in large measure on their possession and retention of decisive traditional military capabilities.[35] Where nonstate actors were considered consequential, it was only in the context of those that managed to acquire weapons of mass destruction (WMD) or could pose other catastrophic threats.[36]

The earliest public expressions of defense policy by Rumsfeld's DoD were captured in the *Guidance and Terms of Reference for the 2001 Quadrennial Defense Review* and the subsequent *2001 Quadrennial Defense Review Report* itself.[37] In the main, these two documents articulated a basic position on defense transformation that had grown throughout the 1990s. Those advocating this position argued that the United States enjoyed decided military advantages over all of its likeliest

state competitors, and that it should seize on an historic opportunity to guarantee its substantial advantages in perpetuity through an aggressive high-tech program of military transformation.[38]

In the author's view, architects of the 2001 defense vision overmilitarized the politico-security challenge. Thus, they weighted their recommended strategic design heavily toward traditional—albeit transformational—military superiority.[39] According to the logic of QDR 01, the most strategically significant challenges would continue to be nails and the solutions to them increasingly more capable, complex, and technically advanced hammers.[40] In short, nothing would be novel about the sources of consequential competition—only the quality of that competition and the physical address of prospective competitors. States would continue to be the dominant (if not only) sources of real strategic hazard for the United States and they would largely continue to compete with the United States in ways that were perhaps novel technically and operationally but not necessarily unrecognizable from past periods of military rivalry.

QDR 01 was replete with references to anticipated "asymmetric" competition.[41] However, the authors of QDR 01 appeared to imply that the most significant security challenges—while "asymmetric" by their definition—would continue to manifest themselves most prominently in well-recognized forms of military rivalry. Principally, these included rising great powers and rogue states employing ballistic missiles and WMD to limit American regional influence by holding the U.S. homeland itself at risk.[42] Further still, though ostensibly founded on the principal of "uncertainty" and thus trumpeting a "capabilities-" versus "threat-based" approach to strategy, QDR 01 focused implicitly

on the certainty of future military competition with a rising China.[43] In a word, it was classical realism redux where the grand strategic dynamics of the nation's future looked very much like its Cold War past. This worldview enabled those influential in QDR 01's development to review the strategic landscape and declare meaningful military competition with the United States a decade or more in the future. They therefore sought to hinge future American success on careful exploitation of a "strategic pause" in meaningful military rivalry and an attendant opportunity then for an American "leap ahead" in military capability.[44]

Those responsible for NDS 05 saw perilous attachment to unreconstructed realism in QDR 01. Among their core findings was the idea that broad spectrum American primacy was most vulnerable in domains lying outside that of traditional military competition. In their view, QDR 01 failed to acknowledge that real power and its effective employment no longer adhered to 20th century realist convention alone. Continued American primacy relied only in part on retention of dominant traditional military capacity—transformed or not. They concluded that traditional military superiority neither guaranteed broad spectrum primacy nor was it sufficient to contend with irregular, catastrophic, and hybrid competition and resistance effectively. In their view, the politico-security playing field was at once more complex and in some regards more level than most understood.

Though meaningful strategic competition and resistance strayed further and further away from the traditional military domain, the American defense establishment continued to bind its relevance to the narrow maintenance of traditional military dominance alone. Strategic risk calculation in this regard was

one-dimensional and binary—not unlike the net and risk assessments that dominated Cold War strategic thinking. For DoD, risk was measured and accounted for in the context of traditional military conflicts with great or lesser powers. It pegged the department's relevance and thus its risk calculations exclusively against what, in light of years of demonstrated U.S. military superiority, seemed both the unlikeliest and the most favorable strategic circumstances for the United States—purposeful traditional military rivalry and conflict focused squarely at the jaws of American advantage.

In reality, the range of consequential actors had expanded exponentially. In light of obvious American advantages, all aspiring challengers viewed traditional military competition or conflict with the United States as pointless and unnecessary for effective pursuit of their own discrete interests. From their perspective, active military competition or open military conflict engendered enormous—even existential—hazards. Thus, NDS 05's framers questioned the validity of DoD's strategic trajectory. They further questioned the utility of the military instrument as it was currently configured and as they perceived it would be configured after the high-tech transformation envisioned by QDR 01. Candidate Bush argued in 1999, "The best way to keep the peace is to define war on our terms."[45] NDS 05's framers concluded that the American defense establishment may be redefining "war" perhaps as it would prefer it to be versus as it was or should become.[46] As a consequence, they feared DoD was increasingly transforming itself, at best, toward limited strategic utility and, at worst, into strategic irrelevance.

Informed by the currents of post-Cold War social science and the events that unfolded after 9/11, NDS

05 proceeded from the hypothesis that consequential competition and resistance themselves were in the midst of revolutionary transformation. While there may in fact be a revolution in military affairs (RMA) underway, the defense establishment's adjustment to a more fundamental transformation in the character of competition and resistance was more relevant and important to the relative strategic success or failure of the United States. The view was that much of the RMA rested squarely in the realm of traditional competition. And, further, since the principal aspects of the RMA continued to be largely dominated by the United States, traditional military competition was neither the likeliest nor the most important future challenge to American primacy.[47] As Joseph Nye suggested:

> The agenda of world politics has become like a three-dimensional chess game in which one can win only by playing vertically as well as horizontally. On the top board of classical interstate military issues, the United States is likely to remain the only superpower for years to come, and it makes sense to speak in traditional terms of unipolarity or hegemony. However, on the middle board of interstate economic issues, the distribution of power is already multipolar . . . And on the bottom board of transnational issues, power is widely distributed and chaotically organized among state and nonstate actors.[48]

At a minimum, the corporate reevaluation of defense strategy chartered by Secretary Rumsfeld necessitated that DoD's establishment ask and truthfully answer what some might consider impertinent questions given powerful predilections for high-tech military transformation focused against future state competitors.[49] Doing otherwise though—ignoring what some considered real gaps in QDR 01's analysis and scope—might prevent or impede essential change

and leave American interests woefully vulnerable to the dominant, unconventional security challenges of the new century.[50] Broadly this meant the staid defense community should undertake an elemental investigation into the primary challenges to American interests and DoD's role in confronting them. By implication, this necessitated looking beyond the most immediate challenges associated with the ongoing "war on terrorism." It required the defense establishment instead to examine the broad character of American position, its costs and hazards, and its rational defense in a period marked by enormous systemic change. In advance of DoD's work, a comprehensive whole-of-government security assessment would have been providential.[51] However, none was forthcoming.

At the working level, three big ideas underwrote continued work on NDS 05. First, the United States had entered a period of persistent conflict, resistance, and friction that would—without some substantial adaptation—undermine its ability to secure its interests and position effectively.[52] Second, purposeful state and nonstate rivals would increasingly employ irregular, catastrophic, hybrid, and perhaps in the future, disruptive methods against the United States in order to offset their own vulnerability to traditional American military preeminence.[53] In this regard, those developing NDS 05 assumed that America's most consequential strategic competitors had already consciously ceded much of the traditional domain to the United States and had instead opted to compete in alternative, security- and defense-relevant domains where the United States had in the past demonstrated some vulnerability (e.g., domestic and international politics, American and world opinion, economics, culture, information, ideology, public safety, etc).[54]

Finally, security- and defense-relevant competition with and resistance to the United States was neither exclusively confined to the conflict with extreme Islam, nor was it driven by a future showdown with a rising near-peer like China alone. Strategic circumstances were more complex and irreducible than either of these suggested. The reality was that the United States had entered an era where conflict on some level was the norm and peace by most definitions the exception.

NDS 05 then proceeded from a radically different point of departure than did QDR 01. In late 2003, as work on NDS 05 began, American great power was proving much more vulnerable to nonmilitary (but not necessarily nonviolent) forms of competition and resistance than commonly acknowledged in public policy statements.[55] To NDS 05's framers, this nonmilitary competition and resistance was increasingly relevant yet still not meaningfully accounted for in defense strategy and policy.

THE STRATEGIC ENVIRONMENT AND ITS CHALLENGES.

To those responsible for developing NDS 05, the terms traditional, irregular, catastrophic, and disruptive held particular meanings. It is clear now that all of these would benefit from a richer more substantive explanation. As stated earlier, this treatment is primarily concerned with the evolution of consequential competition and resistance away from traditional military threats and toward a challenge matrix exhibiting an irregular, catastrophic, and hybrid character. Therefore, the author will devote much of the following discussion to the latter challenges as working-level strategists visualized them in the opening stages

of NDS 05's development and its subsequent DoD-wide socialization.

NDS 05's framers believed the security environment and its hazards held substantial nuance and ambiguity. But, perhaps not the same level of abject uncertainty indicated in QDR 01. The world was full of competitors ranging from the openly hostile and violent to the inherently subtle, political, but no less unfriendly. The environment's many challenges combined in intricate, often indistinguishable hybrids. Those wishing the United States or its interests harm sought to do so across a range of competitive arenas. It appeared many actors were out to get us; but not all of them were necessarily out to kill us.

To those drafting the strategy, power still mattered in the international system. However, they concluded that employable power neither resided with states alone nor was it defined only within the context of those classical instruments of power normally associated with the world's most powerful nation-states.[56] Further, while violence or its threatened use remained significant levers in the competitive relationships between rivals, neither was sufficient nor necessarily determinative by itself of favorable strategic outcomes. Finally, they concluded that many—if not most—defense-relevant 21st century challenges were, at their core, nonmilitary or would at a minimum require substantial nonmilitary resources to confront them effectively. In brief, the United States had entered a period of substantial resistance and friction that would require the nimble management of the U.S. Government's various instruments of power in order to drive the most consequential sources of danger below the threshold of strategic significance.

The Traditional Challenge—Costly but Familiar.

Before discussing the catastrophic, irregular, and hybrid challenges in detail it is important to describe the more familiar traditional challenge in context, as it was envisioned by the DoD strategists responsible for NDS 05. In the purest security context, the term "traditional challenge" connotes the employment of "legacy and advanced military capabilities and recognizable military forces in long-established, well-known forms of military competition and conflict" with the United States or its key strategic partners.[57] The traditional challenge not only includes "the conventional air, sea, [and] land forces" of competitors or potential rival states, but also their traditional institutions of political power and military command and control.[58] Thus, it represents the recognized, highly-structured, and routinized competition between military powers employing their armed forces to deter, threaten, attack, or defend themselves.

Use of the phrase "legacy and advanced" in the context of the traditional challenge is wholly intentional. It implies to the defense community that, to the extent an opponent's "transformational" or "asymmetric" means fall within the realm of recognized military capabilities and methods, they are considered traditional. One man's "asymmetry" is another man's "good generalship" in this regard. Active preparation for traditional military rivalry and vigorous prosecution of traditional military conflict are costly but also familiar endeavors for the United States.[59]

Often lost in descriptions of the traditional challenge is the idea that it also encompasses the nuclear forces of established (and, the author would argue,

assumed) nuclear powers.[60] By extension, the author believes the traditional challenge should also include the wider nuclear and non-nuclear WMD arsenals of known WMD states. This is particularly true for those states where convention and capability indicate that the United States retains significant leverage and their behavior—though confrontational—is still rational. NDS 05's working-level strategists assumed many WMD states exercised a degree of rational and responsible control over their WMD arsenals that some popular conceptions of WMD possession were rejected. Further, there were traditions, routines, and conventions governing the disposition and possible employment of nuclear weapons that would continue to favorably influence the behavior of well-established nuclear powers. Combined, these seemed to moderate the external challenge of some WMD possession and thus made stable strategic management of the WMD challenge—in a limited number of instances—more practicable.

This logic was not intended to imply that extant WMD arsenals (particularly, in the author's view, nuclear and biological weapons) were not key sources of concern.[61] Nor was it meant to accept as fact the inevitability of wider WMD proliferation. Rather, NDS 05's framers believed that a history of restraint with respect to nuclear weapons and a post-9/11/ post-Iraq environment increasingly intolerant of WMD misbehavior combined to militate against the occurrence of overtly hostile or irresponsible acts certain to provoke a hyper-sensitive American superpower.[62] Further, they believed that many of the classic levers of state and international power that successfully moderated behavior during the Cold War remained operative against traditional state challengers

in the post-9/11 period as well. Finally, though acknowledging prevention and counterproliferation as national priorities, they believed that once WMD possession was a reality or an inevitability, efforts to shape outcomes positively through skillful application of the broad instruments of power were more likely to succeed than were forcible efforts to reverse acquisition or eliminate capabilities altogether. This is particularly true if one adds the proviso '*without incurring unacceptable increased strategic risk*' to more force-oriented approaches to counter-proliferation.

In the broadest sense, this view of 'traditional challenges' was never intended to wholly discount as insignificant the military threat from rival or potential rival states. Nor, for that matter, did NDS 05's framers overlook the prospect of future tensions between the United States and competitors boasting some significant traditional capacity. However, work on NDS 05 operated from the assumption that meaningful state and nonstate rivalry moved on, in practical terms, toward what were to prospective competitors other more cost effective and risk-informed approaches. Toward that end, those developing NDS 05 believed most rival improvements in traditional military capacity were complementary to hybrid competitive strategies vis-à-vis the United States. Thus, they further believed that the most significant and consequential competition was occurring largely in alternative, nonmilitary domains.

This neither ignored unprovoked state-sponsored violence as a potential challenge nor did it indicate that the United States could forgo investment in those military capabilities necessary to offset future traditional military competition or conflict. It did, however, indicate that the risk calculations of most state competitors identified traditional military competition

with the United States as cost prohibitive and astrategic. To NDS 05's framers, strategically significant violence originating from a hostile state would likely be surreptitious, indirect, and unconventional in character; and therefore, less vulnerable to redress through traditional American military responses.[63] They believed that transnational and substate competitors had already internalized these ideas, long since migrating active resistance to the United States into irregular, catastrophic, or hybrid domains.

Given this view of traditional challenges, fresh perspectives on the prospects for military conflict were warranted as well. Clearly large, capable states continued to maintain substantial traditional capacity. This implied that the United States would have to continue to account for traditional military challenges in its strategic and operational calculations. Yet, given that meaningful politico-security competition was moving away from traditional military rivalry, it also implied that the United States must learn to manage residual traditional challenges differently than it had in the past. New irregular-cum-catastrophic and hybrid challenges would require increasing attention and resources.

Those developing the defense strategy acknowledged that the United States would have to maintain sufficient military capacity to defeat multiple state competitors simultaneously in a traditional context. However, given recent American military performance and the concept of "defeat," as it was commonly understood in mainstream defense convention, this was not a particularly high bar.[64] Thus, they determined that large-scale traditional military conflict constituted neither the likeliest nor the most dangerous politico-security challenge for the United States.[65] Therefore,

it seemed intuitive that American strategists should be prepared to assume some risk in the traditional domain in order to offset real vulnerability to irregular-cum-catastrophic resistance. This was particularly disquieting to the military departments who staked so much of their reason for being on underwriting success in major combat actions against traditional military opponents.

If it occurred at all, NDS 05's framers believed traditional military conflict would originate from one of three precipitating triggers—rival miscalculation, accident, or American preemption/prevention. They assumed that even the most capable state challengers would avoid purposefully initiating traditional hostilities as a matter of policy, as any deliberate provocation would clearly occur on terms favorable to the United States. Further, they concluded that this would remain the case for as long as the United States maintained its decisive overmatch in traditional warfighting capacity.[66] They assumed that traditional military conflict—should it occur at all—would proceed from circumstances often outside the immediate control of rivals, but often within the proximate control of the United States. Maintaining this advantage was still considered a key component of future defense policy.

With respect to miscalculation, a rival state might again underestimate American resolve over what they perceive to be a peripheral U.S. interest—à la Kim il Sung in 1950 or Saddam Hussein in 1990. Therefore, they could cross unforeseen U.S. redlines and, as a result, elicit an American military response. Likewise, future American decisionmakers could underestimate foreign resolve. In doing so, they might trigger a military response previously unaccounted for in U.S. strategic calculations. Though the offended state is

likely to be universally less capable than the United States, honor and the instinct for self-defense may trump more rational alternatives to war.

On the issue of accidental war, inadvertent tactical or operational confrontation between American forces and those of a potential rival; unintentional foreign or American encroachment on a sensitive interest; or a fundamental misreading of strategic warning could all result in unwanted military confrontation. Each, without deliberate counteraction, could lead to uncontrolled escalation that ends in traditional military hostilities. Past behaviors or events that under the right conditions might have triggered "accidental war" include the aggressive quasi-war between rival Cold War submarine fleets; the accidental bombing of the Chinese embassy in Belgrade; the U.S.-Russian stand-off at the Pristina Airport; and finally, the Sino-American P3 incident over Hainan Island. All of these illustrate how relatively insignificant tactical confrontations under the right circumstances might result in "accidental war" between the United States and a rival state.

Finally, the recent preventive war in Iraq indicates that traditional conflict might also result from deliberate American policy choices. Whereas obvious U.S. traditional overmatch gives rival states substantial pause when considering initiation of traditional hostilities, the opposite might be true for American decisionmakers. The Iraq War is at once demonstrative of the substantial U.S. capacity for prosecution of traditional military campaigns; the obvious temptation to employ that capacity against vulnerable rivals; and the inherent susceptibility of traditional American military advantages to purposeful irregular resistance and civil disorder in the "post-maneuver" phase of military operations.[67]

The American experience in both Iraq and Afghanistan may temper a future president's interest in forcible regime change and extended stabilization. In both instances, the United States demonstrated its capacity to overthrow an unfavorable status quo but failed to demonstrate the requisite follow-on capacity to rapidly and effectively establish or restore a stable new status quo in its place.[68]

This view of traditional military conflict leads to two conclusions. First, the United States has the resident capacity and defense culture to effectively mitigate most risk originating from residual traditional competition. Its enormous experience and success against ill-behaving, conventionally-minded state challengers, its continued devotion to military innovation, and the great potential of American technological know-how, all indicate that the United States can maintain a decisive edge in traditional warfighting capacity and mitigate most future risk in this regard through prudent hedging. Thus, the United States is likely to affect the course and outcome of conflicts rooted in the traditional domain on its terms for the foreseeable future. In 2006, Principal Deputy Undersecretary of Defense Ryan Henry concluded similarly in *Parameters*:

> The U.S. military of today is the dominant world power when it comes to traditional challenges: state-on-state warfare . . . in a regularized battlespace—the classic competition of firepower and maneuver. In the course of investing heavily in the capabilities to meet traditional challenges, and as successive generations of combatant commanders have absorbed lessons from the battlefield . . . we have become the preeminent asymmetrical player in this kind of warfare.[69]

The second conclusion is that the United States cannot currently guarantee this same level of confidence

with respect to conflicts that are inherently irregular, catastrophic, or hybrid from the outset or assume one of these alternative forms as they mature. One lost aspect of NDS 05—now implied, but once more explicit in the text—is the idea that even the most traditional of military engagements might ultimately devolve into protracted irregular campaigns as occurred in both Iraq and Afghanistan.[70] Throughout the remainder of the monograph, the author will devote a great deal of attention to the broad implications of this second conclusion.

The Catastrophic Challenge—Likely and Paralyzing.

To NDS 05's framers, that which separated a "traditional" conception of WMD possession from WMD possession constituting a "catastrophic challenge" was the presence of rational, responsible, and positive control in the case of the former and a lack thereof with respect to the latter. A suddenly destabilized or ungoverned traditional nuclear power, for example, is instantly an enormous catastrophic challenge. Likewise, partial loss by a traditional power of effective control over some employable weapons of mass destruction to a rogue or separatist domestic actor suddenly presents the United States and the international community with an urgent catastrophic challenge.[71] Further, known terrorist possession of employable nuclear or biological weapons constitutes without any qualification an immediate catastrophic challenge.[72] Yet, to NDS 05's framers, the catastrophic challenge included more than just weapons of mass destruction or their use. They considered some non-WMD mass-casualty and mass-effect terrorism catastrophic challenges as well—particularly in light of al-Qai'da's 2001 attacks inside the United States.

Use of the adjective "catastrophic" was troubling to some. Critics, for example, observed that a major regional war or an extended and quite violent guerrilla conflict in a key strategic region could, by popular conception, be considered "catastrophic" as well. The short answer as to why strategists settled on the adjective "catastrophic" versus any other word is simply that the term conformed with conventional wisdom on the topic of "catastrophic terrorism"—an idea that had come to the fore in the previous decade.[73] As the author has already described and will describe further in upcoming paragraphs, the catastrophic challenge, as envisioned by those crafting NDS 05, included more than just extreme forms of terrorism. However, their wider view was the product of a reasonable extrapolation of the already well-known concept of catastrophic terrorism. In the 1998 report *Catastrophic Terrorism: Elements of National Policy*, Ashton Carter, John M. Deutch, and Philip Zelikow capture the essence of the catastrophic challenge in what is now a chillingly accurate foreshadowing of the post-9/11 world:

> Readers should imagine the possibilities for themselves, because the most serious constraint on current policy is lack of imagination. An act of catastrophic terrorism that killed thousands . . . of people and/or disrupted the necessities of life for hundreds of thousands, or even millions, would be a watershed event in America's history. It could involve loss of life and property unprecedented for peacetime and undermine American's fundamental sense of security . . . Constitutional liberties would be challenged as the United States sought to protect itself . . . by pressing against allowable limits in surveillance of citizens, detention of suspects, and the use of deadly force . . . Like Pearl Harbor, such an event would divide our past and our future into "before" and "after."[74]

By late 2003/early 2004, when the catastrophic challenge was defined initially for the defense bureaucracy, it became, "acquisition, possession, and possible employment of WMD or methods producing WMD-like effects against vulnerable, high-profile targets by terrorists and rogue states."[75] Use of the phrase "rogue state" was in hindsight imprecise. To those crafting NDS 05, the catastrophic challenge described deliberate or inadvertent loss of positive, responsible control over significant WMD capabilities; their use or threatened use; or the employment or capacity for employment of non-WMD methods or capabilities likely to generate WMD-like effects. Thus, the term "rogue" by itself is more suitable to any definition of catastrophic challenge than is the more restrictive phrase "rogue state."

Rogue implies the broader concept of possession or use by a leader or group "no longer obedient, belonging, or accepted and hence not controllable or answerable."[76] A renegade, seditious substate actor who gains possession of all or part of a state's nuclear arsenal and whose intentions are either known and hostile or unknown would by definition present a sudden and quite complicated catastrophic challenge, for example, in the same way that an irresponsible or irrational state actor would. Thus, again from a working-level perspective, a "rogue state's" possession of employable WMD and ballistic missile capabilities does not necessarily constitute a catastrophic challenge. The "rogue state" in question may still exercise rational, responsible, and positive control over its WMD capabilities, and the United States may continue to exercise substantial 'traditional' leverage over its behavior as well.

Like the subjective distinctions NDS 05's framers made between traditional and catastrophic challenges,

there were equally subjective distinctions made with respect to exactly what constituted "catastrophic" as well. Earliest descriptions of the four challenges were displayed graphically on different versions of the now familiar quad chart (See Figures 1 and 2).[77] Though some phrasing changed throughout 2004, there was very little change in meaning. The challenges were also first publicly described in the text of an obscure March 2004 Base Realignment and Closure Act (BRAC) report.[78] One of the first public versions of the quad chart was included in a briefing by DoD's then Director of the Office for Force Transformation entitled *Security Planning and Transformation*.[79] This version represents an abridged description of the four challenges as originally conceived by NDS 05's working-level framers—naturally adjusted to the preferences of senior defense leadership.

Common to all graphic depictions of the catastrophic challenge is the idea that it exists with the intent or capacity to "paralyze [American] power."[80] Principal Deputy Undersecretary of Defense for Policy Ryan Henry later reiterates this in his *Parameters*' piece published in early 2006.[81] In this regard, understanding two key terms and their relationship is critical—that of catastrophe and that of paralysis. The catastrophic challenge, to NDS 05's framers, implied having the capacity to elicit "(a) sudden, terrible calamity" (on the United States or its interests), as Webster's defines catastrophe, and, therefore, inflict on the United States some "severe impairment of activity," as paralysis is partially defined by American Heritage.[82] In this regard, the previous citation from Carter *et al*. is also instructive.

These nuanced perspectives are especially important when thinking about the catastrophic challenge

in its non-WMD context. Al-Qai'da's demonstrated capacity to exact catastrophe through non-WMD means combined with increasing uncertainty about the surety of some existing WMD arsenals and the responsible stewardship of WMD know-how drove those developing NDS 05 to conclude that catastrophic challenges were both increasingly likely and prospectively paralyzing in their effect on the United States.[83]

They believed the catastrophic challenge fell into one of two categories. You either knew a catastrophic challenge when you saw it—à la 9/11. Or you knew it when your mind's eye conceived of it; it was both plausible and bad; and its effects would be nationally or internationally paralyzing—e.g., nuclear or biological terrorism against major American metropolitan centers.[84] On 9/11, 19 hijackers employed four domestic jetliners as precision-guided weapons, attacked three "vulnerable, high-profile targets" in Washington and New York, and killed almost 3,000 Americans.[85] The widespread political, security, economic, social, and cultural ramifications of the attacks were in a word catastrophic. Clearly, a small yield nuclear device employed in lower Manhattan would kill or injure more and do a great deal more physical damage than did the 9/11 hijackers.[86] Yet, both the effects of 9/11 and the assumed effects of a nuclear attack demonstrate the not dissimilar prospect of "sudden, terrible calamity" of substantial strategic consequence exacting a "severe impairment of activity."

The catastrophic challenge merits some further extrapolation as well. For example, national security decisionmakers should assume that simultaneous, coordinated suicide attacks—dispersed across the United States, targeted strategically for mass

psychological effect, and employing terrorists similar in number to 9/11—could also paralyze American life through sudden calamity. And this would be true in spite of the fact that the net casualties and physical damage associated with each individual attack would be substantially lower than the two obviously catastrophic examples provided above. The 2004 BRAC report referenced earlier also hints at the prospect of catastrophic attacks on infrastructure that conceivably involve little or no immediate loss of life but nonetheless prove calamitous and paralyzing to the United States over all. The BRAC report observed:

> Elements of the U.S. national infrastructure are vulnerable to catastrophic attack. The interdependent nature of the infrastructure creates more vulnerability because attacks against one sector—electrical power grid for instance—would impact other sectors as well. Parts of the defense-related critical infrastructure are vulnerable to a wide range of attacks, especially those that rely on commercial sector elements with multiple single points of failure.[87]

One final extrapolation is also quite important. Admittedly, some prospective natural or human disasters merit some deeper examination as catastrophic challenges. These occur or arise in the absence of any hostile volition or intent but nonetheless exhibit "WMD-like effects" in their wake. An honest and comprehensive post-tsunami/post-Katrina appraisal of catastrophic challenges would acknowledge that some "acts of God," as well as the sudden catastrophic failure of some hazardous human functions should be included in the concept as well. Hurricanes, earthquakes, floods, tsunamis, volcanoes, widespread blackouts, nuclear or industrial accidents, pandemics, and, even future meteor strikes could

prove strategically dislocating for important states or regions. This naturally includes the United States.

One need only recall the Southeast Asian Tsunami (2004) and Hurricane Katrina (2005) to see how the political, economic, and physical security of key U.S. interests might be threatened by devastating natural or human disasters in ways that would warrant well-considered defense-specific responses. For certain, defense-relevant implications of catastrophes like these mostly lie in the realm of consequence management, security, and post-event risk mitigation. However, catastrophes like these do have clear strategic-level, politico-security implications that should be considered thoughtfully in advance, within the context of key American interests.

The Irregular Challenge—Persistent and Corrosive.

'Irregular challenges' too, as they are currently conceived, would benefit from an expanded discussion of their origin and development. Neither the description contained in NDS 05 nor those circumscribed definitions outlined in various "quad charts" referenced earlier represents the fullest accounting of the irregular challenge as originally conceived.[88] All of these provide important components of the concept. None, however, renders a complete, comprehensive description. In one of the 2004 briefing charts cited earlier, irregular challenges are described as "(u)nconventional methods adopted and employed by nonstate and state actors to counter stronger state opponents."[89] In this context, irregular challenges seek to "erode [American] power."[90]

NDS 05 similarly describes irregular challenges as those "employing 'unconventional' methods to counter

the traditional advantages of stronger opponents."[91] Consistent with briefing chart references to an erosion of American power, NDS 05 concludes, "Irregular opponents often take a long-term approach, attempting to impose prohibitive human, material, financial, and political costs on the United States to compel strategic retreat from a key region or course of action."[92] The strategy itself lists "terrorism and insurgency" as illustrative of purposeful irregular challenges, while 2004 briefing charts consistently identify "terrorism, insurgency, civil war and emerging concepts like 'unrestricted warfare'" as their examples.[93]

NDS 05's framers believed that the United States would persistently encounter purposeful resistance, as well as less focused residual, environmental friction that would present direct challenges to compelling national interests.[94] This is foundational to understanding the irregular challenge as originally conceived. The strategy's framers posited that purposeful resistance arises when the United States employs its enormous capacity and influence to secure core interests and, in doing so, encroaches—intentionally or otherwise—on the vital or survival interests of other strategically consequential actors. As a corollary, they anticipated that even latent American power—viewed as a potential challenge by prospective opponent's—will trigger some preventive resistance in an attempt to shield or secure key interests prior to their being threatened by the focused attention of the United States.

Use of "encroachment" when describing U.S. actions and "resistance" or "defense" to describe actions by U.S. opponents that include terrorists, insurgents, criminals, and rival states is not meant to cast American foreign and security policy in a negative light. Nor for that matter should it be taken to suggest

some moral equivalency between, say al-Qai'da, the Mehdi Militia, or the governments of Iran or Syria and the United States. Rather, it is intended as clinical recognition that the United States will—intentionally or otherwise—challenge the core interests of other consequential actors (legitimate, illegitimate, hostile, neutral, and at times, friendly) in ways that will engender some violent and nonviolent resistance. In short, it will both pick fights intentionally and trigger fights as a result of who it is, what it does, and what it represents.

Those opponents who believe that their core interests are threatened by the United States will employ what they perceive to be the most effective tools at their disposal to push back against U.S. encroachment and secure for themselves the most defensible, interest-based position. In this regard, effective resistance relies on employment of those instruments that convention, culture, and capability indicate will have both the greatest impact and greatest likelihood for success.[95] Given enormous traditional American advantages—across all instruments of power—NDS 05's working-level strategists believed that determined competitors will increasingly seek to employ innovative, unconventional forms of resistance and competition against the United States to offset their own obvious vulnerabilities. Though NDS 05's drafters considered many irregular-cum-catastrophic approaches to be morally abhorrent, they nonetheless also recognized them as on some level rational. This indicates simple recognition that there are rivals who believe that the ends justify often unspeakable means when physically resisting the United States. It further indicates that a wider universe of violent and nonviolent irregular innovations will stalk American great power and offer

determined competitors a range of attractive, cost-imposing alternative strategies.

To those developing NDS 05, purposeful irregular resistance would assume many forms. They believed some would follow the conventions and norms of civil politics, international relations, and legitimate political discourse. Thus, they would remain confined to economic, political, cultural, and social resistance as well as some forms of "soft balancing."[96] Others would be more violent, corrosive, and ultimately, degenerative in effect. Persistence was common to all. If successful, all could erode American power, national will, and real influence over time through the imposition of increasing physical, psychological, and political cost. In the extreme, those irregular opponents who are unconstrained by conventional norms and are seeking more immediate strategic outcomes will attempt to paralyze the United States and its partners through episodic catastrophic attack. This will be discussed in greater detail in the next section.

The most aggressive forms of purposeful irregular resistance naturally include but are not limited to terrorism, insurgency, civil war, and other nonmilitary modes of violence. However, as indicated above, the challenge universe also includes a range of less violent but no less hostile or potentially damaging forms of confrontation as well. Therefore, reference to "unrestricted warfare" under the rubric of the irregular challenge in various 2004 briefing charts was, at least at the working level, intentional.[97] However, the concept of "unrestricted warfare" was not included in the abridged definition of irregular challenges included in NDS 05.[98]

"Unrestricted warfare," as described in February 1999 by Chinese theorists Qiao Liang and Wang

Xiangsui, surveys alternative forms of competition and conflict available to those confronting a great power like the United States.[99] NDS 05's framers believed many forms of irregular resistance could (if strategically targeted, persistently pursued, and competently employed) exact costs on the United States that in real terms would approach or surpass those commonly associated with traditional military conflict and war.[100] Here Qiao and Wang are instructive. They observed:

> War which has undergone the changes of modern technology and the market system will be launched in even more atypical forms. In other words, while we are seeing a relative reduction in military violence, at the same time we definitely are seeing an increase in political, economic, and technological violence. However, regardless of the form the violence takes, war is war. . .[101]

Unrestricted Warfare was clearly intended to be a theoretical blueprint for meaningful resistance to dominant traditional military power. In it, Qiao and Wang argued that "the new principles of war are no longer 'using armed force to compel the enemy to submit to one's will' but rather . . . 'using all means, including armed force, military and nonmilitary, and lethal and non-lethal means to compel an enemy to accept one's interests'."[102] Qiao and Wang described a range of "nonmilitary war operations."[103] They contended these would all be "waged with . . . greater frequency around the world."[104] These alternative forms of war included trade war, financial war, ecological war, and a new terror war that they suggested would involve "the rendezvous of terrorists with various types of new, high technologies."[105] Qiao and Wang described

a host of other, more speculative, nonmilitary forms of purposeful resistance that could, from the author's perspective, present the United States with significant future irregular challenges originating from a number of hostile competitors or competitive alliances.[106] They concluded:

> Faced with a nearly [infinite and] diverse array of options to choose from, why do people want to enmesh themselves in a web of their own making and select and use means of warfare that are limited to the realm of force of arms and military power? Methods that are not characterized by the use of force of arms, nor by the use of military power, nor even by the presence of casualties and bloodshed, are just as likely to facilitate the successful realization of the war's goals, if not more so.[107]

In the author's view, purposeful irregular resistance to the United States involves the unconventional employment of violence, political agitation, social mobilization, and political or economic "assault" at the international, national, or subnational levels; all specifically targeted at undermining the quality and scope of American reach and influence, the security of core American interests, and the stable functioning of key U.S. allies and partners. In the case of the latter, determined competitors may target vulnerable partners upon whom the United States is uniquely dependent for some key support. This resistance involves the range of "nonmilitary war operations" described by Qiao and Wang. However, as partially argued earlier, the most common and defense-relevant approaches in the near- to mid-term might be insurgency, terrorism, coup, civil war, popular strike or revolt, mass civil disobedience, criminality, assassination, and purposeful civil violence. For the time being, these

may be far more evident than some of the more novel approaches described in *Unrestricted Warfare*.

DoD's working definition of irregular warfare (promulgated within an August 2006 Joint Forces Command study) in large measure captures the essence of purposeful, *violent* irregular resistance as envisioned by those responsible for NDS 05's development. The draft DoD definition begins, "Irregular warfare is a form of warfare that has as its objective the credibility and/or legitimacy of the relevant political authority with the goal of undermining . . . that authority."[108] The intent is not physical defeat of the stronger opponent, but rather, persistent erosion of the stronger opponent's physical and political influence and authority.

The working-DoD definition of irregular warfare does not, however, capture the totality of the irregular challenge – especially its less violent or less purposeful manifestations. As for the less purposeful, NDS 05's framers did envision consequential irregular challenges originating in residual, environmental friction. At the outset, these adverse 'environmental conditions' may have very little to do with the United States directly, but nonetheless become persistent obstacles to the uncomplicated pursuit of its enduring interests worldwide.

Just as purposeful resistance from a range of sources will challenge uninhibited retention of American position and influence, their secure maintenance also demands that the United States contend with this less focused, but no less corrosive and potentially debilitating, environmental friction as well. The greatest challenge in this regard, according to NDS 05, stems from "the absence of effective governance" that, according to the strategy, "creates sanctuaries for terrorists, criminals, and insurgents."[109]

In the author's view, there is also a larger, more comprehensive and fundamental challenge to the sovereignty and stable functioning of some key governments lurking on the strategic horizon. NDS 05 hints at this when it observes, "Many states are unable, and in some cases, unwilling, to exercise effective control over their territory or frontiers, thus leaving areas open to hostile exploitation."[110] While this may be true, an even more fundamental concern about governance revolves around the ability of a handful of key states to remain intact as sovereign entities and to retain functional, sovereign control over their constituent territory and populations as a whole. In short, if the physical and virtual reach of legitimate authority is increasingly in jeopardy in some important states, then the very existence of some of those states as functioning political units is also in greater peril than many currently appreciate.

This more fundamental governance challenge is reflected in the work of John D. Steinbruner. In *Principles of Global Security*, Steinbruner describes what he implies is an under-recognized challenge to the foundations of effective governance that, left unattended, threatens the stable functioning and order of the international system itself. While not necessarily presenting immediate, direct threats to the physical security of the United States, the challenge, as described by Steinbruner, could, if uncontained, threaten what he calls "global legal order" and, by implication, core American interests.[111] Steinbruner observes:

> There is reason for concern that the process of globalization might generate contagion effects powerful enough to undermine the legal foundations of the international economy and of its constituent societies and that sudden surges of civil violence might occur both as a manifestation and as a contributing cause of that

> pathology. . . . Human societies could not indefinitely tolerate any sanctuary for the gestation of a process that seriously threatens the operating rules necessary to sustain the global economy.[112]

From the perspective of NDS 05's framers, collapse of functioning order in a strategically consequential state or region would directly threaten core American interests in manifest ways. This is particularly true for those states where stable functioning of the established order is uniquely important to the continued security and prosperity of the United States and its population or that of a key strategic partner. This idea is explicitly embedded in key passages of NDS 05. For example, in the discussion of "Key States," NDS 05 observes, "(I)f adverse economic, political, and demographic trends continue, large capable states could become dangerously unstable and increasingly ungovernable, creating significant future challenges."[113] Among the assumptions, it observes, "Crises related to political stability and governance will pose significant security challenges. Some of these may threaten fundamental interests of the United States."[114]

In response to this particular form of the irregular challenge, the defense strategy argues that the United States may have to "help defend and restore a friendly government."[115] Later, under the rubric of "denying enemies sanctuary," it concludes that the United States requires the capability "to assist in the establishment of effective and responsible control over ungoverned territory."[116] Finally, in the strategy's description of "(s)wiftly defeating adversaries and [achieving] decisive, enduring results," it underscores the enormity of the challenge associated with confronting the "post-maneuver"/post-collapse environment.[117] On this subject, the strategy concludes that the

American military must have the capacity to "[set] the security conditions [necessary] for enduring conflict resolution."[118] This includes "extended stability operations involving substantial combat and requiring the rapid and sustained application of national and international capabilities spanning the elements of state power."[119] QDR 06 seizes on these points in its new force sizing construct as well.[120]

By these passages, the strategy's authors were not solely implying that "(s)tability operations are a core U.S. military mission that . . . shall be given priority comparable to combat operations," as was later suggested in DoD Directive 3000.05.[121] Rather, by raising the profile of the irregular challenge as one that is fundamentally dangerous to the stable functioning of some key states and under the worst conditions potentially catastrophic to American security interests, NDS 05's framers were implying that the restoration of functioning legal order in some very important states and regions may define for the American defense establishment the most consequential and urgent of its future strategic challenges. To NDS 05's framers, this implied that Security, Stabilization, Transition, and Reconstruction Operations (SSTRO) may not be (as popular military conception would have it) civilian-led and military-supported ventures that follow major combat operations but instead national security ventures of enormous import that supplant major combat operations in relative importance, investment, and strategic consequence for DoD.

Though purposeful irregular resistance and the environmental friction accompanying weak or collapsing political authority are distinct challenges, they can, in practice, appear quite similar in character. For example, terrorists, insurgents, criminals, or foreign

intelligence services may target the United States because of its political or military support for unpopular regimes. Further still, they may do so because of more generalized opposition to what is perceived to be a distinctly American regional or global political order. Likewise, the United States may come into contact with irregular actors like this in the aftermath of preventive or preemptive military action. Or, equally likely, the United States may face determined irregular opposition as a result of a consequential state's sudden collapse and subsequent American efforts to remedy its consequences. Similarly, civil conflict ostensibly focused solely against an important foreign government may emerge as a result of that regime's relationship with the United States or simply because of localized political grievances. The latter may have nothing to do with American policy but the resultant social and political instability may nonetheless challenge American interests fundamentally.

Though the sources or causes of the disputes in question are quite different, the strategic and grand strategic impact is similar. One form of the irregular challenge arises in direct response to American power and influence; the other originates in the weakness, failure, or rejection of local political authority. Both, left unattended, threaten core U.S. security interests. The strategic costs associated with either source are corrosive and accumulate persistently over time.[122] Thus, the United States ignores each at its peril.

Subsequent discussions of the irregular challenge within the defense community were from the outset self-limiting. Much of this is understandable. In the author's view, two interrelated issues were decisive in artificially bounding the discussion of irregular challenges. The first was expediency. As terrorism

and insurgency were the topics du jour dominating the American security agenda at the time and because they were also subelements of the irregular challenge, most subsequent discussions of the irregular challenge and its implications gravitated in their direction. This occurred at the expense of a deeper more nuanced understanding of the concept overall. In short, terrorism and insurgency were transformed themselves into short-hand for the irregular challenge as a whole.[123]

Of course, real political and security exigencies preordained this narrower focus. However, this also reflects, to some extent, what Michele Flournoy and Shawn Brimley insist is the tendency for the American government to be trapped in the "tyranny of managing today's crises."[124] This early, near-exclusive focus on terrorism and insurgency invited some to artificially limit the irregular challenge concept to a much narrower set of conditions than NDS 05's framers originally intended. Neither the strategy by itself nor the 2004 briefing charts cited earlier did much to help in this regard. Each frames the irregular challenge almost exclusively in terms of purposeful violent resistance to the United States.[125] By doing so, these source documents steer clear of meaningful consideration of less purposeful but no less dangerous strategic conditions like consequential state failure, civil war, or uncontrolled civil violence not necessarily rooted in either the War on Terrorism or an unstable Middle East.

Further still, the focus on purposeful violent resistance invites some under-appreciation for those who will confront the United States by choice in irregular, defense-relevant ways that are not necessarily overtly violent. As the previous discussion has attempted to demonstrate, careful manipulation of local politics

or economics mixed with the selective, sometimes subtle, use of political violence might prove to be more effective than overt uses of physical violence alone. The latter, after all, is likelier to trigger unwanted American military responses. DoD leadership, however, should recognize that although some forms of resistance may preclude immediate American military responses, the outcomes nonetheless may have sweeping defense-relevant implications. The author will expand on this in the upcoming discussion of hybrid challenges.

The strategy's text itself underwrites a disproportionate focus on the immediate irregular challenges of terrorism and insurgency. At the same time, the strategy's exclusion of concepts like "unrestricted warfare" and its light treatment of subjects like undergovernance and state failure in an 'other-than-terrorist sanctuary' context help perpetuate some of the misunderstanding.[126] In hindsight, the author believes that the strategy would have benefited from a much more expansive discussion of the governance and state failure challenge in a context beyond that associated with the War on Terrorism.

The second key and related issue in this regard stems from use of the word "irregular." Once, through textual representation, terrorism and insurgency became the sum total of the irregular challenge, it was relatively simple for those examining the problem in some detail to replace the term "challenge" with the more familiar term "warfare."[127] Whole defense-relevant constituencies associated with or interested in "unconventional" warfare (the land-focused military services, U.S. special operations forces and their advocates, joint doctrine writers, military academics, etc.) were then able to seize on this narrower focus and thus revert to "conventional wisdom" as it pertained to irregular unconventional *warfare*.

Admittedly, DoD needed to define the irregular challenge in a unique defense-specific context. QDR 06 and the later work it chartered did do some of this. For example, QDR 06 acknowledged that, as a matter of "steady state," DoD must be prepared to "conduct multiple, globally distributed irregular operations of varying duration."[128] Further, it concluded that the defense department should likewise be prepared to "surge" DoD capabilities to "conduct a large-scale, potentially long-duration irregular warfare campaign including counterinsurgency and [SSTRO]."[129] Both of these conclusions indicate sweeping cultural change within DoD. The key question is, "Has this cultural change really gone far enough?"

The "Hybrid Norm."

The challenges are archetypes. None of the four—traditional, irregular, catastrophic, or disruptive—exist now or will exist in the future in pure form. Thus, "hybrid challenges" will remain the norm.[130] For example, even a traditional state challenger will seek to offset obvious military vulnerabilities through incremental increases in its capacity to compete in the universe of "nonmilitary war operations" suggested by Qiao and Wang. Likewise, as indicated earlier, NDS 05's framers believed that meaningful irregular challenges existed on a single, unbroken, continuum with catastrophic challenges. In their view, the most consequential among them—e.g., al-Qai'da and associated movements—were already complex hybrids, employing irregular and catastrophic methods interchangeably depending on circumstances and available resources.[131] Thus, graphically the DoD "quad chart" consistently implies that irregular and catastrophic challenges are

increasing in both likelihood and relative strategic impact. Likewise, the dashed lines separating the four quadrants were always intended to symbolize the blending of the challenges and the increased likelihood of hybrid combinations.[132] In hindsight, the hybrid concept was not as well-communicated in the text of the strategy as the author would have preferred. After a brief introduction of the four challenges, however, the strategy does say the following without specific reference to the term "hybrid":

> (R)ecent experience indicates that the most dangerous circumstances arise when we face a complex of challenges. For example, our adversaries in Iraq and Afghanistan presented both traditional and irregular challenges. Terrorist groups like al-Qai'da are irregular threats but also actively seek catastrophic capabilities. North Korea at once poses traditional, irregular, and catastrophic challenges. Finally, in the future, the most capable opponents may seek to combine truly disruptive capacity with traditional, irregular, or catastrophic forms of warfare.[133]

Three examples illustrating the hybrid challenge are in order. These are illustrative, and, thus, are not necessarily by themselves exhaustive in their representation of the 'hybrid challenge.' The first is a hybrid state or state-like challenger. In many cases, the hybrid challenge from state or state-like actors continues to be anchored on their retention of some significant traditional military capacity. NDS 05's framers concluded that maintenance of some substantial traditional capacity by prospective state or state-like challengers enables them to engage more effectively in alternative forms of competition with the United States—forms also offering a greater chance for success. Thus, retention or acquisition of traditional capa-

bilities by them—even "transformational" capabilities or WMD—does not by itself demonstrate intent to compete meaningfully with the United States in the traditional military domain. Nor for that matter does it indicate intent to employ military force to secure regional or functional objectives they know to be anathema to American interests and likely to trigger traditional U.S. military responses.

It may indicate the opposite. The maintenance of sufficient traditional capacity may enable a hybrid state or state-like rival to consolidate its current security position within a perceived or recognized sphere of influence and hedge against American military encroachment. Doing so underwrites its freedom of action and enables it to compete with the United States in other more favorable domains—e.g., politics, economics, trade, etc.

What if, for example, Beijing's substantial traditional capacity underwrites an alternative, more irregular approach to the Taiwan issue? What if China's military build-up adjacent to Taiwan is not necessarily intended as direct leverage over outcomes but rather as an enabler for an indirect political fifth column?[134] China's ability to threaten Taipei and those inclined to support Taipei with certain military costs may be less about securing Taiwan through military incursion or intimidation and more about securing, from sudden military reversal, political gains achieved through persistent political agitation and electioneering. Under even more complex circumstances, China might exploit future political volatility in Taiwan to cultivate and mobilize indigenous agitators who share its interest in reunification and who are willing to employ or manipulate politics, economics, social activism, civil disobedience, and limited nonmilitary violence to realize it.

That outlined above is illustrative. Paraphrasing Qiao and Wang, in an era of unquestioned high-end American military primacy, state or state-like competitors are better off avoiding overt military competition with the United States all together. Those blessed with patience and time are more likely to shape long-term political outcomes in their favor by using common culture and propinquity to their advantage. Further, they might employ political influence, foreign direct investment, development aid, humanitarian assistance, and discrete violence as suggested earlier in some clever combination to influence the form and direction of a targeted population's strategic choices.[135]

The purposes and sources of traditional military violence are easy to recognize. Given American military preeminence, they are also easy to defeat. Therefore, the hybrid state or state-like competitor only employs violence when absolutely necessary—nimbly avoiding known thresholds for American retaliation—to shape attitudes, adjust behaviors, or demonstrate the weakness and vulnerability of an existing, U.S.-supported political order. To be cost effective, the hybrid state or state-like competitor employs violence surreptitiously, as overt use of traditional military force crosses obvious U.S. and international redlines, plays to the traditional strengths of the United States, and is likely to draw focused and costly American military retaliation.

Thus, the choice between the battlefield and the ballot box in this hybrid environment might be a false one. As determined competitors opt out of meaningful military competition with the United States, they increasingly recognize new opportunities to manipulate local, regional, national, and international politics

in their favor at much lower cost and without automatically incurring unacceptable levels of physical vulnerability to traditional U.S. advantages. They may simply choose to outflank American military might through politics, toxic populism, and the selective use of political violence. In this regard, the ballot box might be the battlefield—war not as politics pursued by other means but rather politics as war.

Recent events in Lebanon are instructive. Hezbollah is to many Lebanese a legitimate political party in a fragile parliamentary democracy. Yet, it is also an armed militia boasting some significant traditional military capacity and a terrorist organization known to be responsible for attacks against Western and Israeli interests. Hezbollah has also been called "a state within a state" (and thus, state-like) and is, at the same time, commonly assumed to be a client of both Syria and Iran.[136] Thus, Hezbollah and its state patrons are by definition collectively some irregular-traditional hybrid at a minimum. In this regard, Hezbollah's near simultaneous escalation of the physical threat to Israel and the political threat to Lebanon—at the alleged behest, inspiration, or acquiescence of one or both of its state patrons—offers a clear example of a state-like hybrid challenge undermining key interests principally through irregular means. Hezbollah's overt challenges to Israel's physical security and Lebanon's political stability are underwritten by the veiled threat of some substantial traditional military cost associated with direct confrontation of either the client or its patrons.[137]

Suspected Iranian intervention in Iraq provides an equally relevant example. Iran is at once suspected of both influencing Iraqi political outcomes through soft infiltration of Iraq's Dawa and SCIRI parties and

fomenting civil conflict by providing at a minimum some material support to Shi'a militias involved in sectarian violence. This dual track approach allows the Iranians to undermine American interests and shape strategic outcomes in Iraq while carefully avoiding open provocation or direct military confrontation with the United States.[138] The relationship between patron and client is symbiotic in this regard. The state is an instrument of the nonstate actor and the nonstate actor is at the same time an instrument of the state.

The focus of an opponent's traditional military strategy vis-à-vis the United States then may not be on achieving strategic objectives by force of arms. Rather, the intent may be more subtle. Military strategy and traditional military capacity—to include some WMD—may be insurance against intervention. In short, rivals underwrite alternative forms of irregular competition. The maintenance of some traditional (or catastrophic) capacity by the weaker rival promises the potential of unacceptable physical and political costs on the stronger competitor—particularly if the stronger competitor attempts to employ its own traditional advantages to prevent or reverse unfavorable strategic outcomes. Note that this does not necessitate the capacity to defeat the United States on a traditional battlefield. Rather, it implies the need to maintain that minimum military capacity essential to drive American political and military risk calculations toward prohibitive or unacceptable levels.

In this way, a rival's traditional military capacity is not the primary instrument of competition but rather an enabler for it. Maintenance of traditional military dominance by the United States then may be necessary but not sufficient. Securing core U.S. interests against alternative forms of hybrid strategic competition like

this implies the need for a more expansive U.S. capacity to employ politics, information, money, and force in more nuanced combinations to achieve favorable strategic outcomes. In short, effecting comprehensive and enduring results under these circumstances demands the capacity for real strategic acumen; not simply the operational art.

This is particularly true if key interests of the United States—long-considered vulnerable to military attack—are instead threatened or "seized" by alternative means, thus leaving traditional American military superiority irrelevant or illegitimate to prevention or redress of strategic loss. In cases like this, the question is not, "Can the United States military effectively restore a favorable status quo through force of arms?" Rather, the more important question becomes, "Can the United States legitimately and cost-effectively employ military force to secure vulnerable interests, given the opponent's chosen form of competition and adopted strategic course of action?"

A second hybrid example stems from purposeful, irregular-cum-catastrophic, nonstate competition. As in the case of the nuanced, state or state-like competitor, the capable nonstate competitor may utilize similar combinations of culture, politics, identity, and violence to maximum benefit. Employed effectively in combination, these can make transnational and subnational movements successful rivals to the United States in certain competitive domains and within a certain politico-security context. This is true in the absence of any measurable traditional military capacity whatsoever. These movements can combine political agitation, social mobilization, active or threatened irregular violence, their own forms of toxic populism, and the specter of catastrophic attack to influence outcomes in their favor.

Under most circumstances, superior American military capability can achieve immediate tactical and operational success with some ease. Yet the United States has greater difficulty recognizing and subsequently attacking with its variegated instruments of power the real locus of consequential competition and conflict in a transnational or subnational context. Thus, transient tactical or operational military success often obscures real strategic vulnerability. The United States is simply less capable of "sealing the strategic deal" in the face of irregular-cum-catastrophic nonstate resistance. It frankly has yet to determine the proper role, relative contribution, and effective configuration of American military power when it is confronted with effective, irregular nonstate competition. And, though clearly uncertain about how best to employ its military instrument under these circumstances, the United States is doubly uncertain, even incapable, of employing its other—likely more important—instruments of power nimbly and in effective combination with military force under all circumstances.[139]

Effective transnational or subnational competition is far more ideational, political, socio-economic, and cultural in its primary orientation than the United States is either comfortable confronting or likely in its current configuration to succeed against—particularly if it employs military power as its sole or primary instrument.[140] Throughout the Cold War, the United States was content and comfortable competing with a peer equal. Its defense institutions, structures, doctrines, and strategy were all programmed to support great power competition. Today, the United States finds itself confounded by lightly-armed and loosely organized opponents that use violence illegitimately; information and the media indiscriminately; and in

practice, appear more violent communities of interest than suitable military rivals. In spite of their obvious weaknesses, however, these nonstate opponents and malcontents have proven remarkably equal to the task of effective competition with the United States and its range of advantages in military power, resources, and prestige.

As in the state-centric or state-like examples outlined earlier, the effective nonstate competitor employs violence strategically to seed fear, undermine legitimate political authority, and demonstrate weakness in the stronger state opponent. Violence is not, however, the principal mechanism of competition. The war occurs more subtly in the realm of ideas and perceptions. The nonstate opponent hopes to make a political, cultural, and socio-economic narrative compelling to a target constituency through propaganda, agitation, political activism, and intimidation. At the same time, he seeks, through the targeted employment of nonmilitary violence and irregular resistance, to persistently drive the physical and political price of effective American competition toward excessive and increasingly prohibitive levels.

As described previously, irregular or catastrophic violence then is not intended to generate physical defeat of the stronger U.S. opponent. Rather, its intent is public demonstration of American vulnerability to unconventional, cost-imposing resistance. This demonstrated American vulnerability enables weaker nonstate opponents to contend successfully with the United States on more favorable terms.

The actual locus of physical violence need not be proximate to the primary competitive arena either. Violent demonstrations of U.S. or partner vulnerabilities, may be substantially detached from the real object

in dispute yet still accomplish their intended purposes. Under these circumstances, effective communication of meaningful political messages is far less important to American rivals than is persistently driving up the physical, psychological, and political costs of U.S. activism on the one hand and material cooperation and support for United States by strategic partners on the other. With respect to the United States specifically, irregular opponents recognize that preventing or persistently increasing the costs of American success in one functional or geographical arena may affect U.S. risk tolerance in others. Thus, "once bitten" in an important but peripheral or optional endeavor, the United States may find itself "twice shy" when more critical interests are at substantial, immediate risk.

Recent history is instructive here. The negative experiences of Vietnam and to a lesser extent Lebanon and Somalia tempered American willingness to employ force through the 1990s.[141] Further, extended, resource-intensive peacekeeping missions in the Balkans undoubtedly affected Bush administration predilections regarding nation-building.[142] By implication then, one should be concerned about the effect of the on-going Iraq War on future American strategic decisionmaking. At the outset, the United States had substantial control over the time, place, and manner of intervention. Yet, in spite of these advantages, a sea of subnational, transnational, and hybrid-state competitors consistently thwart American-led efforts to stabilize Iraq. How this reality affects policy downstream is uncertain. However, its impact will likely be significant.[143]

Those who argue that consummate irregular actors like terrorists or insurgents cannot match up with the United States or its partners on quasi-equal terms

because they lack both organizational cohesion and a meaningful political program often miss the point of the competition itself.[144] They are in the same company as those who consistently cling to the notion that an unbroken accumulation of tactical military victories is automatically determinative of future strategic success.[145] An irregular challenger who prevents the United States from visibly succeeding or drives the broad costs associated with success to unanticipated levels creates more operating space for himself and others determined to vie for primacy over local politico-security outcomes against the Americans.

In this regard, past failures against irregular-cum-catastrophic opposition may result in American vacillation, miscalculation, or inaction when more urgent future circumstances instead demand prompt responses. Thus, while to many American policymakers the Iraq War is a "central front in the war on terrorism," some of the most active and capable U.S. opponents likely see it also as an opportunity to bleed the United States into future self-deterrence elsewhere.[146]

Sudden escalation of physical violence to catastrophic levels accelerates the perceived intensity of an irregular conflict in a profound way but does not change the basic aims of the principal antagonists. The irregular challenger who ventures into the catastrophic arena does so to raise the physical and psychological stakes of the conflict exponentially, while also securing some legitimacy as an able and —in their view— rightful opponent of the United States. A successful catastrophic attack demonstrates—in a very dynamic and public way—the stronger American opponent's obvious vulnerabilities. The dominant opponent, struck with sudden catastrophic attack, is for a time stunned in the same way a sloppy, right-handed professional

boxer might be challenged by a capable, southpaw amateur. Failure of the more experienced fighter to keep the aggressive pretender off-balance while, at the same time, defending against the "lesser" opponent's obvious capacity for harm, could result in an early and surprising knockout or functional surrender through exhaustion.

Since the sudden, disorienting 9/11 attacks for example, al-Qai'da-inspired terrorism and political agitation remain decidedly irregular. However, the prospect of additional catastrophic attacks raises al-Qai'da's political and security profile and significance to levels previously reserved for the nuclear-armed Soviet Union. At the same time, 9/11 triggered a chain of American national security investments—e.g., wars in Iraq and Afghanistan, counterterrorism campaigns in Southeast Asia and Africa, increased vigilance and key site protection in the United States, secret detention facilities, military tribunals, etc.—that cumulatively drive the price of effective U.S. competition in the irregular and catastrophic domains to very high levels. This is all true 5 years beyond the first and only real catastrophic terrorist attacks against the United States.

It is fair to suggest that had al-Qai'da not attacked New York and Washington, the United States may still be managing the terrorist challenge episodically at levels it finds costly but tolerable. Under these circumstances, al-Qai'da and its fellow travelers might today only be considered strategically consequential to the extent they threaten the existence of friendly foreign governments like Saudi Arabia or Pakistan. Instead, al-Qai'da's demonstrated capacity to reach into the United States and the perceived severity of the 9/11 attacks forced American decisionmakers into a comprehensive campaign focused on some future—as

yet undefined—endgame with al-Qai'da and a range of other al-Qai'da-like competitors.

A final illustration of the hybrid challenge involves the specter of a strategic state's sudden collapse. Collapse of a state of some real strategic consequence is among the most complex prospective hybrid challenges. The failure or collapse of any state is tragic; the failure or collapse of some would prove strategically disastrous.[147] Given the trajectory of globalization and the increasing vulnerability of some important governments around the world, it is likely that a state whose stable functioning is uniquely important to the United States will succumb to its own structural weakness and collapse. It is equally likely that the United States will be compelled to respond.[148] The threat or damage to American interests and the degree to which the United States involves itself in post-collapse remediation efforts varies according to the affected state's relative strategic value.[149] However, the prospective SSTRO and horizontal escalation challenges associated with failure of one or more of the states that both meet the threshold of unique importance and demonstrate proclivity for the types of weakness associated with collapse indicate the United States should account for this potentiality in its strategic calculations. In most cases, the burdens on DoD would be enormous.

In the worst of these collapse scenarios, elements of the armed forces and police may remain under coherent command and control and resist intervention. Agents of the fallen regime—hesitant to dispense with the old order—may attempt to defend or restore the collapsed and discredited status quo. Self-interested criminals and substate militias may carve out a defensible sphere of influence at the grass-roots

level, rapidly filling the naturally expanding security vacuum. Adjacent powers and foreign agents with a significant interest in the post-collapse order or who have a substantial interest in sewing wider instability may intervene directly or indirectly to extend their influence over outcomes. Repressed constituencies may seek to exercise newfound freedom. In doing so, vengeance against agents or perceived agents of the former regime is likely. Local nationalists may resist what they perceive to be foreign-imposed political solutions.

Meanwhile, significant segments of the population may physically oppose both a necessary international intervention, as well as an essential and long overdue rebalancing of indigenous political authority. Further, angry, lethal extremist diasporas might emerge from the chaos and export violence to other vulnerable states and regions. Overlay on this a large, ethnically heterogeneous population; the presence of employable WMD; substantial strategic resources like oil or natural gas; vulnerable constituencies susceptible to mass migration; transregional ethnic, religious, political or criminal associations; and a host of other potential complicators. Combined, these indicate the prospect of swirling traditional, irregular, and catastrophic challenges interacting both by chance and design to create a very complex hybrid security challenge of enormous geo-strategic relevance.

There are obvious parallels between the above description and the on-going Iraq War. Indeed, Iraq may be an archetype (sadly, in microcosm) for the most complex prospective strategic collapses. Admittedly, the coalition intervention triggered Iraq's failure. However, Iraq's pre-war disposition and its post-collapse environment provide a useful analog for the United States as it considers future interventions to

contain instability and restore functioning order to a large, important, but failed state.

At a minimum, the United States now understands that redressing the worst effects of collapse—with immediate stabilization and subsequent political, economic, social, and security reconstruction—is fraught with enormous cost, sacrifice, and risk. Upon intervention, responsibility for the amelioration of a failed state's preexisting vulnerabilities and maladies falls on the external powers that choose get involved.[150] Thus, early understanding of the character and scope of the challenge is critical.

The key operational difference between Iraq and a future collapse of equal or greater consequence is the degree to which the United States controls the time, place, manner, and mechanism of both the failure of the victim state itself and the course and conduct of the subsequent intervention to restore it to a minimum essential, self-sustaining order.[151] Needless to say, the United States had enormous control initially over conditions and outcomes in Iraq. This luxury is unlikely in the future, save for those limited occasions where the United States might again act preemptively or preventatively and thus become the principal mechanism of both collapse and stabilization.[152]

What should be clear from the wider discussion of hybrid challenges is that they are collectively neither solely nor even principally defined by a single actor employing diverse forms of competition and resistance. Rather, hybrids are more commonly characterized by a number of consequential actors who formally, informally, or accidentally combine to resist American encroachment, undermine U.S. interests, or complicate intentionally or otherwise unhindered pursuit of core U.S. objectives. The state-centric and state-like illustrations, at the outset for example, suggest that

the most effective state-based resistance may be by proxy—particularly when either violence or political manipulation are involved. By definition, competition by proxy requires two or more consequential actors (at least a patron and a client) to agree to collective opposition.

The nonstate example is also illustrative. That thoughtful analysts refer to the current jihadist challenge as al-Qai'da and those "associated with or inspired by al-Qai'da" is itself instructive.[153] The violent Islamist threat is not monolithic. Rather, it is a bundle of like but at times distinct challenges. It is a loose movement—atomized, amorphous, and at times, competing within and against itself. The mere description of consequential state collapse underscores both its varied sources, as well as the diverse forms of resistance and friction that it would likely generate for an intervening American great power.

In any hybrid set of circumstances, states might combine with other states; nonstate entities might ally with other nonstate entities; states may align themselves with nonstate actors; or alliances of states and alliances of nonstate movements might themselves combine into a networked front of common opposition and resistance. In the case of strategic state collapse, it may be even worse—a "war of all against all."[154] Indeed, as the United States discovered in Iraq, creation of or intervention in conditions of general collapse makes the intervening power vulnerable to becoming a party to *all* sides of a very complicated and violent competition for political primacy. The potential permutations are innumerable and should be given thoughtful consideration.

Yet, just as the diversity of actors is important, so to is multiplicity of methods and potential realms of competition. Most actors who look to purposefully

limit American influence will increasingly do so both by employing a combination of mutually supportive methods as well as by doing so across a variety of physical and functional domains. As suggested earlier, Baghdad may be a battlefield for Sunni foreign fighters in Iraq but it is likely not their ultimate objective. Riyadh and Amman, on the other hand, are very rarely battlefields but are quite likely still the object of intense competition for Sunni extremists. Acts of violence in London, Madrid, or Bali are intended to impact policy locally and globally. Likewise, demonstrations in Beirut and political boycotts in Najaf or Basra are focused both against indigenous political authorities, as well as the foreign powers that hold substantial sway over local outcomes.

From the perspective of NDS 05's framers, state competitors are largely traditional challengers fast diversifying into the irregular-cum-catastrophic and, where possible, nascent disruptive domains. Purposeful nonstate competitors are by definition irregular challengers. However, many like al-Qai'da and its fellow travelers through their own deliberate, strategic choices are beginning to recognize the value of catastrophic capability. Further still, to the extent that nonstate competitors act in common-cause with state powers possessing some significant traditional capacity, they too can combine into very difficult irregular, catastrophic, and traditional hybrids. All individually or in unison are complex amalgams that are difficult to untangle. Likewise, the environmental friction of un- and undergovernance and state collapse may originate in local weakness and conflict having nothing to do with the United States or its policies. Nonetheless, the convergence of compelling U.S. interests and the prospect of uncontrolled instability may see these circumstances rapidly evolve into active

forums for opportunistic, purposeful resistance to American great power.

STRATEGIC IMPLICATIONS – INEVITABLE COMPETITION AND RESISTANCE OR THE "LONG WAR"

Critics of NDS 05 correctly observe that the four challenges (traditional, irregular, catastrophic, and disruptive) are only really described in the abstract. This is both true and intentional. In the wake of the Cold War, traditional military competition for too long governed strategic decisionmaking in DoD. NDS 05's framers believed that early, abstract recognition of real change in the environment would enable the defense establishment to thoughtfully reexamine and dispense with significant portions of conventional defense wisdom long overcome by strategic circumstances. The challenges offered defense strategists a different philosophical lens through which they might assess the department's readiness to fulfill its numerous 21st century responsibilities.

If DoD was to remain broadly relevant, it could not afford to limit its utility to one narrow slice of the more expansive spectrum of competition and resistance that was likely to buffet American great power into an indefinite future. Thus, articulation of the challenges was intended to establish a conceptual foundation for the more detailed bureaucratic calculation that was to occur during QDR 06. Whether the defense community either recognized this value or applied it effectively during the QDR is a separate discussion.

Strategists responsible for NDS 05 would have ultimately preferred to undertake a more detailed examination of the environment and its hazards

through the lens of the four challenges—naming names and setting real regional and functional priorities as a result. Still, early abstract recognition of change in the environment did enable NDS 05's framers to break down some conventional conceptions of competition and resistance. Entrenched defense wisdom saw competition with the United States in discrete binary terms—e.g., U.S. vs. China, U.S. vs. al-Qai'da, U.S. vs. North Korea, etc. Each competitive relationship was self-contained and, at various stages in development, each was viewed as one-dimensional—a crisis of economics, diplomacy, or security alone.

In this framework, meaningful conflict—narrowly defined by the Pentagon as war—was episodic. War was the exception; peace and the preparation for war the norm. According to the dominant DoD narrative, there were to be distinct periods of pre- and post-conflict sharply divided by short, intense periods of traditional warfare. This view saw DoD exercise primacy over the course and tempo of events in the middle, while leaving responsibility for the two extremes to others.

This cognitive framework underwrote a classically realist bias among both DoD professionals and some key defense intellectuals. The author includes advocates of the high-tech RMA in the latter category. This view saw preparation for major regional war and traditional military rivalry as the *raison d'etre* of the 21st century DoD. The most common argument within the military establishment in this regard was that, whereas the United States could afford setbacks in what became the irregular domain, it could not afford the same in a future traditional military conflict with a rising great power.

This logic was on one level true and on yet another dangerously irrelevant. It was a foil with which defense

traditionalists—even those advocating high-tech transformation—repelled truly necessary innovation in the way DoD (and by implication the wider national security community) thought about consequential competition and resistance. Few were arguing for the United States to dispense with its traditional advantages or its commitment to military transformation. Some—including those responsible for drafting NDS 05—were, however, suggesting that traditional military conflict and rivalry were for the United States at once the least likely, best understood, and most over-prepared for set of strategic circumstances on the horizon.

NDS 05's framers offered an alternative worldview. They saw competition and resistance as endemic and perpetual. They were the products of American primacy and its natural opponents as well as real devolution of effective governance and responsible sovereign authority over key areas of the world. Some competitors in this environment acted in concert with others against the United States. Others acted alone. Some shared a common interest in limiting American influence but enjoyed no common cause with respect to either methods or strategic outcomes. Thus, their actions, though uncoordinated and even at times competing, would effectively combine in effect. In some cases, as suggested earlier, the environment itself, without specific volition or intent, resisted effective pursuit of core U.S. objectives. However, regardless of origin or purpose, the secure maintenance of American position would likely rely on simultaneous, strategic management of all of these competing sources of resistance and competition. Though much of the competition and resistance was nonmilitary in character, all of it had defense-relevant implications.

Purposeful resistance, by definition, is more

predictable and thus, more manageable. To the extent purposeful resistance is grounded in the conventions of traditional military rivalry, it is even more so. Less conventional irregular-cum-catastrophic resistance is somewhat predictable and potentially manageable, but certain to be less so given recently demonstrated U.S. vulnerability. The idea that the environment itself might self-generate consequential challenges like endemic under-governance and strategic state collapse is a relatively new consideration in DoD calculations. Likewise, the idea that natural or human disaster might, without hostile intent or volition, challenge core security interests and thus, might require defense-specific responses as a consequence is also a somewhat new defense planning consideration.

What is clear by now is the idea that meaningful competition with and resistance to the United States are already straying increasingly away from the traditional military domain. Likewise, purpose and volition are no longer essential components in any definition of consequential strategic challenges. Meaningful adjustment to these core findings is essential to DoD's future relevance. This requires that the Department of Defense study and orient against fundamentally different strategic priorities than those that dominated post-Cold War defense strategy and planning. To NDS 05's framers, should the United States fail to adjust to these conditions, adverse strategic costs would accumulate in real and profound ways, ultimately limiting American freedom of action. It was increasingly clear that, if the United States was to lose its position, it was more likely to "die by a thousand cuts" than succumb to sudden traditional military reversal at the hands of a near-peer competitor.

Thus, NDS 05's framers believed that the United

States should actively secure its position and interests against persistent competition, resistance, and friction. In short, there was mounting evidence—most recently from the War on Terrorism—that traditional American military superiority (transformed or not) was necessary but not sufficient for success in an environment rife with irregular-cum-catastrophic and hybrid challenges. Conventional wisdom was put to the test in both Iraq and Afghanistan. In each instance, American military power overwhelmed organized resistance to the extent it existed, but was patently un- or under-prepared to "seal the strategic deal."

NDS 05's working-level strategists believed that the United States was assuming increasing risk in areas where recent history had consistently proven it most vulnerable. The United States had repeatedly demonstrated its obvious capacity to dispatch with the organized military forces of competitor states. This was not necessarily so when it faced determined irregular resistance, however.

Furthermore, American mettle had not yet been fully tested in an environment certain to be defined by extended periods of persistent engagement in overlapping, violent contingencies where the United States confronted an array of capable nonstate and state competitors under conditions of considerable operational ambiguity. In this environment, the United States operated inside a band of constant, unrelenting resistance and friction. Within it, a range of discrete competitors applied innovative cost-imposing strategies to limit U.S. influence.

To those responsible for developing NDS 05, the environment would never universally conform to a pre-conflict, war, and post-conflict model where DoD ramps-up capabilities, fights high-intensity military

engagements, and then resets or withdraws after successfully ceding primary responsibility for final conflict resolution to other U.S. Government agencies. Instead, DoD was now elemental to a persistent whole-of-government effort to manage consequential politico-security competition and resistance perpetually in real time. If a revolution in understanding was to occur in this regard, it would only happen after substantial intellectual reprogramming. Thus, those who drafted NDS 05 undertook the modest and admittedly incomplete but nonetheless important and timely articulation and socialization of the four challenges.

The challenge concept was not the product of radical futurist thinking. Admittedly, some of the challenges were less well-developed. The disruptive challenge for example—not discussed in any real detail in this monograph—is the least well-defined and the most speculative of them all. However, collectively, the challenges were grounded in a number of thoughtful post-Cold War strategic assessments predating 9/11. One for example, the 1999 report *New World Coming: American Security in the 21st Century* by the U.S. Commission on National Security/21st Century seemed to allude to the irregular, catastrophic, and disruptive challenges specifically when it concluded:

> (F)or many years to come Americans will become increasingly less secure, and much less secure than they now believe themselves to be. That is because many of the threats emerging in our future will differ significantly from those of the past, not only in their physical but also in their psychological effects. While conventional conflicts will still be possible, the most serious threat to our security may consist of unannounced attacks on American cities by sub-national groups using genetically engineered pathogens. . . . Other threats may inhere in assaults against an increasingly integrated

> and complex, but highly vulnerable, international economic infrastructure. . . . Threats may also loom from the unraveling of the fabric of national identity itself, and the consequent failure or collapse of several major countries.[155]

In the 3 years since the challenges were first introduced, there have been numerous other attempts to classify or define the current security era. The most recent is the concept of "the long war."[156] It is true that the United States is at the front end of a long, irregular (and potentially catastrophic) conflict with a web of determined extremist opponents. In the author's view, it is not true, however, that the "long war," as it is narrowly described, constitutes by itself the totality of active, hostile competition and resistance to the United States. The "long war" concept by itself is an incomplete and dangerous characterization of the environment. Indeed, the "long war" against radical jihadists, as it is conceived by security and defense leaders in and out of uniform, is only one aspect of a complex mosaic of non-state and state competition and resistance.

Adherence to the "long war" concept as definitive artificially limits meaningful consideration of the full range of opponents certain to aggressively push back (politically, economically, socially, and at times quite violently) against American primacy. To define the current security era as one populated solely by disaggregated, nonstate terrorist threats, for example, ignores what NDS 05's working-level strategists believed was the near-certainty that the United States would engender substantial resistance from wide-ranging irregular, catastrophic, and hybrid sources. Further still, to the extent that violent irregular-cum-catastrophic resistance is perceived to work, "other-than-jihadist," nonstate opponents will certainly be

tempted to employ it against perceived American encroachment. The "long war" concept simply breeds a naïve, myopic focus on Muslim-inspired terrorism and terrorists. And, it does so at the expense of thoughtful evaluation of other consequential sources of meaningful resistance. Rigid focus on the Islamic terrorist or insurgent threat by defense strategists hazards gross oversimplification of a larger, more fundamental long-term challenge universe. This broader collection of physical and political threats is certain to actively test American primacy for as long as it endures.

Some discrete challenges will arise from purposeful resistance—predictable, systemic antibodies to American primacy. Others will originate in environmental discontinuities triggered by globalization and the attendant dissolution of key aspects of the sovereign state system. Regardless of origin or purpose, however, all will test American primacy in unique ways. The successful defense of American position in this environment relies on the nation's ability to assess its relative strengths and vulnerabilities; gauge the appropriate role for the various instruments of power; and then effectively employ its power in sophisticated combinations to prevent or reverse adverse strategic outcomes. In a word, it requires real strategic calculation and design where strategists are forced to apply the nation's finite resources with some discrimination and precision against a seemingly infinite set of consequential hazards.

This may mean dispensing with a great deal of tradition in the defense establishment. Given obvious American leverage in the traditional domain, current circumstances demand a more sophisticated understanding of and adjustment to less-than-traditional sources of meaningful resistance and competition.

It just may be that without this more sophisticated appreciation of the environment, American defense and security policymakers will continue to focus on the most obvious, conventional, and manageable security challenges. To the extent they do so, they likely will fail to devote requisite energy to development of effective counters for those challenges that are sometimes less apparent and more unconventional in military terms, but are, nonetheless, infinitely more dangerous given current U.S. vulnerabilities.

Articulation of the challenge concept was intended to force DoD into detailed consideration of a world populated by relentless, disaggregated, defense-relevant challenges to American power and influence. Perpetual competition and friction in this world are often, at their core, nonmilitary in origin and character. While any single manifestation within it has defense-relevant components, very few are either exclusively or even primarily solvable through defense-specific or military means. This is particularly true to the extent that resistance and friction are more irregular, catastrophic, hybrid, or in the future, disruptive in character.

This more complex challenge environment demands that American strategists nimbly apply the nation's diverse instruments of power in those combinations likeliest to render decisive, enduring outcomes. Clearly, this requires more than DoD and its resources alone. Nonetheless, DoD was the first to recognize the increased scope and complexity of the environment's constituent hazards. Thus, it bears significant responsibility for translating the key implications of these hazards into concepts suitable for wider U.S. Government consumption. Likewise, DoD must itself adjust to the environment's unique

demands and simultaneously lead more comprehensive government-wide change in this regard. It will be some time before the interagency adjusts to the new (or better understood) strategic reality. In the mean time, DoD must compensate for the wider American government's halting recognition of the environment's fundamental transformation and, at a minimum, help it correctly frame the most important security- and defense-relevant choices.

ENDNOTES

1. Thomas Hobbes, *Leviathan, Part I, A Gateway Edition*, Chicago: Henry Regnery Company, 1956.

2. For the content of the 2001 Defense Strategy, see Department of Defense (DoD), *Quadrennial Defense Review Report*, (hereafter DoD, QDR 01) September 30, 2001, available from *www.comw.org/qdr/qdr2001.pdf*, accessed November 1, 2006, pp. 11-15.

3. For a view of the administration's pre-9/11 assumptions and defense priorities, see George W. Bush, "A Period of Consequences," Speech at The Citadel, South Carolina, September 23, 1999, available from *www.citadel.edu/pao/addresses/pres_bush.html*, accessed October 10, 2006; Donald H. Rumsfeld, *Guidance and Terms of Reference for the 2001 Quadrennial Defense Review*, Department of Defense, June 22, 2001, available from *www.comw.org/qdr/qdrguidance.pdf*, accessed October 10, 2006; and DoD, QDR 01. The most definitive and consistent expressions of the Bush administration's defense priorities prior to 9/11 came from Candidate Bush's Citadel address in September 1999 and the subsequent *Quadrennial Defense Review* (QDR) terms of reference and subsequent QDR report of June and September 2001, respectively. The principal focus of these documents was on preparing to confront rising great powers and rogue states who might challenge the United States through niche asymmetric military capabilities—including ballistic missiles, Weapons of Mass Destruction (WMD), etc. Some substantial attention was paid to terrorism in each of these. However, the thrust of the terrorist discussion in all three focuses primarily on future terrorist acquisition and employment of WMD.

4. For baseline discussion of irregular and catastrophic challenges, see *The National Defense Strategy of the United States of America*, Washington DC, Department of Defense, March 18, 2005, available from *www.defenselink.mil/Releases/Release.aspx?ReleaseID=8318*, accessed October 4, 2006, pp. 2-3. The general discussion of the challenges contained in the strategy should give the reader a foundational perspective of traditional, irregular, catastrophic, and disruptive challenges. See also Figures 1 and Figure 2 of this monograph. These provide insights on the evolution of the challenges' definitions over time. The hybrid challenge is not explicit in either the strategy or portrayed on any of the "quad charts." It is, however, implied on p. 2 of NDS 05 with the text beginning, "These categories [traditional, irregular, catastrophic, and disruptive] overlap. Actors proficient in one can be expected to try to reinforce their position with methods and capabilities drawn from others." The dashed lines separating quads on all graphic depictions are intended to imply the likelihood for hybrid combinations.

5. Arthur K. Cebrowski, "Security Environment . . . Four Challenges," in the briefing, *Security Planning and Transformation*, available from *www.pirp.harvard.edu/courses/ISP483_Spring2004/2004Cebrowski.ppt*, accessed February 1, 2007, p. 33.

6. Klaus Schafer, "Today's Security Environment," in *The Chemical and Biological Defense Program: An Update*, a briefing delivered to the Worldwide Chemical Conference, October 12, 2004, available from *www.dtic.mil/ndia/2004chemical/Wednesday/WWCCSchafer.ppt*, accessed February 1, 2006, p. 5.

7. See, for example, *pbs.org*, "The Coming War," Online Newshour, available from *www.pbs.org/newshour/bb/military/july-dec98/war_8-25a.html*, accessed October 11, 2006. In the aftermath of al-Qai'da's 1998 attacks on two U.S. embassies in East Africa and subsequent U.S. cruise missile strikes against suspected terrorist targets in Afghanistan and Sudan, Secretary of State Madeleine Albright observed in a *News Hour* set-up piece, "I think it's very important for the American people to understand that we are involved here in a long-term struggle. We have been affected by this before. This is, unfortunately, the war of the future." She further observed, "We are involved in really a long-term struggle . . . and this is but one stage in it. And I think we have to understand that this is a long-term problem for the United States and the civilized world." In the same *News Hour* segment, during a panel discussion, former State Department Counterterrorism

Coordinator Ambassador L. Paul Bremer observed, "I don't think it's a new war, especially since I'm not aware that we ever had a peace with the terrorists. . . . It's a continuation of a war." Bremer continues,

> There's no point in addressing the so-called root causes of bin Laden's despair with us. We are the root cause of his terrorism. He doesn't like America. He doesn't like our society. He doesn't like what we stand for. He doesn't like our values. And short of the United States going out of existence, there's no way to deal with the root cause of his terrorism.

8. See, for example, L. Paul Bremer and Maurice Sonnenberg *et al*., *Countering the Changing Threat of International Terrorism: Report of the National Commission on Terrorism*, June 2000, available from *www.fas.org/irp/threat/commission.html*, accessed October 12, 2006, p. 7; and The U.S. Commission on National Security/21st Century (USCNS/21), *New World Coming: American Security in the 21st Century/Major Themes and Implications*, September 15, 1999, p. 4. In their congressionally mandated report, Bremer, Sonnenberg *et al*., concluded,

> (N)either al Qaida's extremist politico-religious beliefs nor its leader, Usama bin Ladin, is unique. If al Qaida and Usama bin Laden were to disappear tomorrow, the United States would still face potential terrorist threats from a growing number of groups opposed to perceived American hegemony. Moreover, new terrorist threats can suddenly emerge from isolated conspiracies or obscure cults with no previous history of violence.

Likewise, the USCNS/21 concluded, "(E)merging powers will increasingly constrain U.S. options regionally and limit its strategic influence. As a result, we will remain limited in our ability to impose our will, and we will be vulnerable to an increasing range of threats against American forces and citizens overseas as well as at home."

9. See USCNS/21, 1999, p. 8. The Hart-Rudman Commission warned of this well in advance of 9/11 when they concluded in their phase I report, "While the likelihood of major conflicts between powerful states will decrease, conflict itself will likely increase. The world that lies in store for us over the next 25 years will surely challenge our received wisdom about how to protect American interests and advance American values."

10. For NDS 05's description of the environment and the underlying strategic assumptions, see *The National Defense Strategy*, March 2005, pp. 2-6. For the earliest public articulation of the four challenges, see DoD, *The Report Required by Section 2912 of the Defense Base Closure and Realignment Act of 1990, as Amended Through the Defense Authorization Act for Fiscal Year 2003*, March 2004, available from *www.dod.mil/brac/docs/04_0_body 032403.pdf*, accessed November 21, 2006, pp. 18-22. For early public depictions of the "quad chart," see Cebrowski, 2004, p. 33; and Schafer, 2004, p. 5.

11. Some editing occurred after January 2004. However, no significant change in the structure or conceptual foundations occurred between January 2004 and publication in March 2005.

12. The strategy was released publicly on March 18, 2005.

13. See, for example, George W. Bush, *The National Security Strategy of the United States of America*, Washington DC, March 2006, available from *www.whitehouse.gov/nsc/nss/2006/nss2006.pdf*, accessed February 5, 2007, p. 43. A brief and slightly modified description of the traditional, irregular, catastrophic, and disruptive challenges is found in the 2006 *National Security Strategy*. NDS 05's framers also engaged the Central Intelligence Agency's Strategic Assessment Group (SAG) about the challenges.

14. See, for example, Department of Defense, *Quadrennial Defense Review Report* (QDR 06), February 6th, 2006, available from *www.defenselink.mil/pubs/pdfs/QDR20060203.pdf*, accessed October 10, 2006, p. 19. QDR 06 observes, "The National Defense Strategy, published in March 2005, provides the strategic foundation of the QDR. The strategy acknowledges that although the U.S. military maintains considerable advantages in traditional forms of warfare, this realm is not the only, or even the most likely, one in which adversaries will challenge the United States during the period immediately ahead. Enemies are more likely to pose asymmetric threats including irregular, catastrophic, and disruptive challenges."

15. *The National Defense Strategy*, March 2005, pp. 2-4. There is still significant semantic debate over each label—traditional, irregular, catastrophic, and disruptive. However, important reasons exist for selection of each specific term. "Traditional," for example, began as "conventional" but as the concept involved some WMD possession, that label was considered confusing. Likewise, "irregular" was at one time "asymmetric," but the

framers concluded that asymmetry spanned all four challenges, as opponents sought comparative, asymmetric advantages in whatever domain in which they sought to compete. The complete story behind any one of them is complex and beyond the scope of this monograph.

16. For definitions of the disruptive challenge, see Cebrowski, 2004, p. 35; Shafer, 2004, p. 5; and DoD, March 2005, p. 4.

17. The author discussed this conclusion specifically with Mr. D. Burgess Laird on January 17, 2007, in his Arlington office.

18. See J. Noel Williams, "Matrix Warfare: The New Face of Competition and Conflict in the 21st Century," available from *www.smallwarsjournal.com/documents/williams2.pdf*, accessed January 7, 2007, p. 2. Williams identifies al-Qai'da as representative of "matrix warfare." The challenge concept (especially the idea of hybrid challenges), while not wholly consistent with Williams', is nonetheless similar on a number of points. For example, Williams observes,

> The principal attribute of matrix warfare is the dynamic nature of its internal membership structure and its external alliance structure. Membership is actualized to fulfill varying combinations of geo-political, economic, and/or psychological/ideological/religious needs or desires . . . (M)embers can share common economic interests on one level and join together to accomplish a specific goal and then disengage and reshuffle to accomplish a different set of objectives.

19. This was not widely acknowledged within the U.S. Government prior to 9/11. However, a host of bipartisan sources were warning of patent American underpreparedness for post-Cold War challenges lying on the near horizon. See, for example, USCNS/21, 1999, p. 2. The Hart Rudman Commission observes, "Traditional distinctions between national defense and domestic security will be challenged further as the new century unfolds, and both conventional policies and bureaucratic arrangements will be stretched to and beyond the breaking point unless those policies and arrangements are reformed."

20. See, for example, Richard K. Betts, "The Soft Underbelly of American Primacy: Tactical Advantages of Terror," *Political Science Quarterly*, Vol. 117, Issue 1, Spring 2002, available from *proquest.umi.com/pqdweb?did=120997109&sid=2&Fmt=3&clientld=20167&RQT=309&VName=PQD*, accessed on November 2,

2006, p. 3. Betts observed, "For may, primacy was confused with invulnerability. American experts warned regularly of the danger of catastrophic terrorism . . . But the warnings did not register seriously in consciousness of most people."

21. Nathan Freier, "What if—An Impertinent Question Indeed," Strategic Studies Institute, September 2006, available from *www.strategicstudiesinstitute.army.mil/pdffiles/PUB727.pdf*, accessed October 10, 2006. The author advanced these questions in a September 2006 web-based op-ed. They were not necessarily operative specifically at the time of NDS 05's development. However, they do represent the kind of questions in play during strategy development.

22. Harlan K. Ullman and James K. Wade, Jr., *Shock and Awe: Achieving Rapid Dominance*, Washington, DC: National Defense University, Institute for National Strategic Studies, October 1996, p. viii.

23. See, for example, Gary Hart and Warren B. Rudman (Co-Chairs), *America—Still Unprepared, Still In Danger, Report of an Independent Task Force Sponsored by the Council on Foreign Relations*, New York: Council on Foreign Relations, Inc., 2002, pp. 7-8. On this point, the Hart-Rudman CFR report observes,

> On September 11, we witnessed how warfare will likely be conducted against the United States for the foreseeable future. Prudence requires we assume America's adversaries . . . have learned . . . the extent to which the U.S. homeland is unprotected. They will also have observed that relatively low cost terrorist operations directed at civilian targets can inflict extensive damage and profound disruption. In short, as long as catastrophic attacks are likely to yield tangible results in undermining America's economy and way of life, undertaking these attacks will be attractive to those who regard America as their enemy.

24. See United States Institute for Peace (USIP), *Special Report: Global Terrorism after the Iraq War, Special Report 111*, October 2003, available from *www.usip.org/pubs/specialreports/sr111.pdf*, accessed October 24, 2006, pp. 2-3; and Professor Graham T. Allison and Richard Clarke, "Are We Entering an Age of Terrorism?" April 21, 2004, Harvard University, John F. Kennedy School of Government, Institute of Politics, available from *www.iop.harvard.edu/pdfs/transcripts/clarke_04.21.04.pdf*, accessed October 24, 2006, pp. 6-7. In a 2003 special report, the USIP observed, "The record

is by no means one of unchallenged American victories. On the contrary, . . . the terrorists of al-Qai'da and affiliated groups have continued to be extremely active, frequently to disastrous effect." USIP continues, citing attacks in Jakarta, Bali, Moscow, Mombassa, Yemen, and the Philippines. In a forum at the Kennedy School of Government, former White House counter-terrorism coordinator Richard Clarke observed similarly,

> There have been many more . . . major al-Qai'da terrorist attacks since 9/11 than there were before. They've been in places like Bali, and Istanbul, and Casablanca, and Madrid, Moscow, Riyadh . . . (T)he fact is . . . al-Qai'da is not eliminated, it's just morphed. And the reason we're getting these many more terrorist attacks now than we had before is that al-Qai'da is no longer a centralized hierarchical organization.

25. See Frederick W. Kagan, "War and Aftermath," *Policy Review*, August 2003, available from *www.policyreview.org/aug03/kagan_print.html*, accessed November 27, 2006, p. 1 and USIP, 2003, p. 5 and 9. Kagan, referring to the early phases of the Afghanistan and Iraq wars, observed, "The United States has just fought two wars against enemies thought to be difficult to defeat and has won decisively, rapidly, and with minimal loss of life. The military performance in both cases was impressive . . . In both cases, the U.S. has been far less successful in winning the peace than it has been winning the war." Daniel Byman observed on page 9 of the USIP's 2003 report,

> (H)opes for a quick withdrawal from a stable, democratic Iraq were quickly dashed. Each week brings additional casualties, with no end in sight. Indeed, the United States may have engendered a backlash in Iraq, with the remnants of Saddam Hussein's regime allying with international radicals and angry Iraqi nationalists to oppose the occupation . . . As a result of these troubles, the U.S. occupation may last a decade or more, requiring tens of thousands of U.S. troops to keep peace and promote democratization.

On Afghanistan specifically, USIP observes,

> A number of other developments suggest additional problems that require greater attention by the United States and its allies. Perhaps the outstanding one is the deterioration of conditions in Afghanistan. Both

> Taliban and al-Qai'da fighters are showing increasing signs of activity, and with the ambit of Hamid Karzai's government essentially restricted to Kabul, the possibility of another round of warlordism is growing.

26. For background on recent evolution of the North Korean nuclear issue, see *The Nuclear Threat Initiative,* "Nuclear Overview," *NTI Profile – North Korea*, available from w*ww.nti.org/e_research/profiles/NK/Nuclear/print/index_157.prt*, accessed October 25, 2006.

27. For background on the nuclear proliferation network of A. Q. Khan, see William J. Broad, David E. Sanger, and Raymond Bonner, "A Tale of Nuclear Proliferation: How Pakistani Built His Network," *The New York Times (Late Edition (East Coast))*, February 12, 2004, available from *proquest.umi.com/pqdweb?did=544115111&sid=5&Fmt=3&clientld=20167&RQT=309&VName=PQD* accessed November 27, 2006; Jim Hoagland, "Pakistan's Nuclear Ali Baba," *The Washington Post,* February 10, 2004, available from *proquest.umi.com/pqdweb?did=542005471&sid=5&Fmt=3&clientld=20167&RQT=309&Name=PQD*, accessed November 27, 2006; and *Economist*, "Pakistan's proliferator-in-chief," *Economist.com/Global Agenda*, February 5, 2004, available from *proquest.umi.com/pqdweb?did=543616611&sid=5&Fmt=3clientld=20167&RQT=309&VName=PQD*, accessed November 27, 2006.

28. For example, see Joseph S. Nye, "U.S. Power and Strategy After Iraq," *Foreign Affairs*, Vol. 82, Issue 4, July/August 2003, available from *proquest.umi.com/pqdweb?index=6&did=411411591&SrchMode=1&sid=1&Fmt=3&VInst=PROD&VType=PQD&RQT=309&VName=PQD&TS=1161866069&clientId=20167#fulltext*, accessed November 26, 2006, p. 4. Nye observed, "Unable to balance American military power, France, Germany, Russia, and China created a coalition to balance American soft power by depriving the United States of the legitimacy that might have been bestowed by a second UN resolution. Although such balancing did not avert the war in Iraq, it did significantly raise its price."

29. For an excellent net assessment of Hugo Chavez's role in defining a new form of effective nonmilitary competition with the United States, see Max G. Manwaring, *Venezuala's Hugo Chavez, Bolivarian Socialism, and Asymmetric Warfare*, Carlisle Barracks, PA: Strategic Studies Institute, U.S. Army War College, October 2005, available from *www.strategicstudiesinstitute.army.mil/pdffiles/PUB628.pdf*, accessed November 27, 2006.

30. See, for example, Robert S. Chase, Emily B. Hill, and Paul Kennedy, "Pivotal States and U.S. Strategy," *Foreign Affairs,* Vol. 75, Issue 1, January/February 1996, available from *proquest.umi.com/pqdweb?did=8928733&sid=1&Fmt=4&clientId=20167&RQT=309&VName=PQD*, accessed January 8, 2007, p. 33; Robert Chase, Emily Hill, and Paul Kennedy, eds., *The Pivotal States: A New Framework for U.S. Policy in the Developing World*, New York: W. W. Norton and Company, 1999, p. 5; Robert D. Kaplan, *The Coming Anarchy: Shattering the Dreams of the Post Cold War*, New York: Random House Inc., 2000, and John D. Steinbruner, *Principles of Global Security*, Washington, DC: Brookings Institution Press, 2000, pp. 18-19. Chase, Hill, and Kennedy introduced the concept of "pivotal state" in 1996. They suggested, "America's national interest also requires stability in important parts of the developing world. . . . (I)t is vital that America focus its efforts on a small number of countries whose fate is uncertain and whose future will profoundly affect their surrounding regions. These are the pivotal states." Later, in their expanded 1999 edited volume, they observed,

> The traditional, state-centered approach to foreign policy, which [stresses] . . . military security, does not adequately attend to the newer threats to American national interests. A country such as Egypt . . . could become unstable . . . through excessive demographic and environmental change, which might weaken the Egyptian state and create serious security threats for the United States.

In 2000, Steinbruner warned,

> It is prudent to expect that civil violence will become a more serious international security concern . . . Intensifying economic interactions and the pattern of inequitably distributed growth associated with them increase the possibility that major instances of sustained civil violence will themselves interact more consequentially. . . . (S)ome critical number of these instances occurring simultaneously might undermine the basic legal standards necessary to operate the globalizing economy.

31. For a description of the strategic implications and risks associated the collapse and remediation of a collapse of either North Korea or Pakistan, see Michael O'Hanlon, *Dealing with the Collapse of a Nuclear-Armed State: The Cases of North Korea and*

Pakistan, The Princeton Project on National Security, available from *www.wws.princeton.edu/ppns/papers/ohanlon.pdf*, accessed January 8, 2006. See also Robert D. Kaplan, "When North Korea Falls," *The Atlantic Monthly,* October 2006, available from *www.theatlantic.com/doc/200610/kaplan-korea*, accessed January 8, 2007.

32. On contemporary worries about the threat to the stability of the GCC and Saudi Arabia specifically, see Stanley K. Moskowitz, Director of Congressional Affairs, The Central Intelligence Agency, "Responses to the Questions for the Record from the Worldwide Threat Hearing on 6 February 2002," April 8, 2002, available from *www.fas.org/irp/congress/2002_hr/020602cia.html*, accessed January 8, 2007; Michael Knights and Anna Solomon-Schwartz, "PolicyWatch #883: The Broader Threat from Sunni Islamists in the Gulf," The Washington Institute for Near East Policy, July 19, 2004, available from *www.washingtoninstitute.org/templateC05.php?CID=1761*, accessed January 8, 2007; Simon Henderson, "PolicyWatch #1082: Al-Qai'da Attack on Abqaiq: The Vulnerability of Saudi Oil," The Washington Institute for Near East Policy, available from *www.washingtoninstitute.org/templateC05.php?CID=2446*, accessed January 8, 2007; and Charles M. Sennott, "Driving a Wedge: Doubts Are Cast on the Viability of Saudi Monarchy for Long Term," *The Boston Globe*, March 5, 2002, available from *www.boston.com/news/packages/underattack/news/driving_a_wedge/part3.shtml*, accessed January 8, 2007. On Saudi Arabia in particular, the CIA report observes, "The Saudi royal family faces increasingly open challenges to its control. These include opposition from disparate elements hostile to the Al Saud and the U.S. military presence, lack of job creation, a rapidly growing population, and over reliance on oil income for government budget revenues." On specific percentages of world reserves, see Ugo Fasano and Zubair Iqbal, "GCC Countries: From Oil Dependence to Diversification," International Monetary Fund, 2003, available from *www.imf.org/external/pubs/ft/med/2003/eng/fasano/index.htm*, accessed January 8, 2007.

33. Unattributed, "To Paris, U.S. Looks Like a 'Hyperpower'," *International Herald Tribune*, February 5, 1999, available from *www.iht.com/bin/print_ipub.php?file=/articles/1999/02/05/france.t_0.php*, accessed January 8, 2007.

34. See Nye, 2003, p. 6. Nye observed,

> The problem for U.S. power in the twenty-first century is that more and more continues to fall outside the control

> of even the most powerful state. Although the United States does well on traditional measures of hard power, these measures fail to capture the ongoing transformation of world politics brought about by globalization and the democratization of technology.

35. This view was influenced by strong advocates among defense intellectuals for high-tech military transformation. See, for example, Steven Kosiak, Andrew Krepinevich, and Michael Vickers, *A Strategy for a Long Peace*, January 2001, Washington DC: Center for Strategic and Budgetary Assessments, p. 1. Kosiak *et al*., observed,

> America's principal competitors will likely be those states that can threaten its enduring vital interests and which are disposed to do so. . . . We should be concerned about maintaining favorable military balances in . . . key regions, and in key functional areas of the competition, such as in space and information warfare, to prevent the emergence of a regional hegemon. This is not to say that any rising (or recovering) great regional power, such as China, India, or Russia, will aspire to hegemonic status within its region or to threaten key U.S. interests. If history is any guide, however, the United States will be challenged to maintain a stabilizing distribution of military power in regions where it has vital interests.

36. See for example, George W. Bush, 1999; and DoD, QDR 01, p. 5. Candidate Bush argued in 1999 that he would "build America's defenses on the troubled frontiers of technology and terror." He then elaborated on this point by conflating the quite traditional challenges posed by North Korean, Iranian, and Chinese missiles with "the threat of biological, chemical, and nuclear terrorism." QDR 01 observes similarly,

> The attacks against the U.S. homeland in September 2001 demonstrate that terrorist groups possess both the motivations and capabilities to conduct devastating attacks on U.S. territory, citizens, and infrastructure. . . . In addition, the rapid proliferation of [chemical, biological, radiological, nuclear, and explosive] technology gives rise to the danger that future terrorist attacks might involve such weapons.

37. See DoD, QDR 01, pp. I-71; and Donald H. Rumsfeld, *Guidance and Terms of Reference for the 2001 Quadrennial Defense*

Review, Department of Defense, available at *www.comw.org/qdr/qdrguidance.pdf*, June 22, 2001, pp. 1-23.

38. See Rumsfeld, 2001, pp. 1-2. The SecDef's guidance for the 2001 QDR states, "Today the U.S. faces a rare opportunity to transform its defense posture to meet emerging threats, maintain stability in critical regions and preserve American leadership and freedom of action for the future. The U.S. needs to act now to meet longer-term security challenges." It continues on the next page, "The current period of U.S. military preeminence is the best time to transform for the challenges of the future."

39. *Ibid*., p. 1. Evidence of this might be found in the QDR 01 Terms of Reference when the Secretary of Defense observes,

> This review is based on the premise that, in combination with the other instrument of power, the foundation of a peaceful world . . . rests on the ability of the U.S. Armed Forces to maintain a substantial margin of national military advantage relative to others. The U.S. uses this advantage not to dominate others but . . . dissuade new functional or geographic military competitions from emerging and to manage them if they do.

40. See *Answers.com*, "Abraham Maslow," available from *www.answers.com/topic/abraham-maslow*, accessed January 8, 2007; and University of Kentucky Public Relations, "Nation's Top Warrior Says Force Should Be a Last Resort," November 19, 1999, available from *www.uky.edu/PR/News/Archives/1999/NOV99/sheltonspeech.htm*, accessed January 8, 2007. This formulation has its origins in Abraham Maslow's famous conception, "If the only tool you have is a hammer, you tend to see every problem as a nail" but was employed in a defense and national security context as a caution to policymakers by then Chairman of the Joint Chiefs of Staff General Hugh Shelton who observed in 1999, "The military is a very powerful hammer, but not every problem is a nail."

41. See DoD, QDR 01, p. 3. For example, QDR 01 observes, "(T)he United States is likely to be challenged by adversaries who possess a wide range of capabilities, including asymmetric approaches to warfare, particularly weapons of mass destruction" (p. 3).

42. See DoD, QDR 01, pp. 3, 6; and Bush, 1999. QDR 01 observes, "As the September 2001 events have horrifically demonstrated, the geographic position of the United States no longer guarantees

immunity from attack. . . . (I)t is clear that over time an increasing number of states will acquire ballistic missiles with steadily increasing effective ranges." Later, the report observes, "The pervasiveness of proliferation . . . has increased the availability of technologies and expertise needed to create military means to challenge directly the United States and its allies and friends. This includes the spread of CBRNE weapons and their means of delivery, as well as advanced conventional weapons." In this regard, the authors of QDR 01 appear to imply that strategically significant competition would still principally originate from state actors employing advanced military technologies in innovative ways. Toward that end, they focused primarily on state-based adversaries' operational military capabilities, particularly ballistic and cruise missile technology and weapons of mass destruction. This is consistent with the vision of Candidate Bush who observed,

> (W)ith the spread of technology, distance no longer means security. North Korea is proving that even a poor and backward country, in the hands of a tyrant, can reach across oceans to threaten us. It has developed missiles capable of hitting Hawaii and Alaska. Iran has made rapid strides in its missile program, and Iraq persists in a race to do the same. In 1996 . . . a Chinese general reminded America that China possesses the means to incinerate Los Angeles with nuclear missiles.

43. See DoD, QDR 01, p. 4; and Nye, July/August 2003, p. 2. QDR 01 has no direct references to China. However, there are strong indications of a focus on China embedded in the document. For example, the report asserts, "Asia is gradually emerging as a region susceptible to large-scale military competition." Later on the same page, it observes, "Maintaining a stable [military] balance in Asia will be a complex task. The possibility exists that a military competitor with a formidable resource base will emerge in the region. The East Asian littoral—from the Bay of Bengal to the Sea of Japan—represents a particularly challenging area." Nye would argue that this reflected the administration's overall view of the international system. Nye observed later in 2003, "George W. Bush entered office committed to a realist foreign policy that would focus on great powers such as China and Russia and eschew nation building in failed states of the less developed world. China was to be 'a strategic competitor,' not the 'strategic partner' of Bill Clinton's era."

44. See National Defense Panel (NDP), *Transforming Defense: National Security in the 21st Century*, report of the National Defense Panel, December 1997, available from *www.dtic.mil/ndp*, accessed November 27, 2006, p. I; Kosiak *et al*., 2001, p. 19; and Bush, 1999. These ideas first saw quasi-official ascendancy in the 1997 report of the National Defense Panel (NDP). The NDP observed, "Today we are in a secure interlude following an era of intense international confrontation . . . The United States needs to launch a transformation strategy now that will enable it to meet a range of security challenges in 2010 to 2020." Kosiak *et al*., observe in their footnote 4, "*Leap ahead,* as used in a transformation context, means capabilities that are compatible with an emerging military regime. Advances within an existing warfare regime, no matter how revolutionary . . . will usually fail to meet this test." Later, Candidate Bush implied that pause and leap ahead were cornerstones of his defense transformation agenda when, during the campaign, he observed, "My third goal is to take advantage of a tremendous opportunity—given few nations in history—to extend the current peace into the far realm of the future. A chance to project America's peaceful influence, not just across the world, but across the years."

45. Bush, Citadel Speech, 1999.

46. See DoD, 2005, p. iii. This idea was captured in the Secretary's foreward to NDS 05. In it, the Secretary states, "This National Defense Strategy outlines our approach to dealing with challenges we likely will confront, not just those we are currently best prepared to meet."

47. In reviewing this monograph on January 17, 2007, with Mr. D. Burgess Laird, the author was reminded of working level conclusions about the four challenges, their interrelationship, and their place in the context of past defense reviews. In those conversations in 2003-04, Laird and the author concluded that disruptive challenges would often arise through the evolution of traditional capabilities. Thus, just as irregular and catastrophic challenges likely represented a single continuum, so too did the traditional and disruptive. Employing the language of NDS 05, QDR 01's heavy emphasis on the RMA and defense transformation revolved around the United States maintaining its competitive edge along the traditional-disruptive axis while hedging against catastrophic challenges.

48. Nye, 2003, p. 4.

49. See Bush, 1999; and Rumsfeld, 2001, p. 1. Candidate Bush defined the parameters of defense transformation when he observed in 1999, "Power is increasingly defined, not by mass and size, but by mobility and swiftness. Influence is measured in information, safety is gained in steal, and force is projected on the long arc of precision-guided weapons. This revolution perfectly matches the strengths of our country—the skill of our people and the superiority of our technology." Likewise, Secretary Rumsfeld similarly observed in the QDR 01 Terms of Reference, "New combinations of technologies, combined with innovative concepts of operations and organizational arrangements will serve as multipliers of future U.S. forces . . . . U.S. forces must transform, in a manner that outpaces competitors by pursuing new technologies, concepts and organizational arrangements."

50. See Freier, September 2006; and Jeff Hesterman, *National Military Strategy*, a briefing presented at the Precision Strike Winter Roundtable, January 2005, available from *www.dtic.mil/ndia/2005precision_winter_roundtable/Hesterman.ppt*, accessed November 24, 2006, p. 7. The author posits some key questions in this regard in the referenced on-line op-ed. On the issue of altering DoD's strategic trajectory, see the chart referenced above. This chart (created by the Joint Staff) was commonly used to articulate this necessary shift in the Department's orientation.

51. See Nathan Freier, "Primacy Without a Plan?," *Parameters*, Autumn 2006, available from *www.carlisle.army.mil/usawc/Parameters/06autumn/freier.pdf*, accessed February 22, 2007, pp. 6; and Clark A. Murdock and Michele A. Flournoy, *Beyond Goldwater-Nichols: U.S. Government and Defense Reform for a New Strategic Era/Phase 2 Report*, Washington, DC: Center for International and Security Studies, available from *www.csis.org/media/csis/pubs/bgn_ph2_report.pdf*, accessed February 22, 2007, p. 17. The author argues in the above reference that "the exercise of American influence is not, as many imagine . . . the product of some deliberative, whole-of-government process enforcing unity, order, and focus on the nation's instruments of power." Likewise, Murdock and Flournoy observe,

> There is no "national security command and control system" giving the President command authority over the national security agencies similar to that given to the [SecDef] over the military services. Today's security challenges require solutions that more effectively integrate the diplomatic, military, economic,

> informational, and other dimensions of national power, but this must be accomplished within the constraints of the American political system—that is, in the absence of unity of command.

52. See, for example, Richard K. Betts, Spring 2002, p. 8; Stephen M. Walt, "American Primacy: Its Prospects and Pitfalls," *Naval War College Review*, Vol. 55, Issue 2, Spring 2002, available from *www.nwc.navy.mil/press/Review/2002/spring/art1-sp2.htm*, accessed January 20, 2006, p. 8; and Stephen G. Brooks and William C. Wohlforth, "American Primacy in Perspective," *Foreign Affairs*, Vol. 81, Issue 4, July/August 2002, available from *proquest.umi.com/pqdweb?did=128867981&sid=2&Fmt=3&clientld=20167&RQT=309&VName=PQD*, accessed November 2, 2006, p. 5. Betts observed, "Primacy has two edges—dominance and provocation." Walt argued, "The tendency for the strongest power to provoke widespread opposition is probably the central challenge of contemporary U.S. foreign policy." Finally, Brooks and Wohlfor, while to some extent downplaying the strategic significance of resistance currently, observed, "The world finds it unfair, undemocratic, annoying, and sometimes downright frightening to have so much power concentrated in the hands of one state, especially when the United States aggressively goes its own way. But given the weight and prominence of U.S. power on the world stage, some unease among other countries is inevitable no matter what Washington does."

53. See Betts, 2002, p. 2. Betts argues similarly,

> Political and cultural power makes the United States a target for those who blame it for their problems. At the same time, American economic and military power prevents them from resisting and retaliating against the United States on its own terms. To smite the only superpower requires unconventional modes of force and tactics that make the combat cost exchange ratio favorable to the attacker. This offers hope to the weak that they can work their will despite their overall deficit in power.

54. For a non-western perspective on this, see Qiao Liang and Wang Xiangsui, *Unrestricted Warfare*, Beijing: PLA Literature and Arts Publishing House, February 1999, available from *www.terrorism.com/modules.php?op=modload&name=Documents&file=index*, accessed February 22, 2007.

55. The phrase nonmilitary should neither be taken to imply nonviolent nor nonstate. For example, see Qiao and Wang, 1999, p. 50. They introduce the concept of "nonmilitary war operations." According to Qiao and Wang, "The . . . concept, 'nonmilitary war operations,' extends our understanding of exactly what constitutes a state of war to each and every field of human endeavor."

56. See David Jablonsky, "Chapter 10: National Power," in J. Boone Batholomees, Jr., *U.S. Army War College Guide to National Security Policy*, 2d Edition Revised and Expanded, Carlisle, PA: U.S. Army War College, June 2006, p. 128. Jablonsky, in introducing students to the concept of national power, alludes to this when he observes, "National power is relative, not absolute. Simply put, a nation does not have abstract power in and of itself, but only power in relation to another actor or actors in the international arena . . . In reality, the superior power of a nation is derived not only from its own qualities, but from that of other actors compared with its own."

57. Schafer, 2004, p. 5. This DoD briefing (referenced on several occasions already) contains a graphic depiction and description of the challenges in quad form. While not responsible for this briefing over all, the author, Laird, and their organization (in consultation with DoD leadership) were responsible for Chart 5's content.

58. *Ibid*.

59. The author added the "costly but familiar" tag line to his subsequent use of the quad chart as a way to communicate foundational belief about the nature of the traditional challenge in the context of future defense-relevant strategy and policy.

60. Schafer, 2004, p. 5.

61. The author believes that a state's possession of chemical weapons is an inherently traditional challenge. Employment of chemical weapons could constitute a catastrophic challenge. However, technical issues limiting the effectiveness of chemical weapons as a terrorist weapon make it a lower priority than offsetting the catastrophic capacity resident in nuclear and biological weapons in anyone's possession.

62. Note the timeframe of the strategy's development. Some might argue that North Korea's subsequent nuclear test occurred at a time when the "focused attention" of the United States was not a serious and credible threat to Kim il Sung. Others may find

Kim's actions consistent with rational brinksmanship and thus, traditional as well.

63. DoD, March 2005, p. 3.

64. See DoD, September 2001. In the 2001 QDR, the concept of defeat implies denying adversaries the ability to "impose their will on the United States, its allies, or friends" (p. 13). Later QDR 01 suggests there are gradations of defeat—"swiftly defeat" and "decisively defeat" (p. 21). The former involves military operations that are "structured to eliminate enemy offensive capability across the depth of its territory, restore favorable military conditions in the region, . . . create acceptable political conditions for the cessation of hostilities . . . [and] degrade an aggressor's ability to coerce others through conventional or asymmetric means." The latter involves military operations focused on "imposing America's will and removing any future threat [an adversary] could pose. This capability will include the ability to occupy territory or set the conditions for a regime change if so directed." In tenor, both of these imply maintaining the capability to destroy an opponent's traditional military capacity. The term "set conditions for regime change" implies purposeful limitation on the military's responsibilities in the aftermath of traditional military operations.

65. *Ibid*. To that end, the NDS concludes, "Allied superiority in traditional domains, coupled with the costs of traditional military competition, drastically reduce[s] adversaries' incentives to compete with us in this arena."

66. For some perspective on early socialization of the challenge concept overall, the new idea of overmatch, and Secretary Rumsfeld's earliest introduction to these ideas, see Thomas E. Ricks, "Shift From Traditional War Seen at Pentagon," *washingtonpost.com*, September 3, 2004, available from *www.washingtonpost.com/ac2/wp-dyn/A57491-2004Sep2?language=printer*, accessed November 9, 2006, p. A01.

67. Edward B. Atkeson, "Adapting to the New American Way of War: Post-maneuver Security Operations," *Army Magazine*, Vol. 53, Issue 9, September 2003, available from *proquest.umi.com/pqdweb?did=534825781&sid=3&Fmt=4&clientId=20167&RQT=309&VName=PQD*, accessed October 30, 2006, p. 3. Atkeson appropriately designates the period following major combat operations as "post-maneuver security operations." He observes,

> In post-maneuver security operations, most of the major combat actions of the ground forces have given way to actions involving lots of vigorous, semi-independent, but broad-scale search, seizure and stability efforts. We turn from the canonical seizure of topographical objectives and the destruction of organized resistance to the identification, dismemberment, and disarmament of hostile elements remaining within the indigenous society.

68. See Tom Clancy with General Tony Zinni and Tony Koltz, *Battle Ready*, New York: G. P. Putnam's Sons, 2004, p. 433. Former Central Command Commander Anthony Zinni is particularly poignant in this regard. He observed, "Victory no longer happens when you capture the enemy capital . . . . These events signal that the home team is ahead in the third inning. The game goes nine innings—longer if necessary; and victory happens when you put in place a lasting, stable environment."

69. Ryan Henry, "Defense Transformation and the 2005 Quadrennial Defense Review," *Parameters*, Winter 2005-06, p. 13-14.

70. See DoD, March 2005, p.8. This idea is still strongly implied in the strategy's discussion of "Defeat(ing) Adversaries." NDS 05 observes, "Bringing military operations to a favorable conclusion demands the integration of military and nonmilitary actions. When combined, these measures should limit adversaries' options, deny them their means of support, defeat organized resistance, and establish security conditions conducive to a secure peace."

71. These very circumstances were set up in a fictional sense in the 1995 Hollywood movie, "Crimson Tide." In the course of a fictitious Russian civil war, rebel Russian forces seize control of a portion of Russia's substantial strategic nuclear arsenal and threaten to employ it. Though fictional, this illustrates circumstances where a substate actor could seize control of a traditional power's WMD capabilities and thus transform part of what was a traditional WMD challenge into a quite unpredictable catastrophic one. See Internet Movie Database, "Plot Summary for Crimson Tide," 1995, available from *www.us.imdb.com/title/tt0112740/plotsummary*, accessed February 22, 2007.

72. See Endnote 61 for a qualifying statement with respect to chemical weapons.

73. See, for example, Aston Carter, John Deutch, and Philip Zelikow, "Catastrophic Terrorism: Tackling the New Danger," *Foreign Affairs*, Vol. 77, Issue 6, November/December 1998, pp. 80-94; and Ashton B. Carter, John M. Deutch, and Philip Zelikow, *Catastrophic Terrorism: Elements of National Policy,* A Report of Visions of Governance for the Twenty-first Century, A Project of the John F. Kennedy School of Government, Harvard University, available from *www.ksg.harvard.edu/visions/publication/terrorism.htm*, accessed February 22, 2007.

74. Ashton B. Carter *et al*., 1998, p. 6.

75. Schafer, 2004, p. 5.

76. "Rogue." *Dictionary.com Unabridged (v 1.0.1),* Based on the Random House Unabridged Dictionary, Random House, Inc., 2006, On-line/Available: *dictionary.reference.com/browse/rogue*. See also DoD, March 2005, p. 3; and Department of Defense, *Report Required by Section 2912 of the Defense Base Closure and Realignment Act of 1990, as Amended Through the National Defense Authorization Act for Fiscal Year 2003*, March 2004, available from *www.dod.mil/brac/docs/04_0_body032403.pdf*, accessed February 22, 2007, p. 21. Both the March 2004 Base Realignment and Closure Act (BRAC) report cited above and NDS 05 imply this distinction but perhaps not to the extent necessary to clear up any lingering confusion. The BRAC report says catastrophic challenges "involve terrorist or rogue employment of weapons of mass destruction (WMD)." The strategy itself says "(c)atastrophic challenges involve the acquisition, possession, and use of WMD or methods producing WMD-like effects."

77. See, for example, Cebrowski, 2004, p. 35. This represents the earliest version of the "quad chart" developed by OSD Strategy. This and the Shafer briefing from fall 2004 demonstrate some changes in language but very little change in meaning over time.

78. DoD, March 2004, pp. 19-22.

79. Cebrowski, 2004, p. 35.

80. See Shafer, 2004, p. 5; and Cebrowski, 2004, p. 35. The specific language from the chart in Shafer's briefing is "paralyze our power." Earlier versions, like that in Cebrowski's briefing, describe catastrophic challenges in a more personal and purposeful context. The early quad chart definition was, "(t)hose seeking to *paralyze* American leadership and power by employing WMD or WMD-like effects."

81. Henry, p. 14.

82. "catastrophe." *Webster's II: New College Dictionary*, Boston-New York: Houghton Mifflin Company, 1995 and "paralysis." *The American Heritage® Dictionary of the English Language*, Fourth Edition., 2004, available from *www.dictionary.reference.com/browse/paralysis*, accessed December 8, 2006.

83. As with the traditional challenge, the author added the "likely and paralyzing" tag line to subsequent use of the quad chart in order to communicate foundational beliefs about the nature of the challenge in the context of defense-relevant strategy and policy.

84. See The National Commission on Terrorist Attacks Upon the United States (NCTAUUS), *The 9/11 Commission Report*, July 22, 2004, available from *www.gpoaccess.gov/911/pdf/fullreport.pdf*, accessed February 22, 2007, p. 344; and Christopher Chyba, Harols Feiveson, and David Victor, *Report of the Working Group on Relative Threat Assessment*, The Princeton Project on National Security, September 2005, available from *www.wws.princeton.edu/ppns/conferences/reports/fall/RTA.pdf*, accessed February 22, 2007, p. 7. On the idea of conceptualizing catastrophic challenges, the 9/11 Commission was instructive. Members observed, "Imagination is not a gift usually associated with bureaucracies . . . It is therefore crucial to find a way of routinizing, even bureaucratizing, the exercise of imagination." Likewise, Chyba *et al*., observe, "Threats without bureaucratic champions . . . often get overlooked . . . In some cases, threats simply are not well imagined until some event focuses attention. We saw this recently . . . after 9/11."

85. See Schafer, 2004, p. 5. The phrase "vulnerable, high-profile targets" comes from the version of the quad chart contained in Schafer's briefing.

86. See International Physicians for the Prevention of Nuclear War (IPPNW), "Effects of a Nuclear Explosion in a Populated Area: New York City, New York," A Briefing Paper from International Physicians for the Prevention of Nuclear War, October 2004, available from *www.ippnw.org/NuclearTerrorismNYC.pdf*, accessed February 22, 2007. This IPPNW briefing paper indicates that fatality rates (with some substantial qualifications/assumptions) resulting from a 12 kiloton nuclear detonation in lower Manhattan would kill as many as 60,000 people in New York and New Jersey.

87. DoD, March 2004, p. 9. To the author's knowledge, this was the first public articulation of the four challenges. The author drafted the first unedited version of the text between pp. 7-9.

88. For perspective on the various descriptions cited here, see DoD, March 2005, p. 3; Cebrowski, 2004, p. 35; and Schafer, 2004, p. 5.

89. Schafer, 2004, p. 5.

90. *Ibid*.

91. DoD, March 2005, p. 2.

92. *Ibid*., p. 3.

93. DoD, March 2005, p. 2; Cebrowski, 2004, p. 35; and Schafer, 2004, p. 5.

94. DoD, March 2005, p. 6. NDS 05's framers embedded these concepts in the strategy's assumptions. For example, under the category labeled "Our Vulnerabilities" the strategy observes, "Our leading position in world affairs will continue to breed unease, a degree of resentment, and resistance." Likewise, under the sub-heading labeled "Our Challenges" the strategy asserts, "Crises related to political stability and governance will pose significant security challenges. Some of these will threaten fundamental interests of the United States, requiring a military response."

95. See USCNS/21, 1999, p. 3. The Hart-Rudman Commission advanced a similar idea when they concluded, "We should expect conflicts in which adversaries, because of cultural affinities different from our own, will resort to forms and levels of violence shocking to our sensibilities."

96. On the subject of "soft balancing," see T. V. Paul, "Soft Balancing in the Age of U.S. Primacy," *International Security*, Vol. 30, No. 1, Summer 2005, pp. 46-71.

97. For a full description of the concept of "unrestricted warfare," see Qiao and Wang, 1999. For briefing chart references to "unrestricted warfare," see Cebrowski, 2004, p. 35; Schafer, 2004, p. 5; and Henry, p. 13 (also Figures 1 and 2 in this monograph).

98. There was a concern that introduction of the concept of "unrestricted warfare" into the defense strategy might add confusion. To senior leaders, it was important first for defense consumers to understand the most urgent manifestations of the irregular challenge—terrorism and insurgency. The exclusion

of an explanation of concepts like "unrestricted warfare" likely artificially limited meaningful consideration of the irregular challenge and its implications to commonly recognized forms of "irregular warfare." More will be said on this in later text.

99. Qiao and Wang, 1999.

100. See DoD, March 2005, p. 3. The "costs" referred to here are "human, material, financial, and political" in nature. The author, in hindsight, would also add psychological to this construction.

101. Qiao and Wang, 1999, p. 6.

102. *Ibid*., p. 7.

103. *Ibid*., pp. 50-57.

104. *Ibid*., p. 50.

105. *Ibid*., pp. 51-55.

106. *Ibid*., p. 55. Qiao and Wang observe:

> (W)e can point out a number of other means and methods used to fight a nonmilitary war. . . . Such means and methods include psychological warfare . . . ; smuggling warfare (throwing markets into confusion and attacking economic order); media warfare (manipulating what people see and hear in order to lead public opinion along); drug warfare (obtaining sudden and huge illicit profits by spreading disaster in other countries); network warfare . . . ; technological warfare (creating monopolies by setting standards independently); fabrication warfare (presenting counterfeit appearance of real strength . . .); resources warfare (. . . plundering stores of resources); economic aid warfare (bestowing favor in the open and contriving to control matters in secret); cultural warfare (leading cultural trends along in order to assimilate those with different views); and international law warfare (seizing the earliest opportunity to set up regulations).

107. *Ibid*., p. 56.

108. Charles F. Shaver, *Irregular Warfare Special Study*, Joint Warfighting Center, Joint Forces Command, August 4, 2006, p. II-2.

109. DoD, March 2005, p. 3.

110. *Ibid*.

111. See John D. Steinbruner, *Principles of Global Security*, Washington, DC: Brookings Institution Press, 2000, pp. 133-174. The author has engaged Dr. Steinbruner personally on this issue on number of occasions from the summer of 2002 to the present.

112. *Ibid*., p. 139.

113. DoD, March 2005, p. 5.

114. *Ibid*., p. 6.

115. *Ibid*., p. 12.

116. *Ibid*., p. 14.

117. See Atkeson, 2003, for a discussion of the role of the Army in particular in the "post-maneuver" environment.

118. DoD, March 2005, p. 17.

119. *Ibid*.

120. DoD, February 2006, pp. 35-39.

121. *Department of Defense Directive Number 3000.05, SUBJECT: Military Support for Stability, Security, Transition, and Reconstruction (SSTR) Operations*, November 28, 2005, available from *www.usaid.gov/policy/cdie/sss06/sss_1_080106_dod.pdf*, accessed February 22, 2007, p. 2.

122. As in the case of the traditional and catastrophic challenge, the author added the "persistent and corrosive" tag line to later use versions of the quad chart to communicate foundational beliefs about the irregular challenge in the context of defense-relevant strategy and policy.

123. See DoD, March 2005, p. 3. By the time the defense strategy was published, the words "civil war" and emerging concepts like "unrestricted warfare" (consistently included in graphic depictions of the challenges) were removed as examples. Thus, the strategy's main irregular challenges discussion opened with "Increasingly sophisticated irregular methods—e.g., terrorism and insurgency—challenge U.S. security interests." This automatically limited the aperture. Suddenly, the irregular challenge was restricted to those issues officially connected to the ongoing War on Terrorism.

124. Michele A. Flournoy and Shawn W. Brimley, *Strategic Planning for U.S. National Security: A Project Solarium for the 21st Century*, The Princeton Project Papers, on-line/available at

www.wws.princeton.edu/ppns/papers/interagencyQNSR.pdf, accessed February 7, 2007, p. 3. Flournoy and Brimley observe, "In the national security arena, the 'tyranny of the inbox' often becomes 'the tyranny of managing today's crisis'." From this perspective, "today's crises" were the global challenge of violent jihad and regional challenges posed by ongoing counterinsurgency campaigns in Iraq and Afghanistan.

125. See Cebrowski, 2004, p. 35; Shafer, 2004, p. 5; and DoD, March 2005, p. 3. The definition on the chart contained in Cebrowski's briefing begins, "Those seeking to *erode* American influence and power." The later definition in the Shafer briefing begins, "Unconventional methods adopted and employed." Finally, the definition found in NDS 05 begins, "Irregular challenges come from those employing 'unconventional' methods." All three imply volition or purpose. None effectively accounts for less purposeful environmental friction.

126. See DoD, March 2005, p. 3. The strategy calls "the absence of effective governance" a key factor contributing to the rise of the irregular challenge. However, it inadvertently limits the discussion by concluding, "The absence of effective governance in many parts of the world creates sanctuaries for terrorists, criminals, and insurgents. Many states are unable, and in some cases unwilling, to exercise effective control over their territory or frontiers, thus leaving areas open to hostile exploitation."

127. See DoD, February 2006, p. 2. "Irregular warfare" is one of five follow-on QDR "roadmaps." These roadmaps are intended to "guide the implementation of key QDR proposals and continue the refinement of the Department's approaches in these important areas." Indeed, QDR 06 reframed all four challenges at the outset referring to traditional and irregular "warfare," catastrophic "terrorism," and disruptive "threats." Later the text reverts back to the more familiar "challenge" in all four cases.

128. DoD, February 2006, p. 38.

129. *Ibid*.

130. See DoD, March 2005, p. 3. In hindsight, the author finds it unfortunate that the term "hybrid" itself was not employed in the strategy's text, as hybrids clearly represent the norm. Blanket employment of the terms traditional, irregular, catastrophic, and disruptive alone is imprecise.

131. 9/11 demonstrated the catastrophic potential resident in non-WMD capabilities and methods and convinced many that had al-Qai'da possessed nuclear weapons, they certainly would not have hesitated to employ them.

132. For an example, see Cebrowski, 2004, p. 5; and Schafer, 2004, p. 5.

133. DoD, March 2005, p. 2.

134. See Office of the Secretary of Defense, *Annual Report to Congress: The Military Power of the People's Republic of China – 2005, A Report to Congress Pursuant to the National Defense Authorization Act Fiscal Year 2000*, available from *www.defenselink.mil/pubs/pdfs/China%20Report%202006.pdf*, accessed February 22, 2007. This report provides a thorough DoD perspective on the PRC's capabilities and assumed military intentions. See also Chyba *et al*., 2005, p. 13. Chyba *et al*., are thought-provoking in this regard when they observe, "We have found that most assessments have emphasized the capabilities of potential enemies, without much sustained attention to their motives . . . Such excessive attention to capabilities may reflect that they often can be gauged more objectively than can motives and worldviews."

135. See, for example, Associated Press, "Venezuela, Iran to Finance Opposition to U.S.," January 14, 2007, available from *www.cnn.com/2007/WORLD/americas/01/13/venezuela.iran.ap/index.html*, accessed January 16, 2007.

136. Memorial Institute for the Prevention of Terrorism (MIPT), "Group Profile: Hezbollah," MIPT Terrorism Knowledge Base, available from *www.tkb.org/Group.jsp?groupID=3101*, accessed January 6, 2006. For a general overview of Hezbollah, its history, its political and terrorist activities, and its relationship to Iran, see MIPT above.

137. See Ester Pan, "Backgrounder: Syria, Iran, and the Middle East Conflict," Council on Foreign Relations, on-line/available: *www.cfr.org/publication/11122/*, July 18, 2006. Pan provides an excellent survey of expert opinion on the Iran/Syria/Hezbollah relationship with respect to the recent conflict in Lebanon and Israel.

138. See Kenneth Katzman, *Iran's Influence in Iraq*, CRS Report for Congress, Congressional Research Service, The Library of Congress, September 29, 2006, available from *www.fas.org/sgp/crs/mideast/RS22323.pdf*, accessed February 22, 2006, p. CRS-6;

and International Crisis Group (ICG), "Iran in Iraq: How Much Influence?" *Middle East Report No. 38*, March 15, 2005, available from *www.crisisgroup.org/library/documents/middle_east_north_africa/iraq_iran_gulf/38_iran_in_iraq_how_much_influence.pdf*, accessed February 23, 2007, p. 22. Katzman concludes, "In an effort to acquire strategic depth and prevent any strategic threat from materializing on its western border, Iran appears to be pursuing multiple options in Iraq: supporting the U.S.-engineered political process because doing so favors pro-Iranian movements . . . while simultaneously preserving the option of sponsoring militatnt activity against the United States." Similarly, the International Crisis Group calls Iran's politico-security strategy in Iraq "a strategy of managed chaos." ICG asserts, "The picture that emerges is of widespread, diversified, but also cautious Iranian involvement that aims at securing the regime's fundamental interests: preserving Iraq's territorial integrity, avoiding . . . chaos or civil war, promoting a Shi'ite dominated . . . government, maintaining . . . influence with a range of actors, and . . . keeping the U.S. preoccupied."

139. See Tim Russert; Video, Transcript: Newt on *Meet the Press* (MTP), *Newt.org*, December 17, 2006, available from *www.newt.org/backpage.asp?art=3905*, accessed February 23, 2007; and Michele A. Flournoy and Shawn W. Brimley, "Strategic Planning for National Security: A New Project Solarium," *Joint Forces Quarterly*, Issue 41, 2d Quarter 2006, p. 81. Former House Speaker Newt Gingrich, was crystal clear on this issue in a December 2006 appearance on *Meet the Press*. Gingrich observed, "(A)t some point we have to have a national conversation about the fact that, outside of the uniform military, none of the instruments of national power work, and they need to be fundamentally overhauled." Flournoy and Brimley similarly observe, "Given that the United States has embarked on what is surely another long twilight struggle, it is past time to make a serious and sustained effort at integrating all the elements of national power in a manner that creates the unity of effort necessary for victory."

140. See The National Intelligence Council (NIC), *Global Trends 2015: A Dialogue About the Future With Nongovernment Experts*, December 2000, available from *www.dni.gov/nic/PDF_GIF_global/globaltrend2015.pdf*, accessed February 23, 2007, p. 11-12. *Global Trends 2015* implied this when it observed, "The responsibilities of once 'semiautonomous' government agencies increasingly will intersect because of the transnational nature of national

security priorities and because of the clear requirement for interdisciplinary policy responses."

141. See, for example, Richard Holbrooke, *To End a War*, New York: Random House, 1998, pp. 215-227. In Holbrooke's discussion of policy debates concerning deployment of NATO's Bosnian Implementation Force (IFOR), he observes, "At least three times since Vietnam, the military stumbled [Iran 1980, Lebanon 1983, and Somalia 1993]." Of those three, he singles out Somalia and Vietnam as particularly influential on Clinton administration decisionmakers when contemplating intervention in the Balkans. He observes, "The scars from [Somalia] would deeply affect our Bosnia policy. Combined with Vietnam, they had left what might be called a 'Vietmalia syndrome' in Washington."

142. See Bush, 1999. Candidate Bush was explicit in this regard. He observed,

> [Our military] needs the rallying point of a defining mission. And that mission is to deter wars—and win wars when deterrence fails. Sending our military on vague, aimless and endless deployments is the swift solvent of morale . . . As President, I will order an immediate review of our overseas deployments . . . (W)e will not be permanent peacekeepers, dividing warring parties. This is not our strength or our calling.

143. See Nathan Freier, Tomislav Z. Ruby, and Thomas S. Mowle, "Chapter 8, Conclusion: Hoping for a Plan," in Thomas S. Mowle's, ed., *Hope Is Not a Plan: The War In Iraq From Inside the Green Zone*, Westport, CN: Praeger Security International, 2007, p. 148. The author, Ruby, and Mowle observe, "The American Iraq experience leaves us with two unanswered questions. Will the difficulties encountered in Iraq after major combat operations self-deter a rapid and effectual response to the next strategically significant crisis of order and governance? If not, will the United States and its institutions have internalized the lessons of Iraq so that intervention will yield decisive and durable...results?"

144. See, for example, George W. Bush, "President Outlines Strategy for Victory in Iraq," November 30, 2005, available from *www.whitehouse.gov/news/releases/2005/11/20051130-2.html*, accessed February 23, 2007. This has become a common refrain during the course of the Iraq War. The President said in November 2005,

> These terrorists have nothing to offer the Iraqi people. All they have is the capacity and the willingness to kill the innocent and create chaos for the cameras. They are trying to shake our will to achieve their stated objectives. They will fail. America's will is strong. And they will fail because the will to power is no match for the universal desire to live in liberty.

145. See Harry G. Summers, *On Strategy: A Critical Analysis of the Vietnam War*, Navato, CA: Presidio Press, 1982, p. 1; John D. Banusiewicz, "Abazaid Pledges to Root Out, Destroy Zarqawi Terror Network," American Forces Information Service, News Articles, September 22, 2004, available from *www.defenselink.mil/news/Sep2004/n09222004_2004092213.html*, accessed January 15, 2007; Petty Officer 3rd Class John R. Guardiano, "Rumsfeld Clarifies Status of Iraqi Security Forces," American Forces Information Service, News Articles, June 26, 2005, available from *www.defenselink.mil/news/Jun2005/20050626_1853.html*, accessed February 23, 2007; *FOXNEWS.com*, Transcript of Rumsfeld on Fox News, June 27, 2005, available from *www.foxnews.com/story/0,2933,160716,00.html*, accessed February 23, 2007; and Karen Hensel, "Congressman Pence Returns from Iraq," *Investigative Team 8*, September 7, 2005, available from *www.wishtv.com/Global/story.asp?S=3814461&nav=0Ra7eDIH*, accessed February 23, 2007. All of the above are variations of the same theme. Beginning with the oft-quoted Harry G. Summers exchange with a North Vietnamese Colonel Tu in Saigon in April 1975 through CENTCOM Commander General John Abazaid, Secretary of Defense Donald Rumsfeld, and Florida Congressman Mike Pence all trumpet tactical military success as indicative of ultimate victory. Returning to the Summers-Tu exchange, Summers recalls saying to the North Vietnamese Colonel, "You know you never defeated us on the battlefield." To which the Vietnamese officer responded, "That may be so, but it is also irrelevant."

146. There are innumerable examples of Iraq being referred to as the "central front to the war on terrorism." That broader War on Terrorism, however, is principally thought of as the conflict between the United States and a universe of Sunni extremist groups—sometimes referred to as al-Qai'da and associated movements. From a religious perspective, Iraq is much more important within Shi'a religious canons than it is in the Sunni tradition. While Saudi Arabia is the cradle of the religion itself, its control is clearly the coin of the realm for Sunni extremists. Thus, a

cogent argument can be advanced that Iraq has become a magnet for extremists both because of perceived American encroachment in the Muslim world but also to exhaust American commitment in the Middle East more broadly to the extent that it leaves key Sunni-dominated states vulnerable to extremist overthrow.

147. See Robert C. Orr, "Chapter Seventeen: An American Strategy for Post-Conflict Reconstruction," in Robert C. Orr, ed., *Winning the Peace: An American Strategy for Post-Conflict Reconstruction*, Washington DC: The CSIS Press, 2004, pp. 290-291 and Chase *et al*., 1996, p. 3. Orr suggests five categories of states that should be priorities for the United States. First, "countries with weapons of mass destruction"; second, states "that have been or are being used by terrorists as bases for international operations"; third, countries "that affect the prospects of achieving top U.S. foreign policy objectives, such as Middle East Peace"; fourth, states "whose collapse could flood U.S. shores with refugees"; and fifth, those states "that supply the world with significant amounts of the energy needed to keep the world's economy running." Chase, Hill, and Kennedy's description of pivotal states is instructive as well. They observe, "What really defines a pivotal state is its capacity to affect regional and international stability. A pivotal state is so important regionally that its collapse would spell transboundary mayhem: migration, communal violence, pollution, disease, and so on."

148. See Chase *et al*, 1996, p. 2; and USCNS/21, 1999, p. 5. Chase, Hill, and Kennedy warned of this in 1996 when they observed, "(T)he domino theory may now fit U.S. strategic needs better than it did during the Cold War. The new dominoes, or pivotal states, no longer need assistance against an external threat from a hostile political system; rather, the danger is that they fall prey to internal disorder." Likewise, Hart-Rudman observed,

> States will differ in their ability to sieze technological and economic opportunities, establish the social and political infrastructure necessary for economic growth, build political institutions responsive to the aspirations of their citizens, and find the leadership necessary to guide them through an era of uncertainty and risk. Some important states may not be able to manage these challenges and could fragment or fail.

149. See Robert C. Orr, "Chapter One: The United States as Nation Builder," in Orr, ed., *Winning the Peace*, p. 12. Orr observed,

> The question for the United States at the beginning of the twenty-first century is not whether to engage in post-conflict reconstruction but, rather, how to do so most effectively. . . . (A)lthough the exact nature of the U.S. role will vary case by case, depending on the U.S. interests at stake, it is safe to assume that the United States will be involved in some way in most major reconstruction efforts.

150. Kaplan, 2006, p. 6. Kaplan observes of a collapsed North Korea, for example, "On one day, a semi-starving population of 23 million people would be Kim Jong Il's responsibility; on the next, it would be the U.S. military's, which would have to work out an arrangement with the Chinese People's Liberation Army (among others) about how to manage the crisis."

151. See Freier, Ruby, and Mowle, 2007, p. 145.

152. *Ibid.*, p. 147.

153. Angel Rabassa, Peter Chalk, Kim Cragin, Sara A. Daly, Heather S. Gregg, Theodore W. Karasik, Kevin A. O'Brien, and William Rosenau, *Beyond al-Qaeda (Part 1): The Global Jihadist Movement*, Santa Monica: RAND Corporation, 2006, available from *www.rand.org/pubs/monographs/2006/RAND_MG429.pdf*, accessed February 23, 2007, pp. 1 and 77. Rabassa *et al.* observe later,

> (T)he terrorist entity that we currently label al-Qaeda has metastasized into a network of like-minded Islamic radicals who are committed to using mass violence to defeat their adversaries. This configuration of terrorists can be more accurately described as a global jihadist "nebula," which, though held together by bonds of varying degrees of intensity, collectively seeks to harm the United States, the West, and "apostate" governments in the Muslim world.

154. See Thomas Hobbes, 1956, p. 118; and Patrick J. Buchanan, "The War of All Against All," December 1, 2006, available from *www.realclearpolitics.com/articles/2006/12/the_war_of_all_against_all.html*, accessed February 23, 2007, p. 2. Hobbes first introduced this concept in Chapter XIII of *The Leviathan*. He observed, "Hereby it is manifest, that during the time men live without a common power to keep them all in awe, they are in a condition which is called war; and such a war, as is of every man against every man." Patrick Buchanan seized on this theme when describing

civil conflict in Iraq. He observed, "Iraq seems to this writer less a classic civil war . . . than a version of *bellum omnium contra omnes*, the war of all against all."

155. The USCNS/21, 1999, p. 8. See also NIC, December 2000, p. 11. Under the rubric of "Future Conflict," the NIC report concludes, "The United States will face three types of threats [asymmetric, strategic WMD, and regional military]." As described, these roughly mirror the irregular, catastrophic, and traditional challenges.

156. See Department of Defense (DoD), "DoD News Briefing with Secretary Rumsfeld and Adm. Giambastiani," February 1, 2006, available from *www.defenselink.mil/transcripts/2006/tr20060201-12403.html*, accessed February 23, 2007; Josh White and Ann Scott Tyson, "Rumsfeld Offers Strategies for Current War: Pentagon Releases 20 Year Plan Today," *Washington Post*, February 3, 2006, available from *www.washingtonpost.com/wp-dyn/content/article/2006/02/02/AR2006020202296.html*, accessed February 23, 2007, p. A08; Bradley Graham and Josh White, "Abizaid Credited With Popularizing the Term 'Long War'," *Washington Post*, February 3, 2006, available from *www.washingtonpost.com/wp-dyn/content/article/2006/02/02/AR2006020202242.html*, accessed February 23, 2007, p. A08; Ann Scott Tyson, "Ability to Wage the "'Long War' Is Key to Pentagon Plan: Conventional Tactics De-Emphasized," *Washington Post*, February 4, 2006, available from *www.washingtonpost.com/wpyn/content/article/2006/02/03/AR2006020301853.html*, accessed February 23, 2007, A01; and DoD, February 2006, pp. 9-16. In February 2006, coinciding with roll-out of the 2006 QDR, there appeared to be a deliberate introduction of the term "long war" into the public discourse.