

# All Possible Wars? Toward a Consensus View of the Future Security Environment, 2001–2025

SAM J. TANGREDI



Institute for National Strategic Studies  
National Defense University

## About the Author

Captain Sam J. Tangredi, USN, is a senior military fellow in the Institute for National Strategic Studies at the National Defense University, where he is a member of the Quadrennial Defense Review 2001 Working Group. He is a surface warfare officer who has served in a fast frigate, aircraft carrier, guided-missile destroyer, and dock landing ship. His most recent command was USS *Harpers Ferry* (LSD-49). A Navy subspecialist in strategic planning and international negotiations and a fully-qualified joint specialty officer, he has served on the Joint Staff as special assistant and speechwriter to the Secretary of the Navy and as head, Strategy and Concepts Branch, Office of the Chief of Naval Operations.

A graduate of the U.S. Naval Academy and the Naval Postgraduate School, Captain Tangredi received a doctorate in international relations from the University of Southern California and was a national security fellow of the Hoover Institution at Stanford University. He has written over seventy articles and working papers on defense issues and appeared on The History Channel in “The Great Ships” series.



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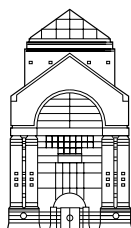
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*Sam J. Tangredi*

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# Foreword

This survey is a product of the Quadrennial Defense Review (QDR) 2001 Working Group, a project of the Institute for National Strategic Studies at the National Defense University. Sponsored by the Chairman of the Joint Chiefs of Staff, the working group is an independent, honest-broker effort intended to build intellectual capital for the upcoming QDR. More specifically, it aims to frame issues, develop options, and provide insights for the Chairman, the services, and the next administration in three areas: defense strategy, criteria for sizing conventional forces, and force structure for 2005–2010.

One of the group's initial tasks was to assess the future security environment to the year 2025. This was pursued by surveying the available literature to identify areas of consensus and debate. The goal was to conduct an assessment that would be far more comprehensive than any single research project or group effort could possibly produce.

This survey documents major areas of agreement and disagreement across a range of studies completed since the last QDR in 1997. Because it distills a variety of sources and organizes and compares divergent views, this volume makes a unique contribution to the literature. It also provides a particularly strong set of insights and assumptions on which both strategists and force planners can draw in the next Quadrennial Defense Review.

Michèle A. Flournoy  
Project Director



# Introduction

There was a legend in ancient Rome about a fabulous set of nine books which contained a predestined history of the Roman people and—in particular—details of all future wars and crises which would beset them.

These oracles, the property of Amalthea—the sibyl or prophetess of Cumae—were proffered to the Roman government. In a tale of greed, chauvinism, and intrigue worthy of a melodrama, the Romans decided not to pay the sibyl's price for the books and to bargain for a better deal. Upon learning of their decision, an angry and incredulous Amalthea threw the first three books into a fire where they burnt to ashes. She thereupon asked for the exact same price for the remaining six books.

Again the Romans, wanting a view of the future on the cheap, refused her price and made a lower offer. An angrier Amalthea burned three more books, and again asked the same price for the last three. Now desperate, the Roman government acceded, and purchased what came to be known as the Sibylline Books.

Because six books were destroyed, there could be no consensus among the Romans on interpreting the three surviving books. Despite sifting through the Sibylline ashes, they were unable to find the threads of meaning that could turn disconnected prophecies into a coherent view of the future. The books hinted that Rome would someday be a great power, dominating and bringing order to the known world. But the fragmented verses seemed to provide no basis for policy. Years later, a frustrated Caesar Augustus destroyed some 2,000 verses as spurious; they warned of things that seemed implausible or could not be understood.<sup>1</sup>

Today, the United States is the dominant world power. We strain to bring what we understand to be order to an apparently chaotic world. Many dream of a future age of freedom, justice, and peace for all humanity.

In the meanwhile, all of us wish to bequeath to our children a nation free from the threats and dangers that beset far-off lands and, potentially, our own: wars, poverty, oppressive ideologies, and ethnic hatreds. We want to know what particular dangers the future will bring. We want to be able to craft policies to protect and defend ourselves against those who would be our enemies, and, where possible, to bring peace to those whom we would aid.

There is no sibyl to offer us a complete set of reliable predictions and thorough explanations of the future threats we will face. There is no predestined chronology or policy which we can follow like a road map. What we do have is a series of learned studies of the meaning of the past and the present, expert assessments on the trends that appear to be developing through current events, thoughtful speculation as to how these trends may change or evolve in the future, and collective worries about what dangers could lie in wait, hidden from view.

This survey sifts through these dispersed piles of Sibylline ashes of our day, in order to develop the nearest to a consensus view of the future issues of war and peace—a view of the future security environment in which the United States will conduct its international relations. The proximate objective is to provide analytical support for the Quadrennial Defense Review of 2001 (QDR 2001), a comprehensive, Congressionally-mandated review of U.S. military strategy, policy, and force structure.

QDR 2001, like its predecessor in 1997, is intended to be a strategy-driven assessment that balances the preparations of the present with the anticipated challenges and opportunities of the future. Obviously, the first step in developing any strategy is the identification of objectives and the environment in which those objectives are to be pursued. In fact, the QDR 1997 report opened with a section that specified the assumptions about the future security environment that were used in guiding the review.

Theoretically, there should be no shortage of futures studies that could be used to form the basis for deriving the future security environment assumptions of QDR 2001. A recent survey identified over 50 academic or professional studies conducted since 1989, the approximate end of the Cold War.<sup>2</sup> As in ancient Rome, the future is a popular topic for serious speculation. However, there are severe problems in attempting to apply the results of these futures studies to effective policymaking. Among the difficulties are the lack of coordination between these studies; the significant differences in their methodologies and the time periods

examined; the broad and divergent scope of topics; the presence of underlying and often unidentified biases; and the wide range of contradictory results. Many studies begin with a clean slate, taking scant interest in previous, related work. An unedited compilation of these studies would constitute a modern Sibylline oracle, capable of generating much debate, but not a basis for policy.

To construct a policy requires some sort of baseline consensus from which implications and issues can be examined in an analytical context. This survey attempts to derive such a baseline for the years 2001–2025. The methodology adopted is straightforward, but apparently unique among futures assessments. Thirty-six existing studies concerning the future security environment were selected based on the criteria discussed in chapter one. Conceptually, these studies are representative of views from the range of organizations involved with or interested in national defense issues. All of the studies, with two exceptions, were published between 1996 and 2000. Selecting a publication date of 1996 or later was based on the assumption that such earlier work had been considered by QDR 1997.<sup>3</sup>

The thirty-six studies are then surveyed, analyzed in detail, and compared on a subject-by-subject basis to identify areas of agreement and disagreement.<sup>4</sup> From this comparison, sixteen points of consensus and nine of divergence are identified. The points of consensus do not necessarily represent absolute agreement of sources, but do represent majority agreement.<sup>5</sup> The points of divergence do not necessarily represent a fifty-fifty split, but indicate that there was no clear majority position.<sup>6</sup>

After the consensus and divergence points were developed, they were tested for validity against the conclusions of over three hundred other sources, most of them specialized studies. Most, but not all of these consulted sources are also recent publications. The purpose was to identify dissenting positions on the points of consensus, as well as to validate the fact that the consensus represents a majority view.<sup>7</sup>

Additionally, both the primary and consulted sources were surveyed for the identification of wild cards—unpredictable events that could present a considerable challenge during the 2001–2025 time period.<sup>8</sup> Combined with the dissenting positions, the wild cards indicate changes in the security environment that may require the development of hedging strategies.

The final portion of this essay includes a consensus scenario that describes the anticipated 2001–2025 future security environment in narrative form and a list of possibilities that warrant hedging.

There are conceptual and practical limitations to providing a consensus view of the future which this study identifies, attempting a balanced effort of insight and caution. Chapter one identifies the sources surveyed and details the analytical methodology. The next chapter explores the differences between the three major intellectual approaches to assessing the future, in an effort to illustrate the conceptual difficulties in comparing results among future studies. This is followed in chapter three by a discussion the practical limitations to using any consensus view of the future as a basis for policymaking. These caveats point to the need for serious consideration of dissenting views and wild cards in the development of hedging strategies.

Chapter four is a detailed assessment of the future security environment identified in the QDR 1997 report, using the common subjects. This assessment is an illustrative model of the analysis performed on the other thirty-five primary sources. Additionally, the question of whether the QDR 1997 assumptions remain a valid analytical baseline is discussed.

Sixteen points of consensus are outlined in chapter five, as well as dissenting views on each of the points. Chapter six details the nine points of divergence and their relationship to the consensus views. Then, in chapter seven, the wild cards most frequently identified in the literature surveyed are described.

Chapter eight presents the 2001–2025 consensus scenario narrative, as well as the wild cards that appear most appropriate for consideration in constructing hedging strategies. This discussion is concluded in chapter nine.

The conclusions found in this survey are but a starting point for the public debate on American defense policy for the 2001–2025 period. Critics will undoubtedly contest the points of consensus. The points of divergence are, effectively, intellectual debates already in progress. Nearly everyone has a different future they would prefer to see. Professional futurists often suggest that scenarios should describe the optimism of goals, rather than the pessimism of threats. But for the purposes of strategic planning, and particularly for comprehensive defense reviews involving a multitude of organizations and people—many with conflicting agendas—a baseline view of the future is critical in ensuring that competing

choices of action are addressing the same challenges, instead of being built on completely different sets of assumptions.

Unlike the Sibylline Books, this survey does not claim to predict or illustrate all possible wars that America might face between now and the year 2025. Rather, it attempts, through analysis of representative and reputable sources, to incorporate the most likely characteristics of the future security environment into a single scenario, while heightening our awareness of dissenting viewpoints and plausible wild cards. The objective is to avoid the mistakes made by great powers in the past by moderating both the natural urge for economy in defense and impatience with futures that do not conform with the desired outcomes of our strategic vision of the future security environment.

# Sifting the Sibylline Ashes

*If I always appear prepared, it is because before entering on an undertaking, I have meditated for long and have foreseen what may occur.*

—Napoleon<sup>9</sup>

Attempts to gaze into the crystal ball of the future are rife with paradox. On the one hand, most people *believe* that the future—particularly in the details of probable events—is essentially unknowable. On the other hand, humans inherently *want* to know their future, and, more importantly, the essence of all planning—particularly long-range or strategic planning—*requires* an assessment, or at least, a supposition of the situations or environment that will be faced. No plan—except the most general or serendipitous—can exist without some definite assumptions about the future.<sup>10</sup>

To the defense planner, an expectation of the future is an absolute requirement in preventing, preparing for, deterring against, and, if necessary, fighting wars.

At the operational and tactical levels of war, an ability to anticipate the future actions of the enemy has always been considered a defining skill of history's greatest military commanders. In fact, it is a skill that most clearly delineates the successful from the unsuccessful military leader. While personal leadership and courage may be the two elements that bring victory in the tactical situation of the battlefield, even the bravest of great captains have faced ultimate defeat because an unanticipated element derailed the overall plan.

This can also be true of otherwise successful strategists, including the great Napoleon himself—who did not foresee the effects of delay and Russian winter on his 1812 campaign.

On the level of grand strategy—where there is the interplay of the competing efforts of nation-states in defending their security and achieving their vital interests—a detailed assessment of the overall international security environment is clearly the fundamental requirement in the development of a national defense policy.

For the policy to remain effective, the common understanding of the security environment should be continually assessed, and changes in the security environment must be anticipated.

As the United States enters the 21<sup>st</sup> century, it is certainly prudent for the nation to review its overall defense policy to ensure that its strategy, plans, and military force structure are valid for an ever-changing security environment. In addition to the normal planning processes within the Department of Defense, the Department of State, the National Security Council, and other organizations entrusted with national defense, there has been in recent years a series of Congressionally-mandated defense reviews. Along with increasing Congressional participation in defense policy, the intent of these reviews has been to obtain a formal assessment of American security in order to foster longer-range planning and decisionmaking by the Department of Defense, which has frequently been accused of focusing on the urgent, rather than the important.

The first of these reviews, the Department of Defense Quadrennial Defense Review, was conducted in 1997.<sup>11</sup> Following QDR 1997, an alternative, independent assessment, also mandated by Congress, was charged with critiquing the results of QDR 1997. This National Defense Panel (NDP) provided several alternative defense concepts and force structure recommendations based on a somewhat different view of the future. Currently, an additional Congressionally-sponsored study group, The U.S. Commission on National Security/21<sup>st</sup> Century (previously known as the National Security Study) is completing a series of reports that includes a specialized look at the future security environment.<sup>12</sup> And a second Quadrennial Defense Review, to begin January 2001, has been included as a requirement in the latest Congressional defense authorization bills. Original legislation indicated a Congressional intent to make QDR a recurring four-year evaluation of American security efforts.

A natural first step in this evaluation process is to determine what is the future, or more properly, the range of alternative futures that we are planning for. What challenges and opportunities will the future security environment present to the United States? What developments should we anticipate? Exactly what sort of threats do we expect to face?

What possible wars should we plan for, prepare our forces for, and, hopefully, deter through our policies, programs, and actions?

### **From Clear Threat to Cloudy Lens**

The need for a continuing assessment of the security environment seems common sense when a security threat is evident. During the Cold War, the NATO alliance and most other nations of the noncommunist world saw the potential expansion of the Soviet empire as a clear and present danger against which well-defined security plans were an absolute necessity. Constant assessment of the trends and shifts in international security were required if the plans were to be valid and deterrence maintained. Entire organizations were created—staffs of intelligence collectors, analysts, and planners, supported by academic assessments of demography, industrial capacity, economic factors, and social trends—to give decisionmakers a clear picture of the international environment. The fact that such clarity was difficult, and that assessments were sometimes invalid, is much less an indictment of these efforts than a validation of the limits of human perception.

Yet, there is an underlying irony that this intensive assessment effort occurred during an historical period in which the international security environment changed relatively little. It was largely a bipolar world in which security issues revolved around or were primarily affected by the rivalry between the two superpowers. Thus, it was relatively easy to forecast the strategic importance of any particular event, even when its occurrence could not be anticipated.

In contrast, the post-Cold War world—a world heady with the collapse of communism and in which the United States remained the sole superpower—proved a much more difficult environment to analyze, particularly after the apparent stabilizing effects of victory in Operation *Desert Storm* and in the absence of a clear security threat.<sup>13</sup> Many thought that the reduction in East-West tensions created a new world order, made possible a “peace dividend,” and made extensive security assessments practically moot.<sup>14</sup> As a practical matter, the United States did reorient and reduce its defense structure by approximately one-third. From this perspective, re-assessment of the future security environment appeared difficult and important, but not necessarily urgent.<sup>15</sup> The reduction in defense structure included a corresponding reduction in assessment organizations and policymaking staff.

Arguably, the United States now faces a post-post-Cold War world in which threats are more direct, more dispersed, and, to some degree, more evident.<sup>16</sup> It is a world in which a liberated Russia did not develop a solid foreign policy partnership with the United States. It is a world in which China did not allow the inevitable growth of democratic sentiment, but crushed it ruthlessly at Tienanmen Square and elsewhere. It is a world in which globalization and economic interdependence did not prevent a series of ethnic wars along an Adriatic coast that was rapidly becoming the summer vacation zone of choice for Western Europeans. It is a world in which a thirty-year series of arms control treaties and proposals did not prevent other nations—even states presumably nonaligned during the Cold War—from seeking to build nuclear arsenals.<sup>17</sup> It is a world in which the crushing coalition victory over the Iraqi forces that had invaded neighboring Kuwait did not deter, for all time, the aggressive encroachment of other authoritarian regimes on their neighbors.

In other words, it is a world that did not cease to be dangerous, frequently chaotic, and ruled by power, rather than by law. Recognition of this post-post-Cold War world was a significant motivator behind the current series of Congressionally-mandated defense reviews. The common perception was that defense processes originating in the Cold War or the immediate post-Cold War era might not be appropriate to the apparent and anticipated changes to the future security environment. A fresh look was needed. And, in fact, all of the reviews—with their wide range of current and potential future impacts on U.S. defense policy and structure—sought to define, to a varying degree, the future security environment that American decisionmakers would face.

## **Consensus and Divergence**

Each of the reviews used different methods. QDR 1997 relied primarily on intelligence estimates and forecasts, some of which were later publicly released by the National Intelligence Council (NIC) as *Global Trends 2010*.<sup>18</sup> Supplementing the intelligence community work was a series of commission studies by outside research institutes, along with a series of projects by the Institute for National Strategic Studies at National Defense University.

The corresponding NDP report attempted to construct a series of alternative future scenarios that could provide insight into the range of defense policies that might be considered in the face of an uncertain

future. However, this effort was conducted primarily off-line from the rest of study, and the panel's final recommendations appear to have had only limited impact.

In the case of both QDR 1997 and the NDP, much of the logic leading to their respective future assessments is largely implicit or was developed from other sources. Describing the future security environment was but the prerequisite to their overall objectives. In contrast, the U.S. Commission on National Security/21<sup>st</sup> Century, established in July 1998, attempted to make its views of these threat estimates particularly explicit as a separate phase of the study. Released September 15, 1999, this phase one assessment, entitled *New World Coming*, is (as of July 2000) the latest U.S. Government-sponsored futures work in publication. Given the complexity and attractiveness of this field of study, it will obviously not be the last word on future security threats.

The issue of consensus and divergence in studies of the future security environment studies is an intriguing one, since almost every government agency, Federal research institute, nongovernmental organization, and academic center involved with national security policy issues has—at one time or another—pursued its own assessment of the future security environment. An unpublished study addendum of the U.S. Commission on National Security/21<sup>st</sup> Century cites 20 studies published since the end of the Cold War which the commission surveyed as pertinent to its efforts.<sup>19</sup> As previously discussed, these studies were chosen from approximately 50 identified futures efforts. Sixteen studies from the mid-1970s also were identified. Whatever the exact number of ongoing futures studies, it is obvious that political decisionmakers, business leaders, and academic observers consider such assessments worthy of considerable time, effort, and expense. Yet, there have been few attempts to categorize and compare the findings of this myriad of future security environment studies.<sup>20</sup> Practically all of the ongoing efforts, particularly those that focus on future scenario development, essentially begin with a clean slate.

## **The Fallacy of the Clean Slate**

While the clean slate approach is intended to avoid intellectual bias and group-think generated by the study of previous futures efforts, it also leads to disconnects between what could be mutually supportive endeavors, as well as to the lack of a corporate knowledge of the cognitive and political factors that influence future analyses.

A dramatic example of the failure of linear trend analysis—the projected future of the manned space program in the late 1970s—is frequently used to explain why the incorporation of previous future forecasts may be detrimental to fresh assessments. Forecasts based on the continuing and incremental successes of the manned space program in the 1960s and 1970s tended to project a robust future for the program—with permanent moon colonies established by 1990, and missions to Mars underway by 2000. Many of the public forecasts were based on internal assessments by the National Aeronautics and Space Administration of the evolution of space technology. Obviously, these events failed to come about—primarily due to political and public disinterest in funding the high cost of manned space exploration, factors not anticipated by otherwise technologically accurate forecasts. It is presumed that clean slate thinking can avoid such traps. Instead of analyzing previous assessments and accepting them as starting points for further refinement, it is argued, such previous efforts should be largely ignored lest they contaminate the intellectual freedom and greater accuracy of current creative thought.

However, it can also be argued that a comprehensive assessment of the future of manned space flight can *only* be developed if such previous misassessments, and the spirit of optimism that generated them, are analyzed and understood. This is an argument for inclusion of context as well as content. Likewise, there is much to learn from previous accurate forecasts. Processes that produce accurate results are appropriate starting points for replication and should not be discarded without careful examination. If the wheel needs to be reinvented at every turn, who will have the energy to reinvent the whole car?

## **Purpose and Methods**

With that in mind, the purpose of this survey is to provide, *not* an independent forecast, but a comparative analysis of current studies of the future security environment in order to support upcoming reviews of American defense posture. It does so by providing background information of futures study methodology, and then surveying both governmental and private studies. In short, the survey technique consisted of first developing an analytical summary of each primary source, and then preparing a series of matrices comparing the conclusions of each study concerning specified common issues. The common issues were initially organized under the categories of anticipated threats, nature of probable conflicts, and drivers.<sup>21</sup> The goal was to identify both consensus and disagreements

among the selected studies concerning the following three questions that define the future security environment from the perspective of the United States:

- What are the most likely security threats that the United States will face?
- If conflicts occur, what are the likely nature or forms of these conflicts?
- What are the drivers—such as ideology, economic competition, or advances in technology—that might cause such threats and propel conflicts to occur?

The apparent consensus and disagreements are then more fully developed and discussed on an issue-by-issue basis as findings. The findings are categorized as consensus, divergence, contradictions, and—in the case of forecasts that are confined to a single source, or rare events that are discussed as mere possibilities, but not probabilities—as wild cards and outliers.

In sum, the survey employed a four-step technique:

- Summarize the source.
- Identify topics addressed in each source by the following categories: anticipated threat, nature of probable conflict, drivers, or common themes.
- Compare the sources by building matrices displaying sources, topics, and conclusions, which either supported a view, did not support a view, or did not discuss a view.
- Develop findings, which could be in the form of a consensus view, a dissenting or diverging view, or an outlier/wild card.

## **The Second Round**

After consensus points, divergence points, and outliers were initially identified, these findings were subjected to a second round of analysis. Over 300 other sources were examined and compared to the findings in an effort to ascertain:

- whether the consensus points represent a majority view across the literature
- whether other points of dissent could be identified
- whether the divergence debates were common to the literature
- whether additional wildcards could be identified.

The 300-plus secondary sources were identified from bibliographic searches through various media, including libraries, electronic databases, and the Internet.<sup>22</sup> Searches were primarily restricted to sources published after 1996, except for issues that appeared to require earlier background information. For example, the issue of economic competition led to the identification of concerns between the United States and Japan that peaked in the early 1990s. Material from those years was used for background information.

### **Criteria for Primary Sources**

The underlying objective of the selection process for the primary sources was to collect material that generally represents viewpoints from the range of different types of organizations (and, by extension, individuals) which influence defense planning in the United States. A working assumption was that a representative view could be identified for each of the following types of organizations: Congress (in the form of Congressionally-mandated reviews); the White House; intelligence community; Office of the Secretary of Defense (OSD); Joint Chiefs of Staff (JCS) and unified commanders-in-chiefs (CINCs); war colleges; individual services (Army, Navy, Marine Corps, and Air Force); Federally-funded research institutes; independent research institutes; nongovernmental organizations; independent or ad hoc citizen commissions; private consultants; political opposition; and a range of independent scholars whose work influences the defense debate.

After prospective sources were identified for these organizational categories, standardized criteria were used to determine whether the source constituted an assessment of the future security environment suitable for detailed analysis. In accordance with the criteria, a primary source should:

- focus on the overall future security environment, not just particular drivers (such as population growth or availability of resources) of future trends
- examine multiple subjects affecting the future security environment
- be representative of the collective views of an organization influential in national defense policymaking
- be produced by a source with a solid professional or scholarly reputation
- have been published since 1996

- be unclassified (if a U.S. Government product) or provide analysis of the future security environment in unclassified sections.<sup>23</sup>

Based on these criteria, at least one source per category was selected; in certain cases, multiple sources were deemed necessary to provide for the representative view.<sup>24</sup> As will be discussed, representative views of the future are not necessarily the official view of the organization concerned.

Once the representative sources were selected, they were summarized and their conclusions categorized in the method outlined above.

## Representative Views

Selection of representative sources was meant to be both inclusive and simplifying. At least one view from each type of participant in the defense debate was included. But the sources needed to be kept to a manageable number.

In most cases, the organizations identified do not have official views. As a practical matter, it can be said that the official view of the future security environment for the overall U.S. Government is contained in the President's current *National Security Strategy*. But this strategy is a political document as well as an expression of policy; it represents the public view at the national command authority level, but is not necessarily inclusive of views at other governmental levels. Other sources may have some degree of official standing in the respective agencies. For example, the National Intelligence Council's *Global Trends 2010*, which is developed in consultation with members of all of the U.S. intelligence community (as well as other sources) could be construed as the official unclassified view of the overall intelligence community concerning the future security environment to 2010.

Although developed by defense organizations, other sources are designed as reports or reflections, but are not intended for acceptance as an official view for the respective organization. An example is the Joint Strategy Review (JSR), a report prepared annually by the Joint Staff in consultation with the staffs of the Armed Services, and presented to the Joint Chiefs to assist them in strategy and policy formulation. The JSR is intended as a strategic study, not an official JCS view. Its thematic focus varies year-to-year based on direction from the Chairman. In 1998, the JSR focused exclusively on alternative futures.

Among the services, the Air Force 2025 project appears to be the most extensive alternative future scenario-development effort, but does

not represent an official Air Force view of the future. The three selections from Army sources represent the perspectives of three different, though related organizations within the service itself. None is official.

The Navy sponsored significant reexaminations of the future security environment in conjunction with the development of its post-Cold War . . . *From the Sea* strategic vision in the early and mid-1990s, but since that time has not directly sponsored futures work. To derive a representative view, two sources were surveyed: an alternative futures analysis conducted by the uniformed officers of the Navy Strategic Studies Group (SSG) in 1995 for a previous Chief of Naval Operations, and a personal view of the future security environment written by the Secretary of the Navy. Again, neither can be construed as an official Navy view.

In contrast, the genesis of the Marine Corps sources allows them to be construed as the official view of the Marine Corps during the tenure of General Charles C. Krulak as Commandant. This reflects a deliberate choice on the part of the leadership to develop a consensus view for their Marine Corps.

Within OSD, the Defense Planning Guidance, a classified document issued to direct the Title 10 activities of the individual branches of the armed forces and defense agencies, contains an unclassified section detailing "The Projected Security Environment." This section is the closest to an official view of the future by the civilian authorities of the Department of Defense, and the 1999 version was selected for survey. A subordinate organization, the Office of Net Assessment within OSD, which reports to the Under Secretary of Defense for Policy has long been known for its iconoclastic, outside-the-box studies and analysis of current and future military threats. Its unclassified 1999 Summer Study reports were selected for survey as representative of distinctly unofficial OSD views.<sup>25</sup>

A source that can be construed as contending with the views of the individual services and representative of the perspectives of the unified commands is the "Futures Program" of U.S. Joint Forces Command (formerly U.S. Atlantic Command). The "Futures Program," geared to the development of joint experimentation and identification of future weapons requirements, has not produced a documentary final report. However, a series of unclassified briefings were surveyed as being potentially representative of general CINC concerns toward the future security environment.

Several studies conducted by the National Defense University Institute for National Strategic Studies were selected as representative of the

futures assessments being conducted at military war colleges, and that presumably impact thinking within the Pentagon.

## Outside Sources

The process of selecting analyses from outside the U.S. Government was intended to capture the richness of the contending voices of the defense debate in the United States. But while there are many contending assessments, there are not many studies that fit the criteria described above. Many outside sources consist of single-issue forecasts, or examine the future security environment only indirectly. Thus, the wider range of debate is captured largely in the secondary sources. However, fourteen nongovernmental sources were selected as representative of differing organizational or individual perspectives.

Two studies conducted by research institutes that are primarily federally-funded were selected: RAND's *Sources of Conflict in the 21<sup>st</sup> Century: Regional Futures and U.S. Strategy* was produced for the U.S. Air Force, and the *Vision 21* project was conducted for the U.S. Marine Corps by the Center for Naval Analyses.

Included in the primary sources are two studies published by independent research institutes, the Center for Strategic and Budgetary Assessments (formerly known as the Defense Budget Project) and the Institute for Foreign Policy Analysis (or IFPA, associated with the Fletcher School of Law and Diplomacy at Tufts University).<sup>26</sup> Nongovernmental organizations (NGOs) are represented by three studies sponsored by an environmental NGO, a humanitarian assistance NGO, and a project cosponsored by two public policy NGOs. Studies are also included that represent an independent, self-appointed commission, a private consultant on strategic futures, and a political candidate running in opposition to the current administration.

Four studies that are the published work of individuals represent different types of experiences as participants in the defense debate were selected. Paul Bracken and Donald Snow are both teaching academicians; however, Bracken has served on official defense advisory groups, such as the Chief of Naval Operations Executive Panel, and has consulted for the Department of Defense and intelligence agencies. Ashton Carter and William Perry are both associated with academic institutions but have frequently served as defense decisionmakers. After a distinguished career in defense-related industry and government service, William Perry was Secretary of Defense from 1994 to 1997. A retired career mili-

tary officer, Ralph Peters is a prolific and widely-respected contrarian on defense issues.

Although an enormous number of outside sources could have been selected, these four met the criteria and appeared representative of varying, but influential, perspectives, ranging from teaching academic, to academic consultant, to former defense official, to retired officer. As discussed, other unofficial and civilian perspectives were captured within the collection of over 300 secondary sources. Secondary sources were not subjected to the same rigorous subject-by-subject analysis and comparison as the primary. Instead, they were assessed for their support or opposition to the consensus points or their views on the divergence debates. Readers interested in details on primary and secondary sources surveyed may consult the appendices.

## **Outliers and Wild Cards**

While the relationship between consensus and divergence may be evident, the impact of outliers and wild cards on defense planning is not. The term “outlier” is used to define those findings that appear plausible but are idiosyncratic to a particular study; they lie outside the norm or consensus. Outliers are neither contradicted nor confirmed by other studies, but usually evaluate a topic specific only to its parent assessment. For example, one outlier concerns the development of a standing UN military force. This topic is addressed by assessments directly focussed on the future of the United Nations Organization, but is addressed separately by the broader future security environment studies.

Wild cards are “unforeseen events that could cause a major discontinuity or fundamental change” in an environment.<sup>27</sup> By their occurrence, wildcards literally sweep away the effects of many of the anticipated events and supplant them as the overriding driver and primary planning concern. An example of a wild card would be a cascading economic crisis that impoverishes much of the world. Under such circumstances, the security equation might change overnight, with a shift in focus from deterring major theater war (MTW) to preventing mass migrations, internal conflicts, and the rise of a neo-fascist ideological threat to democracy.

By definition, wild cards are not events that are normally planned for. They can be conceived but not predicted. At best, they are occurrences that could (and should) be hedged against. Their role in scenario building, and futures assessment in general, is precautionary as well as instructive—they encourage intellectual humility.

On the other hand, as elements of future defense planning, they are cards that must be played wisely. Incorporating the conceivable premise that earth could be invaded by space aliens into a significant assessment of national security, tends not to add credibility to the assessment.

Outliers and wild cards are included in this study to reinforce the fact that prudent defense planning must include hedging factors. For the purposes of analysis, there will be no distinction made between outliers and wild cards.

### **Sum of All Fears**

Once the findings—including wild cards—are identified and discussed, this study attempts to incorporate them into a consensus scenario that describes a baseline view of the anticipated future security environment. The objective is to provide a most likely view of future threats against which defense plans and force structure can be evaluated and developed. One of the most frequent criticisms of contemporary American defense planning is that we tend to plan for the last war instead of the next. Part of this problem, of course, is that no one can predict absolutely what the next war will be. The best we can do is combine the lessons from previous wars with an assessment of what kinds of wars might occur.

From that overall assessment, combined with creative thought and a wide range of evaluative tools, a range of defense strategy options—along with corresponding force structure alternatives—could be developed that would best prepare the United States to deter or defeat likely threats, while hedging against the less likely. That is, in fact, the objective of previous defense reviews, as well as the desired objective of QDR 2001. As expressed in the *National Defense Authorization Act for Fiscal Year 2000*:

The conferees intend that the Quadrennial Defense Review described in this provision should include an effort to determine a defense strategy designed to protect the full range of U.S. national security interests and to identify forces sufficient to do so at as low a risk as possible.<sup>28</sup>

Included in the QDR report would be “the threats to U.S. national interests examined for the purposes of this review.”<sup>29</sup> The obvious first step in determining a full range of threats to United States national security interests would be to assess—as methodically as possible—the plausible future environment in which they will arise.

Yet, even as we attempt this task, it is of vital importance to keep in mind two significant hazards. First, it is difficult to compare fu-

tures assessments that are based on different methodologies. Second, adherence to a consensus view may be very dangerous in a world of rapid change. These concerns are discussed in the following chapters.

# Estimates, Forecasts, and Scenarios

*People have an innate ability to build scenarios, and to foresee the future.*

—Peter Schwartz<sup>30</sup>

Three distinct methodologies are used to assess the future security environment, namely, estimates, forecasts, and scenarios.

## Estimates

Estimates utilize an assessment of current conditions to identify possible future events. This method is most closely associated with official intelligence estimates provided by intelligence agencies and services, the most significant of which are the National Intelligence Estimates (NIEs) summarizing assessments common to the overall intelligence community.

Such intelligence estimates generally combine current information on a variety of elements—such as industrial production, technology trends, and military orders-of-battle—in a manner that is comprehensive enough to identify probable near-term policies and events. Due to Cold War controversies, as well as natural conservatism and bureaucratic pressures for continuous accuracy, most official intelligence estimates focus almost exclusively on capabilities of potential opponents and shy away from discussion of likely intentions.<sup>31</sup> But whether including intentions or not, the priority remains accuracy, which requires a relatively short time horizon. Department of Defense net assessments generally fall under the category of estimates.

## Forecasts

Forecasts represent longer-range assessments, primarily relying on trends-based analysis. Most credible forecasts are issue-specific, generally under the assumption that an issue-area expert is best qualified for

making an assessment concerning the continuity or modification of current trends. When issue-oriented forecasts are combined in an attempt at comprehensiveness, variations of the Delphi Method—in which experts are polled as to their views—appear most often used.<sup>32</sup>

Although most future assessments produced today can best be considered forecasts, the term is frequently disparaged by futurologists of the burgeoning “futures industry” who favor the use of scenarios. As one source admits, “the success of forecasting is decidedly mixed, especially so in industries that are experiencing discontinuous change. . . . Forecasting. . . has a long history of unreliability when it was wrongly used to predict the unpredictable.”<sup>33</sup> However, the same compendium advises: “We would suggest that organizations need to employ both technologies [forecasts and scenarios], because forecasting does shed light on how predictable trends may combine to produce significant changes in the business environment.”<sup>34</sup>

Forecasts, along with the futurologists themselves, are subject to considerable criticism from policy analysts. As the late Harry G. Summers, a prolific author and retired U.S. Army colonel, argues:

Although futurologists like Alvin and Heidi Toffler make their livings in claiming to predict coming events, their 1993 effort, *War and Anti-War: Survival At the Dawn of the 21<sup>st</sup> Century*, like other such works, is at best an exercise in scientific wild-ass guessing. Unless taken to heart and acted upon, most such attempts are harmless, and may even offer some minor insights. But the future is and will remain uncertain.<sup>35</sup>

Ironically, forecasts can be implicit, and as such, appear in almost every analytical work on future policy. This includes the very work in which Colonel Summers dismisses the Toffler forecasts, which is subtitled “A Military Policy for America’s Future.”<sup>36</sup>

Since forecasts are not necessarily explicitly labeled as such, and appear at least implicitly in every strategic assessment, a first step in evaluating the validity of any policy recommendation is to determine the assumptions about the future, i.e., the forecast, on which the recommendations are based. This is a preliminary step that is not always followed in debates on defense policy.

## Scenarios

Scenarios can be thought of as a range of forecasts, but both their construct and intent are more complex. In defense analysis, scenarios can be traced back at least to Herman Kahn’s *Thinking About the Unthinkable*

approach to analyzing potential nuclear wars that might occur if deterrence failed.<sup>37</sup> The current popularity of scenarios in business planning is largely the result of Pierre Wack's strategic business planning for Royal Dutch/Shell. Wack is often credited as the sole forecaster of the rise of OPEC and the oil crisis of the 1970s; however, scenario builders are quick to point out that their objective is not to forecast a particular future at all, but to help "to make strategic decisions that will be sound for all possible futures."<sup>38</sup> In the words of Wack's collaborator, Peter Schwartz, who had a significant role popularizing scenarios work in the United States, the breakthrough in scenario development came about when Wack changed from "developing simple tales of possible futures" to building descriptions of "full ramifications" designed to "change our managers' view of reality."<sup>39</sup> Thus, modern scenarios tend to be richly developed depictions of alternate worlds based on plausible changes in current trends. "The end result, however, is not an accurate picture of tomorrow, but better decisions about the future."<sup>40</sup> This is the significant difference between scenarios and forecasting; presumably, forecasts *are* attempts at an accurate, ostensibly predictive picture of the future.

The technique of scenario building has become professionally formularized. Usually done with groups of diverse subject matter experts, the initial step is determined by the drivers that will propel future change. Drivers are the underlying factors in current trends, such as population growth or decline, technological development and diffusion, or human factors like the will to power. Changes in drivers result in changes in trends, which, in turn, result in changes in the human environment. A scenario is a depiction of the future based on the selected directions of a series of drivers. Because of the multiple directions possible for multiple drivers, the number of scenarios required to depict all plausible future outcomes can be rather large. The heuristic effect of considering the difference in implications of the multiple plausible future outcomes provides for a strategic conversation that allows decisionmakers to consider implications that may not be evident in the reality of today.<sup>41</sup> The differing implications of multiple scenarios thus provide for a wide range of policy options to analyze. Like theories, and unlike forecasts, scenarios are neither right nor wrong, merely plausible or implausible. Despite the quotation opening this chapter, the innate ability developed through scenarios is not to foresee the future, but a range of possible futures.

Scenario work is used increasingly by defense planners because the development of a range of alternatives corresponds well with the

traditional military planning process of anticipating all possible moves of enemy forces. The would-be Napoleons of history rarely considered only one possible move or one possible response.

Of the military services, the Air Force has placed the greatest resources toward formal futures scenario development, with a significant effort culminating in late 1996.<sup>42</sup> *Project 2025*, a study conducted by Air University for the Air Force Chief of Staff, developed eight alternative world futures and conducted an analysis of the defense policy implications of the four assessed as “providing the most stressful planning challenges.”<sup>43</sup> Other service efforts have generally focused on two or three alternative worlds, or on specific technological trends.

## Methodology

Comparing the strengths and weaknesses of the three primary methodologies for futures assessment reveals implications for policy recommendations. The strengths and weaknesses of the many competing defense policy recommendations are themselves influenced by whether their expectations are derived from near-term estimates, longer-range forecasts, or insights from scenario building. Theoretically, the time frame for which the policy recommendation is intended would dictate the method or mix of methods utilized. However, rarely are the methods used clearly and distinctly identified.

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### Summary of Strengths and Weaknesses

Methods	Estimates	Forecasts	Scenarios
Strengths	Greater definition Quantitative orientation Application to immediate decisions Appeal to practical decisionmakers	Longer time frame Diverse viewpoints Simplified planning Expert creativity encouraged Holistic approach not required	Longer time frame Heuristic orientation Inclusive of varied options Contrarian thinking evoked Appropriate for developing hedge strategies
Weaknesses	Short time frame Reliance on linear trends Discussion of intent often avoided	Accuracy based on continuity of trends Tendency toward extreme assessments	Translation required for application to immediate decisionmaking Unappealing to practical thinkers

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As summarized in the table above, estimates have the strength of a greater degree of definition that appears directly applicable to practical, relatively near-term decisionmaking. But the reliance on accuracy in an environment with multiple variables mandates the examination of a relatively short time frame of events. Political and technological trends often do not proceed in a linear manner, and therefore defy prediction over a long period.<sup>44</sup> Defense policy recommendations based on estimates may assuage immediate concerns but may not capture the range of possible long-term concerns against which a prudent planner might hedge.<sup>45</sup>

In contrast, forecasts capture a longer time frame, but their ultimate accuracy is subject to events that cannot be predicted with certainty. Many forecasts make up for this vulnerability by examining a very specific topic or small slice of possible futures. Presumably, the narrower the topic, the more specific—and therefore the more accurate—the forecast.

Unlike scenario building, forecasting need not take a holistic approach toward the future. For example, forecasts are routinely made on the future profitability of a particular corporation or industry. Indeed, most of the decisions made on Wall Street or in commodity futures trading are based on forecasts with much the same characteristics as the most outlandish writings of futurists.<sup>46</sup> And like the plethora of conflicting financial advice, there is considerable contradiction between forecasts.

The validity of forecasts is assumed to correspond to the expertise of the forecasters themselves. To get the best forecast, the common approach is to find the most experienced or credentialed expert. Indeed, forecasting encourages the creativity of subject matter experts, requiring them to go beyond the safer realm of estimates. The element of creativity promotes the comparison of diverse viewpoints, and many forecasts are compiled by committee in order to ensure all possibilities are considered and analyzed. This simplifies planning and makes the forecast a more acceptable tool for decisionmakers used to relying on the collective wisdom of their staffs.

However, the existence of contradictory forecasts creates an insidious tendency toward extreme forecasting. Outrageous statements are often made in order to attract attention to otherwise responsible forecasts, as often by media reports as by the forecasters themselves. There is an even greater tendency to claim an unjustified degree of certainty.

Scenarios have a heuristic orientation, and thus do not need to demonstrate an accuracy for prediction. The intent is to be inclusive of all possibilities, even contrarian thinking. In order to discourage the

perception that scenarios should be predictive, Pierre Wack referred to scenarios as “the gentle art of re-perceiving.”<sup>47</sup> “Re-perceiving” consists of questioning assumptions about the world.<sup>48</sup> Peter Schwartz advises the use of “remarkable people,” unconventional thinkers “found in unconventional locations and roles” to ensure the development of inclusive scenarios.<sup>49</sup>

Freedom from the need for direct prediction promotes a longer-range look at alternative futures and allows for the development of hedge strategies toward unlikely, but possible events. However, the heuristic approach requires a methodology for translating insight into practical policies. This translation process often requires more intellectual effort than the process of scenario-building itself. Likewise, it does not necessarily lend itself to immediate, problem solving decisions.

The need for translation makes scenarios less attractive to practical decisionmakers, who are likely to view scenario efforts in the same light as Summers views forecasting by the Tofflers: harmless, and even offering some minor insights. But the process of scenario building lends itself to conferences, workshops, off-sites, and other methods of modern management, thereby ensuring its popularity as an appropriate public demonstration of thinking about the future. Though based primarily on estimates and forecasts, both the National Defense Panel report of December 1997 and the U.S. Commission on National Security/21<sup>st</sup> Century’s *New World Coming* include brief chapters identifying four potential future scenarios.<sup>50</sup>

The inevitable question as to which is the best methodology has a simple answer: it depends on the desired balance between certainty and insight. If time and resources permit, an examination including estimates, forecasts, *and* scenarios would prove the most comprehensive of crystal balls. The sources selected for this study represent exactly that sort of mix.



Chapter Three

# Using the Future— Some Caveats

*To the extent we foresee the future and effectively address it, then the future will not develop as we anticipated it.*

—Richard Danzig<sup>51</sup>

*No plan survives contact with the enemy.*

—Helmuth von Moltke<sup>52</sup>

While accepting that an assessment of the future security environment—no matter the methodology used—is the essential starting point for all strategic planning, planners must be cautioned against both inappropriate use and the belief in a high degree of certainty.

Perhaps the most telling historical example of these dangers is the development of the British “Ten-Year Rule,” and its subsequent unquestioned implementation in the years between the First and Second World Wars. Between 1919 and 1932, the British Cabinet officially advised the service ministries that “major war was not to be anticipated or prepared for at least ten years.”<sup>53</sup> This estimate may have, in fact, held a degree of validity based on a survey of the world in 1919, following the defeat and exhaustion of the German-led Triple Alliance at the hands of a worldwide coalition that included even Japan. But its intent as a budgeting tool, intended to reduce the drain of defense expenditures on the British economy, discouraged systematic reassessment. There is no evidence that any such official reassessment or update in light of world events was ever seriously considered.

What was ostensibly a working hypothesis became a barrier against planning for “remote contingencies or ones which were *beyond*

*the financial capacity of the country to provide against'* (italics in original).<sup>54</sup> A direct result was the defeat of British expeditionary forces on the European continent in 1940, and, even more dramatic, the complete collapse of the British Empire's Far East defenses in the initial Japanese onslaught—an event that independent estimates began to warn against in the 1920s. “The general consensus of opinion is that while there was much to be said for some broad guideline in the years immediately after 1918, it was a mistake to confirm the Rule in 1928, and put it on a moving basis so that the assumption of ten years' peace was pushed into the indefinite future.”<sup>55</sup> The problem of the convenient official assessment was that “ten years is an extremely long time in terms of international relations, but a comparatively short time for a largely disarmed and pacific democracy to rearm for a major war against more than one potential enemy.”<sup>56</sup>

But the potential for the retention of originally accurate forecasts in a changing future is not the sole potential pothole in the path of futures assessments. In addition to the unwarranted belief in certainty, there are at least four other factors that justify caveats: the inclusion of normative assessments, institutional bias, emotional reaction of individuals, and the effect of taking action.

## **Unwarranted Belief**

The information age holds the potential for compounding the problems generated by an unwarranted belief in a high degree of certainty. Repeated in multiple media, popular forecasts tend to become common knowledge, and are treated as if proven fact or certain outcome. Such forecasts range from the inevitability of global warming to the irreversibility of the expansion of democratic governance throughout the world. The result is a form of group-think that narrows the popular view of plausible futures. When expectations are later contradicted by events, the results are often shock, surprise, recrimination, and disillusionment. In planning for warfare, the results can be disastrous.

There is a definite linkage between the repetition of an assessment and its popular acceptance as certain. This holds a certain similarity to mass propaganda in totalitarian societies, referred to as “the big lie” technique. It is often argued that the proliferation of modern media is causing the breakdown of governmental control of information in autocratic nations, and there is ample evidence that such has occurred.<sup>57</sup> However, we cannot discount the historical use of the media by totalitar-

ian regimes to buttress their legitimacy. Under such manipulation, even a plausible assessment of the future can be transformed into unquestioned theology.

An excellent example can be found in the history of Marxism-Leninism. It can be argued that both Karl Marx's world of the 1840s and the post-First World War Europe of Lenin's Bolshevik coup genuinely appeared to be ripe for revolutions by industrialized workers. However, the forecast of workers' revolts was transformed into an ideology of fomenting revolution, and then to a theology of the inevitability of communism. Despite its continuing efforts to foment world revolutions, the Soviet Union was unable to replicate the conditions prescribed in Marxist theory, nor force the rest of the industrialized world to do so. Moreover, the theology of inevitability discouraged efforts to reform communism to match the reality of the world economy. By the time Mikhail Gorbachev attempted to introduce reforms, his *de facto* repudiation of the theology of inevitability caused the complete collapse of the intellectual underpinnings of Marxism-Leninism. Even if the reforms were successful in prolonging the life of the Soviet Union, the forecast of a communist future was shattered forever.

Open societies, awash with information, would seem immune from the unwarranted certainty of forecasts. However, the very plethora of information, with many sources repeating the same assessment, serves to make forecasts appear universal and more certain than a detailed study of their sources would indicate. Political elites may be even more susceptible than tabloid readers, due to their behavior of "constant media grazing."<sup>58</sup> Through repetition, a forecast can become the intellectual version of an urban legend, providing a fascinating myth of dubious plausibility.

## **Normative Assessments**

A significant factor in the transformation of assessment into ideology is the influence of normative desires. Futures assessments, even those based on linear trends in the development of technology, inherently carry the biases of the assessors. Such is inevitable in every social science; humans are unable to stay neutral about human behavior. At its best, realistic forecasting (a description which itself is value-laden) strives to be value explicit rather than value free or value neutral.<sup>59</sup>

The inclusion of normative desires in futures assessments is almost routine. Largely, it extends from "the utopian tradition in ancient and modern literature."<sup>60</sup> The unfortunate aspect is that normative fore-

casting is often presented as scholarly futures assessment, and a frequent topic of normative forecasting is security planning. The agenda is not always as wonderfully evident as that of a recent article—ostensibly a futures forecast—by United Nations Peace University chancellor and former Assistant Secretary General Robert Muller, entitled “The Absolute Urgent Need for Proper Earth Government.”<sup>61</sup> Because various arms of the UN promote futures research, and many normative forecasts are published through organizations such as the World Future Society, it is often difficult to separate rigorous, dispassionate assessments of probable futures from optimistic views of the futures that we might prefer.<sup>62</sup> In the realm of policymaking, the rigorous and the optimistic often compete for attention and acceptance without always being distinguished.

Defense planning does not necessarily remain free from normative assessments. By its very nature, the national security strategy of the United States has as its objective the national security of the United States, and the use of futures assessment is colored by that objective. The very insurance policy nature of defense planning puts a premium on the identification of worst case scenarios. This need not mean that legitimate futures assessments are bent so as to discard plausibility. But it does mean that the existence of such an objective, in itself, colors the likely interpretation of what is plausible.

## **Institutional Bias**

Institutions and organizations, like individuals, have inherent biases. Such biases do not have to be products of deliberate distortion, but may evolve from seeing the world from a particular, often unique, viewpoint. Within the Department of Defense, the individual military services have unique cultures that have evolved from historical experience and the mediums in which they operate. These “masks of war” are filters through which past, present, and future are viewed.<sup>63</sup>

Likewise, the various other departments of the Federal government that are involved in international relations have distinctive viewpoints shaped by interaction with their immediate constituencies. There is nothing particularly sinister in the fact that the Department of Agriculture puts a higher premium on facilitating overseas grain sales than on signaling U.S. displeasure toward another nation’s espionage. It is natural that the Department of Commerce is primarily focused on the benefits of foreign sales of U.S. high technology, while the Department of Defense is more concerned with the potential use of such technologies in strengthening the military

capabilities of potential opponents. As our primary organization for international negotiation, it is likely that the Department of State would characterize the international environment as having a degree of cooperative behavior between nations, while the Defense Department would look to the potential for conflict.

Similarly, it is natural that nongovernmental organizations (NGOs) would have perspectives different from governmental agencies and, most likely, different from each other. Their viewpoints are partly directed by the particular issue they were formed to address. Researchers have wildly varying perspectives, based on personal beliefs and institutional affiliations.

Assessing possible futures is not necessarily a “where you sit is where you stand” exercise, as much as it is a “your view is your viewpoint” situation in which personal experience and ideology provide the telescope through which the future horizon is examined. A telescope can bring distant images into clear focus, but at the cost of narrowing the panorama to pupil-width.<sup>64</sup> This can be compounded by normative desires of what the future *should* be like and fanned by the rhetoric of scenario building in which participants are advised to *create* their future.

## Emotional Reactions

The fact that we are human has two effects on interpretations of the future. On one side it can give us greater understanding. On the reverse, it clouds our judgment.

In a recent address, Brian Sullivan, a scholar who has been involved in Department of Defense futures work, argued that, while specific future events cannot be predicted, the “history of the future” *can* be predicted because it is based on human nature, a subject of which we have some understanding.<sup>65</sup> In Sullivan’s construct, previous historical events provide the range of probable futures. While current trends and technologies may create the setting, the primary driver is human emotions, such as desires for greatness, gain, or revenge. Thus, for example, given the corrupting nature of absolute power and the particular circumstances of his regime, we should expect that Iraqi dictator Saddam Hussein will act in ways similar to Adolf Hitler in attempting to create his desired world order. His moves, therefore, are predictable.

The problem with this approach is not necessarily the methodology, but the fact that there is no common acceptance of what constitutes human nature, and that popular views on its nature tend to change. There

is an immutable division between those who view human nature as basically saintly and those who view it as basically sinful. And, as previously observed, there is a division of interpretation based on experience. President George Bush and Prime Minister Margaret Thatcher had no problem describing Saddam Hussein as a Hitler; both had witnessed the consequences of Hitler's actions. Their viewpoints were colored by their previous views. Others, particularly those born some generations after the Second World War, may have felt uncomfortable with what they considered inflammatory rhetoric.

Yet, in theory, an understanding of human nature should be a useful tool, and probably deserves more attention than it has received thus far in studies of the future.<sup>66</sup>

On the reverse side, emotional reactions to plausible futures is a factor in determining the range of alternative futures acceptable to study. Witness reactions to both Herman Kahn's initial "thinking the unthinkable" and initial nuclear war fighting assessments of the Reagan administration. Both cases evoked condemnation for the very fact they contemplated so horrible a future, a future whose very contemplation was deemed to increase its likelihood of coming about.<sup>67</sup> Based on factual data alone, the potential for a Cold War nuclear exchange was a very plausible forecast. But, like contemporary understanding of the enormity of the Holocaust, it was a plausible occurrence that many deemed too grotesque to recognize.

While genocide and nuclear war may be extreme cases, there is an evident human inclination to recoil from dire forecasts, no matter their merit. For example, even the most ardent of environmental NGOs fundamentally believes—as an organization—that the human race can and *will* prevent environmental catastrophe from coming about, if only it would listen to reason. War itself is such an emotional topic that it is difficult to separate our desire to prevent it from our understanding of its causes. Our preference for a more peaceful future and our emotional reaction to presentations that portray it as unlikely have at least an indirect, if unrecognized, effect on our defense planning.

## **Effects of Action**

Perhaps the most significant difficulty in developing futures assessments and translating them into policies and actions is the fact that all actions taken have the inherent effect of changing the future. The observations made by Secretary of the Navy Danzig and German General

von Moltke at the beginning of the chapter apply here; execution of a plan changes the conditions that inspired it. The dynamics of this change increase through the unfolding of competing actions, such as the plans of a wartime enemy, or his counter-thrusts. In a sense, the future is never what we think it will be, only what our actions—with a whole host of potential unintended consequences—create.

Arguably, the transformation of the immediate post-Cold War world is an example of the consequences—in this case, negative—of this prediction/action (or inaction) cycle. In the immediate aftermath of the dissolution of the Soviet Union, the conventional (and overwhelming) wisdom was that the development of free markets and democratization of Russia and the entire world was inevitable. Market economists argued that it was a natural process.<sup>68</sup> Assumptions were made concerning the expected development of international cooperation. Analysts who suggested that Russia could remain a military threat to the West were dismissed. The result was considerable pressure to take a restrained approach in helping to develop the Russian economic system and cementing mechanisms for bilateral foreign policy cooperation, because it was perceived that the *inevitable* result made such actions unnecessary.<sup>69</sup>

Unfortunately, the miracle of a stable Russian market economy now seems further off than in 1992, as economic oligarchs dominate. Russian support for American-led action for the liberation of Kuwait in 1991 was not matched in the case of NATO actions in Kosovo in 1999. Along with the previous enlargement of NATO membership, the actions in Kosovo were harshly criticized by the Russian government. At the same time, political liberalism did not continue to spread at its anticipated exponential rate. While American inaction was certainly not the *cause* of such events, it is obvious that the anticipation of an inevitably benign future shaped the actions and inaction that occurred. The result was that the future did not occur as we expected.

This does not mean that we should not continue to assess and therefore anticipate the future. Rather, it suggests that the translation of futures assessment into policy is similar to the practice of deterrence. It is impossible to certify when deterrence is effective, only when it is not. If a war does not occur, how can anyone tell whether it was deterred or what means deterred it?

In the theory of strategic nuclear deterrence, a whole series of future actions and reactions were assumed to be prevented by the threat of punishment or denial. In their abstract theorizing of action and reaction,

many analysts argued that it was in the interest of the United States to remain vulnerable to Soviet attack. An attempt to develop invulnerable defenses, it was argued, could cause a “use `em or lose `em” attack, or, in a more cynical assessment, encourage an invulnerable United States to attack the Soviet Union. Since a nuclear war between the superpowers did not occur, the policy was, by default, correct.

Unfortunately, the translation of deterrence theory into the prevention of conventional warfare has proven elusive.<sup>70</sup> The fact that the United States had the most powerful military in the world and a nuclear arsenal failed to deter Saddam Hussein from his fateful actions. Yet, does the invasion of Kuwait invalidate the theory of deterrence? How many other potential invasions—such as on the Korean peninsula—have been successfully deterred?

The assessment of future security environments and corresponding actions to prevent threats from developing suffers the same analytical difficulties as the theory of deterrence. In a very real sense, the question of how much is enough in terms of spending on defense resources can never be answered. No one can ever be certain of what did not occur. The very act of preparation may deter the anticipated consequence. Or it may create unintended consequences.

### **Sum of All Caveats**

The importance of recognizing the limitations of futures analysis and the historical caveats concerning its use lie in the realization that the acceptance of any assessment entails risk. As a starting point for defense planning the assessment of the future security environment is essential, but it cannot guarantee the success of any policy based on its premises. But because defense policymaking in a democracy is inherently a political process, the rhetoric of its debate is couched in certainties. As an example, the current argument over the development of a new generation of air superiority fighter is ultimately premised on assessments of the future. Proponents see American advantages in the air superiority mission as dwindling as current systems age and become more vulnerable. Opponents argue that current trends indicate that potential opponents are more likely to invest in ballistic and missile systems and not the manned aircraft that air superiority fighters are optimized to defeat.

In a very real sense, both positions are correct. The issue is where to invest finite resources when there are a multitude of threats to defend against. Which potential threats can be risked with some assurance that

there will be time to recover from the wrong investment decision? At the same time, it must be realized that the investment decision itself—whether right or wrong for that time—changes the future by encouraging counteractions by a potential opponent. That is why the issue of *asymmetric warfare*, the current focus of much defense analysis and debate, is such a difficult concept to operationalize and plan for.<sup>71</sup> In essence, *all* decisions provoke asymmetric responses in the security environment. And that is also why worst case planning is so appealing; it is an attempt to neutralize the greatest potential risks.

Thus, the most critical aspect to assess is not necessarily what the future security environment will be, as much as what will happen if it suddenly changes. This strengthens the argument that the alternative scenario method—when properly utilized—may have the most to offer defense planning, precisely because, by its very construct, it postulates uncertainty. And this also brings us back to addressing the trap made evident in our opening example of the British Ten-Year Rule. In a dynamic security environment, an assessment of the future is only as valuable as its facility for being updated.

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300 Fifth Avenue (Bldg. 62)

Fort Lesley J. McNair

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*From the foreword to*  
**All Possible Wars?  
Toward a Consensus  
View of the  
Future Security  
Environment,  
2001–2025**

This survey is a product of the Quadrennial Defense Review (QDR) 2001 Working Group, a project of the Institute for National Strategic Studies at the National Defense University. Sponsored by the Chairman of the Joint Chiefs of Staff, the working group is an independent, honest-broker effort intended to build intellectual capital for the upcoming QDR.

One of the group's initial tasks was to assess the future security environment to the year 2025. This was pursued by surveying the available literature to identify areas of consensus and debate. The goal was to conduct an assessment that would be far more comprehensive than any single research project or group effort could possibly produce.

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