NUCLEAR WEAPONS AFTER THE COLD WAR: CHANGE AND CONTINUITY IN PUBLIC DISCOURSES

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This dissertation assesses the rhetorical dynamics of American public argumentation about the appropriate role of nuclear weapons since the end of the Cold War. Four case studies are examined, including the controversy created by "fallen priests" like General George Lee Butler, the U.S. Senate's deliberations on ratification of the Comprehensive Test Ban Treaty, the George W. Bush administration's campaign to implement its 2001 Nuclear Posture Review, and the public debate about the development and deployment of "mini" nuclear weapons. Collectively, the case studies reveal that a potent combination of institutional interests, restricted access to official deliberative spaces, the deployment of threat discourses, the presumption that nuclear deterrence was effective during the Cold War, and the utilization of technical discursive practices narrowed the scope of public debate about the role of nuclear weapons and allowed advocates of robust nuclear deterrence to construct rhetorical and policy bridges between the Cold War and post-Cold War eras. "Security" and "risk management" frames dominated public discussions about nuclear weapons, and advocates of nuclear abolition were largely unsuccessful in their efforts to reconfigure public argumentation on nuclear weapons policy.

A.1.1 TABLE OF CONTENTS

1.0 INTRODUCTION

1.1 NUCLEAR WEAPONS AFTER THE COLD WAR

Nuclear weapons and deterrence policies function as cornerstones of American foreign policy, and are seen by defenders of the nuclear establishment as a principle safeguard of U.S. national security. They occupy a privileged place in foreign policy debates, where it is presumed that continued reliance on nuclear weapons is justified by their purported success in helping America "win" the Cold War. However, this presumption remains contested by anti-nuclear activists, who argue that the end of the Cold War and the newly emerging geopolitical landscape necessitate a re-evaluation of U.S. reliance upon nuclear weapons. Critics of the received wisdom of the nuclear establishment have historically attempted to alter the outcome of nuclear policy debates by changing the form and content of nuclear policy deliberations. Even a cursory review of the history of U.S. nuclear policy demonstrates that public policy debates concerning the role of nuclear weapons are *not* static; they have changed in the past, and are likely to do so in the future. Anti-nuclear advocates viewed the end of the Cold War and the fading of the Soviet Grendel as an opportunity to contest the legitimacy of official deliberative processes that grant presumption to the desirability of nuclear deterrence as a guarantor of national security interests. From the perspective of the critics of Mutually Assured Destruction (MAD), the tearing down of the Berlin Wall in 1989 and the collapse of the USSR in 1991 changed irrevocably the security

environment faced by American military planners, rendering Cold War nuclear doctrines obsolete and potentially dangerous.[1] Many analysts speculated that these developments would yield unprecedented opportunities for reshaping a world rent by the excesses of Cold War superpower competition.[2] Advocates and activists challenged the nuclear establishment by calling for drastic reductions in nuclear arsenals and delivery platforms, limits on nuclear testing, the de-alerting of strategic arsenals, and the eventual elimination of nuclear weapons.

In many ways, the end of the Cold War paralleled a similar moment at the end of World War II in that it represented an epoch ushering in new possibilities for collective security and global cooperation. In the same way that the Baruch Plan of the 1940s failed to prevent an American/Soviet arms race, these hopes for a more stable and a correspondingly less militarized U.S. foreign policy have not been realized.[3] Most importantly, America's continued reliance upon its nuclear forces remains fundamentally unaltered. Although the United States reduced its arsenal to between 1,700 and 2,200 warheads as part of its commitment to 2002's Strategic Offensive Reductions Treaty (SORT) and promises to make additional cuts to 1,550 strategic warheads under the New START treaty, the nuclear doctrines embraced during the Cold War, including reliance upon massive retaliation, a robust nuclear modernization policy, and the continued use of nuclear threats as a means of realizing American security interests, remain firmly in place.[4] Even the ascension of the seemingly dovish Obama administration is unlikely

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[1] An oft-cited example is Francis Fukuyama, *The End of History and the Last Man* (New York: Penguin Books, 1992).

[2] Fukuyama, *End of History*.

[3] See David S. Painter, "The Baruch Plan and the International Control of Atomic Energy," *Pew Case Studies* (January, 1990), Washington, DC: Institute for the Study of Diplomacy, Georgetown University and Henry D. Sokolski, *Best of Intentions: America's Campaign Against Strategic Weapons Proliferation*, (Westport, CT: Praeger Publishers, 2001). For a copy of the plan, see Benard Baruch, "The Baruch Plan," June 14, 1946, accessed November 26, 2010, http://www.nuclearfiles.org/menu/key-issues/nuclear-weapons/issues/arms-control-disarmament/baruch-plan_1946-06-14.htm.

[4] The full text of SORT is available at "The Moscow Treaty," May 24, 2002, accessed November 28, 2010, http://www.dod.gov/acq/acic/treaties/sort/text.htm. Many defense analysts dispute the credibility of SORT's projected force levels, pointing to the 5,100 or so nuclear warheads that will remain in storage. See Natural Resources Defense Council, "The Moscow Treaty's Hidden Flaws," February 3, 2003, accessed August 7, 2010,

to fundamentally alter the U.S.'s nuclear posture, despite the pro-disarmament pronouncements of the new president.[5] Advocates of nuclear predominance have effectively provided persuasive justifications for continued reliance on nuclear weapons in public deliberations over potential changes in American security policy, insulating deliberative processes and their outcomes from the efforts of anti-nuclear critics. Rhetorical critic Tarla R. Peterson notes this persistence of old institutions and their logics, observing that

> a variety of recent commentators have noted the incongruous persistence of Cold War institutions (indicated by their budgets, arsenals, structures, and autonomy), *despite*--and in some cases *due to*--the implosion of the former Soviet enemy... In response to this legitimation crisis, these institutions have been engaged in two related missions: "de-commissioning" their decrepit, irrelevant-and often contaminated infrastructures, and inventing new markets and "vital interests" for applying their ideologies, technologies, and expertise.[6]

In post-Cold War nuclear policy debates, the absence of an overwhelming external threat, such as the Soviet Union, has forced nuclear advocates to find new justifications for weapons programs and nuclear doctrines. Rhetorical critics Bryan C. Taylor and Judith Henry observe, "U.S. officials have rejected challenges to the morality and utility of nuclear weapons, have proclaimed them a necessary fixture of American national security, and have commenced plans

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http://www.nrdc.org/nuclear/moscow/moscflaw.asp; Natural Resources Defense Council, "Bush Plans Permanent U.S. Nuclear Advantage Under Moscow Treaty," February 4, 2003, accessed August 7, 2010 http://www.nrdc.org/nuclear/moscow/moscnuc.asp; and Christopher E. Paine, "Testimony before the Senate Foreign Relations Committee," July 23, 2003, accessed August 7, 2010, http://www.nrdc.org/nuclear/tcp07.asp. The text of the New START treaty can be found at "New START: Treaty Text," U.S. Department of State Website, accessed November 28, 2010, http://www.state.gov/t/avc/newstart/c39903.htm.

[5] Although the Obama administration's official policy calls for a negotiated nuclear disarmament pact between the major nuclear powers, the administration's security policies still emphasize the deterrence function of nuclear weapons. Some commentators have described the Obama administration's posture as "anti-nuclear nuclearism." See Darwin Bond Graham and William Parish, "Anti-Nuclear Nuclearism"," *Foreign Policy in Focus* (January 12, 2009), accessed August 7, 2010, http://www.fpif.org/fpiftxt/5782. Even though the new Nuclear Posture Review (NPR) breaks with many of policies of the Bush administration, it still places a strong emphasis on nuclear deterrence and on using nuclear weapons as a "guardian" of American security interests. See Daryl G. Kimball and Greg Thielman, "Obama's NPR: Transitional, Not Transformational," *Arms Control Today*, May 2010, accessed November 28, 2010, http://www.armscontrol.org/act/2010_05/Kimball-Thielmann and Joshua Pollack, "What Obama's Nuclear Posture Review Accomplishes," *Bulletin of the Atomic Scientists*, April 7, 2010, accessed November 27, 2010, http://www.thebulletin.org/web-edition/columnists/joshua-pollack/what-obamas-nuclear-posture-review-accomplishes. The text of the review is available at Department of Defense, *Nuclear Posture Review Report*, April 2010, accessed November 27, 2010, http://www.defense.gov/npr/docs/2010%20Nuclear%20Posture%20Review%20Report.pdf.

[6] Tarla R. Peterson, ""National Security and All That It Implies…": Communications and (Post-) Cold War Culture," Book Review, *Quarterly Journal of Speech 86:4* (November 2000): 465.

to revive their production."[7] Although military institutions have recycled many of their arguments deployed during the Cold War in public debates, a number of new rationalizations have been advanced. These attempts at rhetorical invention have met with varying degrees of success in blunting the efforts of nuclear critics to challenge the nuclear orthodoxy.

This study explores how argument formations have shaped the burdens of justification and structured public argument about nuclear weapons. The study analyzes the structure, form, and content of post-Cold War nuclear discourse, particularly the deliberative process that justifies nuclear weapons policy. Study of public deliberation is important because it illuminates how particular policies come to be preferred and how these policies are justified by public actors to the general populace. Rhetoric shapes the reality of deliberative processes, influencing who is allowed to participate, what types of arguments are allowed to be offered, and which criteria are used in shaping policy. The work of a number of communications scholars indicates that "mere" rhetoric played an important role in shaping, transforming, and justifying foreign policy deliberations throughout the Cold War. Similarly, it is reasonable to propose that rhetorical interventions and artifacts continue to influence contemporary debates about the role of nuclear weapons in U.S. security policy. Such a study helps to explain the persistence of nuclear deterrence and reliance on nuclear weapons as instruments of statecraft. This study evaluates the dual resilience of pro-nuclear discourses and a prominent role for nuclear weapons in American security policy by investigating four episodes of post-Cold War public debate over the direction of the country's nuclear policy.

This chapter is divided into two sections. The first section provides a review of scholarly literature concerned with analyzing both public discourse about nuclear weapons and the effects

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[7] Bryan C. Taylor and Judith Hendry, "Insisting on Persisting: The Nuclear Rhetoric of "Stockpile Stewardship," *Rhetoric and Public Affairs* 11:2 (Summer 2008): 303.

of nuclear deterrence policies on public deliberations. The second section details the rationale for the study's research questions.

1.2   LITERATURE REVIEW

The bulk of rhetorical analysis concerned with foreign policy and nuclear weapons focuses on Cold War rhetoric. Even with the work of scholars such as G.Thomas Goodnight, Robert Ivie, Gordon Mitchell, Rodger A. Payne, Bryan C. Taylor, and others, a survey of work published in the field of communication reveals that the subject of post-Cold War foreign policy remains relatively underdeveloped, inviting additional inquiry. In particular, many instances of "crisis" in the legitimacy of nuclear institutions are largely unanalyzed. Further research in this area is also warranted by an emerging convergence between Frankfurt School-inspired international relations theory and public argument-driven security studies.[8] Consider international relations (IR) scholar Thomas Risse's suggestion that world politics can be explained via the communicative theories of Jürgen Habermas. Risse calls upon American scholars to rethink tired, traditional IR dualisms, such as realism vs. idealism and constructivism vs. rationality, in light of argumentation theory.[9] Additional work in this area promises to develop both a richer understanding of international relations and a potentially fruitful, normative critique of existing deliberative practices that may suggest ways to move beyond the agonistic communication that characterizes many domestic and international deliberative spaces.

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[8] Gordon R. Mitchell, "Public Argument-Driven Security Studies," *Argumentation & Advocacy* 36 (Summer 2002): 57-71.
[9] Thomas R. Risse, "'Let's Argue!': Communicative Action in World Politics," *International Organization* 54 (Winter 2000): 1-39.

This section provides a survey of several bodies of scholarship relating to foreign policy rhetoric, and is divided into four segments. First, I provide an overview of the work of leading researchers in the field of foreign policy rhetorical criticism. Second, I explore the theoretical insights of public sphere scholarship and discuss some of the more prominent works that address the intersection of nuclear weapons and public deliberation. Third, I review the scholarly literature analyzing the role of word choice and language use in public deliberations about nuclear weapons. Finally, I outline some important theoretical concepts from outside of the rhetorical tradition that have relevance to this project.

1.2.1   Rhetorical Criticism of U.S. Foreign Policy

The use by the United States of atomic weapons against Japan at the end of the Second World War, and the subsequent Cold War, created powerful exigencies that demanded a response from American politicians and policy makers.[10]   Accordingly, the rhetorical artifacts of this era have received considerable attention from rhetorical scholars, including some of the leading figures in the field. An important text in this body of literature is *Cold War Rhetoric*, a 1990 collaboration of several of the most prominent critics of Cold War rhetoric.[11] This text discusses some of the highlights of contemporary Cold War criticism and details many critical theoretical tools articulated during the last forty years of rhetorical scholarship focusing on foreign policy.

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[10] See Lloyd Bitzer, "The Rhetorical Situation," *Philosophy and Rhetoric 1* (January 1960): 1-14. Bitzer defines exigence as "an imperfection marked by urgency; it is a defect, an obstacle, something waiting to be done, a thing which is other than it should be" (7). An exigency thus constitutes a flaw in the world that demands attention from a rhetor, evoking an intervention by a speaker as a means of influencing the beliefs and behavior of an audience.
[11] Martin J. Medhurst, Robert L. Ivie, Philip Wander & Robert L. Scott, *Cold War Rhetoric: Strategy, Metaphor and Ideology*, (Westport, CT: Greenwood Press, 1990).

A fundamental assumption guiding rhetorical criticism of American foreign policy is that the "rhetoric" versus "reality" distinction that pervades our popular and political culture is a false one. Public advocates frequently denigrate their opponents for using "mere rhetoric," and invite audiences to appreciate the "reality" of a given situation. However, rhetorical scholar Robert L. Scott observes that "rhetoric is not something added to reality but a creative force in our grasping and modifying the situations we constantly find ourselves in as we sense the shape and meaning of the lives we live."[12] Scott also suggests that the analysis of foreign policy rhetoric itself is useful because the persuasive patterns utilized in international controversies "reveal a great deal about the forces that form climates of opinion."[13] He claims that a flexible perspective on both the purpose and methods of criticism is useful to scholars interested in studying foreign policy rhetoric. Scott argues that "subject matter makes its own demands," meaning that "pluralism in criticism" is to be welcomed.[14] Three such perspectives are outlined in the chapters following Scott's introduction.

The first approach, discussed by rhetorical scholar Martin J. Medhurst, details a strategic orientation to foreign policy rhetoric. Medhurst begins with the observation that a strategic orientation to rhetoric is "predicated upon a realist view of the world; not the world as it ought to be or as we might wish it to be, but the world as it currently exists."[15] From this perspective, the purpose of rhetorical criticism is to determine whether and how agents in foreign policy debates are effective in achieving their goals and objectives. Such analysis is valuable, Medhurst maintains, because the Cold War (and presumably much of foreign policy in general) is a "war"

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[12] Robert L. Scott, "Cold War and Rhetoric," in *Cold War Rhetoric: Strategy, Metaphor and Ideology* ed. Martin J. Medhurst, Robert L. Ivie, Philip Wander & Robert L. Scott (Westport, CT: Greenwood Press, 1990), 13.

[13] Ivie, "Cold War and Rhetoric," 11.

[14] Ibid., 13.

[15] Martin J. Medhurst, "Rhetoric and Cold War: A Strategic Approach," in *Cold War Rhetoric: Strategy, Metaphor and Ideology* ed. Martin J. Medhurst, Robert L. Ivie, Philip Wander & Robert L. Scott (Westport, CT: Greenwood Press, 1990), 19.

of discourse. He notes that the "Cold War is a matter of symbolic action, action intended to forward the accomplishment of strategic goals."[16] This perspective suggests that rhetorical scholars should, at least in part, concern themselves with both the expressed and tacit goals of actors in foreign policy debates. Similarly, critics should try to understand the constraints placed by military, economic, political, historical, and diplomatic factors upon particular purveyors of discourse while paying careful attention to the unique characteristics of given rhetorical situations.[17] In this approach, critics aim to elucidate and evaluate the underlying strategies speakers use in accomplishing particular goals given a set of rhetorical constraints within a particular speech situation. The tools of rhetorical criticism, particularly those drawing from the Aristotelian tradition, are particularly well suited to this purpose. Medhurst demonstrates the potential of employing this perspective in his analysis of Eisenhower's famous "Atoms for Peace" speech and Kennedy's 1962 speech announcing the United States' resumption of nuclear testing.[18]

Although one could argue that this strategic perspective by itself is problematic in its assumptions concerning rhetorical agency and the reflexive relationship between speakers, constraints and situations, the traditional lexicon deployed by Medhurst remains useful in analyzing particular aspects of foreign policy rhetoric. Rhetorical scholar Robert L. Ivie suggests that strategic analysis "enables the critic to judge whether the possibilities of rhetorical modification have been fully exploited at designated points in time."[19] Likewise, such an

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[16] Ibid.

[17] Ibid., 20.

[18] Martin J. Medhurst. "Eisenhower's 'Atoms for Peace' Speech: A Case Study in the Strategic Use of Language," in *Cold War Rhetoric: Strategy, Metaphor and Ideology* ed. Martin J. Medhurst, Robert L. Ivie, Philip Wander & Robert L. Scott (Westport, CT: Greenwood Press, 1990), 29-50 and Martin J. Medhurst, "Rhetorical Portraiture: John F. Kennedy's March 2, 1962, Speech on the Resumption of Atmospheric Tests," in *Cold War Rhetoric: Strategy, Metaphor and Ideology* ed. Martin J. Medhurst, Robert L. Ivie, Philip Wander & Robert L. Scott (Westport, CT: Greenwood Press, 1990), 51-68.

[19] Robert L. Ivie, "The Prospects of Cold War Criticism," in *Cold War Rhetoric: Strategy, Metaphor and Ideology* ed. Martin J. Medhurst, Robert L. Ivie, Philip Wander & Robert L. Scott (Westport, CT: Greenwood Press, 1990), 203.

orientation foregrounds the underlying strategy of actors and the ways in which agents adjust their messages to particular audiences. Additionally, strategic analysis highlights how important situations, such as the nuclear bombing of Hiroshima (and the collapse of the Soviet Union), can demand a response from public speakers. Finally, Medhurst's perspective foregrounds the importance of goals in rhetorical situations, directing critics to detail and analyze the objectives of parties to public deliberations.

Ivie argues that criticism that focuses on the use (and abuse) of metaphor in foreign policy rhetoric can both illuminate the underlying assumptions driving dominant discourses and point to inventional resources that might promote compromise and harmony. Ivie finds himself skeptical of many metaphors utilized in Cold War rhetoric because they "diminish the political imagination, undermine the incentive to envision better alternatives, and thus reduce the scope of practical options available to leaders."[20] He cautions rhetorical scholars to "treat literalized metaphors as pragmatic fictions," with the purpose of scholarship being to show how many metaphors, which guide thought and discourse, are "no longer practical in the nuclear age."[21] The critic of metaphor thus examines important texts, searching for rhetorical vehicles that are used to convey meaning.[22] Ivie illustrates how metaphorical analysis can shed light upon important public events, such as the conflict between Red-baiting Senator Joseph McCarthy and newsperson Edward R. Murrow and the failed attempts of Cold War "idealists," such as 1948 presidential candidate Henry A. Wallace, Senator J. William Fulbright, and prominent nuclear critic Helen Caldicott, to challenge key elements of the Cold War edifice.[23]

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[20] Robert L. Ivie, "Cold War Motives and the Rhetorical Metaphor: A Framework of Criticism," in *Cold War Rhetoric,* 72.
[21] Ibid.
[22] Ibid., 74.
[23] Robert L. Ivie, "Diffusing Cold War Demagoguery: Murrow versus McCarthy on 'See it Now,'" in *Cold War Rhetoric: Strategy, Metaphor and Ideology* ed. Martin J. Medhurst, Robert L. Ivie, Philip Wander & Robert L. Scott (Westport, CT: Greenwood Press, 1990), 81-101 and Robert L. Ivie, "Metaphor and the Rhetorical Invention of Cold War 'Idealists,'" in *Cold*

Ivie suggests that the payoff of metaphorical criticism is twofold. First, analyzing metaphorical vehicles deployed by foreign policy advocates allows for the demystification and deliteralization of metaphors.[24] Such action strips away the veneer of civility and rationality from positions defended in public deliberations and allows the critic and readers to understand the actual implications of particular policies. Second, metaphoric criticism points to how rhetorical criticism is itself a form of political rhetoric, and can be deployed as an intervention in foreign policy debates. For Ivie, there is thus an important prescriptive and political element to criticism. He reminds scholars that "just as criticism is a form of rhetoric, the critic is a practicing rhetor."[25] The benefits of analyzing language use in nuclear policy debates have been borne out by a large body of research, which will be discussed in the next sub-section.

Rhetorical theorist Philip Wander outlines a third approach to rhetorical criticism of foreign policy, ideological critique. Drawing upon the rich history of Frankfurt School scholarship, Wander argues that criticism can and should take an "ideological turn when it recognizes the existence of powerful vested interests benefiting from consistently urging policies and technology that threaten life on this planet, when it realizes that we search for alternatives."[26] Tying ideological criticism to critical theory, Wander argues that criticism directed at finding and analyzing ideological assumptions marks the way toward a "postmodernist future" and can generate heuristic alternatives to contemporary international hostilities.[27] Wander argues that critical theory is useful for rhetorical scholarship because it recovers a "notion of praxis

War Rhetoric: Strategy, Metaphor and Ideology ed. Martin J. Medhurst, Robert L. Ivie, Philip Wander & Robert L. Scott (Westport, CT: Greenwood Press, 1990), 103-127.

[24] See Kenneth Burke, *A Grammar of Motives* (Berkeley: University of California Press, 1969), 512-516.

[25] Ivie, "Cold War Motives," 77.

[26] Philip Wander, "Critical and Classical Theory: An Introduction to Ideological Criticism," in *Cold War Rhetoric: Strategy, Metaphor and Ideology* ed. Martin J. Medhurst, Robert L. Ivie, Philip Wander & Robert L. Scott (Westport, CT: Greenwood Press, 1990), 132.

[27] Ibid., 132-133.

grounded in an effort to achieve a consensus required for cooperation within and among politically active audiences and publics."[28] He describes criticism as "both a deliberating and doing" that is animated in the "here-and-now of historical struggle, where the future is being constructed in the same way that the present, as an alternative future, was constructed in the past."[29]

Wander argues that an examination of American foreign policy rhetoric should focus on both audiences and argument. Rhetorical critics should be sensitive not only to the "variety of audiences and the relative importance of any given audience," but also to how public officials craft their public arguments and proclamations before particular audiences.[30] Like Medhurst, Wander maintains that analyzing the relationship between audience and argument is at the heart of rhetorical criticism, although Wander is oriented more towards understanding how speakers perpetuate particular ideological assumptions through discourse. Wander also argues that ideologically minded rhetorical critics should "approach debates over foreign policy searching for arguments" that serve the function of advancing particular political interests by appealing to the support of the 'mass audience.'" [31] Ideological criticism thus directs its attention to the underlying political climate and constellation of social forces that inform, constrain, and are reproduced by discourse. Wander's discussion of the 'Prophetic Dualism' that informed American aid policies during the Eisenhower administration, the 'Technocratic Realism' that drove U.S. foreign policy under Kennedy, and the history of anti-communism in America demonstrate the importance of accounting for the role of ideology in American foreign policy

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[28] Ibid., 133.
[29] Ibid., 144.
[30] Philip Wander, "The Rhetoric of American Foreign Policy," in *Cold War Rhetoric: Strategy, Metaphor and Ideology* ed. Martin J. Ivie, Philip Wander & Robert L. Scott (Westport, CT: Greenwood Press, 1990), 155.
[31] Ibid., 157.

debates.[32] Such analysis ties rhetorical criticism to the defense of democratic political theories and institutions, highlighting the importance of "rescuing misappropriated symbols of democracy from the grip of imperialist foreign policies."[33] Additionally, ideological criticism points to the reflexive relationship between rhetoric and ideology. Just as an ideology is powerless without appropriate rhetorical vehicles, rhetorical criticism lacks purchase unless it addresses the underlying conditions that influence who can talk about what to whom.

1.2.2 Public Sphere Theory

Social critic Jürgen Habermas argues that fragmentation of the public sphere, originally thematized by John Dewey in the 1920s, has become increasingly problematic as "steering mechanisms," such as money and power, undermine effective public deliberation on important political problems, transforming the historic public sphere from a culture-creating to a culture-consuming entity.[34] Habermas recognizes the trials posed by a more pluralistic public, and his theories of the public sphere and democratic legitimacy constitute an effort to reconcile political and social pluralism with a vision of democracy rooted in shared norms of communicative exchange and dialogue.

In *The Structural Transformation of the Public Sphere*, Habermas argues that the public sphere arose as relatively privileged individuals, working from their new positions as private persons, came together to form a public that debated the activities of the state.[35] He outlines three

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[32] Ibid. and Philip Wander, "Political Rhetoric and the Un-American Tradition," in *Cold War Rhetoric: Strategy, Metaphor and Ideology* ed. Martin J. Medhurst, Robert L. Ivie, Philip Wander & Robert L. Scott (Westport, CT: Greenwood Press, 1990), 185-200.

[33] Robert L. Ivie, "The Prospects of Cold War Criticism," in *Cold War Rhetoric:* 204.

[34] Jürgen Habermas, *The Structural Transformation of the Public Sphere*, trans. T. Burger, (Cambridge: Massachusetts Institute of Technology Press, 1989), 16, and John Dewey, *The Public and Its Problems* (Athens: Swallow Press, 1927/1991), 12.

[35] Habermas, *The Structural Transformation,* 14-26.

critical elements of a functional public sphere: first, all persons are ensured the right to participate; second, all debates are open to the public; and third, these debates are directed towards issues of general public concern.[36] Public sphere theory maintains that a free-flowing discussion, subject to communicative norms, serves as the basis for the formation of public opinion, which in turn authorizes and legitimizes the actions of the state through the procedurally regulated public spheres of the judiciary and the parliament.[37] Habermas describes two types of discursive participation: informal opinion formation, which occurs in the chaotic soup of public debate and discussion, and decision-oriented deliberation, which is under the purview of legislative bodies.[38] Informal opinion formation serves the two-tiered function of a "warning system," which finds problems that must be dealt with by the political system, and more formal discussions that engage the "effective problematization" of issues, amplifying the pressure of problems through processes of thematization, creating exigencies that demand policy changes from deliberative bodies.[39] Participation in informal public spheres occurs through the everyday social interactions between individuals and small groups, and does not require the unwieldy political structures and rules of will-formation bodies. The informal public sphere of opinion-formation and the formal public sphere of will-formation are linked by actions of the steering institutions, e.g., legislative deliberative bodies, whose actions are only considered legitimate if they are rooted in the problems and solutions thematized in the informal public sphere. Consequently, Habermas contends, the justifications advanced for political actions must find their basis in the free-flowing debate of the informal public sphere.

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[36] Jurgen Habermas, "Further Reflections on the Public Sphere," in *Habermas and the Public Sphere*, ed. C. Calhoun (Cambridge: MIT Press, 1992), 446-7.
[37] The question of how this process is manifested is the subject of one of his most recent books. See Jurgen Habermas, *Between Facts and Norms: Contributions to a Democratic Theory of Law and Democracy*, ed. W. Rehg (Cambridge: Massachusetts Institute of Technology Press, 1996).
[38] Habermas, *Between Facts and Norms*, 307.
[39] Ibid., 359.

A number of American communication scholars have explored the relationship between Habermas's theories of communicative ethics and democratic legitimacy and their utility in analyzing public debates. G. Thomas Goodnight and David Hingstman observe "the public sphere has been at the center of lively discussions crossing academic disciplines, local communities, social institutions and international borders."[40] One of the most theoretically rich examples of work in this area comes from Goodnight, who describes both the differences between personal, technical, and public spheres of argument and the problems that arise when the communicative norms of one sphere replace formerly dominant practices.[41] Goodnight echoes Habermas in cautioning that the rules of expression that govern many contemporary deliberations limit the efficacy of public debate as democratic norms of deliberation are replaced by communicative norms from technical spheres. These emerging rules only permit particular forms of argument and expression by enforcing a relatively rigid orthodoxy of communicative norms and acceptable forms of justification. Because these more "technocratic" discursive patterns do not reflect the preferred practices of members of the public, their increasing influence can serve a powerful exclusionary function. Goodnight argues that the quality of public debate is in serious decline due to the infusion of forms of communication that were previously limited to technical spheres of discourse into the public deliberative sphere. Goodnight is particularly troubled by the changing characteristics of public debate, stating "argumentative practices arising from the personal and technical spheres presently substitute the semblance of deliberative discourse for actual deliberation, thereby diminishing public life."[42] He cautions that older principles of public deliberation are rapidly being replaced by technocratic discursive practices

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[40] G. Thomas Goodnight and David B. Hingstman, "Studies in the Public Sphere," *Quarterly Journal of Speech* 83 (1997): 351.

[41] G. Thomas Goodnight, "The Personal, Technical, and Public Spheres of Argument," *Journal of the American Forensics Association* 18 (1982): 214-227.

[42] Goodnight, "The Personal, Technical, and Public Spheres," 220.

that stifle meaningful debate, arguing that technical practices based upon expertist norms of evidence, proof, and reason exclude the "rules of thumb" and sensitivity to exigency and the contingency of knowledge that informs public debates. Goodnight argues

> issues of public consequences, what should present live possibilities for argumentation and public choice, disappear into the government technocracy or private hands. As forms of decision-making proliferate, questions of public significance themselves become increasingly difficult to recognize, much less address, because of the intricate rules, procedures, and terminologies of the specialized forums. These complications of argument hardly invite the public to share actively the knowledge necessary for wise and timely decisions.[43]

In their discussion of the public and government responses to the Three Mile Island nuclear accident, Goodnight & Farrell demonstrate how problematic constructions of the "public interest" were deployed by members of the Carter administration to foreclose upon public consideration of the utility of nuclear power.[44] Goodnight's analysis of several important speeches by Ronald Reagan concerning the American nuclear confrontation with the Soviet Union and advocating the Strategic Defense Initiative illustrates the dangers of shifting the grounds of public debate from shared communicative norms toward technical questions concerning weapons and doctrines.[45]

Goodnight has also contributed to the study of public debates through his analysis of the nature and function of controversy in policy deliberations. He argues in a 1991 address that public argument scholars largely ignore the nature of controversy itself as they pursue their

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[43] Ibid., 224.

[44] Thomas B. Farrell and G. Thomas Goodnight, "Accidental Rhetoric: The Root Metaphors of Three Mile Island," in *Landmark Essays on Rhetoric and the Environment*, ed. C. Waddell, (Mahwah, NJ: Hermagoras Press, 1981/1998), 75-106.

[45] G. Thomas Goodnight, "Ronald Reagan's Re-formulation of the Rhetoric of War: Analysis of the 'Zero Option,' 'Evil Empire,' and 'Star Wars' Addresses," *Quarterly Journal of Speech* 72 (1986): 390-414. Several other scholars have analyzed these speeches. See Janice Hocker Rushing, "Ronald Reagan's 'Star Wars' Address: Mythic Containment of Technical Reasoning," *Quarterly Journal of Speech 72* (1986): 415-433; Kenneth S. Zagacki and Andrew King, "Reagan, Romance, and Technology: A Critique of 'Star Wars," *Communication Studies 40* (1989): 1-12; Rebecca S. Bjork, *The Strategic Defense Initiative: Symbolic Containment of the Nuclear Threat* (Albany: State University of New York Press, 1992); and Rachel L. Holloway, "The Strategic Defense Initiative and the Technological Subline: Fear, Science and the Cold War," in *Critical Reflections on the Cold War*, ed. M. J. Medhurst and H. W. Brands (College Station: Texas A&M University Press, 2000), 209-232.

analyses of public controversies. Goodnight calls upon rhetorical critics to consider whether and how controversies arise in the face of public problems, turning their attention to how speech acts advancing oppositional perspectives are able to problematize public deliberation, contest underlying social consensus, and spark a search for mutual understanding that can lead to coordinated, corrective social action.[46] Writing with rhetorical scholar Kathryn Olson, Goodnight argues that controversy can effectively expand the public sphere by "rendering evident and sustaining challenges to communicative practices that delimit the proper expression of opinion and constrain the legitimate formation of judgment within personal and public spheres."[47] This perspective suggests that controversies can be studied as opportunities to expand the topics available for public deliberation if they are effective at fostering public debate in what the later Habermas describes as opinion-formation deliberative spaces.[48] Efforts to challenge foreign policy doctrines can thus be assessed to determine whether they are successful in problematizing the communicative practices and norms that sustain those doctrines. Habermas' work remains highly influential, but it has also received serious criticism and undergone significant revision. A number of public sphere theorists, most prominently Nancy Fraser and Rita Felski, have posited that public sphere theory would be both more accurate as a description of actual politics and more useful as a prescription for government policy reform and analysis if it were modified to be more inclusive and less committed to bourgeois rationality.[49]

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[46] G. Thomas Goodnight, "Controversy," in *Argument in Controversy: Proceedings of the Seventh AFA/SCA Conference on Argumentation* ed. D. Parsons (Annandale, VA: Speech Communication Association, 1991), 1-13.

[47] Kathryn M. Olson and G. Thomas Goodnight, "Entanglements of Consumption, Cruelty, Privacy and Fashion: The Social Controversy Over Fur," *Quarterly Journal of Speech 80* (1994): 249-276.

[48] Habermas, *Between Facts and Norms*, 449-450.

[49] Nancy Fraser, "Rethinking the Public Sphere: A Contribution to the Critique of Actually Existing Democracy," in *Habermas and the Public Sphere*, ed. Craig Calhoun, (Cambridge: Massachusetts Institute of Technology Press, 1992), 109-142 and Rita Felski, *Beyond Feminist Aesthetics: Feminist Literature for Social Change*, (Cambridge, MA: Harvard University Press, 1989).

The intersection of nuclear deterrence and the public sphere is addressed by rhetorical scholar Erik W. Doxtader, who argues that the threat of total war in the nuclear age subverts public debate about nuclear weapons. Nuclear weapons create a disturbing paradox where their very existence undermines the meaning of public debate because "the terms of collective-political life develop only within the institutionalized threat of their destruction."[50] Doxtader maintains that this threat of total war is used by public institutions to foreclose upon public debates about nuclear weapons, which are seen as threatening the public's important national security interests. He writes that nuclear deterrence creates a "complex system of institutional power" that is able to utilize vague threats and appeals to a pre-determined public interest, thus using "the future risk of war" as a justification for "why citizens ought not question or criticize the value of military policy."[51] In exploring these arguments through a series of case studies highlighting changes in institutional justifications for nuclear deterrence at different moments during the Cold War, Doxtader develops three major themes. First, he argues that deterrence is an inherently communicative practice wherein parties level threats against each other. Second, he maintains that nuclear policy should and does represent public interests, although not necessarily in the ways offered by government advocates. Finally, he claims that nuclear declaratory argument "renders the institutional representation of public interests paradoxical" by predicating the existence of public life upon a willingness to destroy it.[52]

Doxtader offers a useful formulation of how to utilize Habermas' theories of argumentation in critiques of institutional arguments. He observes that institutions rely upon argumentation to "interpret public interest in order to define, articulate, and support the norms

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[50] Erik W. Doxtader, "Total War and Public Life: A Critical Theory of American Nuclear Deterrence Policy" (PhD diss., Northwestern University, 1997), 1.
[51] Ibid., 6.
[52] Ibid., 13-18.

that sustain public life."[53] Doxtader cautions that institutional arguments about the public good often deploy instrumental rationalities that undermine the ability of individuals to "articulate visions of collective interest" that run counter to those of the institutions themselves. He argues that Habermas' theory suggests two avenues of analysis of the intersection between public deliberation and institutional argument. First, because argumentation creates and "sustains systems of rational coordination," studying institutional justifications permits an analysis of how "communication establishes norms of truth, representation and power." Second, institutional argument norms and practices can be evaluated to determine if they "invite reciprocal participation or if they enact a form of violence in which opportunities for deliberation are foreclosed."[54] Thus critics of institutional discourses should assess the level of inclusiveness and openness to meaningful communicative exchange evidenced in particular nuclear policy debates.

Thomas Risse of the European University Institute in Florence, Italy, offers a cross-disciplinary perspective on the applicability of argumentation and public sphere theory to the study of foreign policy controversies. Risse argues that Habermas' theories of argumentation can be deployed in tackling empirical questions in world politics, offering a way around the theoretical log-jam created by the contest between social construction and rational choice theory in the study of international relations. Risse claims that focusing on argumentation in critiquing international politics is useful for two reasons. First, it increases the collective understanding of how actors develop common knowledge concerning both the definition of a given situation and the underlying rules of the game that structure their interactions in the first place. This perspective suggests that argumentation is a vehicle for problem solving that directs actors

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[53] Erik. W. Doxtader, "Learning Public Deliberation through the Critique of Institutional Argument," *Argumentation and Advocacy 31* (Spring 1995): 185-203.
[54] Doxtader, "Total War," 29-31.

toward a reasoned consensus that surmounts collective action problems. Second, argumentative rationality is linked to the constitutive, rather than regulative, role of communicative norms, permitting an analysis of how international actors explore and contest validity claims concerning those norms. Drawing from Habermas, Risse suggests three forms of communication are evident in different international (and domestic) deliberative settings, including bargaining from fixed preferences, rhetorical action that uses argumentation in a strategic mode to justify preferences to persuadable audiences, and true communicative action directed toward reaching a consensus with others, which by necessity opens actors to the possibility of changing their preferences, norms, and identities in light of a better argument.[55] Risse's observations suggest that public controversies can be analyzed descriptively, in terms of what type of communicative (strategic, rhetorical, argumentative) behavior they suggest, and normatively, based upon their inclusiveness, transparency, and commitment to reaching a consensus that leads to coordinated action. Many American communication scholars have tackled some of these questions in a variety of foreign policy contexts.[56]

Other scholars have addressed the possibility of the development of "transnational public spheres," positing that the deliberative opinion- and will-formation spaces described by Habermas are not necessarily confined by national borders. Public argument scholar Gordon Mitchell suggests both that public debates occur among individuals and institutions across

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[55] Risse, "Let's Argue!" 14-23.
[56] Notable examples include: G.T. Goodnight, "Strategic Doctrine, Public Debate and the Terror War," *Working Paper*, Ridgway Working Group on Preemption and Preventive Military Intervention, 2006, accessed November 25, 2010, http://www.ridgway.pitt.edu/working_papers/hittingfirst/Goodnight%20formatted%20final.pdf, G.Thomas Goodnight, "Public Argument and the Study of Foreign Policy," *American Diplomacy* 3:3 (1998), accessed November 25, 2010, http://www.unc.edu/depts/diplomat/AD_Issues/amdipl_8/goodnight.html; William W. Keller and Gordon R. Mitchell, "Preventive Force: Untangling the Discourse," *Working Paper*, Ridgway Working Group on Preemptive and Military Intervention, 2006, accessed November 25, 2010, http://www.ridgway.pitt.edu/working_papers/hittingfirst/KellerMitchellCh12HF.pdf; and Rodger A. Payne, "Deliberating Preventative War: The Strange Case of Iraq's Disappearing Nuclear Threat," *Working Paper*, Ridgway Working Group on Preemptive and Military Intervention, 2006, accessed November 25, 2010, http://www.ridgway.pitt.edu/working_papers/hittingfirst/Payne%20formatted%20final.pdf.

national boundaries and that bolstering the effectiveness of such transnational spheres offers possibilities for resisting and transcending the hostilities and power-politics that seem to be the "warp and woof" of contemporary international relations.[57] Communication scholar Marie A. Mater makes a similar observation in her analysis of the use of new communications technologies by non- and inter-governmental organizations.[58] The recent edited volume *Restructuring World Politics: Transnational Social Movements, Networks, and Norms* contains perspectives from a number of disciplines that demonstrate the emergence of increasingly international 'publics' concerned with issues ranging from globalization to human rights to development policy.[59] This body of literature points rhetorical critics toward the advocacy strategies employed in public controversies in both formal and informal 'domestic' venues and progressively more prominent 'transnational' settings.

1.2.3 Nuclear Rhetorical Criticism and 'Nukespeak'

Engagement with the possibilities and problems of nuclear weapons policy has a long and proud tradition in the field of communication studies, as noted in a lengthy review essay by Taylor. Taylor observes that a flurry of interest in questions of nuclear deterrence doctrines and their legitimacy animated a diverse and productive body of scholarship during the Cold War. Nuclear-centered works included dozens of journal articles and conference presentations, and witnessed

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[57] Gordon R. Mitchell, "Japan-U.S. Missile Defense Collaboration: Rhetorically Delicious, Deceptively Dangerous," *Fletcher Forum of World Affairs* 25 (Winter 2001): 85-108.
[58] Marie A. Mater, "A Structural Transformation for a Global Public Sphere? The Use of New Communication Technologies by Nongovernmental Organizations and the United Nations," in *Counterpublics and the State*, ed. R. Asen & D. C. Brouwer (Albany: State University of New York Press, 2001), 210-234.
[59] *Restructuring World Politics: Transnational Social Movements, Networks, and Norms*, ed. S. Khagram, J. V. Riker, and K. Sikkink, (Minneapolis: University of Minnesota Press, 2002).

the dedication of complete issues in two journals to the subject.[60] Taylor argues that two modes of inquiry emerged during this time period, one "metatheoretical," embracing "Derridean textualism to critique the possibilities of valid nuclear-critical discourse," and the other "pragmatic," which analyzed texts with the goal of ethnical intervention in public deliberation."[61] The "pragmatic" orientation found itself "concerned with the unique structural properties (such as metaphor and fantasy themes) and strategies (such as domestication and bureaucratization)," while the text-oriented post-structuralists drew "on post-structuralist theories of deconstruction and intertextuality, as well as Bakhtinian theories of dialogism to emphasize the constitutive and relational properties of linguistic and iconic "utterances."[62] In an earlier work, Taylor summarizes a largely shared conclusion of this diverse group of scholars, noting that "nuclear critics have coined the term "nukespeak" to describe a hegemonic form of mass media and foreign policy rhetoric that mystifies the Bomb, pretends to neutrality and rationality, and habituates citizens to its continued presence."[63]

Taylor's essay notes that five "conversations" were advanced within this body of scholarship, including: 1) a series of foundation studies surrounding the legitimation of nuclear power; 2) analyses of the "adequacy of deliberative resources and processes;" 3) explorations of the use of nuclear weapons as a location of reactionary Cold War rhetoric; 4) analyses of the "rhetorical management" of nuclear weapons by U.S. presidents; and 5) assessments of the interplay of nuclear interests in the public sphere.[64] However, he observes that many noted

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[60] See Special issue on argumentation in the nuclear age, *Journal of the American Forensic Association 24:3* (1988) and Special issue on nuclear communication, *Journal of Communication 39:1* (1989).
[61] Bryan C. Taylor, "Nuclear Weapons and Communication Studies: A Review Essay," *Western Journal of Communication* 62:3 (1998), 301.
[62] Taylor, "Nuclear Weapons and Communciation Studies," 306..
[63] Bryan C. Taylor, "The Politics of the Nuclear Text: Reading Robert Oppenheimers' *Letters and Recommendations*," *Quarterly Journal of Speech 78* (1992): 429.
[64] See Taylor, "Nuclear Weapons and Communication Studies," esp. 304-306.

communication scholars previously engaged in nuclear criticism have left the field to pursue other interests, or even other career paths.[65] However, Taylor also notes that a few communication scholars, particularly G.T. Goodnight, still insist that "international crises remain available for prosecution by weapons-possessing states, as 'problems' requiring 'nuclearist' solutions," meaning that the Cold War "may yet be read as simply the opening chapter in the evolving nuclear age."[66] Taylor concludes his essay with a call to other communication scholars to "collectively maintain a comprehensive focus on the nuclear weapons apparatus."[67]

In writing about her study detailing her experiences observing "inside" the nuclear force and strategy planning establishment, sociologist Carol Cohn argues that the discourse utilized in nuclear planning has dangerous consequences, both for individuals within the nuclear establishment and for persons debating and deliberating about the role of nuclear weapons. Cohn develops this point in a 1987 article published in the *Bulletin of the Atomic Scientists*.

> Technostrategic language articulates only the perspective of the users of nuclear weapons, not the victims. Speaking the expert language not only offers distance, a feeling of control, and an alternative focus for one's energies; it also offers escape from thinking of oneself as a victim of nuclear war. No matter what one deeply knows or believes about the likelihood of nuclear war, and no matter what sort of terror or despair the knowledge of nuclear war's reality might inspire, the speakers of technostrategic language are allowed, even forced, to escape that awareness, to escape viewing nuclear war from the position of the victim, by virtue of their linguistic stance. I suspect that much of the reduced anxiety about nuclear war commonly experienced by both new speakers of the language and longtime experts comes from characteristics of the language itself: the distance afforded by its abstraction, the sense of control afforded by mastering it, and the fact that its content and concerns are those of the users rather than the victims. In learning the language, one goes from being the passive, powerless victim to being the competent, wily, powerful purveyor of nuclear threats and nuclear explosive

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[65] Ibid., 309.
[66] Ibid.
[67] Ibid., 311.

power. The enormous destructive effects of nuclear weapons systems become extensions of the self, rather than threats to it. [68]

The discourse of nuclear strategy, which Cohn identifies as an example of technostrategic discourse, distances its users from the consequences of using nuclear weapons while creating a powerful feeling of control over their use. In a later passage Cohn argues that this sense of mastery of "nuclearist" language encourages risk-taking and belligerent political stances concerning the potential use of nuclear weapons. Likewise, she claims that the abstract nature of nuclear language eases public opposition to nuclear weapons by deflating the threat of mass destruction.[69] The discourse of nuclear weapons thus anesthetizes its practitioners from the consequences of nuclear war while deflecting public opposition to what Cohn describes as the "masculine world of nuclear planning."[70] From a rhetorical perspective, her work highlights the powerful effects that what Goodnight describes as "the discourse of the technical sphere" can have upon political deliberations about the role of nuclear weapons. [71]

Drawing from a wide range of both rhetorical criticism and other critiques of the effects of nuclear discourse, rhetorical scholar Edward Schiappa provides a detailed overview of many of the problems associated with nuclear language. He equates "nukespeak," a term coined by a group of British linguists[72] with "terministic screens," extending Burke's analysis that "terminologies direct our attention by *selecting* some aspects of reality to focus on and *deflecting*

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[68] Carol Cohn, "Slick'ems, Glick'ems, Christmas Trees, and Cookie Cutters: Nuclear Language," *Bulletin of the Atomic Scientists* (June 1987): 22. See also Carol Cohn, "Sex and Death in the Rational World of Defense Intellectuals," *Signs: Journal of Women and Culture in Society 12* (1987): 687-718.
[69] Cohn, "Slick'ems," 24.
[70] Ibid., 19.
[71] Goodnight, "The Personal, Technical, and Public,",214-217.
[72] Stephen Hilgartner, Richard C. Bell and Rory O'Connor, *Nukespeak* (New York: Penguin Books, 1982), xiv.

others."[73] Schiappa applies this concept to participants and audiences in nuclear deliberations, observing that:

> the likely consequence of nukespeak is that its users will tend to understand nuclear weapons, strategy, and war as benign or beneficial rather than repulsive and horrifying. This hypothesized result is supported by reports of the military establishment and by an observer of military 'culture.'[74]

Nuclear rhetoric thus structures both the ability of speakers to understand the consequences of nuclear weapons and distances practitioners of nukespeak from the realities of nuclear war.

Schiappa is also concerned with the effects of an uncritical spread of the use of nukespeak upon both the audiences of nuclear policy debates and the general public. He argues that the highly technical nature of nuclear discourse limits the agency of participants and audiences within nuclear debates because those in power define the terms through which the debate can occur. Members of the public are denied access to nuclear weapons decision-making because its technical aspects are structured in ways that rig dialogue to support the perspectives of the nuclear establishment.[75] Schiappa identifies two mechanisms of nuclear discourse that potentially debilitate meaningful debate about the role of nuclear weapons. The first, which he identifies as "domestication," involves translating nuclear discourse into so-called "everyday language." Phrases such as "nuclear exchange," "nuclear umbrella," "bargaining chips," and "richer options" have the effect of making nuclear war more palatable to the public. Similarly, the domestication of nuclear weapons weakens public deliberation about nuclear weapons

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[73] An important nukespeak text is Stephen Hilgartner, Richard C. Bell and Rory O'Connor, *Nukespeak* (New York: Penguin Books, 1982). See also Edward Schiappa, "The Rhetoric of Nukespeak," *Communication Monographs 56* (1989): 251-272 and Edward Schiappa, "Naming as Argument by Definition: The Case of "Nukespeak"," in *Defining Reality: Definitions and the Politics of Meaning*, (Carbondale, IL: Southern Illinois University Press, 2003), 130-150. See also Kenneth Burke, *Language as Symbolic Action: Essays on Life, Literature and Method* (Berkeley: University of California Press, 1966), 44-62.
[74] Schiappa, "Rhetoric of Nukespeak," 258.
[75] Ibid., 260.

because it removes those weapons from the slate of items to be debated.[76] The second process Schiappa identifies is "bureaucratization," which includes both a proliferation of acronyms and technical jargon relating to nuclear weapons and planning for a nuclear war. Acronyms such as MIRV, ICBM, LOW, EMP, and START, and phrases like "radiological emergency," "survivability," and "anticipatory counterattack," he argues, serve to distance the practitioners of nuclear discourse from the consequences of their imagined actions, both lending a false sense of mastery and rendering nuclear war less horrifying.[77] Domestication thus *sanitizes* nuclear discourse while bureaucratization *technologizes* it. Schiappa describes the impact of this as "render[ing] nuclear policy irrelevant or inaccessible to public deliberation and investigation."[78] Nuclear language thus insulates the nuclear establishment from public criticism and limits the horizons of potential debate about nuclear weapons.

British 'nukespeak' analysts develop a slightly different treatment of metaphor and euphemism. In the introduction to the 1982 volume *Nukespeak*, Stephen Hilgartner, Richard C. Bell, and Rory O'Connor observe that misuses of language "have consistently distorted the debate over nuclear weapons and nuclear power."[79] This argument is developed as a critique of the 'nuclear lexicon,' which they describe as "a world of doublethink" that takes traditional notions of peace and security and wraps them in the warped logic of nuclear deterrence, deploying savvy euphemisms and a "highly specialized vocabulary" in an effort to gloss over the horrific consequences of nuclear conflict.[80] In a similar vein, linguist Paul Chilton argues that the use of euphemism and metaphor by practitioners of nuclear discourse functions to obscure

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[76] Ibid.
[77] Ibid., 257.
[78] Ibid., 267.
[79] Hilgartner, *Nukespeak*, 209.
[80] Ibid.

and sanitize discussions about nuclear weapons. [81]   He also claims that "discourse producers concentrate linguistic effects at … critical discourse moments," and "mobilize meaning" by legitimizing, reifying, and dissimulating nuclear weapons and the realities of nuclear war.[82] Metaphors, which equate nuclear weapons with everyday items and concepts, and euphemisms, which deflect attention from the intended purposes and uses of nuclear weapons and strategies, Chilton maintains, suppress public opposition to nuclear weapons. In describing the effects of euphemisms, he claims that they are "thus always a potentially ideological tool of language," and thus are a powerful tool of the nuclear establishment. The replacement of plain language with vague euphemisms in public debates about nuclear weapons removes the horrors of such weapons from the public eye.

Rhetorical critic Charles Kauffman makes a similar observation when he argues that euphemistic descriptions of weapons, policies, and effects, particularly the "Peacekeeper" MX missile system, which was the subject of considerable controversy in the 1980s, serve to mislead the public and obfuscate the effects of nuclear weapons.[83] Richard Delgado, a prominent legal scholar, describes the effects of metaphors in nuclear debates as "reinforc[ing] the audience's unconscious response mechanisms that block out the threat." He argues that "these analogies convey the idea that the events they describe are regular and predictable, even law-like. The disaster that may be only one miscalculation or misjudgment away remains hidden."[84]

Contemporary criticism of the American nuclear weapons policy has concerned itself with both the legacy of the nuclear weapons complex and efforts to "maintain" nuclear

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[81] Paul Chilton, "Words, Discourse, and Metaphors: The Meanings of Deter, Deterrent, and Deterrence," *Language and the Nuclear Arms Debate: Nukespeak Today* (Dover, NH: Francis Publishers, 1985), 103-130 and Paul Chilton, "Metaphor, Euphemism and the Militarization of Language," *Current Research on Peace and Violence 1* (1987): 7-19.
[82] Chilton, "Metaphor, Euphemism," 17.
[83] Charles Kauffman, "Names and Weapons," *Communication Monographs 56* (1989): 282-283.
[84] Richard Delgado, "The Language of the Arms Race: Should the People Limit Government Speech?" *Boston University Law Review 64* (1984): 968-9.

institutions and policies. [85] After tracing the history of the Stockpile Stewardship Program (SSP) and its relationship to both international limits on nuclear testing and the perceived need to develop new nuclear weapons and capabilities, Taylor and Hendry develop the argument that public argument strategies in defense of the SSP are typical of those found in other post-Cold War deliberative settings in five respects. First, the arguments are designed to sustain the nuclear institutions through the crisis of legitimacy posed by the end of the Cold War. Second, the arguments fostered a rhetoric of "nuclear guardianship" that places the control over nuclear weapons and policies with the nuclear elite. Third, these discourses continue to employ euphemism and professional codes as a means of domesticating and bureaucratizing nuclear weapons development, limiting opportunities for adequate public oversight and dissent. Fourth, pro-nuclear arguments still tend to naturalize nuclear weapons as "noncontingent artifacts" of U.S. national security policy, and finally, such arguments tend to minimize the current and historic risks of nuclear weapons policy and development.[86] Another recent study by Taylor draws upon theorist William E. Hudson's analysis of challenges to democratic governance related to the rise of the national security state in arguing that four "interrelated sites of rhetorical power and resistance" are evident in contemporary nuclear policy debates—secrecy, centralization, repression, and distortion—and that these sites represent critical nodes for contesting the legitimacy of the nuclear establishment and its policies.[87]

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[85] See especially *Nuclear Legacies: Communication, Controversy, and the U.S. Nuclear Weapons Complex*, ed. Bryan C. Taylor, William J. Kinsella, Stephen B. Depoe, and Maribeth S. Metzler (Lanham, MD: Lexington Books, 2007).
[86] Taylor and Hendry, "Insisting on Persisting."
[87] See Bryan C. Taylor, "The Means to Match Their Hatred: Nuclear Weapons, Rhetorical Democracy, and Presidential Discourse," *Presidential Studies Quarterly* 37:4 (December 2007), 667-692. See also William E. Hudson. *American Democracy in Peril: Eight Challenges to America's Future* (Washington, DC: CQ Press, 2004).

1.2.4   Other Disciplines

In their influential and controversial work *Indefensible Weapons*, psychologist Robert Jay Lifton and political scientist Richard Falk describe the political and psychological effects of nuclear weapons, detailing what they call "nuclear numbing," a process through which the public and policy makers become increasingly desensitized to the consequences of nuclear deterrence doctrines and the potential use of nuclear weapons. Lifton writes that nuclear numbing is perpetuated by a series of experts who work as "hired anesthetists" that both ignore the effects of nuclear war upon its victims while "conveying the sense that nuclear matters are completely under control" because the knowledgeable professionals have a firm grasp of the situation.[88] Nuclear numbing is a psychological process that is perpetuated by an increasing technicization of nuclear weapons and nuclear discourse. Lifton's argument differs from the work of nukespeak and nuclear rhetorical critics in its emphasis on the role of psychological health in political debates. Although Lifton and Falk have been justifiably criticized for having an overly-deterministic view of the effects of language and for providing relatively scant evidence for their broader claims, they still raise the important point that nuclear discourse does tend to remove nuclear weapons from public debate, both through bolstering public faith in 'nuclear priests' and by sanitizing the potential consequences of the use of nuclear weapons.[89] Lifton, writing with psychologist Eric Markusen, has also explored the desensitizing psychological effects of a willingness to use nuclear weapons upon politicians and members of the nuclear establishment,

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[88] Robert J. Lifton and Richard Falk, *Indefensible Weapons: The Political and Psychological Case Against Nuclearism* (New York: Basic Books, 1982), 107.
[89] See Doxtader, "Total War."

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arguing that the "otherization" and "demonization" used to justify the use of nuclear weapons increases the possibility of their use.[90]

Lifton and Falk make another important contribution to the study of public deliberations about nuclear weapons with their discussion of the argumentative strategies used to mask the inherent dangers of nuclear weaponry and deterrence doctrines from the attention of both nuclear experts and the public. Lifton describes a series of "nuclear illusions" that obfuscate the purported irrationality of nuclear weapons policy. The central illusion is one of 'limit and control," tied to the concept that nuclear war is both survivable and winnable, perpetuated by, among many others, military analysts Keith B. Payne and Colin Gray in their famous 1980 essay "Victory is Possible."[91] Lifton describes this illusion as resting upon the "assumption that a pre-planned combination of bold, limited nuclear action and equally bold, more or less *unlimited* nuclear threat can enable us to *control* the situation and keep it limited."[92] Tied to this illusion of control is the "illusion of fore-knowledge," which presupposes that a planner can know the effects of a nuclear war, the "illusions of preparation and protection," which posit that civil defense measures can limit nuclear casualties, the "illusion of stoic behavior of nuclear attack," which hearkens to Herman Kahn's concerns that the public should be trained to behave "rationally" when atomic bombs are falling in their backyards, and the "illusion of recovery," which argues that an industrial society can rapidly rebuild even after a large nuclear strike.[93] Whether these "illusions" reflect the realities of nuclear war planning and the actual fighting of a nuclear war is open to debate, but they are suggestive of areas of weakness within the nuclear establishment's case for reliance upon nuclear deterrence. Thus a critic interested in exploring

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[90] Robert J. Lifton and Eric Markusen, *The Genocide Mentality: Nazi Holocaust and Nuclear Threat*, (New York: Basic Books, 1990).
[91] Keith B. Payne and Colin Gray, "Victory is Possible, *Foreign Affairs 36* (Summer 1980): 14-27.
[92] Lifton, *Indefensible Weapons*, 15-16, emphasis in original.
[93] Ibid., 16-21.

the justifications for such policies, as Lifton suggests, should pay careful attention to claims of control, rationality, and recovery advanced by nuclear advocates.[94]

Finally, Lifton suggests that a veil of secrecy and removal of nuclear weapons from public scrutiny plays a critical role in perpetuating their continued relevance to security concerns. He describes a process where additional research and new "secrets" of the bomb create a cadre of "nuclear priests" that assume responsibility for ensuring the utility and safety of nuclear arsenals and deterrence doctrines. Nuclear advocates thus use security concerns tied up in the larger nuclear complex as tools to stifle public debate by guaranteeing "perpetuation of dangerous self-deception and the prevention of the kind of informed exchange that might result in more constructive policies."[95] This observation echoes Doxtader's arguments concerning the 'nuclear paradox,' where institutional representatives use the purportedly destabilizing effects of nuclear criticism as a justification for foreclosing upon public debate about nuclear weapons and policies.[96]

Anthropologist and long-time peace activist Hugh Gusterson offers a second perspective on the psychological and sociological aspects of nuclear weapons culture. Describing his extensive interactions with nuclear weapons scientists in the 1996 text *Nuclear Rites*, Gusterson argues that the builders of nuclear weapons are not as distanced from the ethical aspects of their work as Lifton and Falk would suggest. Instead, he contends that many scientists justify their work on the premise that nuclear deterrence strategies decrease the probability of both nuclear and conventional conflict, and thus save innocent lives. The researchers' support of nuclear

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[94] Lifton also suggests that critics be suspicious of claims to rationality He writes: "In all nuclear weapons discourse we must be on guard for such bootlegging of claims to reason and rationality. For the builders of such "rational systems" – of weapons and ideas – are, like the rest of us, confronted by an image they really do not know how to cope with, and seek desperately to call forth, however, erroneously, the modern virtue of reason." Ibid., 22.
[95] Ibid., 31.
[96] Doxtader, "Total War," 1-4.

policies, Gusterson maintains, is more a result of the culture of secrecy surrounding the development and construction of nuclear weapons than nuclear numbing. Restrictions on the exchange of views between scientists shifted interactions to questions on the technology of nuclear weapons, precluding discussions about the moral implications of nuclear weapons.[97] Gusterson's work provides an important cautionary note about the dangers of nuclear deterrence's psychological effects, and how they shape discursive norms within the nuclear establishment to constrain free and open debate about nuclear weapons. In a recent article in the *Bulletin of the Atomic Scientists*, Gusterson also warns that a similar co-option of latent anti-nuclear dissent was likely as the Bush administration used recent arms control initiatives as a means of insulating its relatively aggressive force posture from public criticism.[98]

The role of language and metaphor in American political discourse is also the subject of framing theory, most prominently developed in several works by cognitive linguist George Lakoff. In his widely read *Moral Politics*, Lakoff argues that contemporary American politics can be described as a competition between the liberal "nurturing parent model" and conservative "strict father model" of politics.[99] These frames provide schema for the interpretation of political controversies, both allowing their practicioners to frame problems and solutions in terms familiar to the audience and permitting advocates to play upon audience pre-judgments about the "rightness" of particular policies. Communication scholar Jim A. Kuypers deploys framing analysis in both the study of the new media and in rhetorical criticism, particularly presidential

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[97] Hugh Gusterson. *Nuclear Rites: A Weapons Laboratory at the End of the Cold War* (Berkeley: University of California Press, 1996).

[98] Hugh Gusterson, "Tall Tales and Deceptive Discourses," *Bulletin of the Atomic Scientists* (November/December 2001): 65-68.

[99] George Lakoff, *Moral Politics: How Liberals and Conservatives Think* (University of Chicago Press, 1996/2001).

crisis rhetoric and the Bush administration and media's framing of the war on terrorism.[100]

Kuypers, Cooper and Althouse describe framing as a "process where by communicators act … to construct a particular point of view that encourages the facts of a given situation to be viewed in a particular manner, with some facts made more or less noticeable than others."[101] They also argue that framing is a "normal part of the communication process" because of the public's need to "negotiate the massive amounts of information" that are available in the Internet Age, meaning that "framing analysis is a particularly useful way to understand the potential impact of rhetoric."[102] The question of frames was recently addressed by a meta-analysis of studies of public understandings of nuclear weapons by the advocacy group U.S. in the World. The report's authors suggest that appeals to "nuclear abolition" are unlikely to be successful in persuading the American public to support de-nuclearization policies, and instead suggest that nuclear weapons should be discussed in terms of a "risk reduction" frame to combat the prevailing "safety" frame that governs the public's understanding of nuclear weapons.[103] Earlier work with framing theory by sociologist Robert D. Benford suggests that "frame disputes" are an important point of contestation between "moderate" and "radical" anti-nuclear activists.[104]

Finally, nuclear policymaking and public deliberation has been subjected to rigorous ideological analysis that both compliments and corrects the work of Lifton, Falk and Markusen. A particularly compelling text is Joel Kovel's *Against the State of Nuclear Terror*, which explores the material underpinnings of continued technocratic control of nuclear weapons and

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[100] See especially Jim A. Kuypers, *Presidential Crisis Rhetoric and the Press in the Post-Cold War World* (Westport, CT: Praeger, 1997), Jim A. Kuypers, *Bush's War: Press Bias and the Framing of the War on Terror* (Lanham, MD: Rowan and Littlefield, 2006).

[101] Jim A. Kuypers, Stephen D. Cooper and Matthew T. Althouse, "The President and the Press: The Framing of George W. Bush's Speech to the United Nations on November 10, 2001," *American Communication Journal* 10:3 (Fall 2008), accessed November 29, 2010, http://www.acjournal.org/holdings/vol10/03_Fall/articles/kuypers_etal.php.

[102] Kuypers, Cooper, and Althouse, "The President and the Press."

[103] See U.S. in the World, "Talking About Nuclear Weapons with the Persuadable Middle," 2009.

[104] See Robert D. Benford, "Frame Disputes within the Nuclear Disarmament Movement," *Social Forces 71:3* (March 1993): 677-701.

the institutional domination of public deliberations about those weapons. Echoing Doxtader's articulation of the nuclear paradox, Kovel argues that

> we have to understand who we are in relation to the nuclear threat if it is to be brought under our control. The most critical step of all is to confront our own passivity. This means finding out how the system has kept our voices stifled all these years while its menace mounted, as well as look at our own complicity in it.[105]

Kovel posits that the nuclear establishment perpetuates itself through discourses and material practices that both solidify the control of deliberation about nuclear weapons in the hands of a technocratic elite and perpetuate a state of terror among the general public. The latter constitutes a "nuclear state of being" in which the public abdicates its individual and collective agencies and responsibility for the consequences of nuclear weapons policies to the nuclear establishment in exchange for the purported safety of nuclear deterrence. He maintains that this devil's bargain stunts the mobilization of anti-nuclear resistance forces and abdicates the field of nuclear policy deliberation to the elite. Kovel's work constitutes a late-Cold War synthesis of the 'nuclear numbing' theories of Lifton with a neo-Marxist perspective on nuclear politics and provides a reminder of the importance of the material reality of the state and its ability to quell dissent in the practice of rhetoric and its analysis.

Covering similar ground as Kovel, political theorist Stephen J. Roscow explores the implications of nuclear weapons policies for the legitimacy and legitimation of the state apparatus. Roscow argues that that efforts by institutional advocates to confine "the debate about nuclear deterrence within strategic categories" as discursive practices that create a "discipline of knowledge, or systematic scientific categories which constrain and channel debate as they

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[105] Joel Kovel, *Against the State of Nuclear Terror* (Boston: South End Press, 1984): 5.

institutionalize social power." He maintains that the existence of the nuclear state depends on legitimizing "nuclear weapons as tools of state power."[106]

1.3   RATIONALE, QUESTIONS, AND RESEARCH METHODOLOGY

Many key foreign policy debates during the Cold War centered upon the role of nuclear weapons in prosecuting the United States' conflict against the Soviet Union. Notions such as the desirability of the arms race, the morality of nuclear deterrence, the merits of arms control, and the prospective role of nuclear weapons in combat drove impassioned debates in scholarly journals, newspaper editorial pages and the floors of Congress. Although the U.S. eventually adopted a policy condoning ominous nuclear buildups and overwhelming retaliation in the face of a nuclear attack, this stance was vigorously deliberated in numerous public venues throughout the duration of the Cold War. Towering intellectuals such as Robert McNamara, Henry Kissinger, Edward Teller, Herman Kahn, Albert Wohlstetter, and other members of America's national security establishment successfully deployed the threat of Soviet domination, popularized in the mantra "Better Dead than Red," to justify a policy of nuclear deterrence. Although this deterrence policy occupied the seemingly paradoxical position that a willingness to destroy all life on earth was the only way of preserving cherished democratic freedoms, powerful argumentative strategies centering on the menace of the Soviet threat trumped reasoned, but less convincing, protests from pacifists and disarmament activists.[107]

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[106] Stephen J. Roscow, "Nuclear Deterrence, State Legitimation, & Liberal Democracy," *Polity* 21:3 (Spring 1989): 569.
[107] Doxtader, "Total War," esp. chapter 1.

The geopolitical earthquake of the Soviet Union's collapse and its aftershocks seemingly presented the opportunity to reconfigure U.S. nuclear policy and its seemingly paradoxical stance that policymakers must be willing to destroy society through nuclear weapons use in order to save it. Three central questions guide the research project. Initially, I explore how anti-nuclear activists and defenders of the nuclear establishment have responded argumentatively to the exigency posed by the end of the Cold War. Addressing this line of inquiry suggests an additional question, namely how nuclear advocates have sustained Cold War-era momentum behind nuclear strategy and weapons and why seemingly persuasive anti-nuclear arguments have failed to gain traction in post-Cold War policy deliberations. Such an analysis of the effectiveness of public discourses on both sides of contemporary nuclear policy debates necessitates determining both whether new metaphors or argument formations have begun to structure policy discussions, and whether such tactics have been effective in shifting the terms of public debate about nuclear weapons. Finally, I examine how argumentative norms have structured the discursive terrain of public post-Cold War nuclear policy deliberations, determining who can speak what to whom in what context, probing such norms both for similarities and differences with their Cold War counterparts and assessing their effectiveness in fostering meaningful public dialogue. Rhetorical analysis of the exigency posed by the end of the Cold War is especially useful because of the communicative nature of nuclear weapons and deterrence policies. As observed by Taylor,

> *rhetoric is an inherent, inevitable, and reflexive challenge* for the nuclear nation-state. Official rhetoric, in other words, must be developed and deployed in tandem with nuclear weapons to ensure that the whispers, conversations, and shouts of people do not subvert the principle ... function of those weapons as *rhetoric*.[108]

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[108] Taylor, "The Means to Match," 672. Emphasis in the original text.

Answering these questions requires utilizing many of the analytic tools honed in the analysis of Cold War rhetoric. Attention to strategic considerations is vital to understanding post-Cold War nuclear policy debates. A complete analysis requires knowing which actors are involved in these deliberations, and which are excluded. These facts are revealed by paying attention to which individuals and institutions insert themselves into a particular nuclear policy controversy, and which groups remain silent despite either obvious or subtle stakes in the outcome of the deliberations. The study also tackles the expressed and inferable goals of these actors. This information can be deducted by analyzing both the utterances of actors and their institutional interests and connections. The role of institutional and situational constraints also demands careful scrutiny. Under what institutional and situational constraints do these actors operate? What constraints are recognized, and what constraints are ignored by actors in their efforts to achieve their goals? Analyzing the prevailing social, political, and economic climate that shaped (and was shaped by) policy deliberations exposes the role of constraints in shaping policy discourse. Rhetorical strategy also influences the outcome of public debates. What rhetorical strategies were selected by these actors? Were these strategies effective in achieving each actor's objectives? What were the subsidiary effects of these rhetorical interventions? What effects do varied speakers' credibility play in the effectiveness of their arguments? These questions are addressed by scrutinizing the public pronouncements and arguments of actors and evaluating their effects upon the direction and eventual outcome of policy deliberations.

Similarly, the language and argument choices made by players in nuclear policy deliberations play an important role in shaping the form, content, and outcome of such debates. The ways in which the problems, solutions, and arguments surrounding nuclear weapons are framed structures nuclear policy discourse. Euphemism, obfuscation, governing metaphors, and

command ideas are deployed by the various actors in such debates, often with powerful effects on the outcome of the deliberations. So-called "technostrategic" discursive norms, as articulated by Goodnight, play a key role in shaping the terrain upon which the contest of argument plays. Analyzing the argument frames deployed by different actors in the debates allows both a descriptive and normative critique of the "world views" offered by the competing advocates. Proof standards and burdens affect the argument choices and effectiveness of actors. What types of evidence are deemed useful in resolving factual and normative points of contestation? How much evidence is needed to overcome presumption for or against a particular action? Which actors have presumption, and which have the burden of proving the need for change? How do these burdens vary across audiences and deliberative settings? Addressing these and other concerns demands meticulous attention to the language and argument choices made (and not made) by actors in post-Cold War nuclear policy deliberations.

Finally, there are powerful ideological elements to nuclear policy deliberation. Understanding the role of power in American nuclear policy requires that analysis take a step beyond identifying the actors evident in nuclear policy debates and connecting them to particular economic and institutional interests, including those actors and interests both inside and outside of official deliberative channels. How do secrecy and privilege empower and constrain different perspectives on the role of nuclear weapons? These and other economic, social, political, and individual material and rhetorical constraints should be connected with particular actors and interests, and the strategies and actions of these actors and interests should be evaluated both within and across different deliberative settings. Ideological analysis entails connecting arguments and actors to the underlying political climate and social forces that inform, constrain, and are reproduced by particular discourses. Drawing these connections permits an assessment of

the effectiveness of oppositional and institutional discourses in thematizing, framing, and arguing in both the larger post-Cold War deliberative environment and within the different case studies.

The stakes in the process and outcome of these nuclear policy debates could not be higher. The existence and potential use of nuclear weapons poses an existential threat to the survival of humankind, and perhaps to all life on earth. The existence of the "nuclear status quo" also bears important consequences for the health and function of both our official democratic institutions and informal deliberative spaces. Taylor observes that the "opppressive conditions of secrecy, security, centralization, and containment ... have undermined the willingness of citizens to acquire, deliberate, and act on nuclear information."[109] Taylor also notes that many anti-nuclear critiques conclude that there is a "fundamental incompatibility between nuclear weapons and the ideas of the democratic state," as the "oppressive conditions surrounding the development of nuclear weapons subvert the capabilities of citizens to acquire, deliberate, and act on information concerning nuclear policy."[110] The stakes are also enormously high for the nuclear establishment. Indeed, its very existence depends upon defeating challenges to the nuclear orthodoxy. Taylor again asserts that "normative opposition to nuclear weapons and doctrines inevitably draws into question the legitimacy of state power and is, therefore, more threatening to governmental process than a mere debate about the property of nuclear weapons as statecraft."[111] Rhetorical criticism offers the prospect of both laying bare the threat posed by the nuclear state and, if amplified, "reinvigorat[ing] the dormant nuclear-public sphere so that

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[109] Taylor and Hendry, "Insisting to Persist," 323.
[110] Taylor, "The Means to Match," 671.
[111] Taylor and Hendry, "Insisting to Persist," 323-324.

citizens--and their elected officials--can adequately deliberate issues surrounding the management of the nuclear arsenal."[112]

This study scrutinizes four distinct, but intrinsically interrelated, moments of post-Cold War nuclear discourse. First, I analyze the efforts of "fallen priests," particularly former Strategic Air Commander General Lee Butler, to pressure the U.S. and other governments to make concrete moves towards global nuclear disarmament. Arguments from such acknowledged nuclear experts would seemingly carry considerable weight in public deliberations, yet such contributions to the nuclear debate have not resulted in reduced institutional reliance on nuclear weapons. This paradox serves as a useful point of departure for rhetorical analysis on the protean nature of credibility and how rhetorical ethos plays an important role in shaping public argument. Second, I examine the controversy surrounding U.S. Senate debate on ratification of the Comprehensive Nuclear Test Ban Treaty, which represents perhaps the most visible defeat for nuclear disarmament activists in the post-Cold War era. Third, I evaluate the argument formations surrounding the debate over the Bush administration's vision for a 'post-Cold War nuclear policy,' embodied in the 2001 Nuclear Posture Review (NPR). The 2001 NPR is a particularly important rhetorical artifact because, although it has been characterized by members of the Bush administration as a clean break from nuclear deterrence, critics argue that it merely entrenches Cold War nuclear doctrines. Finally, I address the controversy surrounding efforts to develop new, low-yield nuclear weapons, so-called "mini-nukes." The public and heated debate about the desirability and efficacy of new nuclear weapons is a critical moment where the nuclear establishment attempted to ensure its relevance and legitimacy far into the future as it

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[112] Ibid., 324.

adapted nuclear logics, technologies, and infrastructures to the realities of a "new" post-Cold War threat environment.

A case study approach to analyzing post-Cold War nuclear policy deliberation is justified for several reasons. No study can hope to address such policy debates in their totality. Dozens of controversies related to U.S. nuclear and security policy, large and small, have arisen since the end of the Cold War, including such seemingly disparate issues as nuclear testing, weapons alert status, weapons disposal, arsenal size, delivery force structure, weapons security both in the U.S. and in other countries, the threat of nuclear terrorism, etc. Focusing on case studies that are typical and representative of the important issues, actors, and interests evident in post Cold War nuclear policy debates allows for carefully considered and qualified reflections on general features and trends evident in such debates as differences and similarities between the selected cases are analyzed. Such generalizations about nuclear policy debates are impossible in a project that limits itself to a single controversy. Additionally, research in such case studies sheds light on the case studies themselves, which individually constitute critical components of U.S. nuclear policy. Each case study is an important instance of policy deliberation and rhetorical intervention in its right. Finally, choosing a case study approach over a generalized analysis offers the dual strengths of sharper, more specific analysis and the ability to connect this study to a larger project exploring the multifaceted nature of nuclear and security policy deliberation through the examination of additional cases in the future.

The comparisons between the cases draw upon the several recommendations of political scientist Stephen Van Evera, and are adapted for use in rhetorical analysis.[113] Van Evera offers eleven criteria as potential considerations in the selection of strong case studies, and situates

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[113] Steven Van Evera, *Guide to Methods for Students of Political Scien*ce (Ithaca, NY: Cornell University Press, 1997).

these criteria within two overarching themes for case selection. First, cases should be selected which best serve the purposes of the theory to be tested. Second, selected cases should allow the analyst to maximize the strength and number of "tests" that they allow the investigator to perform.[114] When applied to rhetorical analysis, these two "meta-criteria" suggest that the case studies be a "good fit" with the theory to be tested, meaning the cases should highlight instances where the nuclear establishment was compelled to publicly justify particularl policy preferences in the face of stiff opposition. Good case studies should also be robust in term of the scope and size of the controversy, the number of participants, and the magnitude of the policy questions under debate, to facilitate a multivalent analysis of the rhetorics in play.

Drawing upon Van Evera's suggestions, I deployed four criteria in selecting the case studies through answering the following questions. First, is the case easily demarcated from other potential cases? Demarcation is important in facilitating cross-case comparisons, which enhance the descriptive and normative value of the theory being tested. Second, does the case involve a significant number of important actors and interests, and are these actors and interests typical of the larger realm of nuclear policy deliberation? This draws upon Van Evera's proposal that case studies should be both data rich and have intrinsic importance to understanding the phenomena being analyzed. Third, do these cases involve issues, themes, and argumentation strategies that are generally representative of nuclear policy debates as they have played out since the end of the Cold War, and do they implicate contemporary policy questions? This question reflects Van Evera's suggestion that the background conditions of selected cases have bearing on current policy controversies.[115] Finally, does each case study offer unique insight into one or more distinctive elements of nuclear policy discourse? A "uniqueness" criterion is

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[114] Van Evera, *Guide to Methods*, 78.
[115] See Van Evera, *Guide to Methods*, 76-77.

necessary to both keep manageable the size of the study and to avoid unnecessary duplication of effort by both the researcher and the readers.

Obviously, the selection of cases for this kind of study involves something of a "chicken and egg" problem where analysts cannot be certain that they have chosen their cases well until after they have concluded their analysis. A justification for each case study is outlined in the following section. Although one could make a relatively robust case for including an analysis of the extension of the Nuclear Nonproliferation Treaty (NPT) in both 1995 and 2000, the domestic debate over funding for the Cooperative Threat Reduction (CTR, or Nunn-Lugar) program, or the challenge leveled against maintaining American nuclear forces on high alert status, there are also strong reasons for limiting the scope of this study. First and foremost, the inclusion of even a fifth additional case would have rendered an already large project too unwieldy. For example, cross-case comparisons become exponentially more complex as a study moves from three, to four, to five cases. The added complexity can only be justified if an additional case study added a unique and necessary perspective on the research questions, and this is clearly not the case with any of the suggested case studies. Second, these additional cases can and should be the subject of additional work as part of a larger research project tracking the evolution of post-Cold War nuclear policy deliberations. Even if some incremental benefit to including any of these or other potential cases in this study is lost for now, such benefit will hopefully be captured in subsequent work. Each of the suggested case studies also has limitations. The NPT extension involved little domestic public or legislative debate, and the international aspects of the deliberations both centered on and were largely addressed by analyzing the CTBT. Similarly, the CTR debate plays out largely as a question of spending priorities, with advocates of nonproliferation initiatives scrambling over tight foreign aid monies with other popular programs such as landmine

clearance, child nutrition, and HIV/AIDS prevention and treatment. Justifying exclusion of the "launch on warning" controversy is, on its surface, a trickier proposition. However, the heart of this controversy, namely the role of nuclear weapons and deterrence in promoting American security interests, is also covered extensively in the debate about the 2001 Nuclear Posture Review.

Scholarship is an inherently political enterprise. The analysis that follows is designed to both advance our discipline's understanding of the evolving nature of public debates about nuclear weapons and nuclear policies, and to serve as an intervention into those debates. I take seriously the challenge raised by Peterson, who notes in a recent anthology analyzing discursive structures around the legacy of the American nuclear weapons complex that:

> rhetoric traditionally has focused on communication as it is politically contested. Consistent with its connection to the classical tradition dating at least from the sophists' and Aristotle's attempts to systematize an approach that would enable citizens to participate rationally in their own governance, rhetoric's practical utility for citizens of democratic regimes has been its most enduring *raison d'être*. Despite the fact that rhetorical studies attempt to provide insights into contemporary political concerns, it is increasingly difficult for a growing number of citizens to imagine how these insights can be translated back to the practical, problem-oriented contexts where political deliberations transpire. Given its political roots and continued justification, I find the fact that rhetorical analysis sometimes offers limited textual insight, promising practical political value in some distant or idealized future, especially problematic.[116]

A purpose of this study is to provide, as Foucault suggests, "a ramified, penetrative perception of the present, one that makes it possible to locate lines of weakness, strong points, positions where the instances of power have secured and implanted themselves...."[117] Mapping the terrain of discourse, Foucault argues, opens sites of resistance against the nuclear

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[116] Tarla Rai Peterson, "Nuclear Legacies and Opportunities for Politically and Ethically Engaged Scholarship," in *Nuclear Legacies: Communication, Controversy, And The U.S. Nuclear Weapons Complex*, ed. Bryan C. Taylor, William J. Kinsella, Stephen B. Depoe, and Maribeth S. Metzler (Lanham, MD: Lexington Books, 2007), 249.
[117] Michel Foucault.,"Body/Power." *Power/Knowledge: Selected Interviews and Other Writings, 1972-1977*, ed. Colin Gordon (New York, NY: Pantheon/Random House Books, 1980), 62.

establishment. However, I do not share Foucault's skepticism of the utility of scholarship *as* political activity unto itself. As such, this work both informs and propels my own political activity and suggests several strategies aside from rhetorical criticism for any readers interested in engaging in contemporary nuclear policy debates.

2.0 THE FALLEN NUCLEAR PRIEST

Some may find it surprising that the United States has a long history of former military commanders "turning coat" against the national security establishment, publicly arguing in their post-retirement lives that armaments, military spending, and aggressive national security postures should be curtailed. Most famously, President Dwight D. Eisenhower, a retired four-star U.S. Army general credited with leading the Allied forces in defeating Nazi Germany during World War II, warned in his farewell address about the growing dangers of the military-industrial complex and the need to expand civilian control of national security and procurement policy.[1] Likewise, several former military officials have also cautioned against the drawbacks of the nuclear arms race and the continued reliance on nuclear deterrence postures as a cornerstone of American security policy, including officials with direct professional experience working as cogs in the nuclear establishment. For example, the 1996 "Statement by Generals and Admirals of the World Against Nuclear Weapons," which questioned the efficacy of deterrence policy and called for severe limitations on the roles and missions of nuclear weapons and for their eventual abolition, was signed by no fewer than sixty retired military officers, including many

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[1] Dwight D. Eisenhower, "Farewell Address," January 17, 1961, accessed July 3, 2010, http://www.eisenhowermemorial.org/speeches/19610117%farewell%address.htm. The relevant passage occurs in the middle of the address, where Eisenhower notes that, "In the councils of government, we must guard against the acquisition of unwarranted influence, whether sought or unsought, by the military-industrial complex. The potential for the disastrous rise of misplaced power exists and will persist. We must never let the weight of this combination endanger our liberties or democratic processes. We should take nothing for granted. Only an alert and knowledgeable citizenry can compel the proper meshing of the huge industrial and military machinery of defense with our peaceful methods and goals, so that security and liberty may prosper together."

Americans.[2] Notable dissenters from the nuclear orthodoxy include General Andrew J. Goodpaster, a former NATO Supreme Allied Commander, Europe, who has called for eventual nuclear abolition and Stansfield Turner, a retired U.S. Navy Admiral and former Director of Central Intelligence in the Carter administration, who has advocated a three-step plan that would de-alert, de-value, and ultimately disarm nuclear arsenals.[3] Post-retirement dissent is hardly unique to the American military establishment—in fact, more than forty foreign admirals and generals signed the Statement.[4]

Perhaps the most prominent "turncoat" critic of a continued reliance on nuclear deterrence postures following the end of the Cold War is General George Lee Butler, a career United States Air Force officer who retired as the last commander in chief of the U.S. Strategic Air Command in 1994.[5] Butler intentionally remained out of the public spotlight during the first two years of his post-military life, but in 1996 chose to go public with his concerns about what he saw as the continued entrenchment of Cold War-era nuclear policies and strategy, and he quickly assumed a role as one of the most vocal proponents of an international campaign to

[2] "Statement by Generals and Admirals of the World Against Nuclear Weapons," December 5, 1996, accessed January 15, 2010, http://www.ccnr.org/generals.html. American signatories number many retired officers, including: Lt. General Julius Bector, Major General William F. Burns, Real Admiral Eugene Carroll, Lt. General John H. Cushman, General Jorhn R. Galvin, Admiral Noel Gayler, General Charles A. Horner, Real Admiral Robert G. James, General Andrew O'Meara, Lt. General Robert E. Pursley, Vice Admiral William L. Read, General Bernard W. Rogers, Lt. General George M. Seignious II, Vice Admiral John J. Shanahan, General William Y. Smith, and Vice Admiral James B. Wilson.
[3] For Goodpaster, see "Joint Statement on the Reduction of Nuclear Weapons Arsenals: Declining Utility, Continuing Risks," December 4, 1996, with Lee Butler. The full text of the statement is available in "Pro-Nuclear-Weapon Abolition Statements by Retired Generals & Admirals," Disarmament Diplomacy n. 10, November 1996, accessed July 3, 2010, http://www.acronym.org.uk/dd/dd10/10pro0.htm. For Turner, see Stansfield Turner, "A New Nuclear TRIAD," American Diplomacy v. 3 n. 3 Spring 1998, accessed July 3, 2010, http://www.unc.edu/depts/diplomat/AD_Issues/amdipl_8/abstracts8.html and Stansfield Turner, *Caging the Nuclear Genie: An American Challenge for Global Security*, (Boulder, CO: Westview Press, 1997). Turner's criticism of the nuclear establishment can be seen as particularly damning because it is informed by a career of high postings in the American national security apparatus, including the commander of a naval aircraft carrier group and the president of the Naval War College, in addition to his post-military retirement work with the CIA.
[4] Signatories included former military leaders from the following states: Canada (1); Denmark (1); France (1); Ghana (1); Greece (3); India (2); Japan (2); Jordan (2); Netherlands (1); Norway (1); Pakistan (1); Portugal (1); Russia (18); Sri Lanka (2); Tanzania (1); United Kingdom (4).
[5] See "General George Lee Butler," U.S. Air Force Biographies, no date, accessed July 3, 2010, http://www.af.mil/information/bios/bio.asp?bioID=4877 and "George Lee Butler Bio," The 8th Heinz Awards, accessed July 3, 2010, http://www.heinzawards.net/recipients/george-lee-butler.

abolish both America's and the world's nuclear arsenals. Butler was invited by the Australian government to work with the Canberra Commission, which was established to "propose practical steps towards a nuclear weapons-free world—including the related problem of maintaining stability and security during the transitional period and after this goal is achieved."[6] Butler summarized his case for nuclear abolition in a series of speeches, including an address at the 1996 State of the World Forum, 1996 and 1998 speeches before the National Press Club, a 1998 address at the JFK Library in Boston, and a number of speeches before anti-nuclear organizations and conferences.[7] He also authored several essays sharing his experiences as a professional within the nuclear establishment and his concerns about the lack of progress towards the de-emphasis of nuclear weapons in American security policy.[8] In these speeches and articles, Butler explained how his experience as both an executor and architect of U.S. nuclear policy eventually led him to a "deeply held conviction, that a world free of the THREAT of nuclear weapons is necessarily a world DEVOID of nuclear weapons" (emphasis in the original).[9] He has continued his anti-nuclear advocacy through the present day, including recent

[6] See "Statement," The Canberra Commission on the Elimination of Nuclear Weapons, no date, accessed July 4, 2010, http://www.ccnr.org/canberra.html.
[7] George Lee Butler, "Address at the State of the World Forum," Global Security Initiative, San Francisco, CA, October 3, 1996, accessed July 4, 2010, http://www.gsinstitute.org/archives/000008.shtml; George Lee Butler, "Abolition of Nuclear Weapons Speech," National Press Club, Washington DC, December 4, 1996, accessed July 4, 2010, http://www.wagingpeace.org/articles/butlerspeech.html; George Lee Butler, "The Risks of Deterrence: From Superpowers to Rogue Leaders," Remarks at the National Press Club, February 2, 1998, accessed July 4, 2010, http://www.cdi.org/issues/armscontrol/butler.html ; George Lee Butler, "Statement at the JFK Library," Boston, MA, November 22, 1998, *Disarmament Diplomacy 32*, November, 1998, accessed July 4, 2010, http://www.acronym.org.uk/32lee.htm; George Lee Butler, "Speech at the University of Pittsburgh," May 13, 1999, accessed July 4, 2010, http://www.wagingpeace.org/articles/1999/05/13_butler_upitt-speech.htm; George Lee Butler, "Acceptance Speech for the Nuclear Age Peace Foundation's Distinguished Peace Leadership Award," Santa Barbara CA, April 30, 1999, accessed July 2, 2010, http://www.peace.ca/genleespeech.htm; and George Lee Butler, "Acceptance Speech for the 8th Heinz Awards," March 12, 2002, accessed July 2, 2010, http://www.heinzawards.net/recipients/george-lee-butler.
[8] See George Lee Butler, "A Voice of REASON," *Bulletin of the Atomic Scientists* 54:3 (May/June 1998): 58-61 and George Lee Butler, "Zero Tolerance," *Bulletin of the Atomic Scientists* 56:1 (January/February 2000): 20-21; 72-75.
[9] Butler, "Abolition of Nuclear Weapons Speech."

lobbying efforts pushing the United States Senate ratify the New START agreement with the Russian Federation.[10]

This chapter examines the efforts of General Butler to foster public debate about the role of nuclear weapons by challenging the current trajectory of American nuclear policy. Butler feared that the nation was slipping towards a *sub silentio* ratification of Cold War nuclear policy and procedures as the nuclear establishment carried those policies forward into post-Cold War nuclear planning and doctrine. In his advocacy, Butler deployed a potent mix of strong policy arguments, grounded in his long-time experience as a nuclear Cold Warrior, with powerful appeals to a common humanity and shared destiny in an increasingly globalized and troubled world. He saw speaking out as a duty, believing that insights gained from his time spent as a career member of the "nuclear priesthood," the cadre of weapons scientists, force planners, and military commanders entrusted by policymakers and the public with the critical duty of controlling and directing the nation's nuclear arsenal, demanded that he share his concerns with the public. Butler's expressed purpose was to open the eyes of the American people and their compatriots in other countries to the ongoing danger of intentional or accidental nuclear war as part of a campaign to increase public concern about nuclear weapons and elevate the issue as a matter of national and international concern, with an eye towards increasing pressure on the American and foreign governments to take meaningful steps towards eventual nuclear disarmament.[11]

I contend that Butler's campaign for nuclear abolition and its clash with the nuclear orthodoxy may be productively analyzed as *controversy*, which rhetorical theorist G. Thomas

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[10] "Letter to Senators Levin, Kerry, McCain, and Lugar, signed by General Larry Welch (USAF, Ret.), General John Chain (USAF, Ret.), General George Lee Butler (USAF, Ret.), Admiral Henry Chiles (USN, Ret.), General Eugene Habiger (USAF, Ret.), Admiral James Ellis (USN, Ret.), General Bennie Davis (USAF, Ret.)," July 14, 2010, accessed August 28, 2010, http://www.armscontrol.org/system/files/PPM170_new_start_treaty_letter.pdf.

[11] As reported in John T. Correll, "Nuclear Abolition," *Air Force Magazine* (April 1998): 4.

Goodnight suggests are events where the "normal" patterns of communication about public policy are disrupted by oppositional rhetorics that challenge the fundamental assumptions upon which those policies are formulated, communicated, and justified to the public.[12] My analysis of controversy is informed by Medhurt's theory of portraiture, which Chapter 1 suggests is capable of explaining how public advocates and their critics address questions of credibility in high-profile public disputes. Butler's disarmament crusade was directed at changing public and elite opinion about the proper role of nuclear weapons in the post-Cold War world, taking aim at what he viewed as the calcification of Cold War-era nuclear weapons policies and decisionmaking processes, as expressed in public documents and declarations about the trajectory of official nuclear policy. Butler feared that a critical opportunity to make a clean break with the hostility, terror, and threat of global annihilation that characterized the Cold War was being lost as old patterns of thinking about nuclear weapons were projecting themselves forward from the Cold War into the post-Soviet world. Butler found himself called to speak out and challenge the underlying social consensus, contesting the claim of the nuclear establishment that nuclear weapons would be just as effective in protecting the security of the United States as they had been during the Cold War. In doing so, Butler shared his own experiences as a member of the nuclear priesthood and explained his conversion from Cold Warrior to nuclear abolitionist as part of an "abolitionist rhetoric" that attempted to inspire action by balancing appeals to the audience's common humanity with the overwhelming consequences of an accidental, miscalculated, or intentional nuclear war, the threat of which Butler argued had *not* ended with the Cold War, but instead was becoming a near certainty as Cold War nuclear policies (and rhetorics) carried forward into the post-Cold War world.

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[12] See G. Thomas Goodnight, "The Personal, Technical, and Public Spheres of Argument," *Journal of the American Forensics Association* 18 (1982): 214-227.

The chapter is organized into three major parts. The first section analyzes Butler's critique of nuclear deterrence as a cornerstone of American national security policy. There is a substantial record of public materials concerning Butler and his fellow fallen priests.[13] These texts include public statements from Butler, replies from his establishment peers, public reactions to Butler and his arguments, and press releases from disarmament activist organizations that utilized Butler's advocacy to advance their own political agendas. This analysis informs much of my assessment of the "abolition frame," which I detail in Chapter 6. The second section explores how issues of credibility shaped and directed both Butler's campaign and responses from the nuclear establishment. The third section analyzes direct and indirect responses from Butler's critics, highlighting similarities and differences between the nuclear establishment's Cold War-era and post-Cold War public justifications for embracing the nuclear "balance of terror" as a cornerstone of America's security policy.

Analysis of this case is warranted for several reasons. Initially, it focuses attention on the intersection between realist and liberal criticisms of nuclear deterrence.[14] American nuclear policy is increasingly criticized from both the right and left, and this relatively recent phenomenon promises to have a strong influence on the effectiveness of anti-nuclear criticism. Additionally, the efforts of Butler and similar activists constitute a key area to study questions of credibility in nuclear advocacy. One might expect that, as a former member of the nuclear

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[13] For examples of favorable commentary on Butler and his arguments, see Michael McGuire, "Gen. George Lee Butler; Former Head of U.S. Strategic Air Command, Now a Nuclear Arms Advocate," *Chicago Tribune*, October 17, 1999, C3; *Omaha World-Herald*, "Our Nuclear Disengagement," February 20, 2002, 10B; Joe Dejka, "Former Stratcom Chief Honored for Stance on Nuclear Weapons," *Omaha World-Herald,* February 6, 2002, 5A; John M. LaForge, "Elimination of Nuclear Weapons is a Worldwide Necessity," *Capital Times* (Madison, WI), August 3, 2000,: 15A; Paul Langer, "General Gets Medal in Antinuclear War," *Boston Globe*, November 22, 1998, B1; Douglas Mattern, "Third Act of the Nuclear Age; Need to Abolish Nuclear Weapons," *UN Chronicle 37* (June 22, 2000): 67; Marian Pallister, "Protest Movement Mushrooms," *The Herald* (Glasgow), March 21, 2000, 16; Jonathan Power, "Offensive Nuclear Policy," *Pittsburgh Post-Gazette*, October 17, 1999, B1; and *The Scotsman*, "First Step to Disarmament," May 22, 2000, 15.

[14] See Kenichi Ito, "Realists Take the Zero Option: The Nuclear Debate Has Undergone a Surprising Shift," *The Japan Times,* June 23, 1998, Lexis-Nexis Academic.

establishment, Butler would possess considerable *ethos* in public deliberations about nuclear weapons and that his efforts should have great traction in sparking a public debate about the merits of nuclear disarmament. However, an assessment of Butler's campaign reveals that, despite garnering considerable public attention, it had only a minimal influence in altering the grounds of the debate about American nuclear policy. Assessing the arguments made by Butler in his own defense in light of attacks leveled against his credibility by defenders of the nuclear establishment reveals several mechanisms through which particular arguments are included and excluded from nuclear policy deliberations. Nuclear policy debates do not represent the free-flowing exchange of ideas that characterize Habermas's "ideal speech situation," but are instead heavily influenced by interest politics and technical norms of argumentation.[15] Butler's disarmament campaign also merits consideration in light of the larger goals of the research project. Official responses to Butler and other "fallen priests" showcase the rhetorical strategies of a nuclear establishment under siege. The pressures created by publicized dissent from former "insiders" reveal underlying patterns of advocacy that insulate nuclear weapons logic from outside criticism. A close reading of these texts and their response shows important aspects of the ways in which nuclear advocates and disarmament activists have adapted their arguments to post-Cold War policy deliberations. Analyzing the effectiveness of such public campaigns, political analyst William Hartung has argued, may prove critical in preventing a shift towards more dangerous nuclear postures.[16]

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[15] See Jurgen Habermas, "Reflections on the Linguistic Foundations of Sociology: The Christian Gauss Lectures (Princeton University, February-March 1971)," in *On the Pragmatics of Social Interaction: Preliminary Studies in the Theory of Communicative Action*, trans. Barbara Fultner (Cambridge, MA: MIT Press, 2001).
[16] William D. Hartung, "Bush's Nuclear Doctrine: From MAD to NUTS?" *Foreign Policy In Focus* (December 2000): 1-2.

2.1   BUTLER'S CASE FOR ABOLITION

Beginning with his State of the World Forum address in October of 1996, Butler offered a stinging critique of nuclear deterrence policy, both as it played out in the American-Soviet rivalry during the Cold War and as a strategy for securing American interests in the global order emerging from the demise of superpower competition.[17] The purpose of this critique was to disrupt what he saw as an emerging consensus that nuclear weapons should continue to be the cornerstone of American security policy in the post-Cold War world. Early in a 1998 essay published in the *Bulletin of the Atomic Scientists,* Butler provided a succinct summary of his objections to deterrence policy. First, he argued that "from the earliest days of the nuclear era" the threat posed by nuclear weapons had been seriously underestimated, and "the risks and consequences of nuclear war have never been properly weighed by those who brandish them." Butler claimed that the pro-nuclear deterrence policy risk assessments that undergirded Cold War era security politics were inherently faulty. Second, Butler maintained that the sheer impact of a nuclear conflict is so large that the risk of such a war could be considered only from the perspective of the security interests of a particular nation-state, but instead that "the stakes of nuclear war" should be seen as implicating "not just the survival of the antagonists, but the fate of mankind." Third, Butler denied that there remained any reasonable rationalization for a reliance on nuclear weapons, arguing that the huge magnitude of a nuclear conflict meant that there could be "no political, military, or moral justification" for risking such a war. Finally, he

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[17] Butler, "Address to the State of the World Forum."

argued that it was unethical to utilize nuclear weapons, and that even "the threat to use nuclear weapons is indefensible."[18]

Butler's ethical objections to nuclear deterrence formed the foundation of his call for nuclear abolition, and he further elaborated on them in a 2000 *Bulletin* piece, claiming that it was impossible for an individual or a nation to both hold life sacred and be prepared to destroy it through the use of nuclear weapons. He asserted that it was unethical for the United States to invoke security doctrines, such as nuclear deterrence, that run counter to American principles. He noted that "if we cherish freedom and the capacity to realize our potential as human beings, then we are obligated to relentlessly pursue the capacity to live in harmony with other nations." Nuclear weapons were antithetical to this objective, and Butler admonished his audience to "continue to move the bar of civilized behavior even higher," something that could be realized "as long as we regard nuclear weapons as the ultimate arbiters of conflict." Nuclear weapons, he observed, "cap our capacity to live on this planet according to a set of ideals that values human life." Butler admonished his audience that it was "morally wrong" to endorse a deterrence policy "that accepts the possibility of shearing away entire societies."[19]

Butler's critique of deterrence contained a powerful appeal to *reason*, and he argued that an objective assessment of the risks and benefits of nuclear deterrence called for its rejection. A primary thrust of this case was that nuclear deterrence did not make sense as policy during the Cold War, and made even less sense in the current geopolitical environment, where "even today we cling to the belief that it remains relevant in a world whose security architecture has been transformed."[20] Nuclear weapons seemed even more difficult to justify now than they were

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[18] Butler, "A Voice of REASON," 59.
[19] Butler, "Zero Tolerance," 20.
[20] Butler, "A Voice of REASON," 60.

during the Cold War, which Butler described as "a world beset by tidal forces, towering egos, maddening contradictions, alien constructs, and insane risks. Its arcane vocabulary and apocalyptic calculus defied comprehension."[21] During the Cold War, Butler conceded that it may have seemed reasonable to ignore the seemingly irrational nature of some aspects of nuclear deterrence policy because of the tremendous threat that was allegedly posed to the United States by the Soviet Union. Butler said that he and other members of the nuclear elite "believed that superior technology brought strategic advantage, that greater numbers meant stronger security, and that the ends of containment justified whatever means were necessary to achieve them."[22] However, in this new world, Butler argued that nuclear weapons "continue to entail enormous costs and expose all mankind to unconscionable dangers," a situation he "find[s] intolerable" and necessitated his entry into the public debate about the future direction of American nuclear policy, because Butler claimed to "know too much of these matters—the frailties, the flaws, the failure of policy and practice."[23]

Butler attempted to motivate his audiences through powerfully phrased and carefully documented fear appeals, reminding them that the threat of a nuclear catastrophe, intentional or accidental, did not end with the demise of the Soviet Union. Instead, he argued that human nature, and not the geopolitics of the Cold War, remained the underlying source of the dangers posed by nuclear weaponry. According to Butler, nuclear weapons were dangerous during the Cold War and continue to be dangerous today because they prey upon the most animalistic fears of their human managers and potential victims, and thus fuel dangerous competitive interactions that risk an ever-expanding arms race, one that poses an unacceptable and increasing risk of

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[21] Ibid., 59
[22] Ibid., 58.
[23] Ibid., 59.

nuclear conflict and the potential extinguishment of all of humanity. He blamed nuclear weapons for "the most severe risks and most extravagant costs of the U.S.-Soviet confrontation" because they "intensified and prolonged an already acute ideological animosity" while licensing the creation by both sides of "mammoth bureaucracies with gargantuan appetites and global agendas."[24] According to Butler, nuclear weapons encouraged and facilitated cavalier risk-taking because "they are the natural accomplice of visceral enmities" that "thrive in the emotional climate born of utter alienation and isolation." The continual brandishment of nuclear threats, Butler warned, "play on our deepest fears and pander to our darkest instincts," and in doing so, they "corrode our sense of humanity, numb our capacity for moral outrage, and make thinkable the unimaginable." In the end, he cautioned his audience that the animalistic fears spurred by and licensing nuclear deterrence and potential aggression damage us as people and as societies by "shirking the norms of civilized behavior and diminishing the prospects for escaping the savagery so powerfully imprinted in our genetic code."[25] Under such circumstances, Butler observed that "every quarrel and conflict was fraught with potential for global war."[26]

Butler also contested the received wisdom of post-hoc analyses of the Cold War holding that deterrence somehow "worked" and was the source of relative strategic stability between the superpowers. Instead, Butler argued that even perfect deterrence logics were subject to human frailties and miscommunication, that we should have no expectation that nuclear deterrence would keep the peace, and that a more likely outcome was a renewed arms race that ended in nuclear tragedy. In one of his more striking passages, Butler described deterrence as it existed during the Cold War as "a dialogue of the blind with the deaf." "The blind" were American

[24] Ibid.
[25] Ibid.
[26] Ibid., 60.

policy makers and nuclear force planners, who (Butler among them) pretended to understand Soviet intentions and likely responses to American gambits in a "deterrence strategy that required near-perfect understanding of an enemy from who we were deeply alienated and largely isolated." According to Butler, the U.S. nuclear establishment failed to understand the "motivations and intentions of the Soviet leadership" because they had no "personal association" with their Soviet counterparts, and misjudged the willingness of the Soviet Union leadership to "accede to a strategy premised on the fear of nuclear war" despite their long history of being subjected to invasion and suffering "mind-numbing losses" in the two World Wars during the first half of the century.[27] As a result, Butler argued that the "Soviet leaders became convinced" that a nuclear war "might be thrust upon them," and premised their policy choices on avoiding losing this seemingly inevitable conflict, the Soviet leaders "deaf" to American intentions to use nuclear deterrence as a way of achieving a strategic stalemate between the nuclear powers. In the end, Butler claimed that deterrence "was largely a bargain we in the West made with ourselves." Butler's use of this metaphor suggested that his audience reconfigure their understanding of Cold War history by challenging a conventional wisdom that holds that MAD's effectiveness depended upon the construction and maintenance of a careful "balance of terror" between two nearly-equal adversaries. MAD relied upon a careful, accurate assessment of capabilities and intentions by American policymakers and their Soviet counterparts, the conditions for which Butler alleged did not exist during the Cold War. He was thus able to argue that "reason" did not protect the U.S. during the Cold War; instead, absence of a superpower conflict could be attributed to luck.

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[27] Ibid.

In the resulting arms race, Butler argued that there were no "rational limits on the size and composition of military forces" because deterrence theory had a "voracious . . . capacity to justify new weapons and large stocks" because deterrence stability required a "second strike" capability that compels states to "mount a devastating retaliation" even under nuclear attack. Although weapons characteristics such as hardened silos and mobile launchers could help render a force more "survivable," the best insurance against a "disarming first strike" was an immense nuclear force that simply could not be confidently destroyed in a preemptive nuclear strike. The ever-growing threat of the burgeoning Soviet and American arsenals "intensified" the rivalry, spurring the development of new weapons systems with "ever-mounting levels of destructive capacity." [28] In such a world, Butler contended, the "treacherous axioms of deterrence made nuclear weapons stockpiles numbering in the tens of thousands seem reasonable."[29]

Deterrence breakdowns and subsequent accidental or miscalculated use of nuclear weapons remain inevitable as long as nuclear weapons remain the centerpiece of security policy, Butler maintained. He described nuclear weapons as "inherently dangerous," and cautioned his audience that "implacable hostility and alienation will almost certainly over time lead to a nuclear crisis."[30] The Cold War was not characterized by nuclear stability, according to Butler, but instead, the world spent "forty years at the nuclear brink."[31] In a "world seething with enmities, armed to the teeth with nuclear weapons," he feared that their use may be inevitable unless deterrence logics were rejected.[32] Even if the logic of nuclear deterrence seems clear within a force doctrine or during a crisis simulation, Butler maintained that deterrence "remains a slippery intellectual construct", and that "the fog of fear, confusion and misinformation" that

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[28] Ibid., 60, 61.
[29] Butler, "A Voice of REASON," 61.
[30] Butler, "Address to the State of the World Forum."
[31] Ibid.
[32] Butler, "Abolition of Nuclear Weapons Speech."

characterized the Cuban missile crisis "could have at any moment led to nuclear annihilation," and that we today live with the same threat. [33]

Butler also argued that nuclear deterrence policy was corrosive to the underlying structures of democracy and deliberation, claiming that it undermined the very principles of open government. Deterrence, he cautioned, threatened to destroy the very freedoms that it purported to defend, a paradox identified and elucidated by rhetorical scholar Erik W. Doxtader in his analysis of deterrence communication during the Cold War.[34] The Cold War, Butler observed, was characterized by "the forces of fear, ignorance, greed, power, arrogance, and secrecy," and that these forces "invaded, weakened and subverted the most basic elements of democratic dialogue, debate, and decision making."[35] Decision making relating to nuclear weapons, he maintained, was shielded from "the piercing light of dispassionate scrutiny . . . in the name of security.[36] Butler's observation here paralleled a critical insight of Doxtader's analysis of public justification for deterrence policy, namely that the "conceptual intricacies of nuclear deterrence" restructure how "military institutions and the public interact," wherein military institutions justify deterrence as "public good," yet "this declaration presupposes that the operation of deterrence is prior to the practices of political pluralism from which it claims to grow."[37]

Drawing upon his own experience, Butler argued that this emphasis on secrecy rendered nuclear deterrence ineffective and dangerous. He noted that "vitally important decisions were routinely taken without adequate understanding, assertions too often prevailed over analysis . . . technological opportunity and corporate profits drove force levels and capability, and political

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[33] Butler, "Speech at the University of Pittsburgh."
[34] See Erik W. Doxtader, "Total War and Public Life: A Critical Theory of American Nuclear Deterrence Policy," (PhD. diss., Northwestern University, 1997).
[35] Butler, "Statement at the JFK Library."
[36] Ibid.
[37] Doxtader, "Total War," p. 7-8.

opportunism intruded on calculations of military necessity."[38] Outside and institutional interests reigned in this environment, "constraining the latitude for decision" of "key policymakers," corrupting the decisionmaking process as people "were purposefully denied access to critical information essential to the proper exercise of their office."[39]

Butler's affirmative case for disarmament also tackled the nuclear establishment's primary objections to nuclear abolition: that nuclear weapons could be not "disinvented;" that disarmament would not be verifiable, and thus not worth pursuing; and that disarmament would remove the nuclear "cap" on conflict, and "make so-called 'major wars possible" again.[40] In addressing these arguments, Butler attempted to both reveal the underlying irrationality of deterrence doctrines and reassure his audience that his vision of a non-nuclear future was both achievable and desirable, suggesting that a collective commitment to peacemaking coupled with American conventional superiority could rid the world of the threat of nuclear annihilation forever. Butler objected strongly that nuclear abolitionists were held to higher standards of argumentation and proof than are supporters of the nuclear status quo. He claimed that "the risks of abolition are too often simply asserted" while ignoring their potential for mitigation with effective planning.[41]

The problem of "disinvention," Butler claimed, was "merely a truism" that had "no definitive implications for either abolition or retention." Whether it remained feasible for a state to build nuclear weapons merely begged the question of effective verification, and did not necessarily mean that a state should possess nuclear weapons. Butler argued that "a world free of nuclear weapons but burdened with the knowledge of their possibility" was still better than the

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[38] Butler, "Statement at the JFK Library."
[39] Ibid.
[40] Butler, "Speech at the University of Pittsburgh" and Butler, "A Voice of REASON," 20-21.
[41] Butler, "Zero Tolerance," 21.

tremendous downside risks the world currently faces because of deterrence failure, and that these risks were exacerbated as new states "seek to acquire . . . these weapons under capricious and arbitrary circumstance."[42] A world in which nuclear weapons could be built, but no states possessed active weapons, was described by Butler as having a state of "existential deterrence," and was highly preferable to our current world, which he characterized as "a continuing nightmare of proliferation, crises spun out of control, and the dreaded heading that a city somewhere in the world has been vaporized."[43]

According to Butler, potential problems with disarmament verification were not a reason to give up on nuclear abolition. Although Butler conceded that concerns about verification had "obvious implications for nuclear abolition . . ." he accused disarmament critics of faulty reasoning, deploying what he described as "either/or scenarios" to create false dichotomies—if we cannot "safely determine" there are no defectors from the disarmament regime, nuclear abolition is too dangerous. Instead, Butler acknowledged that "absolute verification" remained an impossibility, but argued that a disarmament regime could be designed where there is a very high probability that potential defectors can be caught. He also distinguished between "militarily significant" and non-militarily significant cheating, touching upon a dispute at the center of the debate over the test ban treaty. Butler maintained that a verification regime would be effective enough to deter such militarily significant cheating, that a "sanctions-and-incentives regime" could be designed to ensure compliance, and that U.S. conventional military assets would be more than adequate to address any minor cheating by other parties to the disarmament regime.[44]

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[42] Ibid., 21
[43] Ibid.
[44] Ibid.

Finally, Butler squarely addressed the claim of nuclear proponents that deterrence policies were responsible for the lack of conflict between major powers since the end of the Second World War. He described this claim as "the most difficult nut to crack," calling it "an article of faith" among "'realists,' government officials . . . and most arms controllers as well." Butler issued several responses. First, he contested the idea that the USSR was bent on "armed aggression" against the U.S. and its allies during the Cold War. Instead, he claimed that Soviet archival data shows that their leadership did not respond to deterrence threats during the Cold War. Instead, Soviet leaders were motivated by other factors, especially NATO conventional forces.[45] Second, although Butler conceded that the presence of nuclear weapons made the superpowers "exceedingly cautious," he also maintained that the possession of nuclear arms increased risk-taking by both parties. He observed that "launch-on-warning force postures . . . brought the world to the brink of nuclear holocaust and left it there," and that leaders on both sides "consistently misread each other's intentions, motivations, and activities," increasing significantly the risks of a nuclear conflict.[46] Third, nuclear deterrence and the threat of nuclear annihilation created stresses among personnel in both the U.S. and Soviet Union that led to "muddled thinking" that "increasingly came to confuse and misguide nuclear weapons policy and posture." Butler described "the capacity for human and mechanical failure . . . [as] limitless."[47] The problems, he maintained, continue to this day, and nuclear risk-taking remains foolish in a world "in which the United States stands unchallenged in conventional military

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[45] Ibid.
[46] Ibid., 72.
[47] Ibid.

weaponry."[48] In the post-Cold War world, Butler argued, the threat of American nuclear use "ha[s] been fully exposed as neither credible nor of any military utility."[49]

2.2   A FALLEN PRIEST

Butler's challenge to the policies and rhetorics of the nuclear establishment was grounded in his experiences as a career Air Force officer, as the source of both his objections to nuclear deterrence as a policy and his legitimacy as a public advocate. His experience with nuclear weapons and policymaking gave him enormous initial credibility, but it also created a unique set of problems in that he was forced to defend his widely publicized break with his peers in the nuclear priesthood and his seeming repudiation of his life's work. This section details how Butler attempted to safeguard his *ethos* by playing upon his experiences as a former member of the nuclear priesthood while negotiating the potential credibility pitfalls arising from the public rejection of his former nuclear faith.

2.2.1   Butler's Resume

Butler's life experiences constituted a rich resource for his anti-nuclear campaign. Almost any observer would readily conclude that his career within the Air Force left him uniquely qualified to evaluate the effectiveness and desirability of U.S. nuclear deterrence policy and the on-the-ground implementation of that policy. A pilot by training, Butler's career spanned the

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[48] Ibid.
[49] Ibid..

operational, policymaking, and arms control aspects of U.S. nuclear policy and strategy. As a young officer, he was tasked with aiding preparations for American negotiators at the Strategic Arms Limitation (SALT) talks with the Soviet Union in 1974, and worked as the executive officer for the Defense Department's special assistance for strategic initiatives in the Office of the Deputy Chief of Staff for Plans and Operations at the Air Force headquarters. Butler also served as the vice commander, and then commander, of a "heavy bombardment" air wing, a military unit whose mission included nuclear weapons training. As Butler moved up the chain of command, he served as both the Vice Director and then Director for Strategic Plans and Policy in the Office of the Joint Chiefs of Staff, where he was responsible for overseeing the development of America's nuclear war fighting plans.[50]   In 1991, he became the last commander of the Strategic Air Command (SAC), which his official Air Force biography describes as "the nation's major nuclear deterrent force with bombers, tankers, reconnaissance aircraft and intercontinental ballistic missiles."[51] Butler was entrusted both with the command of the U.S.'s major deterrent force and tasked with the winding down of SAC, which he completed in 1992 while launching its successor organization, the Strategic Command (STRATCOM), which Butler led until his retirement from active duty in 1994. In these positions, General Butler would have been responsible for receiving and executing any command from the president to initiate the use of nuclear weapons.

Butler frequently observed that his experiences were at the heart of his motivation to speak out, describing how he felt "compelled to speak" against the "abiding influence of nuclear weapons long after the Cold War has ended."[52] In his 1996 address at the National Press Club

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[50] Ibid.
[51] Ibid.
[52] Butler, "Abolition of Nuclear Weapons Speech."

(NPC), Butler laid out the case both for why he felt a responsibility to enter the public debate about the role of nuclear weapons and why he is a person who is uniquely qualified to render a fair assessment of the benefits and drawbacks of a continued reliance on nuclear deterrence as the cornerstone of American security policy. He told his audience that he was speaking to them, and presumably to the American people at large, because he "fe[lt] the weight of a special obligation in these matters, a responsibility born of unique experience and responsibilities."[53] Butler described his twenty-seven-year military career as one that was "embroiled in every aspect of American nuclear policy making and force structuring . . ." His direct experience in nuclear policy making includes a familiarity with an array of contrasting venues, including

> the highest councils of government to nuclear command centers; from the arms control arena to cramped bomber cockpits and the confines of ballistic missile silos and submarines. I have spent years studying nuclear weapons effects; inspected dozens of operational units; certified hundreds of crews for their nuclear mission; and approved thousands of targets for nuclear destruction. I have investigated a distressing array of accidents and incidents involving strategic weapons and forces. I have read a library of books and intelligence reports on the Soviet Union and what were believed to be its capabilities and intentions. . . and seen an army of experts confounded.[54]

Butler related his own "anguish" as he coped with the "imponderable complexities, the profound moral dilemmas, and the mind-numbing compression of decision-making under the threat of nuclear attack."[55] This experience left him "deeply troubled" by the "burden" of a nuclear arsenal, and he found himself particularly disturbed by the "constant prospect that a crisis would hold the fate of entire societies at risk."[56] Butler also decribed the "gratifying" opportunity during the wind-down of the Cold War "to be intimately involved in recasting our force posture, shrinking our arsenals, drawing down the target list, and scaling back huge impending Cold War

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[53] Ibid.
[54] Ibid.
[55] Ibid.
[56] Ibid.

driven expenditures", all in the cause of potentially "restoring a world free of the apocalyptic threat of nuclear weapons."[57]

In discussing his lifetime of service inside the nuclear establishment, Butler frequently talked about his day-to-day experiences with both nuclear weapons and the policies and doctrines that govern their maintenance and potential use. In other essays, Butler contrasted the "highly subjective" part of his career, where he worked on "assessing the values and motivations of Soviet leadership" with what he describes as the "critically objective" work of "preparing weapons for operational launch."[58] He claimed that this "subjective" and "objective" work left him familiar with every part of the nuclear establishment, from strategizing, to target planning, to working to deliver the weapons on bombers and as a missileer.[59] Butler also described many of his experiences with nuclear weapons doctrine and design, writing that he "was present at the creation of many of these systems, directly responsible for prescribing and justifying the requirements in technology that made them possible." He portrayed himself being directly proximate to every aspect of Cold War nuclear competition, saying that he "saw the arms race from the inside," and that he himself "was responsible for nuclear war plans with more than 12,000 targets."[60]

Butler's use of his experience represents a fascinating reversal of the typical deployment of credentials and résumé in most clashes between the nuclear establishment and its abolitionist critics. The citation of technical credentials and professional experience with nuclear policy and the weapons themselves is usually performed by establishment advocates seeking to discredit the arguments of abolitionist dissenters. Butler here used his personal experience with nuclear

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[57] Ibid.
[58] Butler, "A Voice of REASON," 59.
[59] Ibid.
[60] Ibid., 61.

weapons and nuclear policy to burnish his credibility with his largely lay audience. An important feature of nuclear policy debates is that they involve concepts and theories that seem well outside the experience of most members of the public. Although "nukespeak" critics rightly note that much of the jargon is intended more to obscure than clarify, deterrence policy remains complicated.[61] As Willard suggests, policymakers and lay audiences often find themselves unable to render meaningful judgments about the substance of the arguments presented by competing sets of experts, and thus are forced to rely on their perceptions of the credibility of the advocates.[62] In the context of nuclear policy, the public has often deferred judgment about the merits of particular policies to the nuclear priesthood, assuming that these experts will craft nuclear doctrines that serve the greater public interest. Butler thus reminded his audience that he shared the same knowledge and skill-set as his opponents, and that his judgment should perhaps be seen as even more credible because of his extensive experience at the very pinnacle of nuclear policymaking.

2.2.2 Butler's Portraiture

The contest over how to frame General Butler's high-profile break with the nuclear establishment may be productively analyzed as a "rhetorical portraiture" of Butler as a public figure and credible voice in the debate about the role of nuclear weapons after the Cold War. According to rhetorical scholar Martin J. Medhurst in *Cold War Rhetoric*, a portraiture is "a picture intentionally creat[ed] in the minds of the listeners of a particular image" of the public

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[61] See Edward Schiappa, "Naming as Argument by Definition: The Case of 'Nukespeak,'" in *Defining Reality: Definitions and the Politics of Meaning*, (Carbondale, IL: Southern Illinois University Press, 2003), 130-150.
[62] See generally Charles Willard, *Liberalism and the Problem of Knowledge: A New Rhetoric for Modern Democracy* (University of Chicago Press, 1996).

figure. Portraitures do the work of *ethos* building, framing the advocate and his or her message to convincingly address "situational constraints" that might otherwise dilute the impact of the speaker's arguments.[63] The general's disarmament advocacy campaign was framed around four "clusters of images" about Butler as an advocate and expert, and his place in a broader, historic struggle to both free the world of nuclear weapons and "tame" humankind's seemingly innate urge to inflict violence on those seen as foreign and threatening.[64] This portraiture was designed to counter attacks against the credibility of Butler and other military professionals who have "turned coat" on the nuclear establishment. Many critics painted Butler as someone whose ideological blinders cause him to ignore the "real world" threats that necessitate a strong nuclear deterrent. Other critics accused Butler of tunnel vision, over-emphasizing the decline in the Russian threat and ignoring the emergence of new, post-Cold War nuclear threats. Yet other respondents described Butler and his views as outliers, pointing to the broad, continued support for nuclear deterrence among both current and retired members of the military establishment.[65] Most importantly, Butler's framing of himself as a patriotic nuclear insider was designed to attract attention to his message and cause, the importance of which was magnified by the exclusion of Butler and other anti-nuclear advocates from official deliberative spaces.

First, Butler portrayed himself as someone who was not acting for personal gain, but rather, was acting at the behest of his conscience, at great personal and professional cost, to promote the interests of a country that he loved. He described his abolitionist advocacy as "a very conscious departure from a decision [he] made upon retiring, not to speak publicly on

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[63] Martin J. Medhurst, "Rhetorical Portraiture: John F. Kennedy's March 2, 1962, Speech on the Resumption of Atmospheric Tests," in *Cold War Rhetoric: Strategy, Metaphor and Ideology* ed. Martin J. Medhurst, Robert L. Ivie, Philip Wander & Robert L. Scott (Westport, CT: Greenwood Press, 1990): 61.
[64] Medhurst, "Rhetorical Portraiture", 61.
[65] Correll, "Nuclear Abolition."

national security matters.[66]" Instead, Butler claimed that he wanted initially to "close the journal of [his] military career, and never reopen it." [67] His "decision to step back into public life" comes from "an inner voice [he] cannot still, a concern [he] cannot quiet." [68] Butler represented himself as a "citizen of this planet" who felt "a deepening dismay" about the lack of progress in limiting the role of nuclear weapons in American and global security policies. [69] He also assured his audiences that his actions were motivated by a patriotism to both country and humankind as a whole, speaking of his regrets about leaving "the blessed anonymity of retired life" for a position as a "public critic of the nuclear-weapon States."[70] As noted earlier, Butler frequently referenced his own reluctance to become a public spokesperson for nuclear abolition, describing it as a role that "[he] never sought, relish[ed], or ever imagined."[71] He expressed his own discomfort with his status as an "instant icon of the abolition movement," describing himself as "besieged with invitations to speak, to appear, to write books and to otherwise take on a broader role I did not want and with which I am very conflicted."[72] This sense of conflict, Butler said, arose from "sharp disagreements" that he has with many elements of the abolition movement, and he claimed that he "frequently remind[s] the more ardent critics of U.S. foreign and security policy who come to me for support that I was the co-author with Colin Powell of a post-Cold War military strategy premised on robust conventional forces and an unswerving U.S. commitment to global leadership."[73]

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[66] Butler, "Address to the State of the World Forum."
[67] Ibid.
[68] Ibid.
[69] Ibid.
[70] Butler, "Statement at the JFK Library."
[71] Ibid.
[72] Ibid.
[73] Ibid.

Butler was also careful to avoid diminishing the work of the persons who have and continue to work in the U.S. nuclear weapons complex. In a set of 1996 remarks to the National Press Club, Butler noted that he has

> too much regard for the thousands of men and women who served under my command, and the hundreds of colleagues with whom I labored in the policy arena, to take lightly the risk that my view might in any way be construed as diminishing their service or sacrifice. Quite to the contrary, I continue to marvel and will always be immensely gratified by their intense devotion and commitment to the highest standards of professional discipline.[74]

Butler has also praised the service of former and current service personnel in the military establishment on a number of occasions. For example, in his 1998 article in the *Bulletin of the Atomic Scientists*, he wrote that "[n]o one who ever entered the nuclear arena left it with a fuller understanding of its complexity, nor with greater respect for those who served the nation."[75]

Portraying himself as a patriot and concerned citizen served Butler's objectives as an abolition advocate. His embrace of country and his career of military service and sacrifice worked to inoculate him against potential charges of betraying the United States and its interests. Many anti-nuclear activists have their patriotism and love of country questioned by defenders of the nuclear status quo, and sabotaging anti-nuclear movements by connecting the leadership to unpopular political groups and "enemy" nations and organizations has a long history in the United States. Figuratively "wrapping himself in the flag" also insulated Butler from more contemporary versions of the "Red-baiting" tactics that characterized establishment attacks against anti-nuclear activists during the Cold War. Emphasizing his patriotism also protected Butler against charges that he had some financial or other ulterior motive for seeking public

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[74] Butler, "Abolition of Nuclear Weapons Speech."
[75] Butler, "A Voice of REASON," 59.

attention, and worked to shift the focus of coverage of his "outing" to the content of his case for nuclear abolition and away from himself.

Defending the military's protective mission also burnished Butler's own credentials because he himself was a former member of the cadre that he chose to praise, and thus reminded his audiences of his own "intense devotion and commitment" and "professional discipline." Praising his former colleagues and seeming current adversaries in the current "political arena" could be designed to assuage opponent and audience concerns that Butler may have "turned coat" against the nuclear establishment because of some animosity or personal pique towards the establishment's members. By separating his dispute about the *policy* of deterrence and the efficacy of reliance on nuclear arsenals from any implication of private dispute, Butler attempted to focus the public debate on whether deterrence policy achieves its stated objectives, namely protecting the lives and lifestyles of Americans with a minimized risk of nuclear Armageddon.

Second, Butler portrayed himself as the "ultimate insider," a member of the nuclear priesthood who both understood and was disturbed by the implications of a robust nuclear deterrence policy. Not only did Butler often open his speeches by references to his capstone professional appointment as the Commander-in-Chief of the United States Strategic Command, but he also showed care in demonstrating that he was intimately familiar with both the operational and political aspects of American nuclear policy. A passage from Butler's initial public address at the State of the World Forum in October 1996 illustrates this strategy.

> Over the last 27 years of my military career, I was embroiled in every aspect of American nuclear policy making and force posturing, from the councils of government to military command centers, from cramped bomber cockpits to the confines of ballistic missile submarines. I have certified hundreds of crews for their nuclear mission and approved thousands of targets for potential nuclear destruction. I have investigated a troubling array of accidents and incidents involving strategic weapons and forces. I have read a Bookstore of books and intelligence reports on the former Soviet Union and what were believed to be its

capabilities and intentions… and seen an army of "experts" proved wrong. As an advisor to the President on the employment of nuclear weapons, I have anguished over the imponderable complexities, the profound moral dilemmas, and the mind-numbing consequences of decisions which would invoke the very survival of our planet.[76]

Butler largely repeated this list in his December 1996 speech before the National Press Club, where he framed his long resume and experience around the "special obligation" he felt to speak about his experiences as a member of the nuclear priesthood, "a responsibility born of unique experience and responsibilities."[77] He also noted that his status as a former nuclear officer allowed him to "bring a perspective to this issue not normally heard at gatherings" of the disarmament community, and even members of the nation's media elite. [78]

Focusing on his former insider status permitted Butler to magnify the persuasiveness of abolitionist arguments by highlighting his professional expertise in nuclear weapons procedure and policy while providing a compelling explanation for his recent and very public transformation from a pro-nuclear Cold Warrior to a celebrity of the global nuclear disarmament movement. Indeed, Butler recognized that his role within abolition advocacy was one of lending insider credibility to the arguments of nuclear disarmament proponents. He noted that his "purpose in entering the debate was to help legitimize abolition as an alternative worthy of serious and urgent consideration," claiming that his "unique experience in the nuclear weapons arena might help kindle greater antipathy for these horrific devices and policies."[79] Butler hoped that his experiences would validate the concerns about the dangers of nuclear deterrence held by persons outside of the nuclear establishment.

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[76] Butler, "Address to the State of the World Forum."
[77] Butler, "Abolition of Nuclear Weapons Speech."
[78] Butler, "Address to the State of the World Forum."
[79] Butler, "The Risks of Deterrence."

However, Butler's insider status also opened him to charges that he was a "latecomer" to his abolitionist views, which some critics used to question the veracity of logic of his seemingly new-found perspective. Butler's written and spoken remarks make it clear that he recognized this challenge, and he deployed several strategies to address this problem. Most effectively, he did so within the context of explaining his "journey" from being a Cold Warrior to a vocal abolitionist, describing his conversion as a natural, evolutionary process that arose both from his increasing familiarity with the dangers and pitfalls of nuclear deterrence policies and his increasing difficulty in reconciling his professional tasks with his personal ethics. In the process of explaining his own conversion from nuclear priest to committed abolitionist, Butler also hoped to convert his audience from a state of ignorance or apathy about the pending nuclear danger to one of hope and collective action. In many ways, the 1998 *Bulletin* essay reads as the confession of a former nuclear sinner, who with greater knowledge and perspective on the angers of nuclear deterrence has found himself converted to the cause of nuclear abolition. Butler uses language that suggests he viewed his anti-nuclear work not only as a continuation of his professional duties as a soldier and guardian of America's security interests, but also as a calling, arguing that he has been compelled to "abandon the blessed anonymity of private life, to join my voice with respected colleagues . . . to urge publicly that the United States make unequivocal its commitment to the elimination of nuclear arsenals."[80] He described his re-assessment of his stance on nuclear weapons as part of a "life journey" that began professionally during the early days of the Cold War and finds itself reaching its conclusion as the Cold War ended and the doctrines and policies that defined that era no longer seemed to fit with the policy and moral needs of a new world. He described this conversion as a "long and arduous journey from staunch

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[80] Butler, "Abolition of Nuclear Weapons Speech."

advocate of nuclear deterrence to public proponent of nuclear abolition," although he said of his new public role that it "is not one that I ever imagined nor one that I relish."[81]

Butler claimed he saw the need to reconfigure America's military and nuclear policy as part of his professional duties during the winding down of the Cold War. In the 2000 *Bulletin* essay, Butler said he found himself "rewriting the national military strategy in anticipation of the end of the Cold War," working with Joint Chiefs Chairman Colin Powell in Butler's capacity as director of Strategic Plans and Policy. Butler observed that his work involved "redefining the roles, missions, organization, and equipage of our military forces," drafting a new military policy that would be then given "to Powell for his consideration." Butler observed that "with the collapse of the Soviet empire, the stage seemed to be set for a historic realignment of the forces and rules governing security relations and sovereign states." Unfortunately from Butler's perspective, this momentum was lost with the change of administrations in 1993, and Butler described himself as "dumbfounded by the state of today's U.S. leadership," which he argued is "unfocused and uncertain, reeling from crisis to crisis," claiming that the "United States is materially driven and spiritually depleted."[82] Butler thus portrayed himself as an early proponent of a smaller, although still robust, American military profile in the emerging post-Cold War world, and described himself as deeply disturbed by the failure of American policymakers to cash in on the potential "peace dividend" and potential to decrease nuclear and other threats offered by the collapse of the Soviet Union.

Third, Butler characterized himself as a prophetic messenger, warning the general public and members of the policy-making establishment about both the "historic window of opportunity" to address the dangers of nuclear weapons and what Butler saw as the closing of

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[81] Ibid.
[82] Butler, "Zero Tolerance," 73.

that window as Cold War-era nuclear practices, procedures, and policies adapted themselves to the new strategic, political, and rhetorical environments of America after the Cold War. According to Butler, he retired believing that strong momentum towards the devaluation of nuclear weapons was evident with the end of the Cold War, noting that he "left active duty with great confidence that the imperative" of an American commitment to the "elimination of nuclear arsenals" and a policy to "take lead in setting an agenda for moving forthrightly towards that objective" were in place. [83] Butler himself participated in the process of shifting Cold War-era nuclear deterrence policies, claiming that he was "intimately involved in recasting our defense posture, shrinking our arsenals, and scaling back huge impending Cold War-driven expenditures . . ." in his role as the Director of Strategic Plans and Policy for the U.S. military. [84] He left military service believing that the "astonishing turn of events" that had ended the Cold War and coincided with the end of his military service had dealt a death blow to the policies that characterized "four decades of perilous ideological confrontation" and that the Cold War's end "presented historic opportunities to advance the human condition." [85] Indeed, Butler characterized the end of the Cold War as "miraculous," and that the series of events that led to the transformation of Central Europe and demise of the Soviet Union were ones that he "never imagined would happen in [his] lifetime . . . " as the threat of nuclear annihilation was replaced with "the promise of reprieve" from the Cold War's "acute tensions and threats." [86]

Butler warned his audiences that the opportunity to cage the nuclear genie and tame the forces first unleashed in the Trinity test and later used to devastate Hiroshima and Nagasaki "are

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[83] Butler, "Abolition of Nuclear Weapons Speech."
[84] Butler, "Address to the State of the World Forum."
[85] Butler, "Abolition of Nuclear Weapons Speech."
[86] Ibid. and Butler, "Address to the State of the World Forum."

wearing away," the victims of "time and human nature."[87] He argued that we are now poised at a critical crossroads in human history, one which he "find[s] is near miraculous that we now live in an age where the prospective elimination of [nuclear] weapons can be seriously addressed . . . " but one where he is also "dismayed by how badly the handful of nuclear weapons states have faltered in their responsibilities to reduce the saliency of their arsenals." [88] Butler described himself as "seized by a sense of profound dismay, of opportunity lost, of danger prolonged" as an opportunity for political "leadership" towards the marginalization of nuclear weapons was "displaced by the cautious underreach of the bureaucracy."[89] The entrenchment, and even expansion, of Cold War-style deterrence policies Butler labeled "irresponsible and potentially disastrous," claiming that "outmoded routines perpetuate Cold War patterns and thinking . . a new generation of nuclear actors and aspirants lurch backward toward a chilling world where the principle antagonists could find no better solution . . . than Mutual Assured Destruction."[90] He cautioned that the chance to eliminate nuclear weapons "may not come again."[91] Butler lamented that the current "failure of vision was compounded by a failure of imagination, of sheer intellectual paralysis." [92] Nuclear war, he argued, "is a raging, insatiable beast whose instincts and appetites we pretend to understand but cannot possibly control." [93]

Butler reminded his audience that the end of the Cold War offered the opportunity for the United States to chart a new course and craft security arrangements that did not rely upon maintaining a careful balance of nuclear terror. In his 1998 *Bulletin* piece, he argued that the unique strategic and psychological constraints of the early Cold War made it very difficult for

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[87] Butler, "Abolition of Nuclear Weapons Speech."
[88] Butler, "Speech at the University of Pittsburgh."
[89] Butler, "Statement at the JFK Library."
[90] Ibid. and Butler, "Abolition of Nuclear Weapons Speech."
[91] Butler, "Abolition of Nuclear Weapons Speech."
[92] Butler, "Speech at the University of Pittsburgh."
[93] Butler, "Address to the State of the World Forum."

members of the military and presumably the national security establishment, to look beyond the seemingly immediate security benefits offered by nuclear deterrence. Butler described "nuclear weapons" as "the savior that had brought an implacable foe [Japan] to its knees . . . and held another at bay for nearly half a century." Butler aligned himself with the nuclear priests who "believed that superior technology brought strategic advantage, that greater numbers meant stronger security, and that the ends of containment justified whatever means were necessary to achieve them."[94] However, he now claimed that the shift in the underlying geopolitical and security framework called for questioning the desirability of a continued reliance on nuclear deterrence, especially now that the "dimensions, the costs, and the risks of these nuclear netherworlds are coming to light."[95] Butler argued that the elimination of the Soviet threat, which was used as the original justification for a blind reliance on nuclear weapons as the ultimate guarantor of American security, led him, and presumably should lead American security policymakers and the public at large, to reconsider the necessity of relying upon what Butler sees as an irrational and dangerous nuclear posture. Butler continually used the larger cultural theme that the end of the Cold War had fundamentally changed the world to argue that radical changes are necessary for American nuclear policy.

Butler tied his criticism of "outdated" nuclear thinking to his first prescription for making meaningful progress towards a nuclear-free world, arguing that rethinking the role of nuclear weapons and taming potential nuclear dangers required that "first and foremost," the world's nuclear powers "accept that the Cold War is in fact over," allowing them to "break free of the attitudes, habits, and practices that perpetuate enormous inventories, forces standing alert and

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[94] Butler, "A Voice of REASON," 58.
[95] Ibid., 61.

targeting plans encompassing thousands of aimpoints." [96] For Butler, nuclear abolition begins with efforts to "terminate Cold War practices," [97] and his vision of a world free of the threat of Cold War-era weaponry can only be achieved once we reject Cold War-era security logics. The notion of a "closing window" was designed to motivate Butler's audience both to see the need for immediate action and to encourage persons already "converted" to the anti-nuclear cause to redouble their efforts in promoting effective government action deemphasizing the role of nuclear weapons in American security policy.

Fourth, Butler depicted himself as part of the vanguard of a broader social movement and consciousness shift away from the evils of nuclear deterrence and towards more rational national security policies. For example, he noted that his views were part of an emerging "consensus" about the dangers of nuclear deterrence, and that this consensus "is in fact growing daily . . . " as evidenced by the large number of retired military signatories to the report of the Canberra Commission on the Elimination of Nuclear weapons, the "Nobel Prize awarded to Joseph Rotblat and Pugwash," as well as "a strident frustration in the vehement protests against the recent round of nuclear tests conducted by France." [98] Butler thus positioned himself as part of a larger initiative that included other retired military officers, internationally renowned peace activists, and ordinary citizens who voiced their concerns about the dangers of nuclear testing and modernization. He portrayed himself as part of a growing movement of "legions of remarkable men and women from every corner of the earth who have labored long and patiently" in the cause of nuclear abolition, and notes that "[t]heir ranks have now been swelled by tens of millions of citizens of our planet who reject the prospect of living in perpetuity under a nuclear

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[96] Butler, "Address to the State of the World Forum."
[97] Ibid.
[98] Ibid.

sword of Damocles."[99] According to Butler, this emerging consensus was part of "a swelling chorus of reason and resentment that will eventually turn the tide." [100]For Butler, increasingly mobilized and publicized protests against nuclear weapons were inevitable as "the family of mankind develops a capacity for collective outrage . . . " which will eventually "find avenues for collective action."[101] The potential for mass mobilization is, according to Butler, now possible as the "terror-filled anesthesia which suspended rational thought, made nuclear war thinkable and grossly excessive arsenals possible during the Cold War is gradually wearing off."[102] He maintained that the public was gaining "renewed appreciation for the obscene power of a single nuclear weapon… as we confront the nightmarish prospect of nuclear terror at the microlevel."[103]

Butler saw his purpose, and that of the nuclear abolition movement, as one of conversion, noting that "converts are being won on many fronts" to the central tenets of an anti-nuclear security agenda, "that nuclear arsenals can and should be sharply reduced, that high-alert postures are a dangerous anachronism, that first-use policies are an affront to democratic values, and that proliferation of nuclear weapons is a clear and present danger."[104] He described an elevated public awareness "in every corner of the planet" about the dangers of nuclear weapons and deterrence policies as part of a rising "tide of public sentiment . . . running strongly in favor of diminishing the role of nuclear weapons," and that "most publics are well out in front of their governments in shaking off the grip of the Cold War and reaching for opportunities that emerge

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[99] Butler, "The Risks of Deterrence."
[100] Butler, "Address to the State of the World Forum."
[101] Ibid.
[102] Ibid.
[103] Ibid.
[104] Butler, "The Risks of Deterrence."

in its wake."[105] This growing abolition movement offered the hope, he claimed, of providing "new thinking" that can replace the inaction of government on nuclear and other "issues of planetary significance" with "the rich resources of intellectual capital present in every society, and so abundantly in our own," as it is found in our universities, laboratories, NGOs, "foundations, councils, centers and institutes," the sum of which provided "our nation" with "an infinite capacity to marshal its intellectual, economic and moral power."[106]

Butler thus framed himself and other anti-nuclear advocates as being on the side of truth and reason, implicitly painting his opponents as being unwitting victims of irrational fears and unenlightened views of security and the potential for human cooperation to overcome our own violent natures. This maneuver also effectively tied Butler and his arguments to the compelling progress narrative that has captivated audiences since the early Enlightenment, and holds a particular appeal to American audiences who are conditioned from an early age to believe in the perfectibility of American society, especially if the society is led by the leading lights of rationality and an objective evaluation of the facts outside of ideology and bias.

Butler described himself as a part of a transhistorical struggle against human urges towards violence and destruction. He saw the national security establishment's willingness to perpetuate the nuclear deterrence policies of the Cold War as part of a "loss of strategic vision," driven by a willingness to "demonize our enemies, real or prospective, too reading to wield the meat axe of power politics than stay the course of patient diplomacy."[107] Butler urged his audience to begin a "process of national renewal" by "simply [acting] in accordance with the principles and values that set us apart from tyranny and above the murderous instincts of racial,

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[105] Ibid.
[106] Butler, "Statement at the JFK Library."
[107] Butler, "Speech at the University of Pittsburgh."

ethnic, and religious hatred."[108] He held that our collective ability to transcend nuclear deterrence "is . . . the test that will ultimately define our goodness as a people, our worth as a nation and our legacy to humanity."[109] Butler described nuclear abolition as "a waypoint . . . an essential precondition to a state of moral grace that, having rejected the wholesale slaughter of human beings . . . moving instead toward global endorsement of the rule of law."[110] An explicit rejection of nuclear deterrence, he claimed, was a precondition to this goal, which threatened to elude "our moral reach so long as we continue to cloak nuclear weapons as agents of stability, as if their possession somehow conveyed wisdom and forbearance, immunity from the rages of implacable hostility and clarity in the grip of crisis."[111] For Butler, this was a struggle fraught with explicitly religious overtones, arguing that "deterrence is a slippery conceptual slope" that is "at best . . . a gamble no mortal should pretend to make" and "at worst it invokes death on a scale rivaling the power of the creator."[112] Nuclear deterrence remained fundamentally incompatible with a peaceful world for Butler, as he argues that "we cannot at once hold sacred the gift of life and sacrosanct the capacity to destroy it utterly."[113] Butler played upon the fears that many people feel toward arcane and powerful technologies, assigning their proper use to the divine while arguing that mere mortals should themselves eschew those technologies whose use threaten human existence.

This section highlights the importance of professional and personal credibility to Butler in advancing his advocacy campaign. His self-portraiture was designed to both burnish his credential as a nuclear expert and fend off potential criticism that he had betrayed either his

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[108] Ibid.
[109] Ibid.
[110] Butler, "Statement at the JFK Library."
[111] Ibid.
[112] Butler, "The Risks of Deterrence."
[113] Butler, "Statement at the JFK Library."

comrades-at-arms or their professional ideals. Butler's strategy included situating the evolution of his beliefs within a larger set of geopolitical changes that he claimed necessitated a rethinking of U.S. nuclear policy, with an insistence that he was acting out of both a sense of patriotic idealism and the foresight that came from "seeing the abyss" towards which America's nuclear policy was propelling the nation. In Section 3, I explore how Butler's critics attacked this frame, challenging both his professional judgment about the relative risks posed by nuclear weapons and Butler's willingness to protect the nation from a new set of emerging threats. Before I address Butler's critics, I first discuss the reception of Butler's "outing" among anti-nuclear groups and advocates.

2.2.3   Butler's Reception

Butler's call for nuclear abolition was well-received by anti-nuclear advocates and organizations. As Butler noted in several of his public addresses, he quickly became something of a cause célèbre of the anti-nuclear movement. His 1996 outing at the State of the World Forum and presentation at the National Press Club later that year drew considerable attention from news outlets, and Butler quickly found himself in demand as a presenter at anti-nuclear conferences and roundtables. Years later, Butler's endorsement of deep nuclear cuts and eventual disarmament is still featured in a substantial amount of public information and advocacy materials peddled by anti-nuclear organizations.

Most frequently, Butler's views have been used as "insider" validation of the claims of the anti-nuclear advocates or organizations, wielded as a foil to criticisms of nuclear disarmament as unrealistic, unverifiable, and unwise given the current international security

environment.[114] For example, David Krieger, the President of the Nuclear Age Peace Foundation and a prominent voice in anti-nuclear matters, described a "growing chorus of voices to abolish nuclear weapons" and characterized Butler's advocacy as a sign that "we are making real progress."[115] Dean Babst, a researcher with the Nuclear Age Peace Foundation, also frequently cites Butler's criticisms of nuclear deterrence and nuclear weapons. [116] A *New York Times* article on Butler's disarmament campaign contrasted the general's former status as having his "hand . . . in that steel gauntlet" of the U.S. nuclear command with his efforts "to bury the Cold War and slash world nuclear arsenals radically."[117] Other press reports during Butler's most intensive period of public advocacy in the late 1990s characterized his work as a direct challenge to current U.S. military policy. Butler's heresy against the nuclear priesthood was seen as a potential "game changer" by members of the nuclear arms control and disarmament community. A pro-disarmament editorial in *The Scotsman* described him as one of a new generation of "nuclear warriors" who are "beginning to see the light" about the dangers posed by nuclear weapons.[118] *The Herald* claimed that Butler and other nuclear dissenters from within the military

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[114] Representative examples include "Military Leaders Speak Out Against for Nuclear Disarmament." last nodified 2009, Zero Nukes, accessed July 7, 2010, http:///www.zero-nukes.org/militaryleaders.html; Amitabh Pal, "Former Officials Finally See the Light," *The Progressive,* April 25, 2006, accessed July 7, 2010, http://www.progressive.org/mag_apb042506; Andrew Lichterman "A World Still on the Nuclear Brink," *Disarmament Activist*, June 2, 2006, accessed July 7, 2010, http://disarmamentactivist.org/2006/06/02/a-world-still-on-the-nuclear-brink/; "Quotes," Disarmament and Peace Education, Global Security Initiative, accessed July 7, 2010, http://www.gsinstitute.org/dpe/quotes.htm; and "The Vital Statistics," Greenpeace, February 9, 2007 accessed July 7, 2010, http://www.greenpeace.org/international/en/campaigns/peace/abolish-nuclear-weapons/the-vital-statistics/. A large number of organizations host online copies of Butler's public addresses on nuclear deterrence and disarmament.
[115] David Krieger, "A Break in the Clouds," Nuclear Age Peace Foundation, February 1998, accessed July 5, 2010, http://www.wagingpeace.org/articles/1998/02/00_krieger_break-clouds.htm.
[116] See Dean Babst, "How Countries Can Work Together to Rid the World of Its Greatest Danger," Nuclear Age Peace Foundation, March 2000, accessed July 5, 2010, http://www.wagingpeace.org/articles/2000/03/00_babst_countries.htm; Dean Babst, "Our Own Worst Enemy," Nuclear Age Peace Foundation, September 1999, accessed July 5, 2010, http://www.wagingpeace.org/articles/1999/09/00_babst_worst-enemy.htm; and Dean Babst, "Preventing an Accidental Armageddon," Nuclear Age Peace Foundation, February 2002, accessed July 5, 2010, https://www.wagingpeace.org/articles/2000/02/00_babst_armageddon_print.htm.
[117] James Brooke, "Former Cold Warrior Has a New Mission: Nuclear Cuts," *The New York Times*, January 8, 1997, accessed August 7, 2010, http://www.brookings.edu/projects/archive/nucweapons/butler.aspx.
[118] *Omaha World Herald*, 10B.

were having a palpable impact, noting "not since the end of the Cold War . . . has the voice of anti-nuclear protestors been heard to loudly."[119]

A typical example of the praise lauded upon Butler by anti-nuclear activists and organizations is found in the press materials surrounding the presentation of a Heinz Award to Butler in 2001 by the Heinz Family Philanthropies, an award that "recognizes outstanding individuals for their contributions."[120] The Heinz Family Philanthropies stated that Butler was given the award for "the clarity of his vision about the risk and dangers of nuclear weapons, for the courage with which he expressed and implemented it, and for the impact that he has had on the way in which the United States and the world view nuclear weapons in the post-Cold War period."[121] This rationale claimed that Butler changed his views as "he discovered that many of the controversies surrounding the Soviet nuclear threat were based as much on bureaucratic politics as on hardheaded assessments of strategic vulnerability. As he became increasingly privy to the highest reaches of strategic planning, he became increasingly skeptical about its underlying rationale."[122] The general was praised for his efforts to "de-emphasize nuclear roles" as a military commander, when he revised dated "overkill strategies of the Cold War era" by "creating new strike options that involved using nuclear weapons against only a small number of targets," recommended and oversaw the closing of the SAC, and "urged negotiators to adopt lower ceilings of nuclear weapons" during the Strategic Arms Reduction Talks II (START II).[123] Butler was lauded for "virtually single-handedly, and at personal risk to his own career . . . question[ing] whether large number of nuclear weapons were needed for national defense, and inspire[ing] politicians, military officers, academics and ordinary citizens to re-examine their

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[119] *The Herald* (Glasgow), 16.
[120] "The Awards."
[121] "George Lee Butler Bio."
[122] Ibid.
[123] Ibid.

views and reassess their priorities."[124] The Heinz Family Philanthropies identified these career risks as including "being passed over as General Colin Powell's successor as the Chairman [sic] of the Joint Chiefs of Staff" because of his "open and articulate advocacy for arms limitations," stating that "Butler has been willing to take the risks required to do what he felt was right. He has made the world a better place by drastically decreasing the numbers of, and planned uses for, nuclear weapons."[125]

Butler's high-profile dissent from the orthodoxy of the nuclear priesthood created an expectation among some observers, and certainly his allies, that his campaign would turn the tide in the argument over the role of nuclear weapons in the post-Cold War world, a point underscored by his own "epochal turning point" rhetoric. However, despite meeting its objective of generating significant volumes of positive press and a sense of renewed excitement among many disarmament advocates, Butler's campaign was ultimately unsuccessful in fulfilling its stated policy objective of changing the trajectory of U.S. nuclear weapons policy. Butler's failure to change the terms of the public's and government's thinking about nuclear weapons underscores the importance of understanding how the nuclear establishment undermined his appeals for a reconsideration of American nuclear policy. The tactics deployed by Butler's critics both inside and outside of government are the subject of the next section.

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[124] Ibid.
[125] Ibid.

2.3   THE GENERAL'S CRITICS RESPOND

Although General Butler's call for nuclear disarmament received considerable attention from news outlets and anti-nuclear research and advocacy organizations, the public response from representatives of the nuclear policy establishment was understated. For example, a report from the Air Force Academy's Institute for National Security Studies (INSS) shared my own bewilderment at the lack of official reaction to Butler's strong and well-publicized call for the reconsideration of American nuclear policy and the campaign's failure to achieve its goal of sparking public and, especially, governmental debate on the issue. The report described the "muted" public response as "surprising."[126] However, an "understated" response is very different from "no response," and a number of persons with military, policy-making and political commentary backgrounds either directly or indirectly responded to Butler's critique of nuclear deterrence. Butler's critics leveled several attacks against both the veracity of his arguments and his credibility as a nuclear policy expert. Two of these rejoinders are summarized and analyzed here, including public statements and papers from a prominent member of the nuclear policy-making establishment, and a research report sponsored by the U.S. Air Force. This analysis both fleshes out the public debate about the relative merits of post-Cold War nuclear disarmament and facilitates an assessment of the argument strategies of the nuclear establishment as it attempted to justify its continued relevance in a markedly changed world through its attacks on Butler's rhetorical self portraiture

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[126] Gwendolyn M. Hall, John T. Capello, and Stephem R. Lambert, "A Post-Cold War Nuclear Strategy Model," *INSS Occasional Paper 20*, Arms Control Series, USAF Institute for National Security Studies, July 1998, p. 4.

2.3.1 The Head Priest

Several responses to General Butler's critique of both deterrence policy and a continued reliance on nuclear weapons were authored by Keith B. Payne, the President for the National Institute for Public Policy (NIPP) and a person with longstanding ties to the defense establishment, including a close relationship with former Secretary of Defense Donald Rumsfeld, who oversaw the crafting of a provocative post-Cold War nuclear policy in the 2001 Nuclear Posture Review (NPR). Payne has also been linked to the drafting of the 2001 NPR, and has publicly defended both the policy and the process in a widely-cited paper in *The Washington Quarterly*, a publication of the Center for Strategic and International Studies in Washington D.C., which in turn has close ties to both Georgetown University and the U.S. Departments of State and Defense.[127] Dr. Payne is inarguably a member of the "nuclear priesthood" that Butler describes in both his written and oral criticisms of the nuclear establishment, and can credibly be described as one of its "head priests," not only for his role in crafting the NPR but because of his high-profile public advocacy for a continuation of a policy nuclear deterrence as the U.S. adapted to the post-Cold War world.[128] Although Payne's rejoinders to Butler and his allies did not represent an "official" response, they are typical of the position of the nuclear establishment, and an analysis of his work reveals key elements of the "priesthood's" response to its fallen cleric.

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[127] See generally William D. Hartung and Jonathan Reingold, "About Face: The Role of the Arms Lobby in the Bush Administration's Radical Reversal of Two Debates of U.S. Nuclear Policy," *World Policy Institute Special Report* (May 2002), accessed January 18, 2010, http://www.worldpolicy.org/projects/arms/reports/reportaboutface.html.

[128] See generally Keith B. Payne, "Future of Deterrence: The Art of Defining How Much is Enough," *Comparative Strategy 29:3* (2010): 217-222; Keith B. Payne, "Nuclear Deterrence for a New Century," *The Journal of International Security Affairs* (Spring 2006): 49-55; Keith B. Payne, "Bush Administration Strategic Policy: A Reality Check," *The Journal of Strategic Studies 28:5* (October 2005: 775-787; Keith B. Payne, "The Nuclear Posture Review: Setting the Record Straight," *The Washington Quarterly 28:3* (Summer 2005): 135-151; and Keith B. Payne, preface to *Rationale and Requirements for U.S. Nuclear Forces and Arms Control*, volume 1, Executive Report (Fairfax, VA: National Institute for Public Policy, January 2001), accessed January 17, 2010, http://www.nipp.org/Adobe/volume%201%20complete.pdf.

Two examples of Payne's response to Butler and other abolitionists are a 1996 editorial he penned for the right-leaning *Washington Times* and testimony on the future of U.S. nuclear weapons policy that he submitted to the Senate Foreign Relations Committee in 1998. The first essay, intended for a broader audience and playing on conservative caricatures of the foreign policy foibles of so-called doves, addressed Butler and his arguments directly, while the Senate testimony, directed at policymakers and "official" Washington, mentioned Butler's anti-nuclear dissent in the framing portion of the speech, and then provided a relatively detailed policy critique of the general's pro-abolition policy stance. A detailed analysis of Payne's arguments thus provides a relatively complete picture of an establishment response to Butler's dissent.

Payne's editorial continued the long-standing strategy of nuclear deterrence advocates in declaring their abolitionist counterparts as hopeless idealists who failed to understand the geopolitical "realities" that necessitated a strong defense rooted in a robust nuclear arsenal. Payne framed his editorial in mildly derogatory terms, describing as "cotton candy" the recently released (1996) statement from the "Sixty Generals" who "endorsed nuclear disarmament."[129] Payne described the pro-abolition statement of the generals as "reasonable, even pleasing to the soul" because it "reflected an obviously sincere yearning for the world to be a safer place, free of the terrible threat posed by the potential for nuclear war." However, according to Payne, the "thinking behind" the statement, and presumably those of other "fallen priests" and nuclear disarmament activists resembled "cotton candy" in that it is "sweet but without substance and probably unhealthy."[130] The term "cotton candy" is particularly derisive, frequently used by politically conservative commentators to describe the allegedly poorly reasoned and dangerous plans from soft-hearted liberals. Payne concluded the op-ed by describing the general's statement

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[129] Keith B. Payne, "The Truth About Nuclear Disarmament," *Washington Times*, December 13, 1996, p. A23.
[130] Payne, "The Truth About Nuclear Disarmament," A23.

as "ill-informed and potentially damaging," comparing it to the discredited "rhetoric" of the anti-nuclear movements of the 1970s and 1980s.[131] Payne was quick to dismiss the arguments of these dissenting generals, except for his fear that they might actually impact public policy. Payne even said that he himself would be willing to "set aside practical concerns" and "sign-on" to the general's statement as a way of "demonstrating [his] regard for humanity and sophistication in knowing that nuclear weapons are very destructive," except for the fact that Payne, supposedly unlike the generals, was "unwilling to set aside practical considerations."[132] Payne then moved to dismiss the lofty dream of the generals, stating that "leaders see value in nuclear weapons . . . because they prove an instrument for deterrence against opponents," citing "real world" examples of "the need for nuclear deterrence" in cases such as NATO during the Cold War and current day South Korea, Israel, and Pakistan, all of which show the "linkage between conventional imbalance and the need for nuclear deterrence."[133] Allusions to the "real world" grounding of pro-deterrence arguments and the seemingly fanciful nature of abolitionist arguments appear frequently in the work of Payne and other advocates.

Payne also framed his Senate testimony as a response to Butler and a generalized "call for complete nuclear disarmament" that Payne claimed had been "energized by prominent retired military officers such as General Lee Butler." Payne's response before the Senate Armed Services Committee included a detailed rebuttal of Butler's claims and a defense of Payne's preferred "tailored deterrence" strategy, one that Payne argued was "based largely on historical studies of deterrence," and analyzed "how deterrence actually has been practiced by real leaders

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[131] Ibid.
[132] Ibid.
[133] Ibid.

in real crises over 2,200 years of history."[134] Payne also argued that Butler and other abolitionists failed to provide a compelling case for the mechanics of nuclear abolition, claiming that they do not "worry" enough about the "details" of an eventual disarmament regime. In the *Washington Times* opinion piece, Payne also briefly alluded to the "unverifiable" nature of any scheme to eliminate nuclear weapons.[135]

Payne and other supporters of a robust American deterrent directly challenged Butler's claim that the end of the Cold War had fundamentally altered the geopolitical landscape and the security calculations of the United States. Payne's rhetoric worked to establish continuity between the threat environment of the Cold War and that faced by the United States in its aftermath, justifying a similar continuity between the nuclear weapons policies of the Cold War and the present. According to Payne, deterrence was not just an artifact of the Cold War. Instead, nuclear deterrence "will be equally important, possibly more so" in a post-Cold War world, especially because the U.S. would "face regional challengers" armed with weapons of mass destruction, and the U.S. will not be able to ensure that it can nullify these weapons of mass destruction. As a result, policy makers "must make our deterrent as foolproof as possible," presumably to prevent a WMD attack.[136] Payne even used the former statements of General Butler against him, citing him as being "correct, when several years ago, he stated 'Deterrence may not work in the old Soviet-American terms, but I'm convinced that having nuclear weapons still matters.'"[137] As is the case with other defenders of nuclear deterrence policies, Payne

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[134] Keith B. Payne, President, "Why We Mst Sustain Deterrence," Testimony before the Senate Armed Services Committee, Strategic Forces Subcommittee, March 31, 1998, accessed January 15, 2010, http://www.fas.org/spp/starwars/congress/1998_h/s980331kp.htm.
[135] Payne, "The Truth About Nuclear Disarmament," A23.
[136] Payne, "Why We Must Sustain Deterrence."
[137] Ibid.

framed the security environment as both unstable and dangerous, and nuclear weapons as the ultimate guarantor of America's security

Payne centered his defense of nuclear deterrence, and thus the bulk of his rebuttal of Butler and the general's arguments, on a realist vision of an international system. According to Payne, nuclear abolition could not transform the international sphere because "it does not address the underlying security concern that causes states to turn to nuclear arms in the first place," namely their "conventional force disadvantage" relative to other threatening states.[138] This argument rests upon a number of realist assumptions, namely that states are the dominant actors in the international system, that states are primarily interested in maximizing their own power as a means of achieving security, and that power and influence are a zero-sum competition where gains for one state are losses for others. In this world, security cooperation between states is largely driven by the temporary convergence of interests, and is not an intrinsic element of most inter-state relations.[139] Payne's rhetorical choices conceal these realist assumptions about the international system, naturalizing them and masking their contingent, contestable nature. This concealment is done through the idiom of practicality, particularly Payne's emphasis on the need to use nuclear weapons to address concrete security concerns and grounding his arguments in history, insisting that both lack of superpower nuclear conflict during the Cold War and Saddam Hussein's response to implicit American nuclear threats during the Persian Gulf War proved that nuclear deterrence "works." Payne was thus able to frame his preferred nuclear policies as natural and smooth extensions of many years of time-tested policy.

In this world of paranoid security competition, "nuclear weapons," Payne argued, "do not exist in a vacuum" and thus the underlying security needs that lead to their development cannot

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[138] Payne, "The Truth About Nuclear Disarmament," A23.
[139] See generally John J. Mearscheimer, *The Tragedy of Great Power Politics* (New York: W.W. Norton & Company, 2001).

be addressed "by their elimination." The recommendations of abolitionists, he claimed, are "extraordinarily uninformed and potentially dangerous."[140] Payne argued that a shift away from nuclear deterrence toward a reliance on the U.S.'s "great superiority in conventional forces" would actually increase nuclear risks by encouraging American adversaries to develop nuclear weapons as a means of "counter[ing] U.S. conventional superiority."[141] In Butler's preferred world, one where the U.S. relied on its conventional superiority to deter conflict, adversaries would likely use the "relatively inexpensive" trump card of weapons of mass destruction (WMD) to limit U.S. influence. Payne contended that American "conventional superiority" may ironically become a "strong motivation for less-developed countries to emphasize WMD."[142] According to Payne, Butler's hoped-for "American leadership" towards disarmament was doomed to failure, and instead would ensure that "rogue" states will have "every incentive to seek nuclear weapons," presumably for purposes that run counter to American interests. If true, Payne's assertions neatly refute the thesis of Butler's case because they would prove that the end of the Cold War did nothing to alter the "war of all against all" that underlies state-to-state relations.

One noteworthy feature of Payne's discussions about the scope of the WMD threats that confront the U.S. in the post-Cold War environment was the lack of concrete detail in fleshing out the exact nature or scope of these threats. Payne's seeming reluctance to "name names" beyond allusions to "rogue states" and revisionist powers foreshadows an argument strategy utilized by the Bush administration's 2001 Nuclear Posture Review, which inflated the magnitude of potential threats confronting the United States while remaining vague on the details

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[140] Payne, "The Truth About Nuclear Disarmament," A23.
[141] Ibid.
[142] Payne, "Why We Must Sustain Deterrence."

of those threats. This strategy is an important facet of post-Cold War deterrence advocacy, one that plays upon the public's fears of the unknown by highlighting the potential impact of a "deterrence failure" while insulating itself against the need to provide concrete proof of the existence of the threat. The mere coincidence of anti-American motives with a modicum of WMD development capacity becomes enough to justify a potentially overwhelming nuclear response. One could defend such lack of detail on secrecy grounds (revealing too much information could tip potential adversaries to means and methods) or because portraying other states as a WMD threat could unnecessarily complicate relations between the United States and those states. However, the lack of detail provided in such threat assessments also has the dual effect of allowing fear-primed audience to fill in unofficial and undocumented details about alleged threats posed by "rogue" governments, and of insulating the establishment's threat assessment from rigorous analysis and criticism from skeptical analysts and advocates.

Payne claimed that Butler and his allies had misdiagnosed the nature of the post-Cold War world, and that three deadly threats necessitated a robust nuclear deterrent: chemical and biological weapons proliferation; regional conflicts that could escalate to WMD use; and the potential for allied nuclear breakout. The threats described by Payne and his professional colleagues were often couched in terms that rhetorical scholar Robert Ivie's analysis of Cold War threat discourse would find familiar. Ivie described the "logic of nuclear deterrence" as encapsulating "a logic of peace through strength that assumes nuclear weakness invites aggression by a barbarian who only understands and respects force." During the Cold War, Ivie says that "Lady Liberty" was portrayed as "weak and vulnerable," meaning that she "must protect herself by brandishing a nuclear club." According to Ivie, America's Soviet adversaries were depicted as varyingly "a mortal threat to freedom, a germ infecting the body politic, a

plague upon the liberty of humankind, and a barbarian intent upon destroying civilization."[143]

Depictions of the Cold War-era enemy were dominated by a "metaphor of savagery" that constructed an "image of a hostile and threatening enemy," where the enemy was seen as "irrational, coercive, and aggressive" and the Soviets were often described as "dangerous predators . . . as if they were primitives, brutes, barbarians, mindless machines, criminals, lunatics, fanatics, and enemies of God."[144] These images, according to Ivie, dangerously "constrain[ed] the political imagination of Cold War leaders and their publics," and scholarship directed at the process of "deliteralizing" such metaphors could point the path to "practical alternatives to rhetorical hostility."[145] Some of these metaphorical parallels are detailed in the following paragraphs.

Payne and other nuclear deterrence proponents contended that a strong American nuclear force remained necessary to deter attacks against U.S. military forces and the American homeland by states armed by chemical weapons (CW) and biological weapons (BW). This strategy highlights an important aspect of post-Cold War nuclear deterrence advocacy. Nuclear establishmentarians expand the potential roles of nuclear weapons, from the "calculated ambiguity" policies of the Cold War that ensured nuclear retaliation only in response to a nuclear provocation, and were otherwise silent on nuclear use in other circumstances, to a policy that explicitly envisions the use of nuclear weapons in response to a wide array of non-nuclear contingencies. Payne noted that "we in the U.S. have agreed to give up both CW and BW," but many other states retain stockpiles of these deadly weapons. In the event of a chemical or biological attack, Payne argued that U.S. decision makers should not be "in good conscience"

[143] Robert L. Ivie, "Cold War Motives and the Rhetorical Metaphor: A Framework of Criticism," in *Cold War Rhetoric: Strategy, Metaphor and Ideology* ed. Martin J. Medhurst, Robert L. Ivie, Philip Wander & Robert L. Scott (Westport, CT: Greenwood Press, 1990): 72.
[144] Ibid., 74.
[145] Ibid.

constrained to using only conventional weapons to respond. Payne went so far as to claim that the retired generals are "silent on the issue," to the extent that they do not "even acknowledge the problem." He described this lack of substantive response from Butler and other former-military critics of nuclear deterrence as grounded in an ignorance of the important role that nuclear weapons played in preventing an Iraqi chemical or biological attack during the first Gulf War. Payne alleged that statements from "prominent Iraqi political and military leaders" proved that the nation "did not use its chemical and biological weapons because of the U.S. and Israeli nuclear deterrents."

Chemical and biological weapons were described as an overwhelming threat. Payne's colleague at the NIPP, Mark Schneider, said that such WMD would be used by "our enemies… in their conflict with free people everywhere."[146] Payne went to considerable length to expound upon the threat posed by biological and chemical weapons. He claimed that a mere 200 lbs. of anthrax spores, spread "over Washington could, under likely conditions, inflict 1,000,000 to 3,000,000 fatalities," and argued that such an attack "could be more deadly than a megaton hydrogen bomb." Payne also claims that a laundry list of international bad actors, including Iran, Iraq, Libya, North Korea, and Syria have bioweapons programs. These enemies share a common characteristic with depictions of the Soviets in their willingness to kill huge numbers of civilians, situating them as an enemy of the "free peoples" of the world. These states are described by Payne as "highly motivated, and cost- and risk-tolerant," and thus require "very severe deterrent threats."

In Payne's calculus, only nuclear weapons could "serve that purpose" because in such "tough cases they will be necessary; they will make the difference between deterring attack and

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[146] Mark B. Schneider, "Prevention through Strength? Is Nuclear Superiority Enough?" *Comparative Strategy 27:2* (April 2009): 116-139.

being attacked." Accordingly, the abolitionist dream remained both "dangerous and counterproductive" because it increased the probability of a "catastrophe" striking the U.S. and its interests.[147] The risk of such a catastrophe would only increase in the future because the "continuing proliferation of CBW" is set to increase, and in the "tough cases . . . conventional forces alone simply will be inadequate" as a deterrent. From this perspective, "our nuclear capabilities become more, not less important for regional deterrence" now than they were during the Cold War.[148] He concluded this argument by claiming that the general's advocacy of nuclear abolition is "irresponsible" unless they can provide an "alternative means for deterring or otherwise preventing" a rogue chemical or biological attack against the U.S.[149] However, Payne failed to provide a sound justification for *why* these states would choose to use chemical or biological weapons, and ignored the long history of restraint exercised by chemical- and biological-weapon armed states throughout the twentieth century.[150]

Regional conflicts, according to Payne and other deterrence advocates, remained more likely now that the cap on regional conflict and aggression imposed by the superpower confrontation of the Cold War had ended. Payne and other nuclear priests argued that, paradoxically, the recession of an existential Soviet threat made the world *even more dangerous* because the end of the global superpower competition permitted other states to initiate their own challenges to American interests. Payne contended that "empirical evidence . . . strongly suggests that U.S. nuclear threats can be credible and essential" in deterring some "highly motivated and cost- and risk-tolerant" potential American adversaries. Such adversaries were, like the Soviets, depicted as being less rational than U.S. policymakers, and these implacable

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[147] Payne, "Why We Must Sustain Deterrence."
[148] Ibid.
[149] Payne, "The Truth About Nuclear Disarmament," A23.
[150] Payne, "Why We Must Sustain Deterrence."

enemies could only possibly be deterred by "very severe retaliatory threats." Again, Payne returned to the first Gulf War, citing interviews from Iraqi officials allegedly demonstrating that the Iraqi regime did not choose to use chemical or biological weapons during the conflict because "implicit U.S. nuclear threats were credible to Saddam Hussein, and nuclear deterrence worked where conventional threats did not."[151] Nuclear weapons had been proven effective in deterring dictators who would "otherwise have inflicted horrendous civilian and military casualties on us and our allies." Payne also cited the statement by the former Indian Army Chief of Staff General K. Sundarji, who noted that "The Gulf War emphasized again that nuclear weapons are the ultimate coin of power," and Payne alleges that this "view is shared by the military and political leaders in many countries abroad", including "some of those leaders who otherwise would use CBW that we must be able to deter."[152]

The emphasis placed by Payne and other disarmament opponents on emerging "rogue" proliferant threats as a justification for a continued U.S. reliance on nuclear deterrence is a key pivot point in the controversy. Butler hinged much of his case on proving that the Cold War/post-Cold War divide afforded an opening to reconsider the role of nuclear weapons because a diminished threat environment would allow the U.S. and other nuclear powers to scale back their reliance on nuclear weaponry in favor of conventional deterrents. Payne challenged this thesis, emphasizing the rapid spread of chemical, biological, and nuclear weapons, their potential lethality if used by the nation's enemies, and the high probability of such use in regional conflicts in a world where the United States did not possess a robust nuclear deterrent and the corresponding capacity to issue "severe," credible nuclear threats. Payne even argued that the threat of WMD use was greater now than it was during the Cold War because of the risk-

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[151] Ibid.
[152] Ibid.

tolerant nature of America's new enemies. Although Payne and his allies played upon the remnants of the Cold War-era metaphors of the enemy's savagery and brutality, Payne also carefully dodged charges of fear-mongering by often couching his threat assessment in sterile, clinical terms. Payne neatly constructed an equivalency between the Soviet and emergent WMD threats as a means of linking the justifications for nuclear deterrence policies during the Cold War with the need for a powerful deterrent in the post-Cold War world.

Rogue nuclear proliferation and lurking chemical and biological attacks were not the only threat foreseen by Payne and other disarmament critics; even American allies pose a potential security threat. This argument strategy continued an important element of Cold War-era nuclear deterrence justification, namely a distrust of America's alleged allies and the portrayal of the United States as a "vital balancer" whose absence guaranteed a renewal of the rivalries that led to two world wars. Payne argued that American efforts to de-emphasize nuclear weapons "could easily reduce German and Japanese confidence in the U.S. nuclear umbrella—compelling both to 'go nuclear,'" claiming that Japanese officials "have stated this very proposition publicly, as have Germans privately."[153] Payne's Senate testimony added South Korea to the list of states who have publicly stated that they will be more likely to acquire nuclear weapons if the U.S. nuclear umbrella weakens, stating that "the United States could easily fuel nuclear proliferation by reducing its nuclear arsenal precipitously."

Payne performed an argumentative judo-move common to many defenders of so-called "nuclear warfighting" force structures and force doctrines in arguing that deterrence alone, even with seemingly overwhelming threats, is not enough to prevent the outbreak of conflict. He noted that "conditions assumed in deterrence theory frequently are absent in practice," and that

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[153] Payne, "The Truth About Nuclear Disarmament," A23.

"deterrence frequently does not work predictably, and sometimes it does not work at all."[154] Although this position seems to align itself with the abolitionist claim that nuclear weapons cannot "keep the peace," Payne rejected the conclusion that likely deterrence failures argue against any reliance on nuclear weapons. Instead, he argues that the 'one size fits all' nuclear doctrine that culminated in the Mutual Assured Destructive (MAD) posture of the Cold War should be replaced with "deterrence threats and practices" that are "flexible and adaptable," able to respond to the "vastly different goals, determination, values and cost- and risk-tolerances" of potential challengers to American security interests. This "tailored deterrence policy," one that matches a particular threat "to a particular foe and context" was "essential" to the success of any American security policy.[155]

Payne contended that the U.S. needed both a flexible force posture and a flexible retaliation doctrine to ensure an effective, tailored deterrent. Such retaliation may be necessary in the face of potential chemical and biological weapons threats, else the U.S. could see "the unexpected failure of deterrence." A rigid retaliation posture could handcuff decision makers who "will not know in advance those specific conditions and opponents that will necessitate nuclear deterrence," and deterrence is most effective when nuclear threats can be tailored to the specific situation "as the challenger and context warrant." A flexible posture also needs to be supported by a large arsenal, Payne claims, "in some tough cases" where the effectiveness of the U.S. deterrence is likely to be tested by the "wide spectrum of potential foes and circumstances in the post-Cold War era." This call for "flexibility" was later used in the 2001 NPR to justify a much more robust and aggressive American nuclear posture, as I explain in Chapter Four.

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[154] Payne, "Why We Must Sustain Deterrence."
[155] Ibid.

Payne's response to Butler reveals several important aspects of the nuclear establishment's strategy in dealing with Butler and other insiders who "turn coat" and attack key premises that that undergird the case for the nuclear establishment's pre-eminence in American security policymaking. Payne's opening salvo attempted to portray Butler and his allies as hopeless idealists, whose notions about human nature and subsequent calls for nuclear disarmament failed to match up with the reality that underlies both human behavior and the international system. His "cotton candy" description is quite revealing, showing that Payne recognized the intrinsic appeal of Butler's call to humankind's "better angels" while believing that the adoption of an idealistic disarmament agenda was potentially deadly for the nation. Payne chose to attack Butler as lacking substance, attempting to achieve his "yearning for a safer place" with a deadly policy agenda that compromised America's interests. Payne thus argued that Butler may indeed be a patriot acting on the basis of conscience, and that this conscience may be rooted in noble ideals, but following one's conscience opens the country to nuclear attack.

Payne also undermined Butler's claim to special "insider" knowledge by arguing that the general's case was based upon an incomplete understanding of the role of nuclear weapons. Payne claimed that Butler's focus on the destructive potential of nuclear weapons ignored how their proper utilization could actually decrease violence. In doing so, Payne challenged Butler's reading of the Cold War and the role of nuclear weapons in keeping the peace. He frequently highlighted his contention that the nuclear relationship was largely stable between the superpowers, and that the world had witnessed the absence of great power conflicts since the conclusion of World War II precisely because of the deterrent effect of nuclear weapons. Payne asserted that Butler and his allies ignored a number of "real world" examples that demonstrated

the need for a nuclear deterrent, including the regular references to reports from Iraqi insiders that U.S. nuclear threats deterred Saddam Hussein from using nuclear weapons during the Gulf War. Payne was thus able to credibly argue that the nuclear dangers identified by Butler and other disarmament activists were the result of poorly designed policies, and not an intrinsic nature of the weapons themselves.

Payne also questioned the validity of Butler's judgment about the alleged inherent dangers of nuclear weapons by using his prior statements against him. As noted earlier, Payne highlighted prior comments from Butler that seemed to suggest that Butler continued to see an important role for nuclear weapons outside of a Soviet/American framework. Payne used this earlier admission to set up his broader challenge to Butler's claim that the disarmament agenda was on the "right side of history" and that the United States was losing a key opportunity to lead the world away from the "nuclear brink." Payne argued that nuclear weapons were more relevant than ever in protecting the security of the United States in a post-Cold War world. Payne constantly hammered home the claim that this world is even more dangerous than that of the Cold War because of the widespread dissemination of weapons of mass destruction. The emergence of new threats, both in terms of new weapons systems and new state-based and non-state actors, only enhanced the need for a robust nuclear deterrent. Payne directly challenged Butler's claim that nuclear weapons were no longer necessary by pointing to the capabilities and alleged evil intentions of states such as Iran, Iraq, and North Korea, whom he argued were firmly committed to developing nuclear and other unconventional weapons as a means of countering American power and re-configuring the American-led geopolitical order. Instead, Payne argued that the appropriate response to the limits, identified by Butler and others of MAD-style deterrence policies in the face of "rogue" threats was the adoption of Payne's preferred "tailored"

deterrence policy and force structure, revisiting the MAD versus nuclear warfighting debate that occurred at the height of the Cold War.[156]

2.3.2 The Church

A second reply to Butler's pro-abolitionist stance was authored by analysts Gwendolyn M. Hall, John T. Capello, and Stephen R. Lambert for the U.S. Air Force Academy's Institute for National Security Studies (INSS) and published in July 1998. Although this report did not position itself as a direct reply to Butler's critique of nuclear deterrence, it used Butler's arguments as a starting point for a broader analysis of the appropriate role of the U.S. nuclear arsenal in a post-Cold War world and utilized many of Butler's claims as reference points for what it termed the "abolitionist case" for the elimination of the world's nuclear arsenals. Although the Butler initiative was not the first "plan for a new strategic environment," the INSS report suggested that it "was the first time in the post-Cold War period that a cadre of highly-respected and very credible retired officers gave their public support for a recommendation."[157]

According to the INSS report, the "proposal did appear to initiate and stimulate some debate . . . but this debate was short-lived within the most relevant policy-making circles."[158] The report posited a few possible explanations for the seeming ineffectiveness of Butler's campaign. First, it suggested that "participants" in the "policy-making community" may have been unprepared "to respond or they did not want to respond publicly," or the "policy community is still absorbing the suggestion."[159] As a result, the debate that Butler and his allies

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[156] See Payne and Gray, "Victory is Possible."
[157] Hall, Capello, and Lambert, "Post-Cold War Nuclear Strategy Model," 4.
[158] Ibid.
[159] Ibid.

hoped to spark "was relegated to those constituencies that have always had an interest in arms control and disarmament . . . [and] the defense policy community . . . did not engage the matter in a public and direct way."[160] The report positioned itself as a contribution to a possible future "DOD establishment" response to Butler's call to reconsider American nuclear weapons policy.[161] The INSS report concluded that "debate was absent or limited" because "the extreme nature of the Butler proposal made it non-threatening in the defense policy arena and thus not worthy of serious debate" because "the United States could/would never drop to zero strategic nuclear weapons and therefore the proposal should not be taken seriously."[162] Instead, the report suggested that the bold nature of the Butler proposal may have worked to galvanize support around more dramatic START options (e.g. 1,000 warheads or less)."[163]

A more cynical perspective might suggest that the DOD provided only a restrained response to Butler and his allies because the nuclear establishment continued to exert enormous influence over access to official deliberative spheres and both the form and content of public debates over the appropriate role of nuclear weapons. The INSS report can be read as an "unofficial" response for the nuclear establishment to Butler and its allies, and the report itself summarized the establishment's case for a rejection of nuclear abolition, or even milder de-nuclearization policies, in favor of a prominent role for nuclear weapons after the Cold War.

The opening of the INSS report summarized Butler's case as resting on the claim that the end of the Cold War had fundamentally altered the security environment faced by the U.S. and

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[160] Ibid.
[161] Ibid., 5.
[162] Ibid., 6-7.
[163] Ibid., 7.

other states, opening the door for significant progress to be made in nuclear disarmament.[164] The

end of the report succinctly summarized the authors' position:

> General Butler is right—it still looks like the Cold War, particularly with regards
> to United States nuclear strategy and posture. That is, not much has changed. The
> reason is that not enough has changed. One problem is that when there were those
> consistent calls throughout the Cold War to reduce dramatically or eliminate the
> nuclear arsenal, no one specified the conditions under which this could happen.
> Had they done so, General Butler's task would have been easier. Now the
> question has to be, what does the world need to look like before such measures
> could be contemplated?[165]

The INSS report's conclusion is that despite efforts of Butler and other anti-nuclear advocates to

demonstrate that the U.S. should de-emphasize nuclear weapons, the "case" for nuclear

disarmament "has not been made because it cannot be made."[166] The report offered four sets of

arguments in support of this claim.

First, the INSS report maintained that Butler and his allies overlooked important reviews

of American nuclear policy that both included a thorough assessment of deterrence postures for a

changing security environment and suggested and implemented changes that de-emphasized

nuclear weapons. This claim foiled Butler's argument that the current commitment to nuclear

deterrence is merely a product of bureaucratic inertia, and instead suggested that the continuation

of deterrence doctrines was the result of a careful evaluation of the current security environment.

For example, the report suggested that the 1994 Nuclear Posture Review (NPR) "already looked

at nuclear weapons in the context of the post-Cold War period" and "seemed to address the

Butler proposal even before the General gave his remarks at the Washington Press Club in

1996."[167] This NPR, the INSS claimed, considered the same geopolitical dynamics as did Butler

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[164] Ibid., 3-4.
[165] Ibid., 47.
[166] Ibid., 1.
[167] Ibid., 5.

and arrived at the opposite conclusion, namely that nuclear weapons would continue to play a central role in ensuring the U.S.'s security despite the demise of the Soviet Union, and included recommendations against deep cuts below 3,500 strategic warheads.[168] The INSS report posited that the NPR was at the "other end of the spectrum" from Butler on the appropriate role of nuclear weapons, and suggested that the proper "role of nuclear weapons in the post-Cold War Period" lies "somewhere between these two perspectives."[169]

Presidential Decision Directive 60 (PDD-60) was also offered as evidence "that the role of nuclear weapons has been examined in the context of a changed international environment."[170] According to the INSS report, this classified document enacted a "very significant revision to United States [nuclear] policy," particularly in suggesting that nuclear weapons should be used "as a deterrent or response to the use of chemical or biological weapons," demonstrating that "the role of nuclear weapons is expanding in the post-Cold War era."[171] The report also observed that the U.S. nuclear posture has changed, with the role of nuclear weapons in the U.S. defense posture having diminished. Examples of nuclear de-emphasis cited in the report include large declines in spending on strategic nuclear forces, unilateral reductions in non-strategic weapons, the elimination of nuclear weapons from the surface Navy, the removal of nuclear bombers from "quick reaction alert," and the acceleration of ballistic missile dismantlement under START.[172]

Second, the INSS report argued that Butler was "putting the cart before the horse," claiming that decisionmaking about the role of nuclear weapons in American security policy should be driven by a clear-headed assessment of the post-Cold War threat environment, and that

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[168] Ibid.
[169] Ibid.
[170] Ibid., 6.
[171] Ibid.
[172] Ibid., 15-6.

a disarmament posture was threatening because it would not "preserve foundational security concepts such as deterrence, crisis stability, and arms race stability."[173] Here the INSS report paralleled Payne's assessment of the abolitionist case as "cotton candy," tempting but ultimately dangerous because it failed to recognize the hard realities of international politics. Butler's perspective remained misguided, the INSS cautioned, because it focused on the number of weapons, which was increasingly irrelevant in a post-Cold War world where deterrence was about "relationships" and not "numbers."[174] Although concerns about force levels dominated the Cold War, the INSS argued that "the post-Cold War period requires a reassessment of . . . basic concepts, even before numbers enter the debate."[175] The basic concepts of nuclear policy, including "deterrence, escalation, stability, and adequate force mixes" must be applied, the INSS cautioned, outside of the bipolar world and "evaluated in the context of a wider set of issues and relationships than those that occurred during the United States-Soviet bipolar debate."[176] In particular, the authors were "particularly concerned about new members of the nuclear club . . . who do not have the benefit of 50-plus years of debate about the consequences of nuclear ownership."[177] The authors accused Butler and his supporters of failing to engage in a "thorough discussion" of these changes, and that "this is a very serious matter and a challenge to the credibility of those proposing dramatic changes in United States nuclear policy."[178] This failure to account for potentially destabilizing changes in the international security environment "must

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[173] Ibid., 1-2.
[174] Ibid., 7.
[175] Ibid., 8.
[176] Ibid.
[177] Ibid.
[178] Ibid.

be anticipated and prescribed" for Butler and other like-minded generals "in order to be taken seriously."[179]

Similarly, Butler was accused of being overly focused on the seemingly "benign" nature of the Russian threat and ignoring the inherently "anarchical" nature of the international system, which continues to justify a robust role for nuclear weapons.[180] An important feature of post-Cold War nuclear deterrence advocacy is a re-framing of the Russian threat from an authoritarian power bent on world domination to one that threatened the U.S. and global commons because of its weakness. The report later argued that Russia and China remained potential threats to the United States, alleging that Butler has misdiagnosed the post-Cold War environment. Russia and China were concerns because of the "uncertain" nature of their future trajectories, and Russia was portrayed as a state that "sees itself increasingly as a competitor rather than a partner to the United States and the West.[181] The authors also cited former Defense Secretary William Perry, who argued that the potential for the failure of Russian economic and government reforms, the slow pace of its nuclear drawdown, and fears about nuclear warhead and component security were "major stumbling blocks" to any proposal to de-emphasize nuclear weapons in U.S. security policy.[182]

Third, the INSS report selectively utilized the public arguments voiced by "fallen priests," notably General Andrew J. Goodpaster and Admiral Stansfield Turner, in its effort to refute Butler's case for nuclear disarmament. The report cited a statement from Goodpaster before the Senate Governmental Affairs Subcommittee which argued that "nuclear deterrence should be seen as one key element" in future U.S. nonproliferation policy, along with

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[179] Ibid.
[180] Ibid., 17.
[181] Ibid., 26-7.
[182] Hall, Capello, and Lambert, "Post-Cold War Nuclear Strategy Model," 40. See William J. Perry, "Remarks Prepared for Delivery to the Henry L. Stimson Center," September 20, 1994.

cooperative threat reduction programs and other nonproliferation efforts.[183] The INSS report claimed that even though Goodpaster agreed with Butler's eventual goal of nuclear abolition, "he does note that eliminating most is more realistic than eliminating all of them." Goodpaster is later attributed with the belief that deterrence must continue to play a role in preventing the proliferation of nuclear weapons.[184] The report cautioned that "herein lies the major flaw of this logic—the case has not been made that United States security is enhanced by deep cuts, or elimination, particularly given the nature of the relationships between all states, within all regions."[185] Turner is also cited as arguing that "nuclear disarmament is not feasible in the foreseeable future."[186] The INSS report concluded by again quoting Goodpaster's testimony, stating that "the elimination of all [nuclear weapons], is for the present still well beyond our grasp; no one today knows whether, when or how it can prudently be done."[187] The report thus attempted to use more "moderate" perspectives to discredit Butler and other abolitionists, a strategy justified by the authors on the grounds that "in most political debates, those on the extremes rarely succeed in the long run. It would therefore be useful to examine the positions of those in the middle to see if they can satisfy some of what is desired by those on the extremes."[188]

Fourth, the INSS report argued that American nuclear disarmament was dangerous and global nuclear abolition highly impractical because nuclear weapons cannot be "disinvented" and thus would remain a key part of the global security environment for the foreseeable future. This

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[183] Andrew J. Goodpaster, Statement to the Senate Government Affairs Subcommittee on International Security, Proliferation and Federal Services, February 12, 1997, Lexis-Nexis Academic.
[184] Hall, Capello, and Lambert, "Post-Cold War Nuclear Strategy Model," 43-44.
[185] Ibid., 19-20.
[186] Ibid., 42. Turner is quoted in Michael Brown, "The 'End' of Nuclear Arms Control," *Rethinking the Unthinkable*, ed. Ivo H. Daalder and Terry Terriff, (Portland, Oregon: Frank Cass and Co., 1993), 41.
[187] Andrew J. Goodpaster, Statement to the Senate Governmental Affairs Subcommittee on International Security, Proliferation and Federal Services, February 12, 1997.
[188] Hall, Capello, and Lambert, "Post-Cold War Nuclear Strategy Model," 24-25.

argument illustrates another critical feature of pro-nuclear advocacy, the deployment of technological determinism as a justification to deploying even potentially deadly weapons systems. Within this framework, the mere existence of a technology assures its use by state actors, and the United States is justified in brandishing even omnicidal weapons in its own defense against the potential deployment of those same technologies by hostile powers. The report cited Richard N. Haass of the Council on Foreign Relations, who noted that "the abolition of nuclear weapons is impractical [because] you cannot disinvent an idea."[189] The report claimed that "even if the United States could successfully negotiate the elimination of all strategic nuclear arsenals . . . there is still now way to negotiate or mandate the trust that would be required for this to succeed."[190] The INSS report cited a passage from General Eugene Habiger, who argued that "going to zero and staying there" would require "a regime for verification and control light-years beyond anything we have in place today" and would require the monitoring of so many activities that it would take decades to develop effective verification measures, and that the effectiveness of those verification mechanisms "would require fundamental changes in the relations of nations."[191] According to the authors, "as long as there are some nuclear weapons there is a need to have deterrence to make sure they are not used."[192] Indeed, one of the key recommendations of the report is that "nuclear deterrence . . . is not in danger in the near or long term."[193]

The INSS report both supplemented and extended Payne's criticisms of Butler and other disarmament activists in ways that countered key elements of Butler's portraiture. Perhaps most damning is the deployment of seemingly pro-nuclear statements and policy preferences from

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[189] Richard N. Haass, "It's Dangerous to Disarm," New York Times, December 11, 1996, A23.
[190] Hall, Capello, and Lambert, "Post-Cold War Nuclear Strategy Model," 39.
[191] Ibid., 42-43. See Eugene B. Habiger, , "Deterrence in a New Security Environment," *Strategic Forum 109* (April 1997): 1.
[192] Hall, Capello, and Lambert, "Post-Cold War Nuclear Strategy Model," 39.
[193] Ibid.

Butler's political allies, especially General Goodpaster, with whom Butler had collaborated in his public relations campaign. The INSS cited Goodpaster as recognizing the need to maintain some nuclear force levels as a means of checking the proliferation of nuclear weapons and the impracticality of negotiated nuclear disarmament, or even deep nuclear cuts, in the near term. This reveals an underlying strategy that attempts to play disarmament "pragmatists," such as Goodpaster, who see nuclear abolition as a long process that forces short-term compromises, off against disarmament "idealists," such as Butler, who believe that nuclear abolition can be achieved in the near to medium term. Public statements from pragmatists such as Goodpaster are deployed to carve out an appropriate a middle ground between "extreme" nuclear reliance and immediate abolition, a middle ground that justifies some modest force levels. This opening can then be leveraged to ratchet upward the proposed near-term force levels, from the hundreds of warheads preferred by Goodpaster, to the thousands advocated by Payne and other establishment advocates on the basis of inflated threat projections. Highlighting seemingly exculpatory statements about nuclear deterrence policies from Goodpaster and other nuclear experts identified with the "abolitionist" camp discredited Butler's claims to unique insider knowledge about the dangers of nuclear weapons.

The INSS report also underscored the importance of foregrounding emergent WMD threats in the establishment's response to Butler and disarmament activists. The authors directly countered Butler's contention that the end of the Cold War had fundamentally altered the calculus against nuclear deterrence by pointing to the potential threat posed by the WMD programs of Iran, Iraq, North Korea, and other revisionist powers. In the formulation of the INSS report, the world had not changed nearly as much as Butler suggested, with the Soviet Union

being replaced by a cluster of smaller, harder-to-deter powers that still presented an enormous, deadly challenge to American security interests.

The INSS report deployed another new line of response to Butler, claiming that he was not alone among government officials who saw the need to rethink American nuclear policy in light of the end of the Cold War. However, the report cautioned that these other nuclear experts reached very different conclusions from Butler and his allies, as manifested in important nuclear policy planning documents like the 1994 Nuclear Posture Review, which made important changes to the U.S. nuclear arsenal while still leaving an important role for nuclear weapons, and Presidential Decision Directive 60, which envisioned an enhanced role for nuclear weapons in the deterrence of emerging chemical and biological weapons threats. These documents, the authors contended, revealed that the continued emphasis on nuclear deterrence was not a result of bureaucratic inertia, as Butler contended, but rather arose from a careful consideration of the potential threats faced by the U.S. and the potential benefits offered by nuclear weapons in addressing those challenges. Butler was thus not a prophetic messenger, but rather should be seen as one of many current and former members of the nuclear establishment who offered opinions on the future direction of U.S. nuclear policy. The policy evaluation offered by the INSS report suggested that Butler's analysis was simply incorrect.

Finally, the INSS report leveled "realist" versus "idealist" arguments similar to those used by Payne. Butler was again portrayed as a misguided idealist, one whose policy preferences did not warrant a response from the nuclear establishment because they are so unrealistic that they are not "relevant" to ongoing debates about the future direction of American nuclear policy. Butler and other abolitionists were accused of "putting the cart before the horse," placing the interests of abolition before the security realities that necessitate nuclear weapons. Butler was

thus misguided in arguing that he is part of a movement against the violent impulses of human nature, because the elimination of nuclear technologies will not alter the underlying causes of international conflict and human aggression. Consequently, the problem of "disinvention," the persistence of nuclear know-how even in a fully disarmed world, ensured that states will seek to "break out" and acquire their own nuclear arsenals because of the enormous geopolitical advantages to be gained from being the only state to possess nuclear weapons. The nuclear establishment was revealed to control the context of policy debates to such an extent that abolitionist policy perspectives, commonly held and seen as credible in other countries, were excluded almost entirely from official U.S. deliberations.

The arguments of Payne and the INSS report were taken up by political commentators, who expressed considerable skepticism about Butler and his disarmament objectives. This demonstrates that the arguments of the nuclear establishment affected views of lay commentators, which served as a conduit for amplifying their criticisms of Butler and other anti-nuclear advocates For example, Charles Krauthammer, a prominent political columnist and contributor to the flagship conservative publication *The Weekly Standard*, described Butler's call for "the total denuclearization of the United States" as "simply crazy," comparing it to the "nuclear-freeze hysteria of the early 1980s." Krauthammer argued that arms reductions "are largely irrelevant" and anti-nuclear treaties "do practically nothing . . . to enhance strategic stability." Krauthammer echoed the claim of Payne and the INSS report that nuclear weapons were an inevitable part of modern statecraft, noting that "the nuclear genie is out of the bottle," and thus it is impossible to "undo the *knowledge* of how to make the weapons." In a world full of dangerous regimes, "the only problem is acquiring the materials and the brains to assemble the devices." Disarmament was dangerous because the risk of cheating by opposing states is quite

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high, and were the United States to engage in the folly of denuclearization, it would surely wake up one day looking down the barrel of some nuclear-armed bad actor." Krauthammer combined these arguments with an exceptionalist analysis of America's nuclear weapons, similar to that offered by detractors of the CTBT. Krauthammer claimed that the noble intent of the U.S. arsenal was demonstrated by the purposes to which it was put, noting that the Americans "used the bomb to end a war, not to start—or win by threat—new ones," and he contrasted this with the "severe nuclear instability" that ensued once the Soviet Union developed its own nuclear weapons.[194] These observations are typical of the exceptionalist rhetoric that surrounds many public discussions of the American nuclear arsenal, which see inherent dangers in the possession of nuclear weapons by other states but fail to acknowledge similar dangers found in aggressive American nuclear postures.

2.3.3 Continuity and Change from the Cold War

Collectively, the case for a strong American nuclear deterrent offered by these and other critics of Butler's abolitionist stance maintained strong parallels to the public arguments offered during the Cold War for MAD and other deterrence policies. First, the large and unpredictable nature of the threat posed by the nuclear arsenals of other major powers continues to be used as a justification for a robust American nuclear posture. Although the Soviet Union no longer poses a monolithic threat, the inheritor of its arsenal, the Russian Federation, is portrayed as a potential existential threat to the United States and one that justifies a large American nuclear arsenal.

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[194] Charles Krauthammer, "Thinking the Unthinkable… Again," *The Weekly Standard*, June 22, 1998, 24.

Second, the arguments of Payne and the INSS report demonstrate that the "extended deterrence" justification for the American nuclear arsenal remains persuasive for many members of the nuclear establishment. These and other critics of abolitionist policies continue to maintain that the U.S. deterrent is necessary to prevent both American allies and adversaries from acquiring nuclear weapons, in an act of self-defense by states under the U.S. nuclear umbrella and as an act of defiance by hostile states. The threat of "nuclear anarchy" and a world of dozens of nuclear powers, feared since at least the Kennedy administration, continued to animate pro-nuclear discourses.

Third, the purported prior success of deterrence postures continues to feature prominently in the arguments of the nuclear establishment. Payne features claims about the prior effectiveness of nuclear deterrence in nearly all of his public statements on the topic, and the claim that "it has worked in the past and will continue to work again" seemingly remains persuasive among both official and unofficial audiences. This argument both insulates the nuclear establishment from claims that nuclear weaponry is at high risk of "normal" accidents and plays upon the presumption held by most policymakers and members of the public that nuclear weapons will always be a part of global security dynamics.

Fourth, pro-nuclear advocates continue to gesture towards the possibility of a nuclear-free world at some point in the (distant) future as a means of neutralizing ethical arguments against nuclear deterrence. The INSS report and Payne both argue that nuclear abolition may be a laudable goal, but only after substantial changes in the relationship between states. Pro-nuclear advocates thus neatly blunt potential criticism of themselves and their policies as intrinsically violent while establishing a set of goal posts for nuclear abolition (geopolitical conditions) that

can be readily shifted in ways that render "eventual abolition" into "nuclear deterrence now and forever."

However, there are also several important differences in the defense of nuclear deterrence policies that emerge from a close reading of the debate between Butler and his critics. The most significant difference is the expansion of the type and nature of threats that are used to justify a central role for nuclear weapons in American security policy. During the Cold War, the Soviet Union was *the* threat that both justified nuclear deterrence in the eyes of its supporters and animated public and official support, pouring hundreds of billions of dollars into nuclear weaponry and production facilities. The end of the Cold War forced pro-nuclear advocates to look afield for new threats to justify large nuclear arsenals and massive public expenditures, and an array of potential threats have emerged. Russia remains a central threat, both because of the size of its arsenal and the unpredictable nature of its future internal political and geopolitical trajectory. Butler's critics remind us that the Russian government is vulnerable to backsliding towards a more confrontational stance towards the United States and its Western allies. To these fears of the potential for a "new Cold War," pro-nuclear advocates also invoke the specter of a weakened and erratic Russia driven by internal instability into a miscalculated or poorly considered conflict with the United States. The transformed "Soviet/Russian" nuclear threat is then coupled with the emerging nuclear threat posed by a rising Chinese state, which many pro-nuclear advocates claim is on a collision course with the United States. The Chinese serve as an effective potential stand-in for the old Soviet threat, a role they are particularly well-suited to play because of the lack of direct knowledge among policymakers and the American public about Chinese goals and intentions. Finally, the threat of the spread of nuclear weapons to otherwise weak revisionist states is proffered as a justification for a robust American deterrent.

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Payne and other advocates claim that the United States both needs nuclear weapons to dissuade states like Algeria, Iran, Iraq, and North Korea from acquiring nuclear weapons and to deter those states if they cross the nuclear threshold.

Second, pro-nuclear advocates have expanded the range of the imagined roles for nuclear weapons. Although the United States maintained a policy of "calculated ambiguity" during the Cold War, which left the door open for a nuclear response to a chemical or biological weapons (CBW) attack, post-Cold War nuclear advocacy has placed a substantially increased emphasis on the importance of a robust nuclear deterrent in defending the United States against an allegedly growing and deadly CBW threat. Similarly, Payne and defenders of nuclear warfighting policies have utilized the end of the Cold War as an opportunity to renew their criticism of MAD and push for a more "flexible" policy towards nuclear use, one that envisions nuclear preemption and battlefield use as a means of deterring and containing newly-armed WMD states for whom the logics of Cold War deterrence do not apply.

2.3.4   Concluding Thoughts

This case study highlights the strategies used by the nuclear establishment as it responds to internal dissent. The case of Butler is particularly revealing, both because of his status as a former high-ranking member of the nuclear priesthood and his very public advocacy campaign that sought to discredit the policies of the nuclear establishment. The preceding analysis demonstrates that the nuclear priesthood was able to effectively insulate itself from what would presumptively appear to be a powerfully persuasive challenge. This section ties insights about both Butler's campaign and the subsequent defense of the nuclear orthodoxy to the larger research questions posed by this study.

Butler's "turncoat" status was both a resource and a burden in his efforts to challenge the presumption that the nuclear deterrence policies of the Cold War should continue into the post-Soviet era. Among members of the anti-nuclear community, Butler's willingness to repudiate his "nuclear faith" granted him instant credibility and status. The general found himself in high demand on left-leaning lecture circuits, and his arguments were featured prominently in important anti-nuclear publications, such as the *Bulletin of the Atomic Scientists* and in editorials penned by left-leaning newspapers whenever their staffs took up questions of nuclear policy. Butler's highly publicized dissent was seen as validating the arguments of the anti-nuclear community, and was viewed by many advocates and analysts as a potential game-changer in public debates about the future trajectory of American nuclear policy.

However, Butler's "turning coat" also carried serious liabilities. Although Butler was granted numerous opportunities to speak and write about his experiences as a nuclear priest and expound upon the virtues of nuclear disarmament, his audiences were largely made up of persons who already agreed with Butler's policy conclusions. Butler was largely denied access to the formal deliberative settings where security policy is made and justified. He was never called to testify before congress about his views, despite the fact that many hearings on nuclear weapons-related issues featured prominently on the calendars of the relevant house and senate committees. Instead, persons with far less expertise, but also far less controversial views, were asked to validate the assumptions of the nuclear orthodoxy to the many policymakers who lacked any degree of personal familiarity or expertise with nuclear policy issues.

Butler's vocal dissent and repudiation of the doctrines and policies of his former career directed both Butler and his critics to evaluate the merits of his anti-nuclear critique on the basis of his personal credibility. Recognizing that he was vulnerable to accusations of "losing his

edge" or "turning his back" on his former comrades, Butler formulated and communicated a carefully crafted rhetorical portraiture designed to both burnish his own expertise with nuclear policy and defend himself against credibility-based attacks from representatives of the nuclear establishment. He described himself as motivated by conscience, and denied claims that he sought public prominence for his own sake, but instead argued that he paid a significant price for turning his back on his former career. Butler claimed that his extensive knowledge of nuclear weaponry and doctrine, coupled with the insights gained from managing the transition of the country's nuclear arsenal from a Cold War to a post-Soviet doctrine, left him as qualified as anyone to speak to America's future nuclear policies. He re-framed himself as a prophet, arguing that his "heresy" actually represented a new revelation about the relative dangers of nuclear weapons, and he admonished his audience to take advantage of the closing window of opportunity to both eliminate the world's nuclear arsenals and tame humanity's violent urges before we were all extinguished in a collective nuclear suicide.

Butler's credibility was attacked in a number of ways. Perhaps the most damning and effective strategy was simply ignoring Butler and his fellow abolitionists. Butler and his allies received very little attention from the "official" members of the nuclear establishment, which signaled to both elected officials and the general public that the fallen priests and their arguments were not worthy of serious consideration. The "cynical" reading of the understated nature of the official response to Butler is likely correct; no one wanted to give the general an official platform to lend any additional credibility to his arguments. Instead, the establishment relied upon proxies like Payne to address both the substance of Butler's policy recommendations and to attack the general's credibility. Payne took great care to portray Butler and other abolitionists as hopeless idealists, arguing that, in repudiating his former policy positions, Butler had also turned a blind

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eye to the realities that necessitated a robust nuclear deterrent. Butler and other dissenters were described as dangerous, not because of any desire to do harm to the United States, but rather because of their willful ignorance of the deadly threats that were emerging in the post-Cold War order, threats that could only be addressed by nuclear weapons. Butler was accused of only telling only half the story, unnecessarily inflating the dangers posed by nuclear weapons, and ignoring their obvious benefits. Payne accused Butler of misreading the history of the Cold War, claiming that Butler ignored the concrete, stabilizing effects of nuclear weapons while he crafted increasingly speculative and unrealistic arguments about their potential dangers. Payne and other critics argued that the public and decisionmakers should follow the recommendations of Butler before he "fell," which included repeated statements that nuclear weapons were important to safeguarding American security.

Butler's campaign failed, both because he failed to penetrate the deliberative space of "official" Washington and because he was able to only partly defend himself from attacks on his credibility. Butler found himself drowned out by pro-nuclear voices, who both had greater access to key decisionmakers and to message amplification platforms via mainstream media outlets. Butler's inability to challenge the nuclear orthodoxy demonstrates the vast resiliency of pro-nuclear discourses and highlights the enormous challenges faced by anti-nuclear advocates in changing the terms of the public debate about nuclear weapons. Despite support from prominent and highly-qualified nuclear policy experts, abolitionist arguments remain well outside of the mainstream of American political discourse. This exclusion of anti-nuclear viewpoints is also demonstrated in the next chapter, which analyzes the Senate's deliberations over ratification of the Comprehensive Test Ban Treaty.

3.0   THE COMPREHENSIVE TEST BAN TREATY

On October 13, 1999, after only twelve days of hearings and deliberations, the United States Senate rejected ratification of the Comprehensive Nuclear Test Ban Treaty (CTBT) on a largely party-line vote of 51-48.

The United States Senate came startlingly close to never even debating the merits of ratifying the Comprehensive Nuclear Test Ban Treat during the tenure of Clinton administration, despite the treaty being signed on September 24, 1996 and submitted to the U.S. Senate for ratification on September 22, 1997. A toxic mixture of partisan bickering between the White House and GOP-controlled Senate, political and personal hostility between senators, Republican opposition to a president whom many considered to have "beaten the rap" during the Lewinsky scandal and subsequent impeachment trial, and the diehard opposition of Senator Jesse Helms (R-NC), the chair of the Senate Foreign Relations Committee, the body that under Senate rules had to first take up the treaty, helped ensure that the Senate failed to act for over two years after the treaty's submission. It was not until Senator Helms and members of the Senate Republican leadership sensed weakness in a Clinton administration that was ill prepared to devote attention and political resources in support of the treaty's ratification that Helms and his colleagues pursued unanimous consent from the Senate in late September 1999 for a floor debate and vote on the CTBT. After two years of inaction, Helms sparked a political firestorm that earned the ire of many of his Senate colleagues, and directed a truncated set of committee hearings and

subsequent public debate that saw the treaty's eventual defeat on a vote of 51-48 and deeply embarrassed an embattled White House. The CTBT's defeat generated serious concern and considerable consternation in the American and global anti-nuclear communities, a prominent member of which described the CTBT's ratification failure as "one of the most self-defeating moments in the US Senate's history of involvement in international arms control" and "one of the lowest moments in the history of international arms control."[1]

Rhetorical analysis of the debate about US ratification is warranted for several reasons. First, the debate took place during a moment that was widely perceived as a watershed transition period between Cold War and post-Cold War nuclear policy. Anti-nuclear advocates maintained that the treaty would set the stage for a world where nuclear weapons were less important in meeting US security concerns, a policy shift enabled by a fundamentally altered security environment. Additionally, public debates about the CTBT serve as a nexus point for advocates from across the nuclear policy spectrum, from nuclear use theorists (whom detractors have labeled "NUTS") to disarmament activists. A host of groups leveled arguments for and against the treaty, suggesting that the study of discourses relating to CTBT ratification may provide a rich site for generating textured understanding about the nature of many aspects of contemporary nuclear weapons and arms control debates. An assessment of the treaty deliberations reveals how institutions effectively fended off a strong activist push to fundamentally alter both American nuclear policy and way in which that policy was justified and determined. The case of the CTBT deliberations is valuable because of the degree of clash created by both sides marshalling resources and arguments and creates an opportunity to study the interplay of positions. Understanding such interplay is important because it reveals the underlying points of stasis in the

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[1] Damien J. Lavera, "Looking Back: the U.S. Senate Vote on the Comprehensive Test Ban Treaty," *Arms Control Today* (October 2004), accessed June 25, 2010, http://www.armscontrol.org/act/2004_10/LookingBack_CTBT.

technical debates about the treaty's merits and highlights the connections between these technical questions and the public justifications offered for and against the treaty's ratification. Finally, the CTBT debate represents an initial and important skirmish in the ideological and political battle to reshape American nuclear policy to "fit" the post-Cold War world, a contest that is manifested in the controversy surrounding Bush's new Nuclear Posture Review, the subject of Chapter Four.

Analyzing the CTBT deliberations also illustrates how technical argumentative norms steer nuclear policy debates toward issues like stockpile stewardship and arsenal reliability and away from deliberations about the utility of nuclear weapons themselves. Exploring the CTBT debate reveals important connections between various nuclear weapons advocacies and larger visions and debates about the proper role of the United States in foreign affairs. Additionally, the decision by the Clinton administration to distance itself from the potential role of the CTBT in advancing the cause of nuclear disarmament may, in part, explain its inability to counter arguments from the nuclear establishment about the necessity of testing in maintaining a reliable nuclear arsenal. Finally, institutional arguments against US ratification of the CTBT reveal additional evidence of the nuclear paradox described by Doxtader, wherein the potential security risks of open public deliberation about nuclear weapons are used as a justification for closing off such debates.[2]

Numerous primary source materials are consulted in this assessment of the public debate about the merits of the CTBT.[3] First, there are a number of Senate committee hearings, many from the weeks leading to the October 1999 vote.[4] These hearings not only provide a relatively

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[2] See Erik W. Doxtader, "Total War and Public Life: A Critical Theory of American Nuclear Deterrence Policy," (PhD diss., Northwestern University, 1997).

[3] The text of the treaty is available from a number of electronic sources. See *The Comprehensive Nuclear Test Ban Treaty*, accessed June 25, 2010, http://www.ctbto.org/treaty/treatytext.tt.html.

[4] See *Comprehensive Test Ban Treaty: Hearing Before a Subcommittee of the Committee on Appropriations, United States Senate*, 105th Cong. (October 19, 1997).

complete catalogue of the various perspectives voiced in the ratification debate, but a close reading of the hearing transcripts shows how advocates both for and against the treaty utilized and shaped the rules of the official deliberative setting in crafting and presenting their arguments. Further, an assessment of which perspectives were included in the hearings and which were excluded reveals both the ideological interests served by the structure of the deliberations and provide a sketch of the relative inclusiveness of the proceedings. Second, the *Congressional Record* provides a nearly complete record of the Senate floor debate. Examination of the twelve hours of official debate exposes how advocates strategized by adapting their arguments to the audience of their fellow Senators and the larger audience of the public and future historians. Evaluation of the argument forms deployed by the Senators also sheds light on the degree of penetration accomplished by advocates from the military, policy think tanks, and the scholarly community. Third, there are a large number of public statements from both supporters and detractors of the CTBT, available in the form of press releases, press conference transcripts, editorials, web campaigns, and sponsored articles in news and scholarly publications.[5] These

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Witnesses included Federico Pena, Secretary of Energy; Victor Resi, Assistant Secretary for Defense Programs, DOE; Frank C. Miller, Accting Assistant Secretary of Defense for International Security Policy; and Dr. Harold P. Smith, Assistant to the Secretary of Defense for Nuclear and Chemical and Biological Defense Programs; and Hearing on the Final Review of the Comprehensive Nuclear Test Ban Treaty, Senate Committee on Foreign Relations (October 1997). Witnesses included: Hon. Jeane J. Kirkpatrick, Senior Fellow, American Enterprise Institute and former U.S. Permanent Representative to the United Nations; Hon. Stephen J. Ledogar, former Chief Negotiator of the Comprehensive Test Ban Treaty; Hon. Caspar W. Weinberg, former Secretary of Defense; Hon. Madelein K. Albright, Secretary of State; Dr. Richard L. Garwin, Senior Fellow for Science and Technology, Council on Foreign Relations; Hon. J. Robert Kerrey, Senator, NE; Hon. Ronald F. Lehman, former director, Arms Control and Disarmament Agency; Hon. Carl Levin, Senator, MI; Hon. Richard C. Shelby, Senator, AL; Troy E. Wade, chairman, Nevada Alliance for Defense, Energy and Business, Las Vegas, NV; Hon. John W. Warner, Senator, VA.
[5] Examples of advocacy documents supporting U.S. ratification of the treaty include John M. Shalikashvili, *Findings and Recommendations Concerning the Comprehensive Nuclear Test Ban Treaty* (January, 2001), accessed May 9, 2010, http://www.fas.org/nuke/control/ctbt/text/shalictbt.htm; and George Bunn, Sidney D. Drell, Richard L. Garwin, Thomas Graham Jr., Daryl G. Kimball, Damien J. Lavera, Jack Mendelsohn, Paul G. Richards and Amy Sands, *White Paper on the Comprehensive Nuclear Test Ban Treaty* (Washington, DC: Lawyers Alliance for World Security, Fall 2000), accessed May 9, 2010, http://www.lawscns.org/speeches/ctbt_whitepaper.pdf. A relatively comprehensive summary of criticisms leveled against the treaty can be found in Kathleen C. Bailey, *The Comprehensive Test Ban Treaty: An Update on the Debate* (Fairfax, VA: National Institute for Public Policy, March 2001), accessed May 9, 2010, http://www.nipp.org/Adobe/CTBT%20Update.pdf; and Kathleen C. Bailey, *The Comprehensive Test Ban Treaty: The Worst Arms Control Treaty Ever* (Fairfax, VA: National Institute for Public Policy, September 1999), accessed May 9, 2010, http://www.nipp.org/Adobe/oppiece.pdf.

texts provide additional depth in the outline of the scope and content of the CTBT debate while providing an opportunity to assess similarities and differences in argument forms and rhetorical styles between "official" deliberative settings and less formal public spaces.

The chapter is organized into three major sections. The first section evaluates the "rhetorical situation" confronting CTBT proponents and critics, assessing how the combination of domestic political disputes, concerns over an unprecedented round of testing by India and Pakistan, a dispute over the nature of activities at Russia's arctic nuclear test site and their implications for the treaty's verifiability, and larger disputes about the role of the United States and its nuclear arsenal in the post-Cold War world shaped both the form and content of the Senate's and the broader public's debate about the merits of the treaty. The second section provides a detailed assessment of the public arguments offered both for and against the CTBT, outlining the interconnections between the claims made by major public white papers on the treaty and the content of the official Senate floor debate. The third section assesses how a number of key rhetorical elements combined to ensure both that the treaty would be defeated and that the central role of nuclear weapons in America's security policy would remain untouched.

3.1   CONTROVERSY IN CONTEXT

3.1.1   Domestic Political Context

Daryl Kimball, executive director of the Coalition to Reduce Nuclear Dangers, an American anti-nuclear advocacy organization, blamed the CTBT's failure on a number of factors, including a series of "political miscalculations" by treaty supporters, a knowledge gap among many

senators who failed "to understand core issues" relating to stockpile stewardship, testing verification, and global nonproliferation efforts, partisanship, and President Clinton's "failure to organize a strong, focused and sustained campaign" to rally public and elite support for the treaty.[6]

Political interplay between the various groups of Senators, the White House and its representatives, and interest groups was both enabled and limited by a number of structural factors that shaped the relationships between the parties to the debate. The domestic political climate was certainly favorable to neither the Clinton Administration nor the Comprehensive Test Ban Treaty. Clinton was deeply unpopular with the Republican leadership in both the House and Senate, and had only recently survived a Senate trial after being impeached by the House. Senator Jesse Helms (R-NC), the head of the Senate Foreign Relations Committee, was a long-time opponent of most forms of international engagement and had voiced a strong dislike for President Clinton and his policies.[7] Even political supporters described Helms as highly combative.[8]

Clinton's early efforts to promote the treaty had failed, blocked by opposition to the treaty among conservative members of the Senate's Republican leadership. By the summer of 1999, Senate Democrats were threatening to disrupt other Senate business unless the CTBT was

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[6] Daryl G. Kimball, "What Went Wrong: Repairing Damage to the CTBT," *Arms Control Today* (December 1999), accessed June 25, 2010, http://www.armscontrol.org/act/1999_12/dkde99.

[7] See Eric Bates, "What You Need to Know about Jesse Helms," *Mother Jones* (May/June 1995), accessed August 1, 2010, http://motherjones.com/politics/1995/05/what-you-need-know-about-jesse-helms; John Corry, "Jesse's World," *The American Spectator* (November 1999), accessed August 1, 2010, http://spectator.org/archives/2008/07/07/jesses-world; "Jesse Helms Lambastes Clinton's Foreign Policy," *Los Angeles Times*, May 28, 1995, accessed August 1, 2010, http://articles.latimes.com/1995-05-28/news/mn-7038_1_foreign-policy; and Michael Duffy, "What's on Jesse's Mind?" *Time*, December 5, 1994, accessed August 1, 2010, http://www.time.com/time/magazine/article/0,9171,981957,00.html.

[8] See Michael Graham, "Goodbye, Senator No," *National Review Online*, August 23, 2001, accessed August 1, 2010, http://old.nationalreview.com/comment/comment-mgraham082301.shtml.

brought up for a vote.[9] Senate Majority Leader Trent Lott (R-MS) switched strategies, offering

the Democrats a short debate on the treaty with a truncated set of hearings. The Senate Democrat

leadership accepted a modified version of the proposal, which allowed for a limited number of

hearings and a historically short floor debate for an arms control treaty.[10]

The partisan nature of the negotiations leading up to the Senate's consideration of the

treaty spilled over into the Senate deliberations themselves, and provided the treaty's supporters

with a potentially valuable resource with which to direct attacks against their counterparts.

Senator Charles Robb (D-VA) claimed that some senators were allowing their "personal

feelings" towards the president or "their desires for a decisive political victory to weaken the role

of the U.S. leadership in the international community."[11] Senator Max Baucus (D-MT) criticized

the highly partisan nature of the debate around the treaty, lamenting the decline of bipartisanship

in American foreign policy. During a debate on the agriculture bill a few days before the

Senate's floor debate on the treaty, Baucus claimed "it used to be when the President of the

United States had a major foreign policy request of the Congress, politics would stop at the

water's edge."[12] He further stated that "it is highly irresponsible for the Senate to stick its thumb

in the eye of the President of the United States . . . I just cannot believe it. It is just beyond

belief."[13] Senator Herb Kohl (D-WI) adopted a similar tone, stating that he "deplore[d] the

partisanship which has underscored this debate. This treaty is not about politics."[14] Kohl claimed

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[9] Eric Schmitt, "Democrats Ready to Fight to Save Test Ban Treaty," *The New York Times*, August 30, 1999, Lexis-Nexis Academic.

[10] See generally Daryl G. Kimball, "What Went Wrong" and Daryl G. Kimball, "Learning from the 1998 Vote on the Nuclear Test Ban Treaty," *Arms Control Today* (October 2009), accessed June 25, 2010, http://www.armscontrol.org/act/2009_10/LookingBack.

[11] 106 Cong. Rec. S12373 (daily ed. October 12, 1999) (statement of Sen. Robb).

[12] 106 Cong. Rec. S12474 (daily ed. October 13, 1999) (statement of Sen. Baucus).

[13] Ibid.

[14] 106 Cong. Rec. S12512 (daily ed. October 13, 1999) (statement of Sen. Kohl).

that the treaty itself had become "caught up in the politics of this institution."[15] Vice President Al Gore, himself a former member of the Senate, said he was "deeply disturbed to see former colleagues rush to embrace partisanship over statesmanship on a matter so important to safeguarding the national security of the United States."[16] Senator Joe Biden (D-DE), the floor leader in the Senate debate for the treaty supporters, declared that the American public "can forget about" politics "stopping at the water's edge."[17] President Clinton weighed in after the vote, claiming that partisanship itself was responsible for the defeat of the treaty, saying that "many [Senate Republicans] would have supported this treaty had they been free to vote their conscience," especially if the GOP Senate leadership had allowed for the addition of safeguards and understandings to the treaty. Clinton observed that "national security has become just like every domestic issue—politics, pure and simple."[18]

Senator Tom Daschle (D-SD), the minority leader, even described the CTBT as "a political football in a high stakes, highly partisan debate" where some parties seemed more interested in "seeking to score political points instead of carefully weighing this nation's national security interests."[19] Daschle echoed Baucus's comments by arguing that politics should "stop at the waters' edge" as well as "stop[ping] at the door to this chamber when we are deliberating treaties with such tremendous national and international ramifications."[20] Senator Joe Lieberman (D-CT) also expressed concern about the highly partisan nature of the Senate's deliberations and behind-the-scenes maneuvering, stating that "something unusual and unsettling has happened to

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[15] Ibid.
[16] Al Gore, "Statement of Vice President Al Gore on Senate Rejection of the Comprehensive Test Ban Treaty," *White House Press Release*, October 13, 1999, accessed July 20, 2009, www.fas.org/nuke/control/ctbt/text/101399gore.htm,.
[17] Joseph Biden, " Biden on Comprehensive Test Ban Treaty: I Am Outraged," Press Release, October 13, 1999, accessed July 20, 2001, http://www.fas.org/nuke/control/ctbt/text/101399bidenpress.htm.
[18] Bill Clinton, "Remarks by the President after the Senate Voted Not to Ratify the Comprehensive Test Ban Treaty," White *House Transcript*, Office of the Press Secretary, October 13, 1999, accessed July 20, 2009, http://www.fas.org/nuke/control/ctbt/text/101399clintonstatement.htm.
[19] 106 Cong. Rec. S12315 (daily ed. October 8, 1999) (statement of Sen. Daschle).
[20] Ibid.

our politics when party lines divide us so clearly and totally on a matter of national security."[21] Lieberman described the failure of traditional Senate deliberation mechanisms as "part ideological, part partisan, and part just plain personal," which he finds troubling "because the stakes here are high."[22] Senator Biden decried "the total politicization of a national security debate" in reference to the Senate leadership's refusal to consider President Clinton's request to delay a vote on the treaty.[23] After the vote, Biden described himself as "outraged," describing the decision to rush a floor vote as "irresponsible, short-sighted, and partisan."[24] Senator Patricia Murray (D-WA) claimed that the "Senate is failing our great tradition of considering treaties without partisan influences," noting that "the treaty's certain defeat was dictated by partisanship before a single hearing was held on the issue."[25] Murray further lamented that "the Senate's historical and constitutional duty has been laid aside by a majority party currying favor with extremist political forces."[26]

Meanwhile, treaty opponents were just as vocal in accusing CTBT supporters of "playing politics," and many were willing to defend the seemingly partisan nature of the proceedings. The acknowledged partisan nature of the dispute permitted the treaty's critics to accuse the White House and its senate supporters of pushing the treaty for their own political advantage. For example, Senator Helms accused President Clinton and Senate Democrats of being engaged in a "mad scramble" designed to either "create an arms control 'legacy' for the Clinton-Gore administration," to "provide an excuse for the administration's lack of any nonproliferation policy," or to "obscure the fact that this administration presided over the collapse of . . . the

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[21] 106 Cong. Rec. S12353 (daily ed. October 12, 1999) (statement of Sen. Lieberman).
[22] Ibid.
[23] 106 Cong. Rec. S12350 (daily ed. October 12, 1999) (statement of Sen. Biden).
[24] Biden, "Biden on the Comprehensive Test Ban Treaty."
[25] 106 Cong. Rec. S12518 (daily ed. October 13, 1999) (statement of Sen. Murray).
[26] Ibid.

START II Treaty."[27] Senator Jon Kyl (R-AZ), the floor leader for treaty opponents during the Senate debate, also responded to attacks that the Senate leadership had attempted to use the timing of the vote and a relatively short floor debate to punish the administration. Kyl argued that he had been "perfectly willing to keep the treaty in the Foreign Relations Committee," and that it was his Democratic colleagues who were responsible for insisting on an immediate vote. He claimed that at least one Senate Democrat had threatened to hold up all Senate business by "positioning himself on the Senate floor . . . like a potted plant, until CTBT was scheduled for a vote."[28] Helms defended the decision to move forward with a vote even when it became obvious that the measure would fail. Prior to the vote, Helms said that the only way the treaty could avoid defeat would be for President Clinton to withdraw the treaty and agree that the Senate would not consider the treaty for the rest of Clinton's term. He argued that Clinton refused the offer, making the president responsible for the CTBT's eventual defeat.[29] Senator Richard Lugar (R-IN) also blamed the treaty's demise on Clinton, citing a lack of leadership from the White House, which he described as "almost entirely absent on this issue." Lugar noted that the administration had failed over the past two years to "initiate the type of advocacy campaign that should accompany any treaty of this magnitude," again shifting blame to the White House. Helms also argued that the root of his opposition to the treaty had nothing to do with Clinton, and was instead motivated by his belief that "the CTBT is a dangerous treaty which, if ratified, would do enormous harm to our national security." He responded to claims that the Senate Republicans were trying to "score political points against a lame-duck administration" by noting that

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[27] 106 Cong. Rec. S12311 (daily ed. October 8, 1999) (statement of Sen. Helms).
[28] "U.S. Senator Jesse Helms (R-NC) Holds Press Conference with Senators John Warner (R-VA) and Jon Kyl (R-ZA) on Comprehensive Test Ban Treaty," *FDCH Political Transcripts*, October 6, 1999, Lexis-Nexis Academic.
[29] "U.S. Senator Jesse Helms (R-NC) Holds Press Conference."

opposition was rooted in the belief that "the CTBT is unverifiable, and because it will endanger the safety and reliability of the U.S. nuclear arsenal."[30]

Mistrust between the White House and the Republican leadership also complicated the treaty's pathway to ratification, with Senators using the lack of White House consultation over the drafting of the treaty as a justification for opposing the CTBT. Major Senate Republicans also argued that the treaty should be defeated because the White House had failed to work with the Senate during the treaty's negotiating process. Helms claimed that the Clinton administration was only interested in seeking the "Senate's 'consent' on treaties, but they are not interested in the Senate's advice." He maintained that the administration should have had the foresight to see "that an unverifiable, permanent, zero-yield ban on all nuclear tests would be defeated," and instead should "have negotiated a treaty that could be ratified."[31] Senators Lott and Kyl echoed these sentiments, with Kyl noting "it would help if [Clinton] asked the Senate's advice before he requested our consent."[32] Kyl maintained that the Senate was under no obligation to "rubber stamp" any treaty sent up by the President, and even argued that the Senate's rejection would improve American security in the long run by signaling to "our negotiators . . . to negotiate stronger provisions—provisions that we seek because we understand their importance and necessity for sensible arms control."[33]

Obtaining the advice and consent of the Senate on arms control treaties has always been a contentious process, and a number of factors rendered this process even more difficult for the Clinton administration and its allies in the Senate. The Republican leadership's control over the Senate calendar compelled the White House to accept the GOP's terms for the debate, which led

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[30] 106 Cong. Rec. S12509 (daily ed. October 13, 1999) (statement of Sen. Helms).
[31] 106 Cong. Rec. S12510 (daily ed. October 13, 1999) (statement of Sen. Helms).
[32] 106 Cong. Rec. S12541 (daily ed. October 13, 1999) (statement of Sen. Kyl).. See also 106 Cong. Rec. S12549 (daily ed. October 13, 1999) (statement of Sen. Lott).
[33] 106 Cong. Rec. S12368-9 (daily ed. October 12, 1999) (statement of Sen. Kyl).

to an unusually short set of hearings and limited floor debate. Senator Helms, who held the power to determine if and how key Foreign Relations Committee members considered the CTBT, had a long history of opposition to international accords and organizations, as evidenced by his long-standing efforts to constrain US funding for and participation in the United Nations. Treaty supporters were also forced to address Helms' personal animus towards the president, which first manifested itself in the 1993 debate over "gays in the military" and was exacerbated by the Lewinsky scandal and subsequent impeachment and trial.[34] The preceding quotations indicate that the senators themselves recognized that their body was deeply divided by partisan politics, posing enormous challenges for the CTBT's advocates, who responded with relatively weak appeals to "letting politics stop at the water's edge." Advocates also saw the need to re-frame the debate away from a referendum on the character and past foreign policy choices of President Clinton.

3.1.2   Geopolitical Context

The surrounding geopolitical context also influenced Senate deliberations on CTBT ratification. In particular two international incidents, a series of acknowledged nuclear tests by India and Pakistan and a suspected Russian test at an Arctic research facility, provided fodder for contestants on both sides of the ratification debate. Advocates on both sides of the debate were both forced to account for the newly-publicized Pakistani and Indian arsenals and the prospect of additional destabilizing tests in their arguments either for or against treaty ratification. The tests heightened media and public awareness of the potential dangers of proliferation, and provided

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[34] See generally "Jesse Helms," Obituary, *The Telegraph*, July 6, 2008, accessed November 29, 2010, http://www.telegraph.co.uk/news/obituaries/2247518/Jesse-Helms.html.

fodder for arguments about the relative effectiveness of a permanent, global ban in limiting the spread of nuclear weapons. Similarly, treaty proponents and opponents both pointed to alleged Russian clandestine testing as evidence for their side of the dispute, and both sets of advocates were forced to address the possibility of "cheating" by treaty parties and its implications for the effectiveness of the accord.

The dispute over the significance of the South Asia nuclear tests cut to the heart of concerns over the effectiveness of an international test ban in halting the vertical and horizontal proliferation of nuclear weapons. For example, Senator Arlen Specter (R-PA) claimed that the US needed to ratify the treaty to increase America's diplomatic leverage over India and Pakistan, else the world faced "an arms race that can be duplicated around the world."[35] Senator Daniel Patrick Moynihan (D-NY) argued that an unstable Pakistan could end up selling nuclear weapons to Middle Eastern states, something that could only be stopped if the US ratified the treaty because neither India nor Pakistan could be expected to sign onto the CTBT unless America did so first.[36] Senator Tom Harkin (D-IA) claimed that the South Asia nuclear tests proved that nuclear arms racing was just as serious a threat now as it was during the Cold War, necessitating an end to testing and nuclear modernization. In particular, Harkin worried that the arsenals of new nuclear states would be unstable, increasing the risk of nuclear use, and he maintained that the CTBT would "help to halt the development and deployment of new nuclear weapons."[37] Several senators argued that the recent coup by General Pervez Musharraf proved that strong U.S. nonproliferation action was necessary, with Harkin arguing that "if nothing else,

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[35] 106 Cong. Rec. S12266 (daily ed. October 8, 1999) (statement of Sen. Specter).
[36] 106 Cong. Rec. S12269 (daily ed. October 8, 1999) (statement of Sen. Moynihan).
[37] 106 Cong Rec. S11681 (daily ed. September 30, 1999) (statement of Sen. Harkin).

this ought to tell us to ratify this treaty, or else we are going to have more nuclear explosions in South Asia. It is a powder keg waiting to happen."[38]

Treaty opponents contested the claim that the South Asia tests proved the necessity of a CTBT. For example, Senator Jeff Sessions (R-AL) argued that the tests themselves were proof that states could develop relatively sophisticated nuclear weapons without tests, since Pakistan had detonated several warheads of varying yields without any prior tests.[39] Senator Kyl noted that claims other states would follow America's example in refraining from testing were invalidated by the India/Pakistan tests, noting that those two countries, plus Russia, China, and France, had all conducted nuclear tests since the US initiated its own nuclear testing moratorium in 1992.[40] Senator Lott described such modeling claims as being based on "faith," and that hoping others would follow an American lead was "a very dangerous thing to do when you are dealing with something of this importance."[41]

The nuclear tests by India and Pakistan provided many senators a framework with which they could make sense of many of the technical aspects of CTBT verification and the dangers of nuclear proliferation, and provided ready examples for the senators as they explained their rationale in voting for or against the treaty. Many senators attempted to control the interpretation of the causes and meaning of the South Asian nuclear tests, using them to frame discussions about whether the CTBT could be effectively verified, whether the treaty was enforceable, and whether a prohibition on nuclear testing could stop the spread of simple nuclear weapons. These nuclear tests had also disrupted a global nuclear order that had been relatively stable for nearly

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[38] 106 Cong. Rec. S12531 (daily ed. October 13, 1999) (statement of Sen. Harkin). See also 106 Cong. Rec. S12376 (daily ed. October 12, 1999) (statement of Sen. Biden); 106 Cong. Rec. S12524 (daily ed. October 13, 1999) (statement of Sen. Byrd); 106 Cong. Rec. S12468 (daily ed. October 13, 1999) (statement of Sen. Durbin); and 106 Cong. Rec. S12534 (daily ed. October 13, 1999) (statement of Sen. Specter).
[39] 106 Cong. Rec. S12307 (daily ed. October 8, 1999) (statement of Sen. Sessions).
[40] 106 Cong. Rec. S12260 (daily ed. October 8, 1999) (statement of Sen. Kyl).
[41] 106 Cong. Rec. S12285 (daily ed. October 8, 1999) (statement of Sen. Lott).

twenty years, and increased the salience of fears of the acquisition of nuclear weapons by even more states. The tests also reminded the senators that the world had changed markedly with the end of the Cold War, and that the threat of a nuclear exchange had not ended with the demise of the Soviet Union, lending a sense of urgency to the senate debate and vote. Finally, the tests were used by many senators to organize their deliberations about the "signal" sent by Senate acceptance or rejection of the treaty. In particular, treaty proponents argued that a Senate rejection of the CTBT would give license to India and Pakistan to engage in another, potentially destabilizing round of testing.

Similarly, the dispute over the nature of Russian nuclear research at its Novaya Zemlya testing facility in the Arctic highlighted key disputes between treaty proponents and opponents over the verifiability of a permanent global nuclear test ban. Senator John Warner (R-VA), who was respected by members of the Senate from both parties for his strong national security credentials, claimed that the alleged inability of the United States to discern whether seismic activity at the Russian site was natural or the result of a nuclear test showed that a "zero yield ban is not verifiable." Warner also expressed concern that evasive, low-yield testing could confound the treaty's objective of checking nuclear modernization, noting that "testing at yields below detection may allow countries, such as Russia, to develop new classes of low yield, tactical nuclear weapons."[42] He brushed aside claims that even if the Russians had recently engaged in testing, that such tests were not militarily significant, arguing that "the development of any nuclear weapon, regardless of its yield, is militarily significant to this Senator."[43] Similar arguments were voiced by many Senators during the floor debate, including Senators Orin Hatch

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[42] 106 Cong. Rec. S12236 (daily ed. October 8, 1999) (statement of Sen. Warner).
[43] Ibid.

(R-UT), Helms, Tim Hutchinson (R-AR), Kay Bailey Hutchison (R-TX), James Inhofe (R-OK), Richard Shelby (R-AL), and others.[44]

Treaty supporters retorted with ready responses to these criticisms about the verifiability of the CTBT and the intentions of the Russian government. Senator Bob Kerrey (D-NE), for example, argued that any tests at the Russian facility were so small that they had no military significance. He further claimed that the US's verification capabilities were so robust that they could "detect any test that could threaten our nuclear deterrence . . ." and that a "test that could be conducted without our knowledge could only be marginally useful and would not cause a shift in the existing strategic nuclear balance."[45] Senator Robb maintained that nothing had been proven in regards to alleged Russian tests, arguing that the current ambiguity about the situation only argued further for delaying the Senate vote on the treaty.[46] Robb also again reminded his Senate colleagues that the judgment of the U.S. intelligence community suggests that low-yield testing by the Russians and other parties "would not necessarily" allow them to "make gains in their thermonuclear weapons program," and that the threat of international condemnation would deter such tests.[47] Senator Biden even claimed than any shift by the Russians towards extraordinarily small nuclear weapons is evidence that US conventional capabilities far outstrip the Russians'.[48] Important administration witnesses advanced similar arguments. Sydney Drell, a professor emeritus at Stanford University, stated that classified evidence to which he was privy cast doubt on whether Russian activities at Novaya Zemlya were in violation of the CTBT. Drell

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[44] 106 Cong. Rec. S12400 (daily ed. October 12, 1999) (statement of Sen. Hatch); 106 Cong. Rec. S12546 (daily ed. October 13, 1999) (statement of Sen. Helms); 106 Cong. Rec. S12374 (daily ed. October 12, 1999) (statement of Sen. Hutchinson); 106 Cong. Rec. S12374 (daily ed. October 12, 1999) (statement of Sen. Hutchison); and 106 Cong. Rec. S12526-7 (daily ed. October 13, 1999) (statement of Sen. Shelby).

[45] Bob Kerrey, "Statement before the Senate Foreign Relations Committee on the Final Review of the Comprehensive Test Ban Treaty," October 7, 1999, accessed July 20, 2009, http://www.fas.org/nuke/control/ctbt/conghearings/senate.pdf.

[46] 106 Cong. Rec. S12373 (daily ed. October 12, 1999) (statement of Sen. Robb).

[47] Ibid.

[48] 106 Cong. Rec. S12350 (daily ed. October 12, 1999) (statement of Sen. Biden).

also argued that detection capabilities would improve in the future, and echoed the claim that any illicit activity at the site did nothing to threaten American security interests.[49]

The Senate dispute over the "meaning" of alleged Russian testing activity reveals both the continued importance of the Russian Federation and its nuclear arsenal for US policy makers while foregrounding critical fissures between the senators on the merits of the entire arms control enterprise. Some senators permitted no meaningful distinction to be drawn between the Soviet Union and its federation successor, ascribing similar anti-American motives to its actions and seizing on allegations of clandestine testing as proof that the Russians still harbored the ambitions of a global power and a desire to challenge American security interests. Similarly, the dispute over the tests demonstrates that the senators remained split over the capacity of arms control measures to constrain the behavior of states. Supporters of the CTBT, and arms control in general, tended to believe that global rules and norms shaped state policy and compelled compliance, while CTBT and arms control critics held that potential U.S. adversaries would ignore these rules and norms if doing so was in their national interest.

Public and Senate discussions about the merits of the CTBT were also influenced by broader disputes about both the role of a newly-dominant United States in a post-Cold War world and the appropriate roles and missions for nuclear weapons in defending American interests in a significantly altered geopolitical environment. A number of Senators and security analysts, including the vast majority of those in the anti-CTBT camp, saw this new world as fraught with uncertainty and filled with threats to the U.S. and its allies. Many senators and treaty critics openly identified a number of states as posing actual or potential threats to American interests. For example, Senator Kyl stated that "the end of the Cold War does not

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[49] Sydney D. Drell, "Testimony before the Senate Armed Services Committee," October 7, 1999, accessed July 20, 2009, http://www.fas.org/nuke/control/ctbt/conghearings/drell.pdf,.

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mean national security threats to the US have evaporated," and quoted James Woolsey, a former Clinton Director of Central Intelligence as saying "we have slain a large dragon" in the Soviet Union, but cautioned that "we live now in a jungle filled with a bewildering variety of poisonous snakes."[50] Kyl elaborated by describing "rogue nations" like North Korea, Iran, and Iraq, along with major powers China and Russia, as potential threats to the US.[51] Senator Wayne Allard (R-CO) claimed that in the new century, "America is confronting new and improved threats," particularly those posed by states "attempting to acquire weapons of mass destruction."[52] Senator Conrad Burns (R-MT) cautioned his colleagues that although "the Cold War may be over . . . the threat posed to the United States from nuclear weapons in hostile hands is far from over." Burns described a Russia increasing its reliance on nuclear weapons and backing away from arms control, a China that has stolen "priceless nuclear secrets" from the US nuclear laboratories, and "rogue entities" as necessitating a strong deterrent.[53] Senator Hatch argued that "the world we live in today is more dangerous than the Cold War era."[54] These concerns were echoed by several witnesses called to testify before the Senate committees, including Dr. Jeane Kirkpatrick of Georgetown and the American Enterprise Institute, who noted that "the number of countries capable of producing and delivering nuclear weapons and other weapons of mass destruction has increased and is increasing as we speak, and includes several of the world's most aggressive, repressive, and destructive countries."[55]

For many Senators, the uncertain nature about the evolution of the post-Cold War landscape seemingly argued against CTBT ratification and for a continued reliance on nuclear

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[50] 106 Cong. Rec. S12258 (daily ed. October 8, 1999) (statement of Sen. Kyl).
[51] ibid.
[52] 106 Cong. Rec. S12279 (daily ed. October 8, 1999) (statement of Sen. Allard).
[53] 106 Cong. Rec. S12343 (daily ed. October 12, 1999) (statement of Sen. Burns).
[54] 106 Cong. Rec. S12400 (daily ed. October 12, 1999) (statement of Sen. Hatch).
[55] Jeane Kirkpatrick, "Testimony before the Senate Foreign Relations Committee, October 7, 1999, , accessed July 20, 2009, http://www.fas.org/nuke/control/ctbt/text/100799kirkpatrick.htm.

deterrence as the ultimate safeguard of American security. For Senator Allard, this enhanced threat environment "means that the United States needs not a weakened nuclear deterrent but a stronger and more reliable nuclear deterrent."[56] Senator Jim Bunning (R-KY) similarly argued that "significant threats" continue to face the US, and that "our nuclear capability provides us a deterrent that is critical to our Nation and is relied on as a safety umbrella by most countries around the world."[57] Kyl argued that "the fear of a possible nuclear response . . . remains critical to countering this new set of ever more dangerous threats," and cautioned that "despite sustained and determined efforts to de-legitimize our nuclear weapons, and assertions that their utility ended with the cold war, our nuclear weapons are essential."[58] Kyl cited a National Defense University/Livermore National Laboratory study which found that "retaining the safety, reliability, security, and performance of the nuclear weapons stockpile in the absence of underground nuclear testing is the highest-risk component of the US strategy for sustaining deterrence."[59] Senator Hutchison described the CTBT as a "'feel good treaty' that doesn't make the world a safer place" and actually endangers American interests because "a critical element of our military strength is a credible nuclear capability . . ." and the CTBT "will only result in a nuclear weapons-free America, and that would be a much more dangerous world."[60] Senator Burns also called the CTBT "a nice dream and a great idea for another planet . . ." but one that would not work in the real world because of the importance of deterrence, while Senator Bunning described ratification as "a grand symbolic gesture" but one that is "no substitute for

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[56] 106 Cong. Rec. S12279 (daily ed. October 8, 1999) (statement of Sen. Allard).
[57] 106 Cong. Rec. S12345 (daily ed. October 12, 1999) (statement of Sen. Bunning).
[58] 106 Cong. Rec. S12535 (daily ed. October 13, 1999) (statement of Sen. Kyl).
[59] ibid.
[60] 106 Cong. Rec. S12274 (daily ed. October 8, 1999) (statement of Sen. Hutchison).

good policy and hard reality."[61] Senator Larry Craig (R-ID) accused treaty supporters of looking at "the world through rose colored glasses," and cautioned that an assessment of the treaty "must be made on the assessment of the clear and present dangers to the United States now and in the future."[62]

Meanwhile, treaty supporters tended to see the end of the Cold War as an opportunity to finally address the threat of mutual annihilation posed by massive American and Russian (Soviet) nuclear arsenals, and the threat of potential chemical, biological, and nuclear weapons proliferation to a new round of states as a justification for strengthening global nonproliferation norms. For example, Senator Ted Kennedy (D-MA) claimed that "ratification of the Comprehensive Test Ban Treaty is the single most important step we can take today to reduce the danger of nuclear war."[63] Nearly identical language was used by Senator Paul Wellstone (D-MN), and Senator Baucus, who argued that the CTBT would "leave a safer world for our children and our grandchildren" by helping address the "preventable" catastrophe of nuclear war. Baucus concluded that ratification would "reduce the fear of a nuclear holocaust that all Americans have lived with since the start of the Cold War 50 years ago."[64]

Senators Richard Durbin (D-IL) and Barbara Boxer (D-CA) were unique among their colleagues in that they connected their personal experience of fear of the Soviet nuclear threat with the problems faced by the US today in their case for Senate ratification of the treaty. Durbin described participating in "duck and cover" drills at his school, the experience of finding a fallout shelter in the first house he and his wife purchased, his memory of monthly air raid sirens,

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[61] 106 Cong. Rec. S12343 (daily ed. October 12, 1999) (statement of Sen. Burns) and 106 Cong. Rec. S12345 (daily ed. October 12, 1999) (statement of Sen. Bunning).
[62] 106 Cong. Rec. S12514 (daily ed. October 13, 1999) (statement of Sen. Craig).
[63] 106 Cong. Rec. S12354 (daily ed. October 12, 1999) (statement of Sen. Kennedy).
[64] 106 Cong. Rec. S12280 (daily ed. October 8, 1999) (statement of Sen. Wellstone) and 106 Cong. Rec. S12345 (daily ed. October 12, 1999) (statement of Sen. Baucus). Wellstone stated: "Ratification is the single most important step we can take—here and now—to reduce the threat of nuclear war, which is what my father was talking about."

and the pervasive fear of "nuclear winter" and a "nuclear holocaust: in the movies and television." Durbin noted that the recession of this threat with the end of the Soviet menace may have left "many of us lulled into a false sense of security that the threat of nuclear weapons is no longer something we should take seriously" despite the threat posed by nuclear proliferation by North Korea, Iran, and Iraq and the spread of nuclear technology and expertise from Russia. [65] Durban claimed that "the Comprehensive Test Ban Treaty is a key piece of the broader picture of nuclear nonproliferation and arms control," largely because it would bolster the credibility of the Nuclear Nonproliferation Treaty by signaling to non-nuclear parties that the US and other nuclear powers were serious about upholding their commitment "to control and reduce the number of nuclear weapons."[66] Senator Boxer recalled the same duck and cover drills, and the pride she felt at being issued "dogtags like they had in the Army," not recognizing that "the purpose of it was if we were annihilated, someone would know who we were."[67] Boxer also described her experiences as a first-year US representative in 1982, when she sat in on hearings on the effects of the threat of nuclear war on America's children, saying that she would "never forget sitting in that room listening to the young people express their fears of going to bed at night not knowing if the Soviet Union and America were just going to explode these bombs."[68] She also shared the "incredible sigh of relief . . . across the land" felt by Americans "when the cold war ended and we all thought the threat was over."[69]

Using the CTBT to address the seemingly growing threat of nuclear proliferation motivated other treaty supporters, Senator Byron Dorgan (D-ND) argued that "it is in our interest

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[65] 106 Cong. Rec. S11673 (daily ed. September 30, 1999) (statement of Sen. Durbin).
[66] Ibid.
[67] Barbara Boxer, "Questioning Dr. Madeline K. Albright, Secretary of State During Senate Foreign Relations Committee Hearing," October 7, 1999, accessed July 20, 2009, www.fas.org/nuke/control/ctbt/text/100799albright.htm,.
[68] Ibid.
[69] Ibid.

as a country to do everything to stop the spread of nuclear weapons," claiming that "arms control agreements and opportunities to prevent the spread of nuclear weapons are critical."[70] Senator John Kerry (D-MA) concurred, saying that "preventing the proliferation of weapons of mass destruction is one of the most important issues facing the United States today," arguing that the "job of nuclear arms control is far from finished" and that ratification of the CTBT would "on balance . . . enhance—not undermine—US national security interests."[71] Bill Richardson, the Secretary of Energy, testified before the Senate Armed Services Committee that "the end of the Cold War affords the opportunity to ratify this treaty" and that "the threat of nuclear weapons proliferation makes it imperative that we do so."[72] These claims were echoed by General Hugh Shelton, the chair of the Joint Chiefs of Staff, who testified "this treaty provides one means of dealing with a very serious security challenge . . . nuclear proliferation. The CTBT will help limit the development of more advanced and destructive weapons and inhibit the ability of more countries to acquire nuclear weapons."[73]

The senators were clearly divided in their views on how the world worked. This division foregrounds a key challenge faced both by the senators as they debated and rationalized their vote on the CTBT, and by US policy makers in general, as they sought to articulate a rhetoric that made sense of the post-Cold War world. As observed by Goodnight and others, the closure of the Cold War disrupted a wide array of interpretive frames that allowed policy makers to make sense of the world, while debating and justifying their policy preferences within that world. The end of the superpower confrontation compelled senators and other policy makers to formulate new interpretive frames and justify those frames to the American public. Analyzing

[70] 106 Cong. Rec. S12467 (daily ed. October 13, 1999) (statement of Sen. Dorgan).
[71] 106 Cong. Rec. S12350 (daily ed. October 12, 1999) (statement of Sen. Kerry).
[72] Bill Richardson, "Testimony before the Senate Armed Services Committee," October 7, 1999, accessed July 20, 2009, http://www.fas.org/nuke/control/ctbt/conghearings/richardson.pdf,.
[73] Hugh Shelton, "Testimony before the Senate Armed Services Committee," October 6, 1999, Lexis-Nexis Academic.

the Senate deliberations over the CTBT can enrich our understanding of how key policy makers chose to make sense of a radically altered geopolitical landscape, articulate US interests and policy preferences within that framework, and how the CTBT and other arms control measures fit within these new interpretive frames.

3.2   CASES FOR AND AGAINST RATIFICATION

The Senate's deliberations over ratification of the Comprehensive Test Ban Treaty are a fascinating case of the intersection of conflicting deliberation norms between public and technical spheres of argumentation. Each Senator who participated in the questioning of expert witnesses or took the floor to explain their rationales in voting for or against the treaty found themselves in the position where they were being asked to justify a *public* judgment about the merits of the treaty to a largely lay audience, yet the demands of evaluating these merits depended upon the Senators rendering and communicating judgments on highly complex, *technical* issues of arsenal maintenance and reliability, the effectiveness of verification schemes, and the reliability in regime-based global arms control in constraining the further vertical and horizontal proliferation of nuclear weapons. In explaining these public judgments to their colleagues, the media, their constituents, and ultimately to a global audience of foreign leaders and publics, I argue that most members of the Senate chose to explain their votes using one of two competing argument frames about the role of nuclear weapons in promoting US foreign

policy objectives. My assessment of these frames draws upon the work of Lakoff, Kuypers, and U.S. in the World.[74]

Senators who voted against ratification utilized a "security frame," which emphasized the "guardianship" function of nuclear weapons in safeguarding American national interests throughout the Cold War, and projected this "security dividend" from nuclear deterrence into an uncertain and constantly shifting geopolitical landscape. These Senators argued that the US could not afford to take any risks with its nuclear weapons because the arsenal was the "bedrock" of America's security in a dangerous world. For treaty opponents, the post-Cold War security environment was one that threatened the U.S. with the emergence of unpredictable and potentially catastrophic threats from either old enemies, such as a resurgent Russia, or a new cadre of "rogue states," characterized by their common objective of disrupting the American-led geopolitical order through asymmetric balancing techniques, including the acquisition and threatened or actual use of weapons of mass destruction. Votes against the CTBT were justified by tying technical objections to the treaty, raised by anti-ratification experts within the military, the diplomatic corps, and think tank and academic communities, to this broad vision of nuclear weapons as the ultimate guardians of the safety of the American public.

Treaty supporters defended their votes for ratification of the CTBT through the use a "risk management" frame, one which argued that the benefits of the treaty outweighed its costs. The risk management frame differed from the security frame in that it acknowledged that the US nuclear arsenal may itself pose a danger to American interests. Nuclear weapons were seen as tools with benefits and drawbacks whose utility could be maximized through carefully crafted

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[74] See George Lakoff, *Moral Politics: How Liberals and Conservatives Think (*University of Chicago Press, 1996/2001); Jim A. Kuypers, Stephen D. Cooper and Matthew T. Althouse, "The President and the Press: The Framing of George W. Bush's Speech to the United Nations on November 10, 2001," *American Communication Journal 10:3* (Fall 2008), accessed November 29, 2010, http://www.acjournal.org/holdings/vol10/03_Fall/articles/kuypers_etal.php; and U.S. in the World, "Talking About Nuclear Weapons with the Persuadable Middle," 2009.

public policy. Senate advocates of the treaty thus eschewed the "abolition frame" of General George Lee Butler and others, which viewed nuclear weapons as intrinsically dangerous, but still recognized that an unconditional commitment to a nuclear-led security policy jeopardized important US foreign policy objectives in areas such as nonproliferation, where it was vulnerable to charges of hypocrisy as a serial violator of its commitments under Article IV of the Nuclear Nonproliferation Treaty, and in developing productive collaborative relationships with other key international players such as Russia and China, who justifiably felt threatened by the prospect of rapidly advancing US nuclear capabilities. Senate supporters thus argued that although the imposition of testing limits may pose some marginal downside risks by eroding the operational effectiveness of the US nuclear arsenal, such a small decline in deterrence confidence was far outweighed by the diplomatic and strategic gains found in constraining the nuclear acquisition and modernization efforts of current and potential nuclear states.

The Senate's deliberations centered on three major questions. First, could the United States maintain confidence in the reliability of its existing nuclear deterrent without nuclear testing? Second, would ratification limit the ability of the US to maintain its technological superiority in nuclear weaponry relative to other nuclear powers? Third, would US ratification of the CTBT constrain the ability to other states to either cross the nuclear threshold and develop their own nuclear arsenals or modernize their existing nuclear arsenals? This section provides an in-depth analysis of the contest between the security and risk management frames as they were deployed in the Senate's evaluation of these questions, drawing upon three major sources: testimony offered before the Senate Foreign Relations and Senate Armed Services Committees, statements made by Senators during both the committee hearings and the floor debate, and two major public domain white papers that provide a detailed analysis of the political and technical

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arguments both for and against the CTBT. The first white paper was authored by Dr. Kathleen C. Bailey, then an analyst at the Cato Institute and a major critic of the CTBT.[75] Bailey was frequently called to testify before Congress on nuclear policy questions throughout the 1990s, including during the CTBT hearings, and later worked at the influential National Institute for Public Policy (NIPP), a Washington D.C.-based national security think tank with very close ties to prominent members of the Republican defense establishment. The second white paper was presented as a detailed rebuttal to the Bailey piece, authored by Christopher Paine, an analyst with the Natural Resources Defense Council (NRDC).[76] Bailey's paper and testimony and the Paine rebuttal provide comprehensive treatment of the technical cases for and against treaty ratification, and analyzing these documents provides both a framework for assessing and organizing the Senate debate and an opportunity to trace how technical arguments about the treaty's effectiveness moved between the informal disputes amongst "nuclear experts" and the formal deliberative spaces of the U.S. Senate.

Although this argument assessment is fairly lengthy, it reveals the depth and complexity of both the technical and political controversies surrounding American nuclear policy and of the Senate deliberations about the CTBT itself. More importantly, it affords the opportunity to use the Senate debate to elucidate and analyze core elements of the security and risk management approaches to nuclear weapons policy, while exploring how these frames were deployed in a very public and highly controversial debate. One noteworthy feature of the deliberations that features prominently in my later analysis is that a defense of the abolitionist frame was notably absent from the Senate deliberations. Both the security and risk management frames that

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[75] Kathleen C. Bailey, "The Comprehensive Test Ban Treaty: The Costs Outweigh the Benefits," *Policy Analysis* 330, Cato Institute (January 15, 1999).
[76] Christopher E. Paine, "Facing Reality: Resuming Nuclear Test Explosions Would Harm U.S. and International Security," Natural Resources Defense Council, January 1999, accessed June 23, 2010, http://www.nrdc.org/nuclear/acato.asp.

dominated the Senate debate accepted as a given the need for a strong American global presence as the ultimate guarantor of global stability and the central role of a nuclear deterrent in ensuring American leadership and military superiority. Instead, the prospect of nuclear abolition was raised in the debates only by the opponents of ratification as a devil term, one that forced the CTBT's proponents to disavow abolition, further entrenching the norm of nuclear weapons as the guardian of American security. Where the treaty proponents and treaty supporters differed was in how they assessed, and consequently communicated, the relative costs and benefits of a US decision to permanently forego nuclear testing on the effectiveness of the American nuclear arsenal.

3.2.1   Arsenal Reliability

The first major question addressed by CTBT proponents and opponents was whether the United States could maintain confidence in the reliability and effectiveness of its nuclear arsenal without the ability to engage in explosive nuclear testing. This question sparked some of the most heated exchanges in the Senate deliberations, in part because there were conflicting, strongly-worded reports about the CTBT's impact on arsenal reliability from experts on both sides of the controversy. The primary clash between treaty supporters and opponents turned on the technical question of whether a variety of "stewardship" measures under the Department of Energy's (DoE) Stockpile Stewardship Program (SSP) could guarantee the effectiveness of the nine existing American nuclear warhead designs without access to data from new explosive tests. Related disputes concerned the proven effectiveness of the SSP, the prospects for adequate long-term funding for the program, the likely timeline in which the program could be fully implemented, whether the DoE could attract sufficient scientific talent to run the program, the

purported effectiveness of re-manufacturing techniques, and whether the US would be able to withdraw from the treaty and rapidly resume testing if the DoE determined that there were serious flaws in the nation's nuclear arsenal.

Treaty proponents claimed that a combination of detailed materials monitoring, computer simulations, and the re-manufacturing of aging components was sufficient to ensure arsenal effectiveness. The challenges posed to the future reliability of the American arsenals could be effectively addressed through nuclear simulation and careful monitoring, and were thus acceptable for the treaty's supporters as long as they remained confident that the treaty would be at least modestly successful in constraining the modernization of the arsenals of existing nuclear powers and slowing the spread of nuclear weapons to states such as Iran, Iraq, and North Korea. If the CTBT could be proven to check horizontal and vertical proliferation while only having a minimal impact on the effectiveness of the American nuclear arsenal, then ratification was justified.

CTBT opponents argued that only explosive tests could detect emerging flaws in the nation's aging nuclear arsenals. Opponents claimed that testing limits would fundamentally undermine policy makers' confidence in the reliability of the American nuclear arsenal because of a convergence of factors, including the advancing obsolescence of current delivery systems and the unknowable effects of aging on the materials in the nuclear explosive packages. They argued that only explosive tests could detect emerging flaws in the nation's aging arsenal, and that nuclear testing was itself a part of the deterrence function of nuclear weapons. They also disputed diplomatic and nonproliferation gains offered by CTBT ratification, which were irrelevant, according to treaty opponents, if the constraints imposed by the treaty eroded the

effectiveness of America's ultimate "trump card," its enormous advantage in nuclear weaponry and capability.

3.2.1.1 Will the SSP Be Effective?

The first major point of contestation concerned the effectiveness of the Stockpile Stewardship Program (SSP), an ongoing project of the nuclear laboratories to certify the reliability of the US nuclear arsenal in the absence of explosive testing, a project originally necessitated by the US unilateral testing moratorium dating from 1992. Bailey contended that the SSP, lauded by CTBT proponents, was prohibitively expensive and of dubious utility in ensuring a "high degree of confidence" in the US nuclear arsenal.[77] She pointed to statements made by Dr. Sigfried Hecker, the Director of Los Alamos National Laboratory, claiming that confidence in the arsenal had declined since the implementation of the current testing moratorium.[78] If this is the case, she argued that it was reasonable to infer that arsenal confidence would continue to deteriorate under a permanent test ban. Bailey claimed that the technologies upon which the SSP relied were "unproven," meaning that there is "no certainty that those technologies will work as intended."[79] This is especially the case when considering the American nuclear arsenal, which includes a number of very complicated designs that purportedly require testing to ensure that they can accomplish their respective missions.[80] Bailey also argued that actual testing creates a demonstration effect that signals the effectiveness of the US nuclear deterrent to American allies and adversaries. This benefit, she claimed, could not be captured by subcritical testing and

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[77] Bailey, "Costs Outweigh the Benefits," 2.
[78] Ibid., 7.
[79] Ibid., 16.
[80] Ibid., 7.

computer simulations.[81] This argument assumed that nuclear deterrence is only effective if both the capability and willingness to use nuclear weapons is signaled on a regular basis, and if true, provides a strong security-based justification for testing even if treaty proponents demonstrated that nuclear tests are not necessary to ensure the continued reliability of the arsenal's nuclear explosive packages. Other witnesses called to testify before the Senate Armed Services Committee advanced similar concerns. Dr. Robert Barker, a former Assistant Secretary of Defense for Atomic Energy, stated that such a loss of "reliability" could mean that "all weapons of a given type will fail to perform their mission."[82] Dr. John Foster, a former nuclear laboratory director, testified "I oppose ratification . . . because without the ability to perform nuclear weapons tests the reliability and safety of our stockpile will degrade."[83] He also warned the Senators that "without actual weapon testing, uncertainties will grow in our understanding of the stockpile . . . [and] no one can assure that deficiencies, unreliabilities, do not develop; only proof tests will do that."[84]

Senate opponents maintained that the SSP's effectiveness could not be assured, and thus posed an unacceptable risk to the effectiveness of the US nuclear arsenal, mirroring many of Bailey's concerns. Senator Kyl argued during the Senate floor debate that the SSP "faces tremendous challenges," claiming that scientists from the national nuclear laboratories with which he had spoken were "careful not to guarantee that . . . the Stockpile Stewardship Program will succeed in replacing testing."[85] Kyl later cautioned in the same floor speech that "a credible

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[81] Ibid., 17.
[82] Robert B. Barker, "Testimony before the Senate Armed Services Committee," October 7, 1999, accessed July 20, 2009, http://www.fas.org/nuke/control/ctbt/conghearings/barker.pdf.
[83] John Foster, "Testimony before the Senate Armed Services Committee," October 7, 1999, accessed July 20, 2009, http://www.fas.org/nuke/control/ctbt/conghearings/foster.pdf.
[84] Ibid.
[85] 106 Cong. Rec. S12259 (daily ed. October 8, 1999) (statement of Sen. Kyl).

nuclear deterrent is just too important to put all our eggs in the stewardship basket."[86] Senator

Charles Grassley (R-IA) claimed that the SSP faced three challenges that limited the program's

effectiveness, including that "the technology has not been proven," "data from past tests don't

affect aging," and that Chinese acquisition of US "legacy" computer codes, leaving it "highly

vulnerable to espionage—and even to sabotage, by introducing false data."[87] Senator Warner

argued that since "history tells us that weapons believed to be reliable and thoroughly tested,

nevertheless, develop problems which, in the past were only discovered, and could only be fixed,

through nuclear testing," that the US could not rely on the SSP to guarantee the reliability of the

arsenal.

Paine both defended the SSP and contested the claim that the SSP could only be deemed

effective if it ensured the total reliability of the entire American arsenal. He noted that Bailey

provided no analysis about how effective or safe the United States arsenal should be. Paine

argued that even "during the Cold War, neither weapons nor delivery systems were ever tested

sufficiently to provide a valid indicator of their 'effectiveness' in war . . ." and that a resumption

of testing would be very unlikely to provide enough data to validate the effectiveness of the US

nuclear arsenal.[88] He also noted that the US military had rejected a fifteen-test program to

validate safety improvements in the W-88 warhead (used on missile submarines) on the grounds

that the alleged safety upgrades were not cost effective.[89] Paine also claimed that Bailey

"overstates the challenges faced by the program designed to replace nuclear testing with data

from computations and experiments." Although he said that he "tend[s] to sympathize with

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[86] 106 Cong. Rec. S12260 (daily ed. October 8, 1999) (statement of Sen. Kyl).
[87] 106 Cong. Rec. S12518 (daily ed. October 13, 1999) (statement of Sen. Grassley).
[88] Paine, "Facing Reality."
[89] Ibid.

some of [Bailey's] criticisms" of the SSP, he found that "most of her assertions are undocumented and open-ended, and some are clearly exaggerated."[90]

Paine also argued that Bailey's "recall-free" standard of arsenal reliability was neither necessary nor historically apt, noting that "ensuring reliability has always included, and continues to include . . . the capability to both detect the need for and execute a 'recall' should an 'actionable defect' recur in a large sample of warheads."[91] He described Bailey's use of historic evidence to justify continued testing to ensure the reliability of the American arsenals to "constitute a compilation of fallacies."[92] First Paine argued that Bailey's observations fail to distinguish between the warhead systems, which are enormously complex, "and the nuclear explosive package, which has roughly two orders of magnitude fewer parts."[93] Bailey thus exaggerated the difficulty of the challenge presented by using non-explosive testing to validate the effectiveness of nuclear explosive package components. Second, Paine claimed that Bailey has conflated two differently purposed tests, namely those designed to "certify the nuclear explosive performance of a *new* nuclear explosive package design, and those intended to confirm . . . satisfactory performance of stockpiled weapons." He noted that historically "the laboratory leaderships considered [stockpile confidence tests] to be a waste of resources." Paine argued that even the "stockpile certification" tests under the Reagan administration only revealed one performance problem, with was "easily corrected without modifying the nuclear explosive package" and that the nuclear laboratories "did an excellent job of predicting the performance" of nuclear devices in the stockpile."[94]

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[90] Ibid.
[91] Ibid.
[92] Ibid.
[93] Ibid.
[94] Ibid.

Senate proponents defended the SSP, arguing that the program would allow the United States to effectively manage the downside risks associated with giving up explosive nuclear testing while promoting important nonproliferation norms. Senator Kerrey argued that he had "an extremely high level of confidence in the nuclear stockpile even without continued testing." According to Kerrey, the SSP "is maintaining our technological edge without the need for further testing for the foreseeable future," that "this program is based on the most advanced science in the world . . . [and] is based on the results of over 1,000 American nuclear tests."[95] Senator Baucus cited expert opinion in support of the SSP as a justification for his vote for ratification, stating "the Directors of our weapons labs, the Chairman of the Joint Chiefs of Staff, along with four of his predecessors, and an impressive array of Nobel Prize winners believe the Stewardship Program will provide appropriate protection for our national security."[96] Senator Russ Feingold (D-WI) maintained that the SSP was vouchsafed as "an effective mechanism for maintaining the safety and reliability of our nuclear arsenal" by a series of high-ranking officials, and that the expert consensus was that the program would work.[97] Senator Diane Feinstein (D-CA) noted that the heads of all three laboratories had previously certified the reliability of the nuclear arsenal through the SSP, and argued that "further nuclear testing is not necessary to maintain the safety and reliability of the U.S. arsenal."[98]

Treaty proponents also claimed that the success of the current American nuclear testing moratorium proved that the CTBT would not undermine the reliability of the US nuclear arsenal. This ban, which went into effect through an act of congress in 1992, meant that the US had not conducted a nuclear test in the seven years prior to the Senate's vote on the treaty. In the context

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[95] 106 Cong. Rec. S12344 (daily ed. October 12, 1999) (statement of Sen. Kerrey).
[96] 106 Cong. Rec. S12346 (daily ed. October 12, 1999) (statement of Sen. Baucus).
[97] 106 Cong. Rec. S12237 (daily ed. October 8, 1999) (statement of Sen. Feingold).
[98] 106 Cong. Rec. S12528 (daily ed. October 13, 1999) (statement of Sen. Feinstein).

of the risk management frame, the drawbacks of giving up explosive testing had already been demonstrated to be negligible, since a long track record demonstrated that the US could maintain an effective arsenal without nuclear testing. Senator Ron Wyden (D-OR) argued that the US had already "stopped running" in the nuclear arms race, and was "no less safe" in 1999 than it was in 1992, the last time the country conducted nuclear explosive tests.[99] Senator Jack Reed (D-RI) maintained that the moratorium had already demonstrated the effectiveness of the SSP, claiming that we already "have certified that our nuclear stockpile is both safe and reliable. So the assertion that we can never assure the reliability and safety of our nuclear stockpile without testing has been disproven over the last 7 years."[100] Senator Kerry observed that the CTBT should be viewed as binding the US to a previous decision that the country had "already made, because it is in our national interests to stop testing."[101] Finally, Senator Sarbanes argued that since the US was "unlikely to test with or without this treaty, the major effect of the CTBT is to hold other countries to a similar standard."[102]

3.2.1.2 Will the SSP Be Ready in Time?

A second point of contention centered on the completion timeline for all of the components of the SSP. Bailey argued that many of the key testing facilities would not be completed for a decade or longer after the CTBT's ratification, and that in the interim, the safety and reliability of the US arsenal could potentially erode to dangerous levels.[103] This was a particular concern for Bailey because the decline in the size of the US nuclear stockpile and shrinking number of deployed warhead designs meant that the reliability of any one class of warhead was

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[99] 106 Cong. Rec. S12513 (daily ed. October 13, 1999) (statement by Sen. Wyden).
[100] 106 Cong. Rec. S12344 (daily ed. October 12, 1999) (statement of Sen. Reed).
[101] 106 Cong. Rec. S12352 (daily ed. October 12, 1999) (statement of Sen. Kerry).
[102] 106 Cong. Rec. S12365 (daily ed. October 12, 1999) (statement of Sen. Sarbanes).
[103] Bailey, "Costs Outweigh the Benefits," 16.

proportionately more important in ensuring arsenal effectiveness.[104] She claimed that "a few lemons are tolerable . . . but a serious flaw that is common to all weapons of a given type requires a recall".[105] The creation of these "lemons" was for Bailey seemingly inevitable, since field handling of nuclear warheads was likely to subject the materials to unforeseeable stresses and because aging will weaken components in an unpredictable fashion.[106]

Concerns about the potentially long implementation timeframe for the SSP featured in the Senate debate. Opponents claimed that treaty ratification risked creating a window of vulnerability, where U.S. and allied confidence in the arsenal declined while policy makers awaited the full implementation of the SSP. The time lag posed an unacceptable risk because it could leave the president and other officials unable to trust the effectiveness of the nuclear arsenal in a potential crisis situation. Senate Majority Leader Lott argued that even the Clinton administration had conceded that the SSP "won't even be completely in place until 2010," claiming that advocates of early CTBT ratification were guilty of "put[ting] the Stockpile Stewardship cart before the nuclear horse, willing to gamble that the United States can give up nuclear testing now in the hope that Stockpile Stewardship will work in the future."[107] Senator Warner cautioned that the program may not be ready for up to twenty years, and that there was "no certainty as to when" the SSP could replace the role of explosive testing.[108] Similar observations were made by Senators Bunning, Hutchison, Kyl, Rod Grams (R-MN), Frank Murkowski (R-AK), Olympia Snowe (R-ME), and Ted Stevens (R-AK).[109]

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[104] Ibid., 6-7.
[105] Ibid., 6.
[106] Ibid., 10.
[107] 106 Cong. Rec. S12287 (daily ed. October 8, 1999) (statement of Sen. Lott).
[108] 106 Cong. Rec. S12234 (daily ed. October 8, 1999) (statement of Sen. Warner).
[109] 106 Cong. Rec. S12345 (daily ed. October 12, 1999) (statement of Sen. Bunning); 106 Cong. Rec. S12273 (daily ed. October 8, 1999) (statement of Sen. Hutchison); Kyl, "Debate," October 12, 1999, S12106 Cong. Rec. S12368 (daily ed. October 12, 1999) (statement of Sen. Kyl); 106 Cong. Rec. S12313 (daily ed. October 8, 1999) (statement of Sen. Murkowski); 106 Cong.

Paine contested Bailey's claim that the SSP's facilities would take at least a decade to complete, arguing that "all of the major approved stockpile stewardship facilities . . . are scheduled to be operational by 2005 at the latest." Ernie Moniz, the Under Secretary of Energy, argued that the SSP is "grounded in 50 years of experience of more than 1,000 nuclear tests," and that "each weapon in the enduring stockpile has been thoroughly tested and is subjected to regular, in-depth surveillance."[110] Moniz claimed that the SSP "already has had many successes," and that "a full new scientific infrastructure . . . will be in place, completely, in the next three to five years."[111]

These arguments were taken up by Senators in the floor debate. Senator Carl Levin (D-MI) argued that he knew the SSP was effective because "we rely on it every year for a certification that our stockpile is safe and reliable" and that the program "has made significant progress."[112] Levin also pointed to the testimony of the laboratory directors, noting that "they have said three times, based on a Stockpile Stewardship program that we now have up and running, that our nuclear inventory is safe and reliable." If the nuclear laboratory leaders, other executive officials, and the Senate have been willing to accept SSP-derived judgments that the stockpile remained reliable in the present, Levin claimed that it is fallacious to argue that the SSP will not be "ready" to serve its stated purpose for a decade or longer.

Rec. S12347 (daily ed. October 12, 1999) (statement of Sen. Snowe); 106 Cong. Rec. S12523 (daily ed. October 13, 1999) (statement of Sen. Stevens).

[110] Ernie Moniz, "Remarks on the Comprehensive Test Ban Treaty," *White House Press Briefing Transcript,* October 5, 1999, accessed July 20, 2009, http://www.fas.org/nuke/control/ctbt/text/1000599holum.htm.

[111] Moniz, "Remarks."

[112] 106 Cong. Rec. S12274 (daily ed. October 8, 1999) (statement of Sen. Levin).

3.2.1.3 Will the SSP Be Adequately Funded in the Future?

Senators also clashed over whether the SSP would remain adequately funded in the future. Bailey claimed that funding for the SSP would be highly controversial for the foreseeable life of the program, increasing the probability over time that the SSP's budget allocations would shrink, further hampering the program's already questionable effectiveness.[113] She extended this argument about the politically controversial nature of the SSP's funding even further, observing that many arms control proponents were highly skeptical of the SSP, and thus may withdraw their support for funding the program after the treaty secures ratification.[114] Even if treaty proponents, who allegedly viewed the CTBT as a "backdoor" to nuclear disarmament, are not able to terminate the program entirely, their influence could severely limit the types of tests performed by the Department of Energy, again limiting the SSP's effectiveness.[115] Senator Warner cited similar concerns from representatives of the nuclear laboratories, who worried that the Senate would ratify the treaty and then refuse to provide adequate funding for the SSP in the future.[116] For Senate opponents, the threat of future fiscal constraints, misjudgment by overly dovish future congresses, or an active program to undermine the US nuclear arsenal by closeted nuclear abolitionists all cautioned against treaty ratification.

Paine argued that Bailey's claim that the laboratories were likely to "self limit" their non-explosive tests because of pressure from anti-nuclear groups was inaccurate. Paine claimed that he had seen no evidence that the Department of Energy had any interest in placating "anti-nuclear activists."[117] A post-mortem by Daryl Kimball of the Arms Control Association diagnosed this funding concern as generating "uncertainty about maintaining the nuclear arsenal"

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[113] Bailey, "Costs Outweigh the Benefits," 16-17.
[114] Ibid., 17.
[115] Ibid.
[116] 106 Cong. Rec. S12309 (daily ed. October 8, 1999) (statement of Sen. Warner).
[117] Paine, "Facing Reality."

among many Senators, but described it as rooted in "the impulse of the nuclear weapons laboratories to emphasize the challenges the program faces in order to maximize their annual congressional budget appropriations."[118]

Treaty defenders emphasized their (and the risk management frame's) commitment to nuclear deterrence, arguing that future congresses would recognize the need for a robust nuclear arsenal. Senator Biden described his opponent's argument as "circular reasoning," because the most likely threat to SSP funding came from fiscal hawks among the Republican members of the House. He claimed that "it strings together a group of nonsequitors that end up leading to a conclusion that makes no sense." Biden played upon his own long tenure in the Senate, assuring his colleagues that political pressures would ensure continued funding for the SSP.[119]

3.2.1.4 Do "Talent" and "Data Gaps" Threaten the SSP?

Additionally, Senate opponents focused their public arguments on whether the laboratories could ensure sufficient supply of talented scientists and engineers to safeguard the effectiveness of the CTBT. Bailey questioned the effectiveness of the SSP because of the erosion of expertise and technical skill among the staff of the nuclear complex. She argued that the SSP would be unable attract, train, and retain the personnel capable of fixing future problems with old weapons or to design new weapons.[120] Bailey cited statements from the nuclear laboratory leadership in arguing that the lack of a "real" testing program made it difficult to recruit and retain scientists.[121] Thus, the turnover generated by the looming retirements of a substantial number of the laboratory scientists with testing experience meant that this experience, presumably

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[118] Kimball, "What Went Wrong."
[119] 106 Cong. Rec. S12356 (daily ed. October 12, 1999) (statement of Sen. Biden).
[120] Bailey, "Costs Outweigh the Benefits," 1.
[121] Ibid., 17-18.

necessary to assess a weapon's reliability, risked becoming an increasingly rare commodity in the nuclear laboratories. Bailey claimed that only thirty-five out of eighty-five current nuclear designers had led a nuclear test, and this number was likely to decline in the future.[122] Admiral Henry G. Chiles, a former STRATCOM commander, shared the same argument in his testimony before the Armed Services Committee, stating "in twenty years there will be little or no nuclear testing experience in the Defense Programs workforce." Chiles also argued that "experienced scientists and engineers retire from the workforce . . . there is legitimate concern that the new generation will be sufficiently trained and experienced to technically certify the stockpile. We cannot afford the loss of essential competencies and facilities."[123]

Treaty opponents in the Senate argued that the "scientist gap" posed an unacceptable threat to the reliability of the arsenal, citing report from a number of experts. Senator Snowe advanced concerns about future laboratory expertise under a "no testing" regime during the Senate floor debate, citing the same "thirty-five of eighty-five" statistic as Bailey. Snowe also noted a 1994 Congressional Research Report that cautioned about a loss of testing skills and "nuclear test veterans," and described the skills loss as the "greatest jeopardy" faced by the nuclear program. Finally, Snowe cited the testimony of Dr. John Nuckolls, a former director of Lawrence Livermore, who said that a test ban "would trigger the loss of all nuclear trained expert personnel as well as 'major gaps in our understanding of scientific explosive.'"[124]

Paine, on the other hand, cited evidence from the director of the Los Alamos National Laboratory (LANL) to refute Bailey's claim that the laboratories are seeing the atrophy of key skills. The director is quoted as saying that "we find that most of the key skills are being

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[122] Ibid., 7.
[123] Henry G. Chiles Jr., "Testimony before the Senate Armed Services Committee," October 7, 1999, accessed July 20, 2009, http://www.fas.org/nuke/control/ctbt/conghearings/chiles.pdf.
[124] 106 Cong. Rec. S12347 (daily ed. October 12, 1999) (statement of Sen. Snowe).

exercised with the subcritical tests at NTS" and that the laboratories "are working diligently to keep some skills alive by utilizing some of the techniques and people, previously at the test site, here at our laboratory."[125]

Senator Biden contested the claim that testing itself was a prerequisite to attracting top-notch scientific talent to the laboratories, stating that the argument is "legitimate," but also that "if you are going to spend $45 billion in those laboratories, how are you not going to attract an entire new generation, who are going to be even more sophisticated."[126] Other Senate proponents of the treaty largely ignored the scientist recruiting question, which they likely saw as wrapped up in the larger debate about the effectiveness of the SSP. Additional funding and enhanced recruiting efforts would seemingly address the problem, and if the SSP were proven to be effective, charges of a "talent gap" would be largely irrelevant.

For advocates outside of the Senate, the existence and consequences of the "scientist gap" was intrinsically connected to a potential "data gap," the existence of which would compromise the effectiveness of the SSP. According to Bailey, the lack of testing experience with the existing nuclear arsenal was compounded by the fact that much of the data from earlier tests was unavailable for analysis and training, largely because the arsenal was designed under the assumption that the US would continue to test throughout the design life of the warheads.[127] Even if sufficient data from old tests were made available, such data, Bailey argued, would be inadequate because the data not only would not be able to account for the unknown effects of

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[125] "Enclosure 1 to letter to the Honorable Jon Kyl, United States Senate, from S. S. Hecker, Director, Los Alamos, response to Question 13," September 24, 1997.
[126] Madeline K. Albright, "Testimony before the Senate Foreign Relations Committee," October 7, 1999, accessed July 20, 2009, http://www.fas.org/nuke/control/ctbt/text/100799albright.htm.
[127] Bailey, "Costs Outweigh the Benefits," 8.

aging on nuclear warheads, but would not be able to assess the effectiveness of replacement components.[128]

Paine refuted Bailey's claim that there are important archival and knowledge gaps in the US's testing record, describing her arguments as "an excessively dire and therefore misleading view of the state of US nuclear weapons knowledge."[129] According to Paine, the "DOE is seeking to fill these gaps with improved archiving and interviews" and that "much of the accumulated US nuclear weapons knowledge is embodied in the nuclear test calibrated nuclear design codes, which in the hands of skillful users yielded remarkably accurate performance predictions."[130] Similarly, Paine claimed that Bailey is wrong in arguing that the current arsenal was intended to have its reliability validated by testing throughout the operational lifetime of each warhead design, stating that her allegation "is emphatically NOT TRUE . . ." He cited a statement from C. Paul Robinson, the Director of the Sandia National Laboratory, who said that "only a small fraction of our nuclear tests were for the purpose of evaluating the stockpile's health, because we could depend on a variety of other evaluation techniques."[131] Paine also cited a 1996 study from the SSP, which found that "less than 1%" of "defects in stockpile weapons from 1958 to 1993" were 'discovered' in nuclear tests."[132]

3.2.1.5 Will Re-manufacturing Reliably Extend Arsenal Life?

Senate advocates also attempted to tackle the question of whether the "re-manufacturing" of aging components in the nuclear warheads and explosive packages could reliably extend the life

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[128] Ibid., 9.
[129] Paine, "Facing Reality."
[130] Ibid.
[131] C. Paul Robinson, "Sandia's Answers to CTBT Questions from Senator Kyl, response to Question 1" enclosure to letter to Mr. Alex Flint, Majority Clerk, Senate Appropriations Committee, October 22, 1997.
[132] Paine, "Facing Reality."

of the nuclear arsenal without nuclear testing. Bailey attacked the administration's plans for re-manufacturing aging components of the nuclear arsenal. She assured the committee that American policy makers and force planners could have little confidence in any untested replacement components for several reasons, including: (1) the unavailability of many original materials and components because of the decay of the manufacturing infrastructure and a loss of technical expertise; (2) the presence of new environmental and safety standards that precluded the re-manufacturing of some parts; and (3) our inability to produce certifiably reliable equivalent parts without testing.[133] Dr. Foster testified that re-manufacturing of many components would be necessary because "the materials in the weapons tend to be unstable, decaying themselves and often interacting with other components." According to Foster, many system components change as they age, and "these weapons are not the same as those which were confirmed as adequate by proof tests."[134]

A number of Senate critics argued that re-manufacturing hurdles posed an unacceptable hazard to the effectiveness of the US nuclear arsenal, and ultimately, America's security. Senator Kyl claimed that re-manufacturing "poses significant programs" because of changes in manufacturing processes, the banning of chemicals on public health grounds, and the "incomplete" record of "documentation of the technical characteristics of older weapons."[135] Both Senators Helms and Warner argued that relying on re-manufacturing was dangerous, because we could only know that the processes were effective with a high degree of certainty if the US actually tested the weapons. Helms stated that "exact replication, especially of older systems, is impossible without testing . . . and testing is the most important step in product

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[133] Bailey, "Costs Outweigh the Benefits," 10.
[134] Foster, "Testimony."
[135] 106 Cong. Rec. S12259 (daily ed. October 8, 1999) (statement of Sen. Kyl).

certification."[136] Warner said the effectiveness of new materials and components "would have to be validated through underground nuclear testing."[137]

Paine challenged the assertion that nuclear warhead components could not be reliably remanufactured as part of the administration's plan to extend the operational lifetime of existing warhead designs. He claimed that Bailey's concerns about the difficulties in re-manufacturing nuclear pits were largely irrelevant, because such "components have as yet indeterminate life spans, conservatively estimated to be on the order of 50 years or more," and thus the U.S. should have "ample time . . . to reestablish plutonium pit recycling and fabrication capabilities."[138] Paine stated that the United States, as "the richest and most technologically advanced nation in the world," should be able to effectively re-manufacture its weapons if Russia, a "technologically lagging and nearly bankrupt" nation could do so, as Bailey later asserts. Paine noted that the SSP included "billions of dollars . . . [for] consolidating, modernizing and reconstituting production capabilities for both nuclear and nonnuclear components."[139] He even contested the idea that nuclear tests are a particularly useful or valid way of validating pit designs, stating that "they are in fact one of the least viable means" for proving that new production lines are producing functionally similar pits, claiming that "sampling, detailed inspection, and non-nuclear testing of warhead components . . . are the best way of verifying the 'functional identity' of the reestablished production lines."[140] Paine argued that tests are "too expensive" and are not "of much use in identifying the root cause of any system malfunction."[141] Richard Garwin, a nuclear scientist and long-time member of the Council on Foreign Relations, testified that new parts

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[136] 106 Cong. Rec. S12311 (daily ed. October 8, 1999) (statement of Sen. Helms).
[137] 106 Cong. Rec. S122345 (daily ed. October 8, 1999) (statement of Sen. Warner).
[138] Paine, "Facing Reality."
[139] Ibid.
[140] Ibid.
[141] Ibid.

"remanufactured to the same specifications as they were initially produced . . . will be as good as the day they were first made."[142]

CTBT supporters in the Senate floor debate and committee hearings mirrored many of Paine's arguments, claiming that re-manufacturing schemes permitted the US to manage the potential dangers posed by an aging nuclear arsenal. For example, Senator Feinstein argued that the SSP would not only allow the US to make modifications to existing "casings, detonators, batteries, and arming systems," but that "parts that wear out can be replaced, and modifications can be made that will improve the capabilities of the nuclear arsenal." According to Feinstein, the CTBT would "still allow the United States to modify its arsenal to meet the challenges that we may face in the years ahead."[143]

3.2.1.6 Do Safeguards Adequately Protect Against Future Threats?

Finally, Senators addressed the question of whether the US's ability to "opt-out" of the treaty in the event of an overwhelming threat to the country's national security provided sufficient insurance against the potential of unforeseen global events or a crisis in confidence of the American arsenal. Bailey took aim at the "safeguards" regime proposed by the Clinton administration to counter the fears of the CTBT's domestic critics and increase the political palatability of a ratification vote. She claimed that the safeguards themselves were an implicit acknowledgement by the White House "that the CTBT would diminish confidence in the safety and reliability of US nuclear weapons and that the CTBT has serious verification deficiencies."[144] These safeguards, which constitute six policy provisions labeled "A" through

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[142] Richard Garwin, "Testimony before the Senate Foreign Relations Committee," October 7, 1999, accessed July 20, 2009, http://www.fas.org/nuke/control/ctbt/text/100799garwin.htm.
[143] 106 Cong. Rec. S12528 (daily ed. October 13, 1999) (statement of Sen. Feinstein).
[144] Bailey, "Costs Outweigh the Benefits," 14-15.

"F," would commit the United States to: A) a stockpile stewardship program (SSP); B) the maintenance of "modern nuclear laboratory facilities" and programs designed to maintain the nuclear research base; C) maintenance of the ability to resume testing in case the US leaves the treaty; D) continued research and development in test monitoring; E) continued intelligence and analytic methods development "to ensure accurate and comprehensive information" about global nuclear arsenals and programs; and most controversially, F) an understanding that the President would withdraw from the CTBT if notified by key executive officials (Secretaries of Defense and Energy, nuclear laboratory directors, STRATCOM) "that a high level of confidence in the safety or reliability of a nuclear weapon type which the Secretaries consider to be critical to our nuclear deterrent could no longer be certified."[145] This last provision took advantage of the CTBT's "supreme national interest clause," which allows a state to opt out of the treaty if its security is threatened by continued adherence to the treaty's provisions.[146]

Most importantly, Bailey alleged that the Clinton administration's "Safeguard F," which allows the United States to resume nuclear testing under extreme circumstances, provided insufficient assurance that the US could maintain an effective arsenal across time. She maintained that the safeguard would likely never be invoked for several reasons. The implementation of Safeguard F requires consensus among several different decision makers, who would likely approach any purported weakness in the arsenal from widely varying perspectives. Bailey said that it was very unlikely that these persons would ever agree that the criteria permitting testing had ever been met.[147] Similarly, the likely negative reaction from the international community towards any American decision to resume testing would deter policy

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[145] Ibid., 15.
[146] Ibid., 15-16.
[147] Ibid., 19.

makers from invoking the safeguard, even if the need to test was clearly demonstrated.[148] Finally, many hawks may be wary of resuming testing because doing so would signal to American adversaries a potentially dangerous weakness in the US deterrent, inviting attack.[149]

The proposed safeguards were also subjected to substantial criticism during the Senate's deliberations. Senate opponents argued that none of the safeguards could provide sufficient assurances that the US nuclear arsenal would remain fully functional, and even claimed that a decision to withdraw from the treaty after ratification could compromise the nation's security. Senator Allard pointed out that the safeguards themselves were not a part of the ratification vote, but instead were "just promises made by President Clinton", and would thus be "still subject to congressional and budgetary pressures."[150] Senator Lott echoed Bailey's arguments by observing that the proposed safeguards are proof positive "that even President Clinton recognizes that the Comprehensive Test Ban Treaty is brimming with serious deficiencies" and that the safeguards themselves prove "that the administration does not believe the . . . Treaty to be capable of standing on its own merits."[151] Senator Warner also warned that the invocation of Safeguard F would signal American weakness, arguing "taking that action of pulling out, we have to signal to the world that we have less than full faith and credit in the effectiveness of our nuclear stockpile as a deterrent and for safety."[152]

Paine's reply to Bailey is strangely silent on the safeguards regime. However, Senate treaty proponents defended the Clinton safeguard plan as a prudent mechanism for balancing the costs and benefits of treaty ratification. Senator Biden, who was responsible for organizing the

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[148] Ibid.
[149] Ibid.
[150] 106 Cong. Rec. S12279 (daily ed. October 8, 1999) (statement of Sen. Allard).
[151] 106 Cong. Rec. S12291 (daily ed. October 8, 1999) (statement of Sen. Lott).
[152] John Warner, "Statement before the Senate Foreign Relations Committee," October 7, 1999, accessed July 20, 2009, http://www.fas.org/nuke/control/ctbt/conghearings/senate.pdf.

floor debate on behalf of the CTBT's supporters, noted that the entire military leadership supported the safeguards, and attacked the Republican leadership for refusing to include the safeguards as part of the treaty bill brought to the floor of the Senate, accusing his colleagues of arranging a "stacked deck" against ratification.[153] The safeguards were vital to garnering support for the treaty, Biden argued, because they ensured that the Defense Department, the Joint Chiefs of Staff, and the national nuclear laboratory directors were behind the agreement.[154] President Clinton argued that the safeguards addressed every single objection to the CTBT.[155]

CTBT supporters in the Senate also rigorously defended Safeguard F and the "supreme national interest clause" embedded in the CTBT, arguing that it afforded an effective "insurance policy" against the unknown, in their judgment, small but still real risks that whole parts of the US arsenal could slip into obsolescence. Senator Kennedy described it as a "safety valve" that protected American national security interests.[156] Senator Kerry claimed that no president would "place the sanctity of a treaty above the sanctity of the lives of the American people."[157] Biden argued that such clauses were common, stating that "such a clause, or a variation, is in every treaty the United States of American signs."[158] Senator Levin claimed that the United States had already "informed every signatory" that it would withdraw from the treaty and resume testing if it could not certify the safety or reliability of the American arsenal.[159] Senator Specter argued that concerns about signaled American "weakness" were inevitable if the United States again

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[153] 106 Cong. Rec. S12268 (daily ed. October 8, 1999) (statement of Sen. Biden).
[154] 106 Cong. Rec. S11425 (daily ed. September 24, 1999) (statement of Sen. Biden).
[155] Bill Clinton, "Remarks Urging the Senate to Pass the Comprehensive Test Ban Treaty," October 6, 1999, accessed July 20, 2009, http://www.fas.org/nuke/control/ctbt/text/index.html.
[156] 106 Cong. Rec. S12354-5 (daily ed. October 12, 1999) (statement of Sen. Kennedy).
[157] 106 Cong. Rec. S12353 (daily ed. October 12, 1999) (statement of Sen. Kerry).
[158] 106 Cong. Rec. S12268 (daily ed. October 8, 1999) (statement of Sen. Biden).
[159] 106 Cong. Rec. S12274 (daily ed. October 8, 1999) (statement of Sen. Levin).

resumed testing, regardless of whether it had first ratified the treaty and then was forced to withdraw.[160]

The Senate contest over the impact of a permanent test highlights several important features of the competing security and risk management frames. Because the security frame posits a "backstop" function for nuclear deterrence in the event other US military assets fail, it cannot accept any policy that poses any threat to the reliability of the arsenal, because the arsenal itself is the nation's last line of defense. The senators thus demanded absolute certainty that the SSP would maintain a robust and effective arsenal, a proof standard that the laboratory directors, and even treaty supporters, conceded that no stewardship program could possibly meet. Senate opponents of the CTBT thus chose to attack the treaty by listing an array of potential flaws in current and future stockpile stewardship efforts, arguing that any single problem could present an unacceptable risk to the arsenal, and thus the safety of the United States and its citizens. A similar phenomenon is at play in the debate about the safeguards, where opponents attempted to turn the tables on the Clinton administration in arguing that the mere existence of the safeguards proved that the CTBT's own advocates harbored doubts about the SSP's effectiveness. The CTBT's opponents in the Senate were thus able to justify their vote against the treaty as a rejection of a flawed and unproven technical scheme, and a vote for the assured protection that the nuclear arsenal had offered the country since World War II.

The risk management frame defended support for the CTBT by contesting the meaning of potential hurdles in maintaining a nuclear arsenal without explosive testing. The SSP was not framed as a perfect replacement for nuclear tests, but was instead situated as a method of identifying, managing, and curing the problems that were likely to arise as the US nuclear

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[160] 106 Cong. Rec. S12267 (daily ed. October 8, 1999) (statement of Sen. Specter).

arsenal aged. The CTBT's Senate supporters viewed the potential of a catastrophic failure in the SSP as low, because its prior track record of success and its expert endorsement from the laboratory leaders provided them confidence that the program would work. These senators were also able to downplay the threat of the SSP's failure because suck risks were always compared to the benefits of ratification, including burnishing the international reputation of the United States and solidifying the global nonproliferation regime. The next section explores how the security and risk management frames approached the nuclear arsenal modernization debate.

3.2.2 Modernization

The second major question contested by Senators as they deliberated US ratification of the CTBT was whether the United States could effectively modernize its nuclear arsenal relative to the strategic capabilities of other nuclear and non-nuclear states if the US refrained from explosive nuclear testing. Concerns about the CTBT's effects on future American nuclear modernization efforts revolved around several major disputes, including: whether the treaty's testing limits were part of a broader international effort to eventually disarm the major nuclear states; whether the emergence of potential new weapons of mass destruction (WMD) threats necessitated new nuclear weapons and whether such weapons and delivery systems could be developed without nuclear testing; whether new safety measures could be developed and incorporated into existing warhead designs without nuclear testing; and finally, whether US policy makers, allied states, and potential adversaries would have "confidence" in the effectiveness of an aging nuclear arsenal largely designed to fight the Cold War.

The CTBT's critics in the Senate attacked the treaty as a threat to American nuclear superiority. Many Senators echoed concerns from outside experts, arguing that the treaty was a

"backdoor" to the eventual nuclear disarmament of the United States, accusing their counterparts on the other side of the aisle of either failing to recognize the importance of nuclear deterrence in safeguarding the nation's security or of being hopelessly naïve. The Senators offered a number of security-based justifications for the need for continual modernization of the nation's nuclear forces, most of which were grounded in the contention that the world was an increasingly dangerous place and that a number of state and non-state actors threatened the American people and the vital interests of the United States. Senate opponents accepted the contention of right-leaning nuclear weapons analysts that the US could not effectively modernize its nuclear arsenal without explosive testing, and thus argued that ratification would pose an unacceptable risk to the safety and security of the United States and its citizens.

CTBT supporters in the Senate adopted a two-pronged strategy in tackling their opponent's modernization claims. First, many argued that the United States no longer needed to engage in nuclear testing to make modifications to its nuclear arsenal. They observed that substantial, effective modifications to existing nuclear designs, when coupled with a new generation of computerized design methods, allowed the US to maintain its technological advantage without explosive testing, even in the face of likely changes to the geopolitical and strategic environments. Second, CTBT supporters claimed that the implementation of the treaty would obviate much of the need for the US to make continual advancements in its nuclear capabilities, because the country's adversaries would find their modernization capacity to be even more restrained than would the United States. Where treaty opponents saw continual modernization as the only way to ensure future American nuclear dominance, and thus security, the CTBT's defenders in the Senate viewed the treaty as a tool to head off potential future arms races and "lock in" current American nuclear superiority while undercutting both hypocrisy

claims leveled at US foot-dragging in meeting its global nonproliferation obligations and the ability of revisionist states to develop their own reliable nuclear arsenals.

3.2.2.1 Is the CTBT a Backdoor to Eventual Disarmament?

Many of the treaty's most committed opponents claimed that the CTBT was part of a broader plan to "disarm" the United States. Bailey argued that treaty limits on US nuclear testing would preclude vital modernization efforts, while allowing other, less honor-bound nations to "cheat" the verification regime and clandestinely modernize their own forces, undermining the relative effectiveness of the US nuclear arsenal. Bailey noted that "while the Treaty will constrain the United States from modernizing and developing weapons, it will be possible for other nations to cheat with little or no risk of being caught because the CTBT cannot be verified".[161] Bailey even implicitly equated the lack of modernization with nuclear disarmament, saying that "there is no question that the abolition of testing will have the effect of constraining the modernization and improvement of nuclear weapons."[162] "Abolition" is typically used to describe the preferred policy end state of proponents of nuclear disarmament, who push for a world without nuclear weapons. Bailey also returned to her theme of making policy judgments based on the perspective of lab scientists by arguing that neither Russian nor US scientists would deploy any new weapons designs without testing.[163] In her testimony before the Armed Services Committee, Bailey claimed that "the CTBT could actually promote the spread of nuclear weapons, as well as enable Russia and others to continue to modernize their arsenals while the US arsenal remains static."[164]

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[161] Bailey, "Costs Outweigh the Benefits," 1.
[162] Ibid., 4.
[163] Ibid.
[164] Kathleen C. Bailey, "Testimony before the Senate Armed Services Committee," October 7, 1999, accessed July 20, 2009,

Fears about the CTBT leading to eventual American nuclear disarmament resonated with many Senators, who thus framed their vote against the treaty as a defense of the vital role played by nuclear deterrence in protecting US security. During the questioning of Defense Secretary Cohen at an Armed Services Committee hearing, Senator Snowe pressed him on whether the aspirational, pro-disarmament preamble of the CTBT posed "a contradiction with our goals of maintaining a strategic arsenal and a nuclear deterrent."[165] Senator Helms attempted to turn the tables on the Clinton White House claim that the CTBT was the "crown jewel" of arms control, calling the CTBT "the longest-sought, hardest-fought item on the unilateral nuclear disarmament agenda."[166] Senator Inhofe claimed that ratification "is nothing short of unilateral disarmament," while Senator Bunning compared the case presented in favor of the CTBT with the "idea of unilateral disarmament through a nuclear freeze" proposed by anti-nuclear activists in the 1970s and 1980s, concluding that "unilateral disarmament was a bad idea in the 1970s and 1980s; it is a bad idea for the 21st century."[167] These sentiments were echoed in statements by Senators Craig, Kyl, Sessions, and Shelby, who said "the treaty will serve as a stalking horse for denuclearization."[168]

Senate opponents also worried that the alleged modernization constraints imposed by the CTBT would disadvantage the US nuclear arsenal relative to that of its rivals. From their perspective, the security of the nation depended on a robust nuclear arsenal whose capabilities outstripped that of any opponent. Senator Lott argued that "other nations . . . will improve their

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http://www.fas.org/nuke/control/ctbt/conghearings/bailey.pdf.

[165] Olympia Snowe, "Questioning Secretary of Defense Cohen before the Senate Armed Services Committee," October 6, 1999, Lexis-Nexis Academic.

[166] 106 Cong. Rec. S12311 (daily ed. October 8, 1999) (statement of Sen. Helms).

[167] 106 Cong. Rec. S12272 (daily ed. October 8, 1999) (statement of Sen. Inhofe) and 106 Cong. Rec. S12344-5 (daily ed. October 12, 1999) (statement of Sen. Bunning).

[168] 106 Cong. Rec. S12514-5 (daily ed. October 13, 1999) (statement of Sen. Craig); 106 Cong. Rec. S12350 (daily ed. October 12, 1999) (statement of Sen. Kyl); 106 Cong. Rec. S12297 (daily ed. October 8, 1999) (statement of Sen. Sessions); 106 Cong. Rec. S12307 (daily ed. October 8, 1999) (statement of Sen. Sessions); and 106 Cong. Rec. S12526 (daily ed. October 13, 1999) (statement of Sen. Shelby).

arsenals—by exploiting the ambiguity inherent in the treaty's failure to define 'test,' or embarking on testing which we can't detect . . . or by espionage, as we have already seen in the case of China."[169] Senator Sessions said that other nations would "use this treaty to catch up, similar to the yellow caution flag when there is an accident on a race course," and that "in their efforts to catch up, our adversaries may well even achieve a breakthrough, a technological advancement that could leapfrog them even beyond the United States."[170] Senator Hatch described claims that other countries, such as China, would forego nuclear modernization efforts as a result of American ratification of the CTBT as "far more optimistic than I believe is prudent," claiming that the CTBT's "freeze" of the US deterrent was "in effect, abandoning America's technological edge and mortgaging that deteriorating edge on the belief and hope that our geopolitical competitors will do the same."[171] Senator Kyl voiced a similar argument, claiming that "what the CTBT will create is a frozen, degrading US nuclear weapons program, improving Russian and Chinese arsenals, and a host of rogue regimes increasingly aware that the United States nuclear deterrent is deficient."[172]

Paine directly refuted Bailey's claim that a lack of testing would preclude the modernization of America's nuclear delivery systems. He argued that "existing nuclear explosive packages can . . . be integrated into new or modified warhead and bomb systems," and that these reconfigured warheads "can be mated to new or modified delivery systems, without resort to nuclear tests."[173] According to Paine, the CTBT would not preclude the "adaptation" of nuclear weapons systems, because

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[169] 106 Cong. Rec. S12290 (daily ed. October 8, 1999) (statement of Sen. Lott).
[170] 106 Cong. Rec. S12307 (daily ed. October 8, 1999) (statement of Sen. Sessions).
[171] 106 Cong. Rec. S12400-1 (daily ed. October 12, 1999) (statement of Sen. Hatch).
[172] 106 Cong. Rec. S12541 (daily ed. October 13, 1999) (statement of Sen. Kyl).
[173] Paine, "Facing Reality."

improved casings, radars, altimeters, boost-gas delivery systems, neutron generators, detonators, batteries, integrated circuits, fusing and arming systems, permissive action links -- all can be developed, tested, and integrated into nuclear bomb and warhead systems without modifying the primary or secondary components of the nuclear explosive package design.[174]

He conceded that, although Bailey was correct that nuclear explosive packages have historically been designed around the constraints of particular delivery systems, he argued that "those days are over" and that "new missile and reentry systems . . . can be designed to accommodate the dimensions and performance envelopes of existing nuclear explosive packages."[175] Paine suggested that the effectiveness of this process has already been validated by the fitting of the new Trident II missiles to carry both "older w76 warheads as well as newer W88s."[176] Paine pointed out that even Bailey conceded that the creation of the B61-Mod 11 earth penetrating weapon was based on a conversion of the B61-7 bomb, and that this conversion was conducted under the SSP without the need to engage in nuclear testing.[177] Paine also argued that the Stockpile Stewardship Program provided the United States with the ability to "modernize" its arsenal to an extent far greater than other current or prospective nuclear states.[178] This meant that as long as the CTBT could be demonstrated to be reasonably verifiable, the United States could expect to maintain its technological edge in nuclear weaponry even after ratifying and implementing the treaty. Ratification thus hardly poses any risk of "unilateral nuclear disarmament." Meanwhile, in his Armed Services Committee Testimony, Sandia Laboratory Director C. Paul Robinson addressed concerns about the "aspirational disarmament" nature of the CTBT preamble, arguing that the belief that the treaty would "inexorably erode" the world's nuclear stockpiles was "an unrealistic expectation." Robinson cited stockpile stewardship

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[174] Ibid.
[175] Ibid.
[176] Ibid.
[177] Ibid.
[178] Ibid.

activities, the annual certification process, and the "supreme national interest" clause that permits the resumption of testing in extreme circumstances are reasons the CTBT would not result in global nuclear disarmament.[179]

Paine's rejection of the "unilateral disarmament" claim was shared by the treaty's supporters in the Senate. Senator Dorgan stated he would not judge the motives of "those who are strongly in opposition to this treaty, but some of the charges and allegations made just seem… to be preposterous."[180] Later in the same statement Dorgan described the argument as "rubbish."[181] Biden described Bunning's "unilateral disarmament' charge as "an are-you-still-beating-your-wife kind of question," and compared it to his "standing up and saying: I am very surprised my friends who oppose this treaty want to go to nuclear war; I am very surprised they are advocating nuclear war" and noted this "would be equally as unfounded and outrageous a statement as the assertion this treaty is unilateral disarmament."[182] Similarly, Senator Kennedy described the claim as "grossly inaccurate, in both policy and practice."[183]

These exchanges reveal why US policy makers do not consider nuclear disarmament to be a "realistic" policy option and explain why the Clinton administration was careful to distance itself from the aspirational elements of the CTBT's preamble that called for a world without nuclear weapons. Both the security and risk management frames accept the inevitable presence of nuclear weapons in international politics. Defenders of both frames openly deride disarmament as a policy option, with the treaty's opponents accusing their colleagues of secretly pushing a disarmament agenda. Consequently, the senators saw it as pointless to even consider

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[179] C. Paul Robinson, "Testimony before the Senate Armed Services Committee," October 7, 1999, accessed July 20, 2009, http://www.fas.org/nuke/control/ctbt/conghearings/robinson.pdf.
[180] 106 Cong. Rec. S12277 (daily ed. October 8, 1999) (statement of Sen. Dorgan).
[181] 106 Cong. Rec. S12278 (daily ed. October 8, 1999) (statement of Sen. Dorgan).
[182] 106 Cong. Rec. S12349 (daily ed. October 12, 1999) (statement of Sen. Biden).
[183] 106 Cong. Rec. S12354 (daily ed. October 12, 1999) (statement of Sen. Kennedy).

the merits of disarmament as a policy. Senate CTBT supporters also argued that the treaty would constrain the nuclear modernization efforts of potential American adversaries. Here again the treaty's defenders in the Senate claimed that the relative risks and benefits resulting from ratification argued for voting for the CTBT. Senator Kerrey claimed that "the inability of existing nuclear states to conduct further nuclear tests will impede, if not cease, their efforts to make technological advances in yields and miniaturization, advanced already achieved by the United States."[184] Senator Baucus and others argued that the CTBT would prevent the government of the People's Republic of China from developing MIRV (multiple independent re-entry vehicle) technology, a key technological benchmark of an "advanced" strategic nuclear arsenal.[185] According to Senator Kerry, "the United States enjoys a tremendous technological advantage over other nuclear powers in both the sophistication of our weapons and our ability to maintain them reliability," meaning ratification would lock-in existing American nuclear supremacy.[186]

3.2.2.2 Does the CTBT Preclude Responding to New Security Threats?

Senators were deeply split both on the nature of future strategic threats and on the effects of treaty ratification on the capacity of the United States to respond to those threats. Bailey presented three justifications for continual improvements in the US nuclear arsenal. First, she argued that a number of potential and/or emerging threats creates a strong rationale for new nuclear missions, and thus new nuclear weapons, claiming that we may need to adapt our arsenal

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[184] Kerrey, "Statement."
[185] 106 Cong. Rec. S12345 (daily ed. October 12, 1999) (statement of Sen. Baucus). See also 106 Cong. Rec. S12352 (daily ed. October 12, 1999) (statement of Sen. Kerry).
and Joseph Biden, "Statement before the Senate Foreign Relations Committee," October 7, 1999, accessed July 20, 2009, http://www.fas.org/nuke/control/ctbt/conghearings/senate.pdf.
[186] 106 Cong. Rec. S12351 (daily ed. October 12, 1999) (statement of Sen. Kerry).

to "emerging or as yet unknown threats" or emerging defensive technologies.[187] One example of a new military purpose for nuclear weapons is the destruction of deeply buried or "hardened" targets, such as those used by Saddam Hussein's forces in the first Gulf War.[188] Nuclear weapons may also be called upon to incinerate chemical and biological munitions, especially if potential US adversaries choose to develop and deploy these types of weapons.[189] Second, Bailey observed that emerging defensive technologies may require the development of nuclear warheads that can evade missile defenses and other future technologies. Third, Bailey contended that the inevitable need for new nuclear warhead delivery systems, primarily missiles, would necessitate the development of new warhead designs.[190] According to Bailey, particular warhead models were designed to be mated with new delivery systems, and it is extraordinarily difficult to retroactively design missiles around older warhead designs. The need for new such delivery systems is inevitable, she contended, for two reasons. Initially, the aging of the delivery system design and components ensure a degradation of performance and reliability over time. Further, improvements in opposition military technology (including the development of opponent missile defenses), changing military requirements, and a fluid security environment over time dictate that older missiles risk becoming ineffective in protecting American security interests.[191] New missile systems will be so different from their predecessors that they will require new warhead designs, and tying the hands of missile engineers to "reverse engineer" around old warhead designs is both expensive and risks compromising the military effectiveness of the new missile systems, Bailey argued. She also claimed that the inevitable need for new missiles, and subsequent need for new warhead designs, ensures a need for testing because warheads that are

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[187] Bailey, "Costs Outweigh the Benefits," 4.
[188] Ibid.
[189] Ibid.
[190] Ibid., 5.
[191] Ibid.

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altered in weight, shape, and size can only be verified as effective with nuclear explosive testing.[192]

The claim that the US needed to develop new nuclear weapons designs and delivery systems to address new threats dominated the Senate debate. Senate treaty opponents latched on to claims that the new era was even more dangerous than the Cold War, and frequently cited "new" and "emergent" national security threats as a justification for both improvements in the US nuclear arsenal and a rejection of the CTBT. Senator Helms argued that "new and unprecedented threats to United States security are emerging" and our "nuclear deterrent must be capable against a wide spectrum of potential foes, including those desperate and willing to take grave risks." Helms also claimed that a nuclear arsenal "inherited from the cold war is unlikely to be suited to effective deterrence across this growing spectrum of potential challengers."[193] Helms expressed particular concern about the need for "a warhead optimized to kill biological plagues or to destroy deeply-buried targets," and cautioned that "a nuclear arsenal which is unable to keep pace with a changing security environment is unlikely . . . to prove much of a deterrent."[194] Senator Kyl maintained that "new circumstances" in the US security environment could necessitate the development of new weapons designs to "sustain deterrence."[195] He argued that Cold War weapons, which were "primarily designed to strike urban-industrial targets . . . and hardened targets on or near the earth's surface," may not be suitable in world where the new "economics of locating military targets in deep underground locations" has permitted other states to locate facilities deep underground.[196] Senator Lott described the CTBT's limits on arsenal modernization as "risky," arguing that the "nuclear deterrent must be configured such that it

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[192] Ibid.
[193] 106 Cong. Rec. S12544 (daily ed. October 13, 1999) (statement of Sen. Helms).
[194] 106 Cong. Rec. S12311 (daily ed. October 8, 1999) (statement of Sen. Helms).
[195] 106 Cong. Rec. S12535-7 (daily ed. October 13, 1999) (statement of Sen. Kyl).
[196] Ibid.

contains weapons to meet all conceivable needs."[197] Lott cited a Los Alamos Nuclear Laboratory report that claimed "the CTBT has reduced our flexibility and options to meet future nuclear deterrence requirements." Lott argued that an "outmoded nuclear stockpile" would undermine "the credibility of the US nuclear deterrence . . . as new threats develop for which the United States has no weapon that can be used."[198] Senator Warner claimed that the "CTBT will lock the United States into retention of an arsenal designed at the height of the cold war" and that many systems in this arsenal "are simply not suited to the subtle, and perhaps more difficult, task of deterring rogue states from using nuclear, chemical, or biological weapons." Warner was also concerned about "rogue state biological weapon production facilities" sited "deep underground in hardened shelters." Warner also suggested that the "credible" deterrence may require the development of nuclear weapons that do "not threaten to create significant collateral damage or radioactive fallout."[199]

This use of "threat discourse" has strong parallels with Ivie's analysis of the metaphors and similes describing the threat posed by the Soviet Union during the Cold War. Just as the Soviet Union was portrayed as being reckless and willing to sacrifice its own citizens, so too are "rogue" states accused of being capable of taking "grave risks" because of their "desperation" to challenge American power. Similarly, no motive for the actual use of such weapons, despite their obvious drawbacks, is offered. The Soviet Union was presumed dangerous by its very nature, and so too are "rogue" states deemed deadly because of their assumed place outside of the international order.[200]

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[197] 106 Cong. Rec. S12291 (daily ed. October 8, 1999) (statement of Sen. Lott).
[198] 106 Cong. Rec. S12285-91 (daily ed. October 8, 1999) (statement of Sen. Lott).
[199] Warner, "Debate," October 12, 1999, S12236.
[200] See Robert L. Ivie, "Cold War Motives and the Rhetorical Metaphor: A Framework of Criticism," in *Cold War Rhetoric: Strategy, Metaphor and Ideology,* ed. Martin J. Medhurst, Robert L. Ivie, Philip Wander & Robert L. Scott , 71-80 (Westport, CT: Greenwood Press, 1990).

Because the United States could readily adapt existing nuclear weapons components to new delivery design without testing, Paine saw no threat to the US that cannot be addressed under the CTBT from the emergence of biological and chemical weapons (CBW) programs in states hostile to American interests. First, he claimed that developing nuclear weapons specifically designed to counter CBW threats is potentially counterproductive, because the adoption of "a posture of using nuclear weapons to deter the use of biological/chemical weapons . . . would only encourage the legitimize the proliferation of nuclear weapons by . . . states facing far more imminent threat of such use than the US"[201] Consequently, these modernization efforts will confound an important US foreign policy objective by promoting nuclear proliferation. Second, Paine argued that any potential "Chem/Bio incineration mission" could be carried about by existing weapons, and that "the feasibility of this mission is questionable in light of the possibilities for delivery via widely dispersed submunitions."[202] A new warhead design is neither needed for this potential mission, nor is any conceivable nuclear weapon design likely to be effective. Finally, he argued that the United States' ability to withdraw from the treaty would allow the US to defend itself against any "extraordinary" CBW threats, and that the US should not "jettison the near term benefits of a nuclear test ban merely to massage somewhat tenuous nuclear options for countering future WMD threats."[203]

Paine also considered ill-founded Bailey's claim that the United States may need to develop new nuclear weapons to counter the "emerging defensive technologies" of other states. He claimed that "as a technical matter," addressing such a problem "does not require an ongoing

[201] Paine, "Facing Reality."
[202] Ibid.
[203] Ibid.

nuclear testing program."[204] Instead, the "most likely initial countermeasures" will be to the missiles themselves, not the nuclear warheads. Paine also describes Bailey's concern about defensive technologies as "arcane and even bizarre," noting that Bailey's political allies support American missile defenses. He suggests that conservative advocates should "welcome" a test ban as an "adjunct" to American missile defense deployments: "a CTBT would severely limit the ability of future adversaries to build the very kind of sophisticated high yield-to weight MIRV'd warheads that could penetrate" a missile defense system.[205]

Witness testimony before the Armed Services Committee prior to the Senate floor debate offered a number of reasons why CTBT ratification would not unnecessarily constrain the US nuclear arsenal. Energy Secretary Richardson noted that the SSP had permitted the development of the B61 Mod 11, which had been certified without nuclear testing.[206] Robinson testified that "adapting deployed nuclear designs to new delivery systems, or even other delivery modes, is not constrained by the elimination of nuclear yield testing," noting that new delivery systems "can be achieved and certified for older designs without nuclear testing."[207]

The CTBT's Senate proponents were not concerned about the purported effects of treaty ratification on American nuclear modernization efforts. They accepted that existing testing data, knowledge derived from the SSP, and emerging simulation technologies would safeguard the arsenal. Senator Biden argued that the "treaty does not prevent us from adapting most operational characteristics of a nuclear weapons system to changing military missions" and that most components "of a nuclear weapon can confidently be developed, tested, and integrated into nuclear weapons without any nuclear tests because they do not involve changes in the primary or

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[204] Ibid.
[205] Ibid.
[206] Richardson, "Testimony."
[207] Robinson, "Testimony."

secondary components of the warhead; that is, the so-called physics package." Biden also noted that Dr. Robinson, the Director of the Sandia National Laboratory, had testified that "adapting deployed nuclear designs to new delivery systems, or even other delivery modes, is not constrained by the elimination of nuclear yield testing."[208]

3.2.2.3 Does the CTBT Threaten Arsenal Safety?

Concerns over the consequences of CTBT ratification for arsenal modernization also implicated the ability of the United States to ensure the safety of its nuclear arsenal, a problem that featured in the Senate and technical debates. Bailey claimed that nuclear testing was necessary to ensure that the US nuclear arsenal continues to perform at the highest safety levels possible. She compared safety improvements in nuclear warheads to those experienced in automobiles, noting that, just as enormous advances in technology have allowed for a number of novel and innovative car designs and safety features that have led to a marked drop in automobile-related fatalities, so too have advances in warhead design and materials science made is possible to design and manufacture much safer nuclear warheads. Bailey observed that many warheads in the current American nuclear arsenal lack a number of critical safety features that have already been developed, and that further safety advances could be developed through additional testing.[209]

Safety concerns featured prominently in the Senate hearings, and were addressed by several witnesses. Dr. Barker testified that it would be "immoral" to do less than to ensure the safety of US nuclear weapons designs. He noted that, by keeping weapons in the stockpile too long, their "safety features" would become "too deficient with respect to current standards," and

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[208] 106 Cong. Rec. S12355 (daily ed. October 12, 1999) (statement of Sen. Kennedy).
[209] Bailey, "Costs Outweigh the Benefits," 5-6.

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that such weapons had previously been retired "solely because of this deficiency." According to Barker, this standard of retiring weapons with old safety systems should continue. Barker also argued that incorporating "available safety technology" into all warheads in the arsenal could "not only preclude a nuclear detonation . . . but can also dramatically reduce the possibility of the detonation of the nuclear weapon's high explosive in violent accidents and reduce the probability of the dispersal of plutonium in fires." Barker claimed that there were many weapons in the arsenal "which are less safe than they could be because they do not include this full suite of modern safety features," observing that only three of the nine warhead types had "the most modern safety features." Barker also argued that further nuclear testing was necessary to improve the "inherent safety of nuclear weapons."[210] Dr. Kirkpatrick noted that continued testing "is a vital part of ascertaining and maintaining the reliability and safety of our nuclear weapons."[211]

A number of senators voiced similar concerns in the floor debate, with senators arguing that testing limits threatened the future safety of the American arsenal and service personnel. Senator Lugar said he was "concerned . . . by the fact that some of the weapons in our arsenal are not as safe as we could make them," citing Barker's argument that only three of the nine weapons designs in the arsenal "employ[ed] all of the most modern safety and security measures."[212] Senator Kyl argued that safety should be "a paramount concern to the United States," and that "the results of . . . an accident would be catastrophic."[213] Kyl also contested the claim that safety features could be incorporated into existing weapons systems without testing, citing a 1997 letter from the Los Alamos director. Kyl claimed that "tests must be done . . . to confirm that once new safety features are incorporated, the weapons are reliable and still operate

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[210] Barker, "Testimony."
[211] Kirkpatrick, "Testimony."
[212] 106 Cong. Rec. S12314 (daily ed. October 8, 1999) (statement of Sen. Lugar).
[213] 106 Cong. Rec. S12260 (daily ed. October 8, 1999) (statement of Sen. Kyl).

as intended." According to Kyl, ratification would render "it pointless to try to invest in new, improved safety features because they could not be adopted without nuclear testing." Kyl then went on to list a number of existing safety features that could be integrated into systems currently in the arsenal if the nuclear labs were allowed to resume testing.[214] Senator Lott cited the Barker testimony in arguing that "because the CTBT does not allow testing for safety or for any other reason, the United States will face the dilemma of fielding weapons that aren't as safe as they should be or doing without the weapons," alleging that this outcome would be a "good reason to support the treaty" for "those whose ultimate objective is the denuclearization of the United States," but should be rejected by "those of us who understand the continuing necessity of nuclear deterrence."[215] Warner cautioned that fielding an "unsafe" arsenal would pose unacceptable threats to "our sailors, airmen, and marines who live and work in close proximity" with the nuclear arsenal, and quoted Barker's claim that "to leave in place weapons that are not as safe as they could be is unconscionable."[216] Similar safety concerns were raised by Senators Bunning,[217] Grams,[218] Helms,[219] and John McCain (R-AZ).[220]

The safety issue raised by Bailey was a non-starter, according to Paine. He argued that the ability to integrate a new safety technology "does not mean it would be cost-effective to rebuild the nuclear arsenal to incorporate it."[221] Paine contended that "the current arsenal is "safe" in that it meets modern "one-point" safety standards against accidental nuclear detonation," and that this safety "characteristic is an inherent function of a boosted primary's

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[214] Ibid.
[215] 106 Cong. Rec. S12290 (daily ed. October 8, 1999) (statement of Sen. Lott).
[216] 106 Cong. Rec. S12235 (daily ed. October 8, 1999) (statement of Sen. Warner).
[217] 106 Cong. Rec. S12345 (daily ed. October 12, 1999) (statement of Sen. Bunning).
[218] 106 Cong. Rec. S12516 (daily ed. October 13, 1999) (statement of Sen. Grams).
[219] 106 Cong. Rec. S12311 (daily ed. October 8, 1999) (statement of Sen. Helms).
[220] 106 Cong. Rec. S12399 (daily ed. October 12, 1999) (statement of Sen. McCain).
[221] Paine, "Facing Reality."

nuclear design, and does not disappear with age." He also noted that the chemical explosives also remain safe with age. The American arsenal is thus designed to make it impossible for an accidental nuclear explosion to occur, and this "inherent safety" element endures for the lifetime of a warhead. The question then becomes, Paine claimed, whether "we want to make nuclear warheads "safer" than they are today?"[222] He argued that important "warhead parts relative to safety and/or use control—such as detonators, fusing and arming systems, and permissive action links" can all "be improved without modifying the nuclear explosive design." Therefore, the most dangerous parts of a warhead can be upgraded to integrate new safety features.[223]

Senate supporters also addressed the safety issue, with most arguing that it presented a risk that could be easily managed. Senator Kerrey drew upon his prior experience as Secretary of the Navy, where he "learned . . . you can drop these weapons and they won't go off." Kerrey cited his knowledge of "one-point detonation" and an array of other "mechanical and electrical safety measures" in arguing that "the notion that somehow Americans are unsafe with a weapon that is sitting there, some components of which may deteriorate, is simply extraordinarily inaccurate, and, in fact, scary to people in a way that it shouldn't be."[224] Senator Levin argued that the arsenal was "safe, and reliable now" despite the lack of testing under the moratorium, and that SSP provisions would allow the US to continue to certify the safety of the arsenal.[225]

3.2.2.4 Can Confidence in the Arsenal Be Maintained without Testing?

The policy and technical debates about the effect of CTBT ratification on the reliability of the US nuclear arsenal and any potential constraints imposed on nuclear weapons modernization

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[222] Ibid.
[223] Ibid.
[224] Kerrey, "Statement."
[225] Carl Levin, "Implications of the Comprehensive Test Ban Treaty," *Congressional Press Releases*, October 6, 1999, Lexis-Nexis Academic.

efforts also revolved around whether US policy makers (and potential adversaries) could remain confident in the effectiveness of the nuclear arsenal. This question struck at the core of the safety and risk management frames, and was the subject of rigorous debate in the Senate, with numerous senators justifying their votes about this very issue.

Senator Lott's floor speech succinctly summarized the position of many treaty critics, observing that "Credibility is the key to deterrence," and that the American "nuclear deterrent must be credible not only to would-be aggressors, but also to America's leaders." Lott argued "our leaders must be confident in the safety and reliability of our nuclear arsenal," and "adversaries must believe . . . that our nuclear weapons can be used—that they are safe and reliable enough for US leaders to consider seriously the possibility of use." The alternative, Lott claimed, was an erosion of the US nuclear deterrent, noting "Without these conditions American threats of retaliation become less than credible . . . it is the paradox of the nuclear age that ensuring nuclear weapons are never used depends on ensuring they can be used."[226] Senators Sessions argued that no one, whether it was US policy makers, adversaries, or allies could have "doubts" about the "credibility" of the American nuclear arsenal.[227] Similar sentiments were expressed by other senators as justifications for rejecting ratification, including Craig, Grams, Kyl, McCain, Murkowski, and Warner.[228]

Many senators also argued that CTBT ratification could have the perverse effect of encouraging America's allies to develop their own nuclear arsenals if confidence in the US nuclear arsenal continued to erode because of a lack of explosive testing. The CTBT would thus

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[226] 106 Cong. Rec. S12286 (daily ed. October 8, 1999) (statement of Sen. Lott).
[227] 106 Cong. Rec. S12297 (daily ed. October 8, 1999) (statement of Sen. Sessions).
[228] 106 Cong. Rec. S12514-5 (daily ed. October 13, 1999) (statement of Sen. Craig); Grams106 Cong. Rec. S12516 (daily ed. October 13, 1999) (statement of Sen. Grams); 106 Cong. Rec. S12535 (daily ed. October 13, 1999) (statement of Sen. Kyl); 106 Cong. Rec. S12398 (daily ed. October 12, 1999) (statement of Sen. McCain); 106 Cong. Rec. S12313 (daily ed. October 8, 1999) (statement of Sen. Murkowski); and Warner, "Statement."

confound its stated purpose by increasing the spread of nuclear weapons, which in turn threatened the safety of the United States. Senator Kyl posited that the CTBT "may promote proliferation by damaging the US nuclear umbrella," noting that "allies such as Japan, South Korea, Germany, and Italy have long depended on United States nuclear strength to provide them the ultimate protection." According to Kyl, US nuclear tests are necessary to show "allies, and potential enemies, that the United States nuclear arsenal is effective and that the United States is committed to using such weapons if absolutely necessary." Kyl predicted that allies and adversaries alike would "read" the lack of American testing as a signal of a lack of commitment to maintaining the American deterrent. Under this scenario, American allies might consider developing their own nuclear arsenals.[229] Senator Hutchison argued that only the US could provide "a nuclear umbrella to protect world peace" and asked "to whom will our allies look to protect them from an incoming ballistic missile?"[230] These concerns were shared by treaty opponents who testified before the Senate, including Robert Lehman, a former director of the Arms Control and Disarmament Agency, who argued that "if we do not deal with the legitimate security concerns of the others, more states will seek their own WMD programs" and posited that "if a CTBT were to shatter confidence in the safety, security, or reliability of the American nuclear umbrella," widespread proliferation may occur.[231] Senate opponents questioned whether any leadership gains derived from international goodwill generated by American ratification of the CTBT would outweigh the purported negative effects on confidence in the effectiveness of the American nuclear arsenal. Nuclear deterrence was a proven commodity with a long track

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[229] 106 Cong. Rec. S12536 (daily ed. October 13, 1999) (statement of Sen. Kyl).
[230] 106 Cong. Rec. S12521 (daily ed. October 13, 1999) (statement of Sen. Hutchison).
[231] Ronald Lehman, "Testimony before the Senate Foreign Relations Committee," October 7, 1999, accessed July 20, 2009, http://www.fas.org/nuke/control/ctbt/text/100799lehman.htm.

record of both protecting the United States from attack and magnifying America's influence in the world.

Treaty opponents held that the United States was an "exceptional" nation, one whose international responsibilities required it to sometimes ignore international opinion in both protecting its own interests and safeguarding the global order. Despite pressure from key allies to ratify the treaty, many Senators argued that the "unique role" of the United States as the pillar that supported global security necessitated both a strong nuclear arsenal and continued testing. Senator Lugar, for example, claimed that the CTBT was so flawed that its "likely ineffectuality will risk undermining support and confidence in the concept of multi-lateral arms control." Senator Kyl argued that exercising leadership "sometimes . . . means doing things other people in the world are uncomfortable with."[232] Kyl claimed that America "cannot be held hostage to world opinion" because it has "obligations they don't have." Senator Inhofe argued that allied support for the treaty was irrelevant in his view, because he was "not concerned with our allies. I am concerned with our adversaries," noting that he was "concerned about China and Russia and now North Korea."[233] Senator Sessions described his "vision" about treaties like the CTBT as "Gulliver in the land of the Lilliputians, stretched out, unable to move, because he has been tied down by a whole host of threads." According to Sessions, the United States is "not one of equals. The United States is in a category of its own. . . . This treaty might be good for Japan, England, France. It will not be good for us."[234]

These statements reveal how the perceived rise of unipolarity and the possibility of an American *pax* influenced the thinking of the CTBT's senate opponents. Rooted in notions of

[232] 106 Cong. Rec. S12284 (daily ed. October 8, 1999) (statement of Sen Kyl).
[233] 106 Cong. Rec. S12271 (daily ed. October 8, 1999) (statement of Sen. Inhofe).
[234] 106 Cong. Rec. S12298 (daily ed. October 8, 1999) (statement of Sen. Sessions).

American exceptionalism as expressed in Reagan's "City on a Hill" and seemingly confirmed by the United States' geopolitical ascendancy after the end of the Cold War, many American policy makers were fascinated with how to use American power to reshape the world in our country's image.[235] From George H.W. Bush's new world order to Clinton's democratic consolidation, presidential administrations, academics, think tanks, and government bureaucrats competed with one another to articulate rationales for a triumphant America's proper place in this reconfigured world and to articulate the best policy framework which could achieve American domestic and foreign policy objectives.

These confidence concerns were taken seriously and addressed on multiple occasions by treaty supporters. The defenders' strategy hinged on downplaying the need to modernize the arsenal while foregrounding the positive effects of the CTBT in potentially eliminating the need for future nuclear modernization. Senator Biden claimed that someone would have "to be an incredible pessimist" to believe that the nine US designs could "atrophy" over a few years, especially considering the demonstrated effectiveness of the Stockpile Stewardship Program. Biden also contested an implicit component of his colleague's argument, namely that policy makers and potential adversaries must have complete confidence in the performance of every weapon in the arsenal. Biden noted that "maybe one of those bombs won't go off, maybe 10 of them, maybe 100 of them, maybe 1,000 of them, maybe 3,000 of them. We still have 3,000 left. . . . One atom bomb can ruin your day."[236] Senator Jeff Bingaman (D-NM) adopted a similar stance, arguing that there was a difference between the "sufficient confidence" in the arsenal

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[235] See Ronald Reagan, "Remarks Accepting the Presidential Nomination at the Republican National Convention in Dallas, Texas," August 23, 1984, accessed November 30, 2010, http://www.reagan.utexas.edu/archives/speeches/1984/82384f.htm. Reagan's formulation was an allusion to Governor John Winthrop's description of the envisioned New England colonies as a "city upon a hill" as he admonished his followers to remember that the eyes of the world, and of God, were looking to the colonies to be a beacon of hope for the world. See John Winthrop, "A Model of Christian Charity," 1630, accessed November 30, 2010, http://religiousfreedom.lib.virginia.edu/sacred/charity.html.
[236] 106 Cong. Rec. 12262 (daily ed. October 8, 1999) (statement of Sen. Biden).

possible under the CTBT and the "100-percent confidence" demanded by treaty opponents. In Bingaman's judgment, the small loss in confidence in the arsenal should be balanced "against the consequences that would result from a rejection of this treaty by the Senate."[237] Senator Daschle advanced three reasons why senators could remain confident in the effectiveness of the US arsenal post-ratification. First, he argued that "our nuclear weapons are safe and reliable today and are likely to remain so for another decade—with or without a stockpile program." Second, Daschle claimed that even the incomplete SSP had "already demonstrated its viability," as proven by the arsenal certification process conducted by the Department of Energy over the previous four years. Third, he noted that the "national supremacy clause" in the CTBT and the president's "Safeguard F" ensured that the US could "withdraw from the treaty and resume nuclear testing if we have anything other than the highest confidence in the safety and reliability of our nuclear weapons."[238] Defense Secretary Cohen argued in his Senate testimony that a combination of stockpile stewardship, the in-place certification process, and the president's six safeguards would, in his judgment, ensure confidence in the reliability and effectiveness of the American nuclear arsenal.[239] In her Senate testimony, Secretary of State Albright noted that confidence issues cut both ways, because other states looking to develop a nuclear arsenal or modernize their nuclear stockpile would face similar, or greater, confidence concerns than would the US.[240]

Senate supporters of the treaty questioned whether US ratification would spur allied nuclear proliferation, and pointed to strong allied support for American ratification of the CTBT. These Senators rejected the "go it alone" unilateralism of their counterparts, and instead

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[237] 106 Cong. Rec. S12296 (daily ed. October 8, 1999) (statement of Sen. Bingaman).
[238] 106 Cong. Rec. S12315 (daily ed. October 8, 1999) (statement of Sen. Daschle).
[239] William Cohen, "Testimony before the Armed Services Committee," October 6, 1999, Lexis-Nexis Academic.
[240] Albright, "Testimony."

emphasized the importance of international goodwill in promoting American security objectives. Senator Levin observed that "three of our good allies—France, Germany, and Great Britain" were lobbying the United States to ratify the treaty.[241] Levin claimed that "those very same allies that depend on our deterrent and rely upon them to be safe" were pushing for U.S. ratification.[242] Senator Biden predicted that an American failure to ratify the treaty would result in Chinese nuclear tests, which would in turn leave Japan with "no choice but to become a nuclear power."[243] While testifying before the Senate Foreign Relations committee, Secretary of State Albright stated that she had "not heard a single expression of doubt" during her global travels "about the overwhelming power and reliability of our nuclear deterrent."[244] Other senators argued that America's status as a global leader, and thus its influence with both allies and adversaries, depended upon ratifying the treaty. Senator Murray argued that "failure to ratify the test ban treaty will send a disastrous message to the international community," noting that "our closest allies are calling upon the United States to ratify" the treaty and that "without the CTBT, the global effort to combat proliferation will be seriously undermined and US credibility and sincerity will be jeopardized."[245] Senator Hagel stated that "this treaty is symbolic" and that "it represents 50 years of America's leadership throughout the world in dealing with our allies and, yes, our adversaries, in trying to curb nuclear proliferation."[246] Senator Dorgan described ratification in terms of moral leadership, and feared that the US would abdicate its moral

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[241] 106 Cong. Rec. S12357 (daily ed. October 12, 1999) (statement of Sen. Levin).
[242] Carl Levin, "Statement before the Senate Foreign Relations Committee," October 7, 1999, accessed July 20, 2009, http://www.fas.org/nuke/control/ctbt/conghearings/senate.pdf.
[243] 106 Cong. Rec. S12357 (daily ed. October 12, 1999) (statement of Sen. Biden).
[244] Albright, "Testimony."
[245] 106 Cong. Rec. S12519 (daily ed. October 13, 1999) (statement of Sen. Murray).
[246] 106 Cong. Rec. S12269 (daily ed. October 8, 1999) (statement of Sen. Hagel).

authority were the Senate to fail to ratify the treaty, a sentiment shared by Senator Patrick Leahy (D-VT).[247]

Treaty proponents also countered that ratification of the CTBT and global acceptance of the treaty would "lock in" existing American nuclear superiority. They argued that the CTBT would largely "freeze in place" the technical capacity of the existing nuclear powers, undermining the ability of Russia or China close the nuclear technology gap that existed between them and the United States. Senator Bingaman noted during the committee hearings that "the US ability to assure the safety and reliability of our nuclear weapons without any testing far exceeds . . . the ability of other nations to maintain the safety and reliability of their weapon without testing."[248] Senator Kerry advanced the same claim during the floor debate, arguing "the United States enjoys a tremendous technological advantage over other nuclear powers in both the sophistication of our weapons and our ability to maintain them reliably."[249] Senator Daniel Akaka (D-HI) noted that "ratification of the treaty helps preserve American security by locking in our nuclear superiority and limiting the abilities of other nations to match our nuclear capability", which is demonstrated by the calls from American allies for US ratification "because they know it enhances, not detracts, from their security."[250] Senator Specter, one of the few Republican supporters of the treaty, argued that "there is a balance of risks," but that the "enormous lead on nuclear weapons" enjoyed by the United States and the threat posed by nuclear proliferation by "rogue nations" make the US "much better off if we limit testing than if we proceed to have testing."[251] Other senators advancing these claims included Biden, Max

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[247] 106 Cong. Rec. S12277 (daily ed. October 8, 1999) (statement of Sen. Dorgan) and 106 Cong. Rec. S12522 (daily ed. October 13, 1999) (statement of Sen. Leahy).
[248] Jeff Bingaman, "Testimony before the Senate Armed Services Committee," October 6, 1999, Lexis-Nexis Academic.
[249] 106 Cong. Rec. S12351 (daily ed. October 12, 1999) (statement of Sen. Kerry).
[250] 106 Cong. Rec. S12404 (daily ed. October 12, 1999) (statement of Sen. Akaka).
[251] 106 Cong. Rec. S12264 (daily ed. October 8, 1999) (statement of Sen. Specter).

Cleland (D-GA), Feingold, Feinstein, Kohl, Leahy, Lieberman, Murray, Reed, Robert Torricelli (D-NJ), and Wyden. [252]

Treaty opponents disputed these claims about "locking in" American nuclear superiority. Senator Hatch contested the idea that anything could "freeze" the strategic balance between the United States and other countries, noting that "Deterrence is not static, it is dynamic." Hatch argued that the CTBT would fail because it represented "an attempt to impose a static arms control environment—to freeze our advantage—while gambling that our competitors abide by the same freeze," a gamble that is likely to fail because "the world is not static, it is unpredictable and dangerous."[253] Senator Shelby was even more explicit about potential threats and the risk of cheating by other parties that could erode the current US nuclear advantage. Shelby claimed that "one certainty about the CTBT is that, if ratified, the United States will obey it to the letter", but that "other countries' record of deception and denial with respect to nuclear testing is such that we cannot have the same confidence."[254] Dr. Kirkpatrick raised similar cheating concerns in her Foreign Relations Committee testimony, stating that the US "would feel bound by [the CTBT's] terms" and the US "would not feel free to violate it at will as many governments will."[255] Senator Kyl also argued that a consensus of experts, represented by a letter from six former Secretaries of Defense, dictated that the US could only ensure the reliability of the arsenals and

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[252] See 106 Cong. Rec. S11677 (daily ed. September 30, 1999) (statement of Sen. Biden); 106 Cong. Rec. S12525 (daily ed. October 13, 1999) (statement of Sen. Cleland); 106 Cong. Rec. S12237 (daily ed. October 8, 1999) (statement of Sen. Feingold); 106 Cong. Rec. S12528 (daily ed. October 13, 1999) (statement of Sen. Feinstein); 106 Cong. Rec. S12512 (daily ed. October 13, 1999) (statement of Sen. Kohl); 106 Cong. Rec. S12522 (daily ed. October 13, 1999) (statement of Sen. Leahy); 106 Cong. Rec. S12354 (daily ed. October 12, 1999) (statement of Sen. Lieberman); 106 Cong. Rec. S12518 (daily ed. October 13, 1999) (statement of Sen. Murray); 106 Cong. Rec. S12343 (daily ed. October 12, 1999) (statement of Sen. Burns); 106 Cong. Rec. S12300 (daily ed. October 8, 1999) (statement of Sen. Torricelli); and 106 Cong. Rec. S12513 (daily ed. October 13, 1999) (statement by Sen. Wyden).
[253] 106 Cong. Rec. S12401 (daily ed. October 12, 1999) (statement of Sen. Hatch).
[254] 106 Cong. Rec. S12526 (daily ed. October 13, 1999) (statement of Sen. Shelby).
[255] Kirkpatrick, "Testimony."

its nuclear superiority if it reserved the right to engage in explosive testing.[256] The question of American nuclear superiority is also tied up with more technical disputes about the potential emergence of new nuclear threats and the ability of the United States to maintain a high degree of reliability in the arsenal without explosive tests.

This section highlights how the security and risk management frames situated US nuclear policy within conflicting narratives about the threat environment faced by the United States. The security frame suggested that a large number of states were hostile to American interests, and were committed to either acquiring weapons of mass destruction or expanding existing WMD arsenals to challenge American power. Both US policy makers and potential adversaries needed to be "confident" that the US nuclear arsenal was capable of fulfilling its dissuasion and deterrence missions. "Confidence" ensured that US officials could maintain their resolve in the event of a crisis, knowing that their policies were backed by the strongest of potential retaliatory threats. "Confidence" also communicated to America's foes that the price of challenging the US-led geopolitical order was simply too high. The CTBT's opponents effectively argued that ratification would erode confidence in the US arsenals in both senses, "freezing" nuclear technology and capabilities in place while the nature of the threats faced by America and its allies continued to evolve. Security frame advocates maintained that the arsenal could only serve its dual purpose if its explosive potential was regularly demonstrated.

Meanwhile, the risk management frame portrayed a world much more amenable to US interests and resisted the view that explosive nuclear testing was necessary to ensure "confidence" in the American arsenal. The CTBT's defenders were willing to accept something less than perfect reliability in exchange for restraints on the nuclear weapons development of

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[256] 106 Cong. Rec. S12258-61 (daily ed. October 8, 1999) (statement of Sen. Kyl).

other powers. The CTBT and other arms control measures were seen as being capable of "freezing" in place potential WMD threats by preventing prospective nuclear powers from following the same nuclear development path pursued by the United States and other nuclear states. Treaty supporters argued that the CTBT's ratification would preclude other states from following the same nuclear development trail that had been blazed by US scientists, and posited that the future of nuclear weapons development was to be found in computer simulations, and not the deeply excavated caverns of the Nevada desert. Similar themes emerge in the next section, which analyzes the Senate's deliberations about the effect of CTBT ratification on the political and technical restraints on nuclear weapons development.

3.2.3   Nonproliferation and Verification

The final axis of argument over the merits of the CTBT during the Senate debate revolved around whether the treaty would accomplish its stated goal of limiting the spread of nuclear weapons. This controversy involved five intricately intertwined questions, namely: whether the treaty would be able to detect, and thus deter, any military significant tests; whether the treaty's monitoring and compliance network would be effective; whether other alleged shortcomings of the treaty would undermine its effectiveness; whether potential threshold states needed to engage in explosive testing to develop small nuclear arsenals; and finally whether the CTBT in general and US ratification in particular were important in promoting global norms and regimes against nuclear proliferation. I consider each of these controversies separately.

Senate supporters argued that the CTBT would be a boon for nonproliferation efforts, claiming that American ratification would solidify a potentially crumbling global nonproliferation regime while creating substantial roadblocks to the acquisition of nuclear

weapons by "states of concern." These senators viewed the current US arsenal and nuclear capabilities as more than sufficient to protect the United States against any threats posed by Russia or China, and instead argued that potential future threats to US security interests were most likely to emanate from states like Iran, Iraq, and North Korea, who could pursue nuclear weapons as a means of either defending themselves against an overwhelmingly superior American military or as a means for asserting regional dominance. The CTBT would bolster international support for the NPT and other components of the global nonproliferation regime by neutralizing claims from non-nuclear members that the United States and other nuclear weapons states were not living up to their commitments to make progress in de-nuclearizing their own security parties. Addressing charges of nuclear hypocrisy, treaty supporters claimed, would allow the United States to galvanize international support for increased pressure on potential proliferators. The CTBT would also make it very difficult for states to engage in "militarily significant" testing, rendering it all but impossible for states like Iran to deploy effective nuclear arsenals. These arguments for ratification reveal that Senate supporters fundamentally endorsed a "liberalist" perspective of international relations, seeing the most states as open to cooperation in promoting collective goals and thus generally amenable to US interests. Therefore, good faith gestures on nuclear issues by the United States could rally the international community to constrain the behavior of revisionist states.

Senate opponents of CTBT ratification countered that the post-Cold War world was potentially even more menacing than that of the Cold War, with the single, tangible threat posed by the Soviet Union replaced by a myriad of state actors who viewed the end of the geopolitical "freeze" propagated by the Cold War as an opportunity to assert their interests, many of which ran directly counter to the interests of the United States. Russia, the United States' primary

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adversary during the Cold War, remained a potential threat, but most treaty opponents emphasized the menace of nuclear weaponry in the hands of Iran, Iraq, and North Korea, plus a rapidly modernizing China, in their public denouncements of the treaty. Nuclear weapons constituted an insurance policy against geopolitical change and future crises, guarding the homeland with the threat vicious retaliation if vital American interests were threatened. The security frame thus endorses and deploys the most pessimistic interpretation of realist theories of international relations, which see the global system as fundamentally anarchical and security as a zero-sum commodity, the acquisition of which drives state behavior. A US decision to forego some degree of its nuclear advantage not only sacrificed its ability to protect its own security, but also invited other states to exploit American weakness. CTBT opponents also argued that it was foolhardy to assume that adversaries would feel bound by the treaty's testing constraints, claiming that these states would use legal loopholes and clandestine testing methods to circumvent the treaty in the efforts to maximize their power and influence at America's expense.

3.2.3.1 Can "Militarily Significant" Tests Be Detected and Deterred?

One of the most revealing disputes between the senators centered on the question of whether the United States could expect to reliably detect and deter "militarily significant" tests, and secondarily, what exactly constituted a "militarily significant" test. Bailey held that American ratification would have little effect in preventing other states from either acquiring nuclear weapons or modernizing their nuclear arsenals, thus confounding both the purpose of the treaty and the stated administration objectives for ratification. She claimed that effective verification should serve as a litmus test for the treaty, noting that the United States (and Clinton administration) policy had always held that the US would never ratify an unverifiable test ban. Bailey then argued that "verifiable" should meet a standard of "effective verification," meaning

that any "militarily significant" cheating could be detected in a timely manner. She also maintained that a militarily significant test was one that could produce any useful data on warhead design or performance, and that even very small tests (500t) could yield such information.[257]

Concern about what constituted "militarily significant testing" also dominated the Senate debate, and was cited by a number of the CTBT's opponents in their rationale for voting against the treaty. The standard of "effective verification" fit neatly within the security frame, since it viewed nuclear knowledge in zero-sum terms and held that any testing data could pose a threat to both the relative and absolute nuclear superiority of the United States. Senator Allard stated that "one major concern I have about the treaty" is that "it will be possible for other nations to conduct militarily significant nuclear testing with little or no risk of detection." Allard argued that a nuclear test with a yield of 1,000 tons or so would be sufficient to "provide 'proof' data on new weapons designs," based on the US experience with its arsenal, and claimed that other states would use various evasion techniques to avoid detection by the CTBT's monitoring system. Allard described such evasive testing as "a very simple task for Russia, China, or others" based upon testimony he heard during the treaty's ratification hearings.[258] Allard was likely referring to the testimony of Dr. Barker, who stated before the Senate Armed Services Committee that "a proliferator can conduct tests with little or no risk of detection, or, if conducted on the high seas,

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[257] Bailey, "Costs Outweigh the Benefits," 11.
[258] 106 Cong. Rec. S12279 (daily ed. October 8, 1999) (statement of Sen. Allard)

without fear of attribution."[259] Similar arguments were advanced by Senators Grams, Helms, Kyl, Murkowski, and others.[260]

Paine contested Bailey's claim that clandestine testing could threaten America's nuclear deterrent, a possibility that he described as "preposterous." Such an outcome, he argued, is highly unlikely because the United States has "enormous advantages in resources and technology and the knowledge that comes from having conducted over 1000 nuclear test explosions."[261] Paine accused Bailey of a verbal sleight of hand in her criticisms of the verifiability of the CTBT, stating that she "glides" too "easily between the "significant military advantage" over the United States gained by an adversary that engaged in successful clandestine testing and any "militarily significant information" that might be gained from any clandestine nuclear tests.[262] He argued that "militarily significant information" from such tests would not produce a "militarily significant advantage," describing the US arsenal as so advanced that it would take an extensive testing regime "for any state to gain "significant military advantage" over the United States."[263] Paine maintained that it is very unlikely that an adversary would be able to "exploit . . . information [from covert tests] in a manner that preempts timely detection of production and deployment of a deterrent response" and that such tests are very unlikely to provide "a meaningful military advantage."[264]

Paine also argued that small tests will not provide data or verify capabilities that threaten the interests of treaty adherents. First, such tests "do not permit an adequate assessment of

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[259] Barker, "Testimony."

[260] See 106 Cong. Rec. S12516 (daily ed. October 13, 1999) (statement of Sen. Grams); 106 Cong. Rec. S12546 (daily ed. October 13, 1999) (statement of Sen. Helms); 106 Cong. Rec. S12261 (daily ed. October 8, 1999) (statement of Sen. Kyl) and 106 Cong. Rec. S12313 (daily ed. October 8, 1999) (statement of Sen. Murkowski).

[261] Paine, "Facing Reality."

[262] Ibid.

[263] Ibid.

[264] Ibid.

deuterium/tritium boosting, a major performance indicator of advanced nuclear weapons."[265]

Second, "an aspiring nuclear weapons state" may lack the testing expertise to design tests to be

conducted at "greatly reduced yields," which he describes as a "dicey proposition" because such

tests can "overshoot" their planned yield, risking the rupture of "the containment plan . . .

risking disclosure of the test and harm to valuable scientific personnel."[266] Third, Paine claimed

that the high risk of "inadvertent disclosure" through venues like scientific conferences, or the

threat of a "whistleblower" may lead a "proliferant nation" to "conclude that the risks of

detection, including the diplomatic and economic consequences likely to flow from being found

in violation, are greater than the benefits of conducting such tests."[267] He also contested Bailey's

claim that Russian activities in 1996 at its Novaya Zemlya test site invalidates the CTBT's

verification scheme arguing that the Russian government had consistently stated that it was

"performing subcritical experiments, in a manner similar to our own underground experiments at

the Nevada Test Site."[268] Paine asserted that any "current ambiguity surrounding" [Russian]

activities was predicted by independent verification analysts, and is the inevitable outcome of

allowing continuing underground explosive experiments at existing nuclear test sites."[269]

Arguments mirroring these claims by Paine featured prominently in the Senate

deliberations about the CTBT. Senate proponents chose to define "military significant" within

the context of broader American nonproliferation and other security objectives, and were thus

willing to accept some degree of potential cheating in exchange for the security benefits offered

by the treaty. Senator Kerrey argued that "absolute verification is an unattainable standard,"

because no treaty can ever be held to be "absolutely verifiable," and that instead the senators

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[265] Ibid.
[266] Ibid.
[267] Ibid.
[268] Ibid.
[269] Ibid.

should be concerned with whether "we can effectively monitor and verify" the treaty.[270] Senator Daschle also observed that "no arms control treaty is 100 percent verifiable," while noting that the Senate had ratified many prior arms control treaties knowing that some level of cheating was possible. Instead, Daschle argued that the senators should apply the standard of "effective verification," which "in the case of the CTBT . . . means we will be able to detect, with a high degree of confidence, any tests that could undermine our nuclear deterrent."[271] This claim about effective verification was advanced in various formulations by Senators Baucus, Biden, Feingold, Feinstein, Kohl, Patrick Leahy (D-VT), Reed, and Robb. Many other senators, including Carl Levin, cited Defense Secretary Cohen's and Joint Chiefs Chair Shelton's conclusion that even though imperfect, the United States "would be able to detect any militarily significant level of nuclear testing." Levin recounted, word for word, several exchanges he had with both Cohen and Shelton during committee hearings, and concluded that the CTBT would be effectively verifiable.[272]

Senator Helms and other treaty opponents argued that an "effective verification" standard both showed the stark limits of the CTBT as a nonproliferation tool and the folly of ratifying the agreement. Helms described "effective verification" as "an intentionally vague political term-of-art, but as the old saying goes, we all 'know it when we see it.'"[273] Senator Warner cautioned that the treaty would undermine American confidence in its nuclear arsenal while "other countries would capitalize upon US deficiencies and vulnerabilities created by the CTBT and violate the treaty," concluding that "the risk the CTBT poses to US national security by far

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[270] Kerrey, "Statement."
[271] 106 Cong. Rec. S12315 (daily ed. October 8, 1999) (statement of Sen. Daschle).
[272] 106 Cong. Rec. S12275 (daily ed. October 8, 1999) (statement of Sen. Levin).
[273] 106 Cong. Rec. S12546 (daily ed. October 13, 1999) (statement of Sen. Helms).

outweighs any of the benefits that have been identified."[274] Senator Grams repeated a frequently cited maxim of President Ronald Reagan, who claimed that effective arms control required the United States to adhere to the guiding principle of "trust but verify."[275]

3.2.3.2 Are IMS Monitoring Systems Effective?

The CTBT's capacity to constrain nuclear testing depended at least in part on the ability of international observers and treaty adherents to detect and attribute nuclear tests. If treaty opponents were able to prove that proposed monitoring schemes were ineffective, they would effectively gut the case for US ratification. Recognizing this weakness, Bailey's paper provided a virtual laundry list of reasons why the International Monitoring Service (IMS), the global monitoring consortium established by the CTBT, would not be able to detect clandestine nuclear tests. Bailey offered a number of scenarios, including using other, legitimate underground explosive activities (such as those related to mining) to mask nuclear explosions, conducting anonymous tests in open areas, such as the ocean (a strategy used by the Indian government for its first nuclear test), and using the energy-absorbing capacity of cavity and a "decoupled" nuclear device to suppress the shockwave from explosion by a factor as large as 70. This "muffling" capacity of decoupled underground tests, Bailey argued, allows states to escape detection by the IMS monitoring network, which was designed to detect only those underground tests above a 1 kiloton threshold.[276] She even posited that nations hosting monitoring stations may either manipulate the data or turn off the monitors, citing similar actions by the Pakistani government prior to its May 1998 nuclear test.[277] Bailey further noted that even if the US

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[274] 106 Cong. Rec. S12236 (daily ed. October 8, 1999) (statement of Sen. Warner).
[275] 106 Cong. Rec. S12516 (daily ed. October 13, 1999) (statement of Sen. Grams).
[276] Bailey, "Costs Outweigh the Benefits," 12.
[277] Ibid., 13.

government were to detect clandestine nuclear activity, it would likely face substantial political barriers in bringing pressure or sanctions upon offending states, citing the lack of a strong US response despite suspicions that the Russian government had been conducting small-scale nuclear tests at its arctic testing site.[278] She also contests the notion that improvements in monitoring technology by the US or other parties will improve the probability to detect cheating, claiming that very small nuclear tests can be hidden virtually anywhere in relatively large countries, and that such small tests will be indistinguishable from earthquakes, mine explosions, volcanic activity, and the impact of meteorites.[279]

Arguments about verification problems with the CTBT resonated with Senate treaty opponents, and featured prominently in a number of floor speeches in opposition to ratification. These senators likely found such arguments persuasive because they aligned with their pre-existing judgments about the dangerous intentions of America's adversaries and because they highlighted what many opponents saw as the treaty's greatest weakness. Senator Lott noted that "it is possible to conduct a nuclear test with the intention of evading systems designed to detect the explosion's telltale seismic signature" via "decoupling." Lott described the "decoupling scenario" as "credible," noting that "construction of large cavities in both hard rock and salt is feasible, with costs that would be relatively small" and that the "containment of particulate and gaseous debris is feasible in both salt and hard rock," arguing that technical capacity implied intent on the part of potential treaty defectors.[280] Senator Murkowski claimed that "recent reports from the intelligence community indicate that we are unable to monitor low-level nuclear tests precisely enough to distinguish between a conventional explosion, a low-level nuclear test, or

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[278] Ibid.
[279] Ibid., 12-13.
[280] 106 Cong. Rec. S12290 (daily ed. October 8, 1999) (statement of Sen. Lott).

even natural seismic activity."[281] Senator Warner argued that he was "convinced that the United States and the international community cannot now, and will not in the foreseeable future, be able to detect such cheating or testing below a certain level."[282] Concerns about evasive testing and its impact on the viability of the American nuclear deterrent were also voiced by Senators Bunning, Paul Coverdell (R-GA), Craig, Grassley, Helms, Hutchison, Kyl, Lugar, Pat Roberts (R-KS), and Snowe. [283]

Senate opponents were also vocal in their criticisms of the IMS, arguing that it was foolhardy to turn over the safety of the American people to an ineffective and ineffectual international body. Senator Warner argued that the US could not rely on these testing stations because the "monitoring sites will be owned and operated by the host countries, which I believe calls into serious question the reliability of the information collected, and, thus, its value to our ability to detect a nuclear test."[284] Senator Shelby described the IMS network as being of "little value" because it would "be technically inadequate to monitor the most likely forms of noncompliance." Shelby also claimed that the IMS's commitment to "diplomatic sensitivities rather than effective monitoring" undermined the system's effectiveness, and that the IMS would "likely muddy the waters by injecting questionable data into what will inevitably be highly charged debates over possible violations."[285] According to Shelby, the IMS would not even be "complete" for another eight to ten years, and would be unable to detect clandestine testing

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[281] 106 Cong. Rec. S12313 (daily ed. October 8, 1999) (statement of Sen. Murkowski).

[282] 106 Cong. Rec. S12236 (daily ed. October 8, 1999) (statement of Sen. Warner).

[283] See 106 Cong. Rec. S12344-5 (daily ed. October 12, 1999) (statement of Sen. Bunning); 106 Cong. Rec. S12295 (daily ed. October 8, 1999) (statement of Sen. Coverdell); 106 Cong. Rec. S12515 (daily ed. October 13, 1999) (statement of Sen. Craig); 106 Cong. Rec. S12518 (daily ed. October 13, 1999) (statement of Sen. Grassley); 106 Cong. Rec. S12546 (daily ed. October 13, 1999) (statement of Sen. Helms); 106 Cong. Rec. S12273 (daily ed. October 8, 1999) (statement of Sen. Hutchison); 106 Cong. Rec. S12529 (daily ed. October 13, 1999 (statement of Sen. Kyl); 106 Cong. Rec. S12537 (daily ed. October 13, 1999) (statement of Sen. Kyl); 106 Cong. Rec. S12314 (daily ed. October 8, 1999) (statement of Sen. Lugar); 106 Cong. Rec. S12520 (daily ed. October 13, 1999) (statement of Sen. Roberts); 106 Cong. Rec. S12348 (daily ed. October 12, 1999) (statement of Sen. Snowe).

[284] 106 Cong. Rec. S12236 (daily ed. October 8, 1999) (statement of Sen. Warner).

[285] 106 Cong. Rec. S12527 (daily ed. October 13, 1999) (statement of Sen. Shelby).

activity from Iraq or North Korea.[286] Senator Helms expressed his concerns as a series of rhetorical questions, arguing on the Senate floor that a number of barriers limited the IMS's effectiveness, including problems differentiating nuclear tests from other underground activities, inability to determine precise testing locations, difficulties in having inspection requests approved by the treaty's Executive Council, and potential delays in authorized inspections.[287] Senator Lott even claimed that the spread of utilization technology would facilitate cheating because "the verifications regime could serve as a training ground for those who wish to use the treaty to mask their continued pursuit of new or improved nuclear weapons," citing the ability of Saddam Hussein's Iraq to defeat International Atomic Energy Agency (IAEA) inspections using the knowledge of Iraqis who had previously worked as IAEA inspectors.[288]

Paine addressed Bailey's verification concerns about the ability of the IMS and other monitoring systems to detect low-yield nuclear tests. Initially, he noted that Bailey's obsession with potential verification problems with the IMS overlooks other verification components of the treaty, including on-site inspections and confidence-building measures between the treaty parties.[289] He also argued that recent evidence shows that "the IMS will be able to detect and identify non-evasive explosions of less than 1 kiloton in some strategically sensitive areas," pointing to the detection of an earthquake near Novaya Zemlya, "Russia's primary nuclear test site," that was originally thought to be a secret nuclear test but was later revealed to be a small earthquake.[290] This incident showed that the IMS could detect very tiny tests, along the lines of ten-ton yields. Paine also defended the one kiloton monitoring threshold of the IMS, arguing that

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[286] Richard Shelby, "Statement before the Senate Foreign Relations Committee," October 7, 1999, accessed July 20, 2009, http://www.fas.org/nuke/control/ctbt/conghearings/senate.pdf.
[287] 106 Cong. Rec. S12547 (daily ed. October 13, 1999) (statement of Sen. Helms).
[288] 106 Cong. Rec. S12290 (daily ed. October 8, 1999) (statement of Sen. Lott).
[289] Paine, "Facing Reality."
[290] Ibid.

"it is simply not cost effective or sensible to attempt to achieve a uniformly low seismic threshold for all areas of the globe." And that such a capability would be confounded by "a huge increase in the number of seismic events detected in low threat regions."[291] Additionally, he claimed that the IMS's 170 stations are supplemented by "more than 10,000 other seismic stations providing dense regional coverage" and that such stations are also supported by the "enhanced capabilities" deployed by the United States.[292] Finally, Paine argued that multiple non-seismic detection systems, including "hydrophone, infrasound, and radioactive debris systems" coupled with "the ever present possibility of human intelligence and leaks regarding clandestine tests" should give policy makers confidence in the verifiability of the treaty.[293]

Bailey's concerns about decoupled tests were also addressed by Paine, who described the conclusion that such tests pose a threat to US interests as "seriously misleading."[294] First, he argued that states "would be very far from certain" that any such tests would not be detected, and that "this is particularly true for states with little or no nuclear test experience" because such tests are "a major technical undertaking, requiring specialized knowledge and equipment and hundreds of skilled personnel."[295] Second, Paine claimed that Bailey's claim that decoupled tests can "muffle" the seismic signature of a clandestine test is inaccurate, noting that her argument is based on two very small tests whose results may not hold for tests under other conditions. He argues that evidence from decoupled tests in the former Soviet Union "indicate that teleseismic signal amplitudes were reduced only by a factor of ten . . . suggesting that the decoupling factor drops off rapidly if the explosion is too large for full decoupling within the academy."[296] Third,

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[291] Ibid.
[292] Ibid.
[293] Ibid.
[294] Ibid.
[295] Ibid.
[296] Ibid.

Paine argued that even a successfully decoupled test "involves a substantial risk of containment failure," which in turn risks "discovery of the test through large-scale venting of radioactive gases into the atmosphere."[297] This is a real risk for new nuclear states, he notes, because Pakistani tests were detected in such a way by data "collected by U.S. monitoring aircraft," and that even "experienced" nuclear states also face a "risk of containment failure."[298] Paine also noted that even in cases where containment holds during the initial tests, "delayed leakage" of radioactive material long after a test can also expose covert activity, as can the inadvertent creation of "a telltale subsidence crater at the surface."[299] Fourth, small, partially decoupled tests were likely to be detected by the IMS, and that "human intelligence, data from national technical means, and on-site inspections" would likely expose a clandestine test.[300] Fifth, decoupled tests would more than likely be conducted in salt domes, the locations of which Paine describes as well known, and the creation of cavities within the domes would generate telltale activity that would make it relatively easy to discover the testing site.[301] Paine concludes by noting that these difficulties have led "most experts to agree that attempts at full decoupling are completely impractical for yields above a few kilotons and highly uncertain at any yield for nations with no experience with conducting underground nuclear detonations."[302]

Paine was similarly dismissive about the alleged risks of unattributed nuclear tests, such as those conducted in the oceans. He concedes that although Bailey may be correct that it would be initially difficult to finger the responsible party for an open ocean test, "the US and other

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[297] Ibid.
[298] Ibid.
[299] Ibid.
[300] Ibid.
[301] Ibid.
[302] Ibid.

nations would go to great lengths to figure out who did it."[303] The risk of leaks, an ability to track the movement of military and commercial ships via satellite, communications monitoring, and the risk that bomb materials could be traced to a point of origin combine to make a potential tester highly uncertain that they could evade detection.[304] Paine claimed that the lack of such tests (only one has ever been conducted, a 1979 explosion in the Indian Ocean) proves that this is not a particularly useful evasion method.

Paine's rebuttal of Bailey's concerns about cheating under the CTBT's verification regime centered on distinguishing between the "possible" low yield cheating scenarios posited by Bailey and the "probable" behavior of states under the treaty. He claimed that it is "utterly preposterous to suggest that [low yield testing] runs 'no risk' of detection" by the monitoring capabilities of the United States, the IMS, or other nations.[305] Paine claimed that Bailey "largely misses the point on verification" arguing that "one hundred percent certainty is not the goal." Instead, he claimed that the purpose of a verification regime is to "deter all violations of the treaty, while assuring detection of violations what would deprive a party of the security benefits it derives from the compliance of other parties."[306] Instead of assuring that any cheating will be detected, the regime should aim for making "the probability of detecting violations . . . high enough so that potential violators will believe that the risks of being found in violation outweigh the expected benefits of the illegal act," while adherents to the treaty "must be convinced that the security risks posed by any undetected violations are substantially less than the security benefits of the treaty." [307] According to this standard, Paine argued, the CTBT verification scheme will be effective. Experts have a high degree of confidence in the ability of the detection system to

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[303] Ibid.
[304] Ibid.
[305] Ibid.
[306] Ibid.
[307] Ibid.

discern tests "above a few kilotons . . . highly irrespective of location and mode of emplacement."[308] Even though he admits that the monitoring system will have difficulty "discriminate[ing] . . . potential nuclear events from large point-source chemical explosions" at low yield levels, the CTBT "addresses this issue by providing for voluntary notifications and exchanges of data regarding the conduct of large chemical explosions and by mandating procedures for the conduct of on-site inspections."[309]

Paine's views on the relative effectiveness of the IMS were also voiced in the Senate debate. The senators accepted that the monitoring system did not offer a silver bullet in deterring clandestine nuclear testing, but argued that the IMS would enhance the effectiveness of existing American test monitoring capabilities, and thus offered a relative gain over the status quo. For example, Senator Harkin noted that the treaty would add over 200 monitoring stations, noting that "we will have a lot more monitoring stations by ratifying this treaty than we have right now."[310] Other advocates recorded similar statements in the record, including Senators Baucus, Biden, Feinstein, Kennedy, Kerrey, Levin, and Reed. [311] Senator Daschle chose to emphasize the additive nature of the IMS, stating that "with or without the CTBT, we need to monitor the nuclear testing activities of other countries or face the exact same problems people are assigning exclusively to CTBT" except that "in a world of CTBT, the United States would have additional

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[308] Ibid.
[309] Ibid.
[310] 106 Cong. Rec. S12531 (daily ed. October 13, 1999) (statement of Sen. Harkin).
[311] See 106 Cong. Rec. S12345-6 (daily ed. October 12, 1999) (statement of Sen. Baucus); Biden ,"Statement"; 106 Cong. Rec. S12528 (daily ed. October 13, 1999) (statement of Sen. Feinstein); 106 Cong. Rec. S12355 (daily ed. October 12, 1999) (statement of Sen. Kennedy); Kerrey, "Statement before the Senate Foreign Relations Committee on the Final Review of the Comprehensive Test Ban Treaty," October 7, 1999, accessed July 20, 2009, http://www.fas.org/nuke/control/ctbt/conghearings/senate.pdf; Carl Levin, "Statement before the Senate Foreign Relations Committee," October 7, 1999, accessed July 20, 2009, http://www.fas.org/nuke/control/ctbt/conghearings/senate.pdf; and 106 Cong. Rec. S12343 (daily ed. October 12, 1999) (statement of Sen. Reed).

tools at its disposal to determine what has happened."[312] Senator Kerry claimed that "defeating this treaty will make it more difficult, not less, for the United States to detect those tests by denying us the benefits of the International Monitoring System."[313] Senator Kerrey also emphasized that the US would itself be able to monitor treaty compliance through the use of "national technical means," based upon both current capabilities and new monitoring systems that were in the pipeline.[314]

3.2.3.3 Do Definitional Problems Sabotage Treaty Effectiveness?

Senate treaty opponents also argued problems with the treaty's failure to define a "nuclear test" doomed the CTBT's effectiveness. Bailey contended that the CTBT's failure to define a nuclear test could allow offending states to avoid punishment, because the treaty could well allow hydronuclear tests, which can yield military significant data, are largely undetectable, and could be defended as permitted by the offending party if they are caught.[315] She concluded her arguments about testing verification by asserting that ratification would burden the United States with a "zero yield" ban that would hamstring America's ability to maintain a strong deterrent by denying it the benefits of hydronuclear testing, while our potential adversaries would likely feel no such restraint.[316]

Treaty criticisms centering on definitional shortcomings in the CTBT text resonated with many Senate critics, dovetailing with reservations about the ability of international regimes to constrain state behavior. The influential Senator Lugar claimed that "the lack of a common definition of a nuclear test" "bedeviled" the treaty, arguing that other treaty parties, including

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[312] 106 Cong. Rec. S12315 (daily ed. October 8, 1999) (statement of Sen. Daschle).
[313] 106 Cong. Rec. S12351 (daily ed. October 12, 1999) (statement of Sen. Kerry).
[314] Bob Kerrey, "Statement."
[315] Bailey, "Costs Outweigh the Benefits," 13-14
[316] Ibid., 14.

Russia, maintained that "hydro-nuclear activities and sub-critical experiments are permitted under the treaty," which differed from the American interpretation, which viewed hydro-nuclear tests as prohibited.[317] Senator Lott claimed that the CTBT "purports to ban an activity it does not define," observing that negotiators had devoted considerable effort towards hammering out a concrete definition of a nuclear test, but had "left the word undefined purposely because they simply found it too difficult to reach consensus on its meaning." In his view, "the Senate is being asked to render advice and consent to ratification of a treaty that not only bans an activity, but does so comprehensively. We just don't quite know what activity is being banned."[318] Lott also posited that the "ambiguity" around the definition of permitted and prohibited tests would "lead to greater tensions as some accuse others of violating the treaty" and would "enable some countries to improve their weapons and cloak the activities of other nations as they pursue acquisition of nuclear weapons, while the United States abides strictly by the treaty."[319] Similar critiques were voiced by Senators Helms, Kyl, and Warner.[320]

Senate proponents failed to specifically rebut these definitional arguments during the body's deliberations. Paine refuted Bailey's claims that definitional ambiguity in the treaty about the nature of a "nuclear test" necessarily undermines the CTBT's effectiveness. The lack of a "detailed and restrictive definition of prohibited activity," he claims, was "principally at [the] behest" of the US and other nuclear weapons states.[321] Paine also observed that it would have been very difficult to achieve "agreement on a more precise definition," meaning that the negotiators opted to instead include "a broad definition banning all nuclear weapon test

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[317] 106 Cong. Rec. S12314 (daily ed. October 8, 1999) (statement of Sen. Lugar).
[318] 106 Cong. Rec. S12288 (daily ed. October 8, 1999) (statement of Sen. Lott).
[319] Ibid.
[320] See 106 Cong. Rec. S12311 (daily ed. October 8, 1999) (statement of Sen. Helms); 106 Cong. Rec. S12261 (daily ed. October 8, 1999) (statement of Sen. Kyl); and 106 Cong. Rec. S12236 (daily ed. October 8, 1999) (statement of Sen. Warner).
[321] Paine, "Facing Reality."

explosions, and any other nuclear explosion."[322] The United States and France both announced in 1995 that in "their view . . . the treaty prohibited all weapons tests that resulted in a prompt critical assembly of fissile material" and "none of the negotiating parties to the treaty dissented from this view of the treaty's scope."[323] He claimed that the negotiating record shows that even small tests are "prohibited under the CTBT."[324] Even such small tests, Paine contended, are "almost a moot point" because the US had already "made the unilateral determination that such testing was not required for its own security" because "hydrodynamic experiments coupled with computations" would provide results "superior to hydronuclear experiments," and that since "such experiments could be of some limited use to proliferant states . . . it was better to ban them."[325]

3.2.3.4 Is Nuclear Testing a Prerequisite to Nuclear Proliferation?

Senators also debated whether even a global prohibition on nuclear tests could constrain the further spread of nuclear weapons. Bailey argued that the net effect of the treaty would have little impact on levels of nuclear proliferation. She claimed that "nuclear testing is not a prerequisite to acquiring a workable, reliable arsenal," noting that states can build "relatively simple" weapons without testing and still "have sufficiently high confidence that they will work." For example, she observed that the bomb used by the United States on Hiroshima, Japan had never been tested. Bailey also cautioned that potential proliferators can build "relatively sophisticated weapons . . . with high confidence" without nuclear testing, especially if a state has "access to foreign nuclear weapons expertise." Testing, she maintained, is only of significant value to states

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[322] Ibid.
[323] Ibid.
[324] Ibid.
[325] Ibid.

like the United States and Russia, who place high "performance requirements" on their nuclear arsenal while demanding "high standards for the reliability of their weapons." Most potential proliferators, Bailey noted, would be able to address their strategic and reliability needs with untested weapons, claiming that "a national may quite feasibly develop devices that will work, as long as knowing the exact yield does not matter and no exacting specifications are required."[326]

The challenges posed by the potential development of simple nuclear weapons sans testing by potential proliferators were frequently noted in the public Senate deliberations about the treaty. For these senators, nuclear weapons program advancement of any sort was deemed a deadly threat to the United States. They also doubted whether nuclear tests were necessary for "rogue" states, who they argued did not demand the same exact performance from their nuclear arsenals as did American force planners. For example, Senator Kyl claimed that the CTBT would not "pose a significant impediment to the acquisition of nuclear weapons by rogue nations" since nuclear testing "is not required to develop relatively simple first-generation nuclear devices, like those needed to being developed by Iran and Iraq." Kyl cited 1997 Senate Testimony or CIA Director George Tenet, who stated that "nuclear testing is not required for the acquisition of a basic nuclear weapons capability." Kyl also argued that such simple weapons would seriously threaten the US, "severely reduc[ing] our ability to protect our interests in East Asia or the Persian Gulf" as states like North Korea and Iran wielded simple weapons "designed to intimidate and kill large numbers of people in cities, not destroy purely military targets."[327] A

[326] Bailey, "Costs Outweigh the Benefits," 20.
[327] 106 Cong. Rec. S12260 (daily ed. October 8, 1999) (statement of Sen. Kyl).

number of other senators made similar statements, including Craig, Sessions, Snowe, and Warner.[328]

Paine claimed that Bailey underestimated the political and technical effects of the CTBT on nonproliferation, noting that "[s]he focuses solely and inaccurately on what might be accomplished by proliferant states under a CTBT, and neglects entirely . . . the types of weapon developments that would be prevented or severely constrained by the treaty." For example, he argued that "first time proliferators" may not be able to develop many types of nuclear weapons with "high confidence" without utilizing explosive tests. Paine claimed that a number of designs, including fission-only "implosion weapons," which are of "considerable interest to prospective proliferators" because they use much less fissile material, cannot have their yields verified even with a "conservatively designed weapon," and that such warheads would be constrained to a very small yield if "intended for longer range missile delivery."[329] Additionally, Paine noted Bailey overlooked the "greatest strategic impact" of the CTBT, which is its ability to limit the development of high-yield thermonuclear weapons, which will likely require testing to validate their designs. He thus argues that the CTBT both imposes important technical constrains on nuclear weapons development, and "from the political perspective . . . the CTBT likewise remains an undeniably important instrument of political and geostrategic restraint." Paine accused Bailey of "miss[ing] the essence of the political as well as the technical importance of the CTBT to nonproliferation."[330]

Treaty supporters in the Senate were also unconcerned about the potential for would-be nuclear states to construct untested warheads while remaining in compliance with the CTBT. The

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[328] See 106 Cong. Rec. S12514-5 (daily ed. October 13, 1999) (statement of Sen. Craig); 106 Cong. Rec. S12297-8 (daily ed. October 8, 1999) (statement of Sen. Sessions); 106 Cong. Rec. S12347-8 (daily ed. October 12, 1999) (statement of Sen. Snowe); and 106 Cong. Rec. S12234 (daily ed. October 8, 1999) (statement of Sen. Warner).
[329] Paine, "Facing Reality."
[330] Ibid.

treaty imposed a substantial barrier to the creation of a reliable arsenal by potential new nuclear weapons states, and thus represented a significant improvement over the status quo. Senator Feingold claimed that even though the CTBT could not completely stop a nuclear arms race, it had "the power to stem the tide of nuclear proliferation," claiming that the Senate had the power to "make it extremely difficult for those with nuclear aspirations to develop a weapon in which they have high confidence."[331] Senator Kerrey observed that testing limits would "all but halt the ability of threshold states from establishing an effective and reliable strategic nuclear force."[332] Senator Reed stated regarding testing limits, even if they still permitted the development of "unsophisticated rudimentary weapons", that would-be nuclear powers "cannot develop the sophisticated technology which is the key to strategic nuclear power without nuclear testing."[333] Senator Paul Sarbanes (D-MD) claimed that the U.S. should be worried about these more sophisticated weapons that required testing to validate their designs, stating that he was voting for the treaty to limit the development of "smaller, lighter weapons that are easier to transport and conceal and that require less nuclear material."[334] Senator Harry Reid (D-NV) concurred, arguing that "these crude weapons will not upset the deterrent balance."[335]

3.2.3.5 Does the CTBT Solidify Norms Against Nuclear Proliferation?

The final dispute addressed by the Senators was whether any international nonproliferation "norm" fostered by American ratification of the CTBT would have any effect on stemming the spread of nuclear weapons. Bailey contested the claim advanced by treaty advocates that US ratification would be perceived as a down payment on America's commitment to de-emphasize

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[331] 106 Cong. Rec. S12237 (daily ed. October 8, 1999) (statement of Sen. Feingold).
[332] 106 Cong Rec. S12340 (daily ed. October 12, 1999) (statement of Sen. Kerrey).
[333] 106 Cong. Rec. S12344 (daily ed. October 12, 1999) (statement of Sen. Reed).
[334] 106 Cong. Rec. S12364 (daily ed. October 12, 1999) (statement of Sen. Sarbanes).
[335] 106 Cong. Rec. S12330 (daily ed. October 12, 1999) (statement of Sen. Reid).

nuclear weapons, thus bolstering both its nonproliferation credibility and the "nuclear bargain" between "nuclear haves" and "nuclear have nots" under the Nuclear Nonproliferation Treaty (NPT). She argued that despite claims by CTBT proponents that it "is a step in the process by which the United States and other nationals will abandon nuclear deterrence," the US "has no intention of giving up its nuclear weapons . . ." Bailey argued that stockpile stewardship will undermine any "nuclear erosion" from a termination of testing by the established nuclear weapons, and that realizing this, "many nations and non-government groups have already declared that the CTBT does little or nothing to fulfill the NPT article VI obligations . . ." She even cautioned that non-nuclear states "will try to use the threat of unraveling the NPT as leverage" to end stockpile stewardship programs, threatening the US deterrent. The NPT, Bailey argued, is likely not worth preserving and will almost certainly not be bolstered by an end to nuclear testing, because that treaty's "diminished significance stems from a host of other phenomena such as violations of the NPT by North Korea and Iraq" and that these "factors will continue to erode the relevance of the NPT, regardless of whether there is a CTBT."[336]

Bailey also tackled the treaty proponent argument that US ratification of the CTBT would check continued nuclear proliferation by bolstering international nonproliferation norms. She maintained that although "law-abiding nations may hesitate to break a norm," many other states will "readily dismiss treaty norms." The NPT and its nonproliferation norms, Bailey argued, have been repeatedly violated since the treaty's inception in 1970, citing nuclear weapons programs by "Argentina, Brazil, India, Iran, Iraq, Israel, North Korea, Pakistan, South Africa, South Korea, and Taiwan." She also claimed that the Biological and Toxic Weapons Convention has been violated by both Iraq and the Soviet Union/Russia, while concluding that "the CTBT

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[336] Bailey, "Costs Outweigh the Benefits," 22.

will not act as a significant barrier to the spread of nuclear weapons to other countries."[337] Former Ambassador and current professor Jeane Kirkpatrick observed that US national security was already at risk because "several countries who are signatories of the Nuclear Nonproliferation Treaty have violated their commitments under the Treaty," including China,, Russia, Iran, Iraq, and Libya and noted that several nuclear weapons states such as India and Pakistan are not even signatories to the accord.[338]

Many of these claims about the limited utility of the NPT and the CTBT as tools of nonproliferation appeared in Senate deliberations on the issue. Such arguments resonated with the belief of many senators that states pursued policies to maximize their interests relative to those of states, and authorized an interpretive frame that saw a threat in the activities of virtually every other current and potential nuclear weapons state. For example, Senator Helms argued that "there is no credible evidence that the CTBT will reduce nuclear proliferation," noting that the three unrecognized nuclear states of India, Israel, and Pakistan would not "be convinced by this treaty to give up their weapons programs." Helms also argued potential proliferators like Iran, Iraq, and North Korea "will either not sign the Treaty or, equally likely, will sign and cheat," arguing that "these countries have demonstrated the value they ascribe to all types of weapons of mass destruction and are not going to give them up because others pledge not to test."[339] Lott defended a similarly realist frame, claiming that "nations acquire nuclear weapons to enhance their national security," and that the cases of India and Pakistan prove that states will develop

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[337] Ibid., 23.
[338] Kirkpatrick, "Testimony."
[339] 106 Cong. Rec. S12545 (daily ed. October 13, 1999) (statement of Sen. Helms).

nuclear weapons that doing so is "consistent with their national security interests."[340] Other Senators to make similar observations included Kyl, McCain, and Roberts.[341]

CTBT opponents also hammered away at the effectiveness of "norms" in shaping state behavior and ability to the US to persuade other states to forego nuclear weapons development through ratification of the treaty. Senator Lugar contested whether the CTBT would enhance the power of nonproliferation norms, observing that "if a country breaks the international norms embodied in the CTBT, that country has already broken the norm associated with the Nonproliferation Treaty," stating the he failed "to see how an additional norm will deter a motivated nation from developing nuclear weapons after violating the longstanding norm of the NPT."[342] Many other Senators, including John Ashcroft (R-MO), Coverdell, Grams, Kyl, and Bob Smith (R-NH), also expressed their skepticism about the capacity of any new non-testing norms to constrain the behavior of determined proliferators.[343]

CTBT critics also claimed that the CTBT lacked the enforcement mechanisms necessary to ensure compliance from party states. Effective enforcement provisions were necessary, treaty opponents argued, to act as a deterrent to violations of the accords provisions. The lack of concrete consequences for treaty violations virtually ensured cheating in the eyes of many senators, who deeply mistrusted the motives of other current and prospective nuclear weapons states. Senator Lugar described the CTBT as "almost powerless to respond" to alleged violations, stating that the treaty "has no teeth." Lugar argued that the lack of enforcement could "breed

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[340] 106 Cong. Rec. S12289 (daily ed. October 8, 1999) (statement of Sen. Lott).
[341] See 106 Cong. Rec. S12536 (daily ed. October 13, 1999) (statement of Sen. Kyl); 106 Cong. Rec. S12399 (daily ed. October 12, 1999) (statement of Sen. McCain); and 106 Cong. Rec. S12520 (daily ed. October 13, 1999) (statement of Sen. Roberts).
[342] 106 Cong. Rec. S12313-5 (daily ed. October 8, 1999) (statement of Sen. Lugar).
[343] See 106 Cong. Rec. S12402 (daily ed. October 12, 1999) (statement of Sen. Ashcroft); 106 Cong. Rec. S12295 (daily ed. October 8, 1999) (statement of Sen. Coverdell); 106 Cong. Rec. S12516 (daily ed. October 13, 1999) (statement of Sen. Grams); 106 Cong. Rec. S12529 (daily ed. October 13, 1999 (statement of Sen. Kyl); 106 Cong. Rec. S12536 (daily ed. October 13, 1999) (statement of Sen. Kyl); 106 Cong. Rec. S12260 (daily ed. October 8, 1999) (statement of Sen. Kyl); 106 Cong. Rec. S12306 (daily ed. October 8, 1999) (statement of Sen. Kyl); 106 Cong. Rec. S12395 (daily ed. October 12, 1999) (statement of Sen. Smith).

cynicism in the process and undercut support for more substantive and proven arms control measures." According to Lugar, the sanctions for noncompliance proposed by the treaty would "not prove particularly compelling in the decision-making processes of foreign states intent on building nuclear weapons" because "the perceived benefits and international stature and deterrence generally far outweigh the concern about sanctions that could be brought to bear by the international community." Lugar also cautioned it would be "extraordinarily difficult" to implement multilateral sanctions on a state the violated the treaty, pointing to the then-problems in pressuring Iraq to follow UN Security Council resolutions requiring its disarmament and compliance with the international inspections regime. Lugar predicted that it would be even more difficult to rally support for international sanctions against more powerful states such as India and Pakistan.[344] These same concerns were expressed by Senators Bunning, Murkowski and Snowe during the floor debate.[345]

Finally, Senate opponents argued that other states, especially those with nascent nuclear programs, would fail to follow a US lead in ratifying the CTBT. Senator Lott questioned whether other hold-out states, including North Korea, Iraq, Iran, India, Pakistan, China, and Russia, would follow the US in ratifying the treaty, arguing that ratifying on the "faith" that other states would follow "is a very dangerous thing to do when you are dealing with something of this importance."[346] Senator Kyl also maintained that the nuclear tests conducted by China, France, India, Pakistan, and Russia since the United States had started to set a "good example" with the initiation of a testing moratorium in 1992 proved that the CTBT would do little to change

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[344] 106 Cong. Rec. S12313-5 (daily ed. October 8, 1999) (statement of Sen. Lugar).
[345] 106 Cong. Rec. S12344-5 (daily ed. October 12, 1999) (statement of Sen. Bunning); 106 Cong. Rec. S12312-3 (daily ed. October 8, 1999) (statement of Sen. Murkowski); and 106 Cong. Rec. S12347-8 (daily ed. October 12, 1999) (statement of Sen. Snowe).
[346] 106 Cong. Rec. S12285 (daily ed. October 8, 1999) (statement of Sen. Lott).

national attitudes about nuclear testing or nuclear weapons development.[347] Kyl also argued that international pariah states like North Korea had already demonstrated that they were impervious to moral suasion, claiming that "our actions have no influence on North Korea, except to cause North Korea to blackmail the United States by threatening to develop nuclear weapons and by threatening to develop missiles unless we will pay them tribute."[348]

Paine denied Bailey's assertion that CTBT ratification would do little to bolster the NPT. He claimed that Bailey's claim that the CTBT will not satisfy the desire of "non-nuclear weapon state parties to the NPT" because it does not adequately constrain the ability of "the US and other nuclear weapons states" to modernize their arsenals through stockpile stewardship programs as "tend[ing] toward self-contradiction."[349] Paine noted that Bailey spends the bulk of her paper claiming "that the CTBT will undermine the safety, reliability, and deterrent credibility of the US nuclear arsenal," yet "suddenly reverse[s] field and head[s] in the opposite direction" by arguing that the SSP will avert the nuclear erosion desired by anti-nuclear advocates, and thus not prevent the "unraveling" of the NPT. He describes this argument as a "daring if not bizarre conclusion."[350]

Paine refuted Bailey's argument that any nonproliferation "norms" promoted by the CTBT are largely irrelevant in shaping the behavior of states, taking particular issue with Bailey's claim that the lack of universal adherence to the NPT proves that norms are irrelevant in the pursuit of nonproliferation goals. Paine argued that the NPT was ratified in a world where there was no universal nonproliferation norm, but that the treaty itself has been important in promoting such norms over the last 30 years as the treaty has "reach[ed] near universal

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[347] 106 Cong. Rec. S12260 (daily ed. October 8, 1999) (statement of Sen. Kyl).
[348] 106 Cong. Rec. S12376 (daily ed. October 12, 1999) (statement of Sen. Biden).
[349] Paine, "Facing Reality."
[350] Ibid.

adherence." He also claimed that the existence of a few outlier states did not invalidate efforts "to cultivate this norm," and that even the behavior of these outlier states "has already been at least partially constrained" by nonproliferation norms.[351] Treaty supporters also argued that sanctions could effectively punish violating states, claiming that bodies such as the United Nations Security Council could levy sanctions and other measures.[352]

Treaty proponents rallied to its defense as an important part of American and global efforts to limit the spread of weapons of mass destruction. The senators' defenses of the value of nonproliferation norms and the vital role played by arms control regimes displayed some of the most defining examples of the risk management frame at work. Senator Kohl claimed that a strong test ban treaty would deter nations from testing because it will increase the likelihood a state conducting a nuclear test "will be subject to international condemnation."[353] According to Kohl,

> it defies logic that the Senate would not embrace this tool to help us ensure that there are fewer nuclear weapons and fewer advanced nuclear weapons. Without nuclear explosive testing, those attempting to acquire new nuclear weapons cannot be confident that these weapons will work as intended. Banning testing is tantamount to banning the development of nuclear weapons.[354]

Senator Kerrey dubbed nuclear weapons "the Rolex wristwatch of international security, a costly purchase whose real purpose is not the service it provides by the prestige it confers" in arguing that the CTBT should be ratified "because it will help slow the expansion of the nuclear club and make it more difficult for nations to acquire these deadly weapons."[355] Senator Barbara Mikulski (D-MD) warned that "without this treaty, underground nuclear testing will not only continue but

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[351] Ibid.
[352] See 106 Cong. Rec. S12364 (daily ed. October 12, 1999) (statement of Sen. Sarbanes); and Stephen J. Ledogar, "Testimony before the Senate Foreign Relations Committee," October 7, 1999, accessed July 20, 1999, http://www.fas.org/nuke/control/ctbt/text/100799ledogar%20.htm.
[353] 106 Cong. Rec. S12512 (daily ed. October 13, 1999) (statement of Sen. Kohl).
[354] 106 Cong. Rec. S12511 (daily ed. October 13, 1999) (statement of Sen. Kohl).
[355] 106 Cong Rec. S12340 (daily ed. October 12, 1999) (statement of Sen. Kerrey).

will be carried out by even more countries—not by our allies, but rather, by our enemies."[356] According to Senator Wyden, the treaty should be ratified because "without test explosions, a new nuclear state cannot know that their crude bombs will work," and treaty ratification would deny hostile states the ability to build "smaller and more easily concealed" weapons that could be smuggled into the US[357]

The effectiveness of nonproliferation norms and American ratification of the CTBT as a means of bolstering these norms and encouraging other nations to adhere to the treaty was also rigorously defended by treaty supporters. In his floor statement, Senator Wellstone argued that "ratification will help push India and Pakistan to sign and ratify the Test Ban Treaty. This may be one of the few steps taken to bring these two countries back from the brink of nuclear war." Wellstone also claimed that "ratification by the Senate will encourage Russia, China, and other states to follow suit, just as we witnessed when the United States first ratified the Chemical Weapons Convention."[358] Other senators drew a parallel between the CTBT and Chemical Weapons Convention (CWC), including Senator Kerry, who noted that "after the United States ratified the CWC, Russia, China, Pakistan, Iran and Cuba followed our lead. The best chance for achieving the nonproliferation goals of the CTBT is for the United States to lead."[359] Senator Timothy Johnson (D-SD) noted that US ratification was not only necessary for the treaty to enter into force, but that "ratification by the United States will strengthen our diplomatic efforts to influence other states to sign and ratify the treaty."[360] Kerry also argued that even a few holdout states would do little to limit the CTBT's effectiveness, observing that "by creating an international norm against nuclear testing, the CTBT will add a powerful factor in a rogue

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[356] 106 Cong. Rec. S12519 (daily ed. October 13, 1999) (statement of Sen. Mikulski).
[357] 106 Cong. Rec. S12513 (daily ed. October 13, 1999) (statement by Sen. Wyden).
[358] 106 Cong. Rec. S12281 (daily ed. October 8, 1999) (statement of Sen. Wellstone).
[359] 106 Cong. Rec. S12352 (daily ed. October 12, 1999) (statement of Sen. Kerry).
[360] 106 Cong. Rec. S12516 (daily ed. October 13, 1999) (statement of Sen. Johnson).

nation's assessment of whether its national interest will be helped or harmed" and that "U.S. ratification of the CTBT will lay the basis for universal enforcement of the Treaty, even against the few nations that may not sign."[361] Senator Feinstein claimed that the treaty could "deter some from going forward with nuclear developments entirely… and for those it will not deter, it will make the development of nuclear weapons that much more difficult, and perhaps impossible."[362] Finally, Senator Levin, argued that the U.S. looked hypocritical when it pressured India and Pakistan to stop testing, exclaiming "how in the world can we expect other countries to refrain from nuclear testing if we are unwilling to do so?"[363]

The preceding analysis demonstrates the intricate, highly technical nature of the questions upon which the senators were asked to render judgment. Senators justified their "yea" and "nay" votes not only around competing interpretations of the relative merits of the treaty, but also framed them around competing narratives about the role of the United States in the international community, the nature of the post-Cold War geopolitical order, and the appropriate place of nuclear weapons in securing important American policy interests. The technical disputes served as fodder for the senators' public statements, and in many ways mirrored the debates as they unfolded among the various camps of nuclear weapons policy analysts. This close reading of the Senate's deliberations permits us to extract observations about the nature of the security and risk management frames, the subject of the next section, and facilitates rendering some preliminary thoughts on the nature of post-Cold War nuclear policy debates, which I tackle in the chapter's conclusion.

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[361] 106 Cong. Rec. S12351 (daily ed. October 12, 1999) (statement of Sen. Kerry).
[362] 106 Cong. Rec. S12528 (daily ed. October 13, 1999) (statement of Sen. Feinstein).
[363] 106 Cong. Rec. S12275 (daily ed. October 8, 1999) (statement of Sen. Levin).

3.2.4   Key Aspects of the Security and Risk Management Frames

The preceding analysis of the Senate's deliberations on the technical disputes informing the political contest over the merits of CTBT ratification highlights a number of important elements of the security and risk management frames deployed by treaty opponents and supporters during the debate. The security frame borrows and extends several key assumptions of realist international relations theories, while the risk management approach is informed by more liberalist theories of international relations. Each frame attempts to apply a compelling interpretive narrative to the geopolitical landscape of the post-Cold War world, purporting to "make sense" of a world where the old interpretive frames have lost vital referents and exhibit diminished explanatory and persuasive power. This section discusses some core features of these competing interpretive frames within both the context of the CTBT ratification debate and broader questions about the place of the United States and its nuclear arsenal in the new global order.

The security frame proceeds from the assumption that nuclear weapons and the threat of devastating nuclear retaliation in the face of serious challenges to American interests are primary guardians of the safety and security of the US and its citizens. Its proponents claim that a key lesson of the Cold War is that nuclear deterrence is an effective guarantor of the peace, and they view the end of the superpower confrontation not as a chance to take a step back from the nuclear brink, but rather to craft a new era of American dominance built upon the nation's economic might, cultural attractiveness, and unparalleled conventional military forces, backstopped by the overwhelming destructive power and vastly superior technological capabilities of the American nuclear arsenal. Nuclear weapons in the hands of American policy

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makers are the ultimate guarantors of the peace, and any policy changes that might undermine the effectiveness of the US arsenal are viewed with deep suspicion.

The security frame suggests that the world is a very dangerous place for the United States. The world is characterized by a Hobbesian war of all against all as states compete with one another for power, influence, and ultimately, security, and the post-Cold War environment is no exception. International rules and "norms" are only meaningful so long as they can be enforced by strong states. Most states are viewed as potential competitors, while a special category of states, dubbed "rogues" because of their alleged lawlessness, pose a special threat to the United States because of their efforts to overturn the geopolitical order, one that has been arranged to maximize American interests. The threat posed by these countries is magnified by their seeming willingness to use violence to achieve their objectives, their sponsorship of violent sub-state groups, and their pursuit of WMD. Russia is portrayed as a defeated adversary, one whose cooperation is somewhat useful in advancing U.S. foreign policy objectives, but also a state vulnerable to world-threatening instability or backsliding into authoritarianism and a destabilizing nationalism. China is depicted as a new strategic competitor, one that has the potential to challenge the US for regional and even global dominance. Other states are threats because of long-standing, potentially violent rivalries, such as India and Pakistan, or because they face off against key American allies, as is the case with many Arab states and their conflict with Israel. Nuclear deterrence is offered as a magnifier of American power in staving off potential rivals and supporting US diplomatic and military efforts to prevent regional disputes from escalating to conflicts that threaten vital American interests.

Although the security frame is flexible enough to accommodate the long-standing convergence of interests between the United States and its allies in Western Europe, Australia,

South Korea, and Japan, it still insists that virtually all other states are only interested in maximizing their own influence, usually at the expense of the United States and its interests. Even long-standing allies are viewed with some degree of suspicion, often portrayed as security free-loaders, benefitting economically from the global security goods fostered by American power while failing to shoulder their fair share of the economic and military burden or providing that security. This sentiment was especially applicable towards Germany and Japan during the 1990s, as each state was viewed as a potential rival to America's global economic dominance. Some allies were also framed as potential security threats, as made evident, during the Senate's discussion of "allied proliferation" risks, where several Senators posited that a weakened American nuclear umbrella could spur Germany, Japan, South Korea, and Taiwan to acquire their own nuclear deterrent, with potentially devastating consequences for global security. The catastrophic nature of the potential threats faced by the United States, coupled with the suspect motives of other states, suggests that American security interests can only be protected by maximizing American power relative to that of its rivals.

The risk management frame adopts a neutral position on the intrinsic worth of nuclear weapons, portraying them as neither good nor bad based upon their own merits. Instead, their value is judged within the context of the missions and roles in which they are to be utilized. Defenders of the risk management frame concede that nuclear weapons served an important function in promoting global stability and protecting the United States during the Cold War, and accept that nuclear weapons and deterrence doctrines should continue to be used as a tool to promote American interests. The risk management frame also suggests that active US engagement is a linchpin of global stability, as the United States acts to assuage the security concerns of its allies and to deter states who might otherwise be interested in challenging the

current regional or global order. However, the threat of military (and nuclear) force is only one of many tools available to the US as it works to promote its interests, and their utility must be evaluated within the context of their effects in either supporting or undermining other means of influence, including economic power and "soft" means of influence, such as the spread of American culture, demonstrated respect for international law, and the perception that the US uses its power to promote a collective good.

The risk management frame suggests that other actors are generally open to cooperation with the United States, recognizing the potential for international collaboration to yield positive-sum outcomes that enhance the security of all states and peoples. The promotion of norms and law are seen as a potent tool for shaping the behavior of states, representing something of a social contract that can tame the excesses of international anarchy in the pursuit of collective security. So-called "rogue" regimes are portrayed as outliers who should be subjected to pressure to adhere to accepted behavioral norms, with the use of force to be used only *in extremis*. The nuclear nonproliferation regime is defended as a vital guarantor of global stability, both because it constrains the spread of catastrophically dangerous weaponry and because it represents an essential contract between the nuclear haves and nuclear have nots, wherein the nuclear weapons states agree to limit their own nuclear arsenals and make meaningful progress towards nuclear disarmament, while the non-nuclear states agree to forego nuclear weapons development. Within this context, the CTBT is framed as both a down payment on the US's disarmament pledge and as yet another legal barrier to the naked use of threats and force by states.

3.3   ANALYZING THE SENATE DEBATE

Observers of the Senate's 1999 deliberations about the merits of the CTBT could rightly claim that the treaty was doomed from the start. As noted in the introduction, a confluence of domestic political factors stacked the proverbial deck against the Clinton administration and other treaty supporters, and the hostile, partisan character of the Senate made it very difficult for the president or his allies to advance any part of their agenda. However, attributing the CTBT's defeat primarily to the political climate provides a very incomplete picture of both the CTBT debate itself and the importance of institutional interests, access issues, and argument and proof norms in directing the form, content, and eventual outcome of the CTBT deliberations. This section builds on the earlier "political" narrative of the CTBT's defeat by providing a rhetorical reading of how the treaty came to be defeated. Several inter-related issues are addressed, including how limited public and detractor access was to the deliberations, the truncated deliberative calendar, the use of secret evidence, the built-in presumption about the merits of nuclear weapons, credibility concerns relating to important treaty advocates, an alignment of powerful institutional interests against the treaty, and other factors that ultimately contributed to the treaty's demise. The findings not only illuminate the ongoing stranglehold of the nuclear establishment on public deliberations about nuclear weapons, but also offer insight to treaty supporters who are now gearing up for a renewed ratification push as the Obama administration has promised to pursue the CTBT's ratification in the second half of the president's term.

3.3.1   Limited Access to Deliberative Spaces

Access to the "official" deliberations about the merits of the Comprehensive Test Ban Treaty was highly restricted, for the most part limited to members of the United States Senate and current and former government officials and military personnel with duties and purported expertise in issues related to nuclear weapons policy, nonproliferation policy, and international diplomacy. Witnesses were seemingly called for their technical expertise, their personal role in negotiating or implementing the treaty itself, or their responsibility for overseeing the Stockpile Stewardship Program or other aspects of the nuclear weapons complex. Although these individuals were able to adequately, if not fully, articulate and represent the interests of their institutions (the military, the nuclear laboratories, the administration, and government officials opposed to the treaty), a wide array of perspectives about both nuclear policy writ large and the CTBT in particular were excluded from the deliberations.

Although the witness list for the two committees with jurisdiction over the CTBT, Armed Services and Foreign Relations, may seem impressive at first glance, it was dominated by individuals with ties to government and institutions with vested interests in the outcome of Senate deliberations over the treaty. The witness list is also short. As was noted by many treaty proponents during the Senate floor debate (especially Senators Daschle and Biden), the CTBT was granted far fewer hearings (four total, three of which had public components) and opportunities to receive testimony and ask questions of witnesses than has been the norm for arms control treaties, particularly those as momentous and complicated as the CTBT.[364] There

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[364] See Kimball, "What Went Wrong;" Biden, "Debate," October 8, 1999, S12293; 106 Cong. Rec. S12542 (daily ed. October 13, 1999) (statement of Sen. Biden); 106 Cong. Rec. S12301 (daily ed. October 8, 1999) (statement of Sen. Byrd); 106 Cong. Rec. S12270 (daily ed. October 8, 1999) (statement of Sen. Hagel); and 106 Cong. Rec. S12507 (daily ed. October 13, 1999) (statement of Sen. Daschle).

were certainly no surprises on the witness lists of either committee. As is typical for hearings on international agreements that touch upon security issues, both Secretary of State Madeline K. Albright and Secretary of Defense William Cohen were asked to provide testimony to Senate committees. Secretary of Energy Bill Richardson was called before the committee because of his oversight of the nuclear laboratories, which have responsibility for designing, testing, constructing, and maintaining the nation's nuclear weapons arsenal. Similarly, the heads of the three primary nuclear laboratories were called: Dr. C. Paul Robinson of Sandia National Laboratories, Dr. C. Bruce Tarter of the Lawrence Livermore National Laboratory (LLNL), and Dr. John C. Browne of the Los Alamos National Laboratory. General Hugh Shelton, Chair of the Joint Chiefs of Staff, testified before the Senate Armed Services Committee to represent the "official" military perspective. In addition to current civil servants and military officers, a large number of former officials were asked to testify, including Dr. Kathleen C. Bailey, a former Assistant Director in the Arms Control and Disarmament Agency, Dr. Robert R. Barker, a former Assistant to the Secretary of Defense, Dr. Sidney Drell of the Stanford Linear Accelerator Center, Dr. John Foster, a former Director of LLNL, Richard Garwin of the Council on Foreign Relations, Jeane Kirkpatrick, current Professor of Government at Georgetown and former U.S. Ambassador to the United Nations, Ambassador Stephen J. Ledogar, the Chief U.S. Negotiator for the CTBT, Ronald Lehman, a former Director of the Arms Control and Disarmament Agency, Troy Wade, a former analyst with the US Department of Energy, and Caspar W. Weinberger, a former Secretary of Defense.

It is perhaps even more revealing to consider who was *not* included in the Senate's deliberations. Most notably absent was "the public." Although many Senators, especially those who supported the treaty, alluded to public regard for the treaty, nuclear testing, and the use of

nuclear weapons for deterrence purposes, not a single citizen without current or former ties to institutional interests was called before the committee. Although the witness list detailed above includes several persons who currently hold the status of "private citizen," each of them was selected because of the former institutional ties. The committees, which negotiate the witness lists, allowed each side to call their "experts," but non-official perspectives were not granted a place in the official dialogue. Even during the floor debate, when many Senators took pains to enter letters and other documents into the record, not a single one of these entered documents was penned by someone without current or former ties to the government and military.

The public (and presumably private) deliberations about the merits of the CTBT writ large and the effectiveness of the Presidential Safeguards also exhibited a tension between two very different understandings of the role of debate in the formation, articulation, and protection of national security interests by a purportedly democratic polity. On the one hand, the United States Senate, self-styled as the "world's greatest debating society," took its responsibility to fully and publicly vet the merits and risks of the treaty, holding numerous hearings over the course of years and engaging in an impassioned floor debate. However, embedded within some of the critical points of contestation between Senators and interest groups in the CTBT debate was a much more dubious and wary view of the role of deliberation in policy formation, where debate itself was viewed as a potential threat to the effectiveness of the U.S. deterrent, and thus the body politic itself.[365]

Another group that was excluded from the Senate's deliberations, either by design or accident, was persons with institutional and/or technical expertise in nuclear testing, arms control, and international diplomacy whose views markedly diverged from the "nuclear

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[365] See Doxtader, "Total War."

consensus" that dominates US defense policy. As noted in the chapter on so-called "fallen priests," a large number of former military officers and defense officials and experts have "turned coat" upon leaving government service, and now actively work on behalf of domestic and global disarmament efforts. Two of the more prominent examples include Stansfield Turner, a retired admiral and former Director of Central Intelligence and George Lee Butler, the last commander of the Strategic Air Command. These are but two of hundreds of former member of the nuclear establishment who now publicly question the desirability and efficacy of relying on nuclear deterrence as a guarantor of international stability.[366] Although it is likely unreasonable to assume that the Senate would call either of these two individuals to testify, it is revealing of the dominance of pro-deterrence perspectives that *no one* who questions the fundamental tenets of the nuclear dogma was asked to share their perspectives with the committee.

The effect of this "echo chamber" of official discourses on the content and outcome of the Senate's CTBT deliberations and Senator's justifications for rejecting the treaty cannot be overstated. First, the insistence on relying upon "seasoned hands" ensured that the debate played out on the familiar "security" versus "risk management" terrain that had dominated official public discourse on nuclear weapons policy, US national interests, and potential threats for decades. As explained in greater detail in the sections outlining the substance of the Senate debate, the witnesses and their questioners re-engaged with old controversies about the merits of arms control in advancing US interests, the desirability of engaging in arms control agreements with imperfect verification regimes, and whether the United States could maintain its nuclear edge in a world of perceived constraints. Although both sides agreed that important elements of

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[366] A representative list can be seen at "Statement," The Canberra Commission on the Elimination of Nuclear Weapons." no date, accessed July 4, 2010, http://www.ccnr.org/canberra.html; and "Statement by Generals and Admirals of the World Against Nuclear Weapons," December 5, 1996, accessed January 15, 2010, http://www.ccnr.org/generals.html.

the threat environment had changed from that faced by US decision makers during the Cold War, they remained split on the merits of arms control. Aside from the particulars about the effectiveness of the SSP and efficacy of the International Monitoring System (IMS), many of the arguments and positions outlined in the CTBT debate were little changed from discussions about the INF, START, or even the SALT agreements of the 1970s. The security frame rejected arms control as a Lilliputian constraint on American power, while the risk management frame embraced arms control as a mechanism for imposing the rule of law on other international actors. Where one frame saw irrevocable restraints, the other saw safety within a predictable set of rules.

Second, this exclusion of alternative perspectives ensured that questions about the desirability of nuclear deterrence and the utility of nuclear weapons, and even nuclear primacy, in achieving American foreign policy goals were almost entirely excluded from the Senate's deliberations. Aside from some allusions by various Senators to making the "world safer for our children" and Senator Paul Wellstone's allusions to the horrors of a potential nuclear conflict, the need for nuclear weapons themselves was unquestioned. [367] As I explain below in the section on the importance of presumption, the acceptance of nuclear weapons as vital to American security in perpetuity directed the Senate's discussion to technical questions about the ability of the nuclear laboratories to maintain the effectiveness of an aging nuclear weapons arsenal and the capacity of American intelligence agencies and international monitoring organizations to catch any "cheaters" who might engage in clandestine nuclear testing. Consequently, an important opportunity to foster a public debate about the utility and desirability of nuclear weapons in achieving American foreign policy goals, and even over the nature of those goals themselves,

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[367] See 106 Cong. Rec. S12280 (daily ed. October 8, 1999) (statement of Sen. Wellstone); 106 Cong. Rec. S11673 (daily ed. September 30, 1999) (statement of Sen. Durbin); and Boxer, "Questioning."

was irrevocably lost, solidifying the preeminent place that nuclear weapons have in US security policy and discourse.

Notably missing from this replay of major components of the Cold War-era deliberations over verification schemes and the promise and pitfalls of international law was a debate about the desirability of nuclear weapons and deterrence postures themselves. As noted in the section on the CTBT's impact on nuclear modernization schemes, both the security and risk management frames and their advocates rejected the possibility of nuclear disarmament as a policy option. Such a policy stance was antithetical to the security frame, which viewed nuclear weapons as an inevitable outgrowth of technological progress and their deployment and threatened use as an inevitable product of human nature. The risk management frame was perhaps open to the possibility of an eventual elimination of nuclear weapons, but viewed such an outcome as possible only after careful negotiation and confidence-building had assuaged the underlying antagonisms that pushed states to acquire and deploy nuclear weapons. Risk management viewed short-term disarmament as putting the cart before the proverbial horse. The dominance of advocates of these two frames, both in the Senate floor debate and among the witnesses called to testify before the relevant Senate committees, fundamentally excluded voices that held nuclear weapons as themselves responsible for the structural antagonisms that caused international conflict, and argued that collective security could only be achieved once the "ultimate weapons" were abolished from the world's military arsenals.

3.3.2   Truncated Deliberations

The unanimous consent agreement that led to the eventual CTBT vote also constrained Senate deliberations. Perhaps most importantly, the truncated deliberation schedule of roughly a week

allowed for only a limited number of hearings and a mere twelve hours of floor debate. The time constraints and quick decision window were blamed by many of the treaty's supporters as contributing factors in the CTBT's demise. These allegations raise the question of why a relatively short time for deliberation would produce such a pernicious result.

First, many senators have little personal or professional expertise with the complex nuclear and foreign policy issues raised by the treaty. Although several "leading lights" in the Senate expressed a deep familiarity with the role of nonproliferation norms, arcana of verification protocols, and inner workings of global arms control institutions, the vast majority of Senators were forced to rely on outside testimony and their own personal judgment in evaluating the CTBT's effectiveness. From the perspective of many senators, they were being called upon to make a hasty decision on very highly technical issues. Outside observers, such as the Arms Control Association, claimed that the short decision window was determinate in the outcome of the Senate deliberations.

Hampered by the short, twelve-day schedule, treaty proponents were unable to effectively counter the decades-old arguments against the treaty and a few new questions and falsehoods that treaty opponents presented. The result was that many senators who voted "no" based their judgments on erroneous assumptions and distorted representations of the role and purpose of nuclear weapons test explosions, what constitutes an effective stockpile stewardship program, and whether other states can gain militarily significant advantages relative to the United States under the CTBT regime.[368]

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[368] Kimball, "What Went Wrong."

These claims are substantiated by Senator Chuck Hagel (R-NE), a leading moderate, who stated on the first day of the Senate debate that animus between the White House and Senate leadership had tainted the debate.

> We are trapped in a political swamp as we attempt to compress a very important debate on a very important issue. A few minutes ago, there was an exchange about timing. We only have a few hours to debate. My goodness, is that any way to responsibly deal with what may, in fact, be the most critical and important vote any of us in this Chamber will ever make? It is not. We cannot have a serious debate about nuclear proliferation when artificial timelines prevent that important debate. Unfortunately, the political environment has captured this issue.[369]

Hagel was not alone in his desire for additional time to conduct hearings and conduct a floor debate on the treaty. Senator Byrd (D-WV) claimed that the Senate was deliberating the treaty "effectively shackled, gagged, and, to a considerable extent, blindfolded."[370] Senator Levin (D-MI), argued that the unanimous consent agreement was constraining the debate, saying " . . . we as a Senate have a responsibility to deliberate on a treaty. We put ourselves in a position . . . where we could not do that adequately. I think that was a mistake."[371] Byrd and Levin were joined by their Democrat colleagues, Senators Dorgan, Akaka, Daschle, Bingaman, Torricelli, Reid, Feingold, Reed, Kennedy, Sarbanes, Moynihan, and Cleland.[372] Sixty-two senators, including twenty-four Republicans and thirty-eight Democrats, even sent a letter to the Senate leadership requesting that the vote be delayed, to no avail.[373]

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[369] 106 Cong. Rec. S12269 (daily ed. October 8, 1999) (statement of Sen. Hagel).
[370] 106 Cong. Rec. S12301 (daily ed. October 8, 1999) (statement of Sen. Byrd).
[371] 106 Cong. Rec. S12276 (daily ed. October 8, 1999) (statement of Sen. Levin).
[372] 106 Cong. Rec. S12277-8 (daily ed. October 8, 1999) (statement of Sen. Dorgan); 106 Cong. Rec. S12404 (daily ed. October 12, 1999) (statement of Sen. Akaka); 106 Cong. Rec. S12508 (daily ed. October 13, 1999) (statement of Sen. Daschle); 106 Cong. Rec. S12296 (daily ed. October 8, 1999) (statement of Sen. Bingaman); 106 Cong. Rec. S12300 (daily ed. October 8, 1999) (statement of Sen. Torricelli); 106 Cong. Rec. S12330 (daily ed. October 12, 1999) (statement of Sen. Reid); 106 Cong. Rec. S12236 (daily ed. October 8, 1999) (statement of Sen. Feingold); 106 Cong. Rec. S12343 (daily ed. October 12, 1999) (statement of Sen. Reed); 106 Cong. Rec. S12354-5 (daily ed. October 12, 1999) (statement of Sen. Kennedy); 106 Cong. Rec. S12364 (daily ed. October 12, 1999) (statement of Sen. Sarbanes); 106 Cong Rec. S12533 (daily ed. October 13, 1999) (statement of Sen. Moynihan); and 106 Cong. Rec. S12525 (daily ed. October 13, 1999) (statement of Sen. Cleland).
[373] "Letter signed by 62 Senators Requesting a Delay on Consideration of the Comprehensive Test Ban Treaty," *Congressional Record*, 106th Cong., 1st sess., October 13, 1999, accessed July 20, 2009, http://www.fas.org/nuke/control/ctbt/text/101399senletter.htm.

Senator Joe Biden (D-DE), who was responsible for managing the floor debate for the CTBT's proponents, blamed the short deliberations and lack of hearings for the treaty's eventual defeat, claiming that the truncated schedule precluded the Senate from reaching a consensus in favor of the treaty.

> .... I truly believe that, were the American people and our colleagues able to hash this out in the way we designed this body to work, we would, in fact, find accommodation for all those concerns that 67 Senators might have; not 90, but probably 67, 68—70. I truly believe that. I truly believe that. Instead, we got one quick week of hearings, with the Committee on Foreign Relations holding only one day of hearings dedicated to this treaty, the day after the committee was discharged of its responsibility. That abdication of committee responsibility was perhaps only fitting, as most Republicans appear prepared to force this great country to abdicate its responsibility for world leadership on nuclear non-proliferation.[374]

Hagel even claimed that his decision to vote against the treaty was based in large part on the lack of debate and information gathering considering the treaty and its merits, stating:

> Regrettably, I must say to my colleagues, if that vote is held on Tuesday, I will have to vote against this treaty. That will be regrettable because I would like to have more time to ask more questions, to understand what we are doing, because I, as do all my colleagues, take this responsibility very seriously. I say again, this vote, if it does come Tuesday or next year or in 2001, may in fact be the most critical vote any of us ever cast.[375]

Senator Reid maintained that the quick timeframe of the debate and vote precluded an "intense debate," describing the discussions as "little things" of no real consequences. He described the preceding hearings as "hurriedly conducted," claiming that the Senate should "have more debate," "more consultation," and "more hearings" because doing so would "allow us [the Senate] to arrive at a better, more informed decision."[376] Senator Cleland described that entire process as a "rush to judgment" and lamented the Senate's first defeat of an arms limitation

[374] Biden, "Debate," October 13, 1999, S12542.
[375] Hagel, "Debate," October 8, 1999, S12270.
[376] Reid, "Debate" October 12, 1999, S12331.

treaty in 70 years.[377] Feingold claimed that "this debate is too limited in duration and scope," continuing that the treaty would be defeated only "because the Senate has backed itself into a corner," denying the request of many Senators for "further consideration," observing that many Senators would oppose the treaty on a quick vote, "not necessarily because they do not support the treaty, but rather because they feel they cannot yet fully support it without further study."[378]

Treaty opponents contested the claim that the Senate was spending too little time gathering testimony about the CTBT or debating its merits on the floor of the Senate. Senate James Inhofe (R-OK), noted that the treaty had been submitted by the Clinton administration to the Senate over two years before, and that the constraints on debate had been agreed to by all Senators as part of a unanimous consent agreement, to which any Senator could have objected.[379] Several Senators, all in opposition to the treaty, expressed their satisfaction with the number of hearings and length of the debate, including Allard, Gordon Smith, Helms, and Kyl.[380] Smith even claimed that his opponents were asking for more time to debate because the vote was going to go against them, describing the tactic as "spin at its best . . ."[381] Senator Coverdell claimed hearings were largely unimportant to how Senators made decisions, claiming that "in my judgment, individual Senators come to decisions on monumental issues, such as this treaty, far more from their personal and internal counsel than they do on whether or not there have been a

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[377] Cleland, "Debate," October 13, 1999, S12525.
[378] Feingold, "Debate," October 12, 1999, S12236.
[379] Inhofe, "Debate," October 8, 1999 ,S12271.
[380] Allard, "Debate," October 8, 1999, S12278; Helms, "Debate," October 13, 1999, S12509; Kyl, "Debate," October 8, 1999, S12305; and Smith, "Debate," October 12, 1999, S12398. Smith even accused his opponents of "not having done their homework: "I would like to remind my colleagues, this treaty was signed by President Bill Clinton in 1996 and transmitted to the Senate in 1997. Over 2 years, we have had this treaty before us. One of the problems I have in the Senate is that it doesn't matter how much time you spend on something or how long something is before this body; the only time we try to get really involved in it is when we are about to vote on something. Then those who haven't done their homework want to come out here and say we need more time."
[381] 106 Cong. Rec. S12396 (daily ed. October 12, 1999) (statement of Sen. Smith).

series of hearings."[382] Senator Warner, a supporter of delaying the vote, even indirectly refuted claims that the Senate had not been able to fully consider the treaty, claiming it was "an excellent debate for the Senate," and that he could "think of few debates . . . that have been as informed as this one."[383]

However, treaty opponents, especially Senator Daschle, made a persuasive case that the CTBT had received far fewer hearings and far less floor debate than other arms control treaties of similar magnitude, including the recently concluded Chemical Weapons Convention (CWC) and Strategic Arms Reduction Treaty (START), negotiated by the Clinton and Bush I administrations respectively, and ratified by the Senate. For example, the START treaty received 19 days of hearings before the Foreign Relations Committee and five days of Senate floor debate, and the CWC was granted fourteen days of Foreign Relations Committee hearings and three days of floor debate. In contrast, the CTBT was granted one hearing by the Foreign Relations Committee.[384] Given the irreversibility of a 'yea' vote in favor of the treaty, the possibility of reconsidering the treaty at a later time, and the presumption that the nuclear status quo was relatively stable, it is not surprising that many undecided Senators voted against the treaty.

Second, the abrupt decision to schedule the debate and vote caught the Clinton administration and other advocates relatively flat-footed, and likely limited the effectiveness of efforts to push for the treaty's ratification. From the perspective of administration officials, the timing could not have been worse; the president had just survived a protracted sex scandal, impeachment by the House, and a trial in the Senate. Indeed, many respected political

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[382] 106 Cong. Rec. S12295 (daily ed. October 8, 1999) (statement of Sen. Coverdell).
[383] 106 Cong. Rec. S12532 (daily ed. October 13, 1999) (statement of Sen. Warner).
[384] 106 Cong. Rec. S12507 (daily ed. October 13, 1999) (statement of Sen. Daschle).

commentators have suggested that Helms and the GOP Senate leadership timed the vote to take advantage of the administration's political weakness.[385] The short deliberative horizon constrained White House advocacy for the treaty in at least two ways. Initially, it limited the likely effectiveness of direct lobbying efforts on the part of Clinton and his closest advisors. The passage of controversial major legislation, especially legislation closely linked to the aims of a president, typically requires the president to engage in complex negotiations with "persuadable" legislators, and this complex political dance of threat and inducement takes considerable time and effort. Direct involvement by the Johnson administration in securing passage of major civil rights legislation, and even by the Clinton White House in pushing through the North American Free Trade Agreement (NAFTA) in 1993 demonstrate the importance of presidential involvement. The need for presidential muscle in the negotiating process was also evident in efforts to secure Senate ratification of the Partial Test Ban Treaty (under Kennedy), the Strategic Arms Limitation Talks (SALT) treaty, the Anti-Ballistic Missile Treaty (both under Nixon), the Intermediate-Range Nuclear Forces Treaty (under Reagan), and the Strategic Arms Reduction Treaty (under Bush 42). Additionally, the short decision time limited the president's ability to use the "bully pulpit" to rally public opinion in favor of the treaty. As noted by many Senators and advocates throughout the CTBT debate, the American public expressed overwhelming support for the treaty, exceeding eighty percent in favor according to many polls, including a strong majority of Republican-leaning voters. However, many Senators apparently did not feel constrained by the desires of their constituents, likely because this broad but shallow public support did not see expression in clearly identifiable public outcries or pressure for treaty ratification.

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[385] See Kimball, "What Went Wrong."

Third, the short deliberation timeline restricted the flow of information to Senators and constrained the number of witnesses and perspectives that were entered in the "official" public debate, and limited the Senators' ability to seek input from citizens groups or to raise the issue of nuclear testing with their constituents, either on the campaign trail or in the informal "citizen-legislator" meetings that characterize much of the interaction between public officials and private citizens. The Senate held four hearings over the course of less than a week, three by the Armed Services Committee and one by the Foreign Relations Committee. In all, fewer than 30 witnesses testified publicly. Nearly all of the witnesses were either current or former members of the civilian government or military. Each individual had strong ties to institutional interests. As noted elsewhere in this chapter, very few, if any, individuals from outside the Democrat and Republican's respective security establishments participated in the proceedings. The Senators also had limited opportunity to gather information from their constituents, or to consider the treaty within the context of their or their constituent's long-term goals and objectives. Senators were literally swamped with hundreds of pages of prepared statements, documents submitted to the congressional record, and analytic pieces from think tanks and advocacy groups that were largely shut out of the formal deliberative process. These factors combined, as noted above, to make many Senators reluctant to cast a "yes" vote for a permanent ban, and likely magnified the influence of "opinion leaders" among the Senators, particularly that of Senator Richard Lugar (R-IN), who was acknowledged among both the Republican and Democrat caucuses as possessing considerable expertise in security and arms control matters.

3.3.3 Advocate Credibility Problems

Many past statements and policy positions of current administration officials and other treaty advocates also created conditions that made it easier for wavering, centrist Republican senators to opt against voting for treaty ratification. As noted previously, most of these senators were being asked to make a judgment on a lengthy and complex arms control treaty, a judgment that was based on balancing arcane and technical concerns about treaty ratification, verification, and the ability of the United States to maintain an effective nuclear deterrent without explosive testing. Since most senators, by their own admission, lacked the personal expertise and knowledge to make concrete judgments on these matters, they were forced to rely upon the testimony of expert witnesses from both sides of the debate. The CTBT deliberations in the Senate thus embodied many of the characteristics and drawbacks of political bodies called upon to render decisions about technical matters in which there is profound expert disagreement, as identified by Willard and others.[386] The lack of personal familiarity and training in matters of arms control, nuclear weapons design, and international diplomacy placed many senators in the position of deciding their votes based, at least in part, on their judgment of the credibility of the advocates on both sides of the debate. Unfortunately for the CTBT's supporters, several treaty advocates were readily subjected to attack by hawkish senators skeptical of the merits of the CTBT and other arms control treaties.

As the Clinton administration's Secretary of Defense and a former Republican Senator with strong defense and national security credentials, William Cohen would normally be the natural point person for the administration's efforts to push treaty ratification in the Senate.

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[386] See Charles Willard, *Liberalism and the Problem of Knowledge: A New Rhetoric for Modern Democracy* (University of Chicago Press, 1996).

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However, Secretary Cohen's sincerity in advocating for treaty ratification and his personal judgment were called into question by several senators, based largely on prior statements Cohen had made during his time in the Senate. During Senate debate about the desirability of the nuclear testing moratorium in 1992, Secretary Cohen had expressed his concerns about the ability of the United States to maintain a reliable deterrence force without nuclear testing. During questioning at a hearing by the Senate Armed Services Committee on October 6, 1999, Senator James Inhofe (R-OK), a vocal treaty opponent, chose to quote the Secretary's words back at him:

> You said, 'Many of these nuclear weapons which we intend to keep in our stockpile for the indefinite future are dangerously unsafe. Equally relevant is the fact that we can make these weapons much safer if limited testing is allowed to be conducted. So when crafting our policy regarding nuclear testing, this should be our principal objective: to make the weapons we retain safe. The amendment that was adopted last week banning testing does not meet this test, because it would not permit the Department of Energy to conduct the necessary testing to make our weapons safe.'[387]

Inhofe here clearly implied that either the Secretary was insincere in his current belief in the ability of the United States to maintain a reliable deterrent without nuclear testing, or that the Secretary was being forced to advocate against his personal judgment at the behest of the White House. Inhofe claimed such explicitly at least twice during the Senate floor debate, claiming on October 8, 1999:

> There is no one I respect more highly than Secretary Bill Cohen, our Secretary of Defense. I served with him on the Armed Services Committee of the Senate, and he is certainly a most knowledgeable individual. I do have to say this: He has certainly changed his story since he was in the Senate. I am going to quote what Secretary Cohen said in 1992, when at that time he was the most vigorous opponent of a ban on nuclear testing we had in the Senate.

Inhofe invoked then-Senator Cohen's statements against the treaty again on the last day of debate, October 13, 1999, noting:

[387] James Inhofe, "Statement before the Armed Services Committee," October 6, 1999, Lexis-Nexis Academic.

Here is the same Secretary of Defense, back when he was in the Senate, talking about the fact that our weapons are not safe. By the way, we had a chart that we showed of information that came from all three of the Energy labs which is in the Cloakroom right now, but we have used on the floor several times, showing specifically not one of the nine weapons in that arsenal meet the safety tests today. In other words, we have gone 7 years now without testing, and it has now taken its toll. We are having a problem. So anyway, that is very significant to remember those words of Secretary Cohen.[388]

Inhofe was not the only treaty opponent to attack the CTBT on the basis of Cohen's prior statements. In a press conference on October 6, 1999, that was intended to bring attention to a letter from six former Secretaries of Defense in opposition to ratification of the test ban, Senator Jesse Helms (R-NC), the powerful chair of the Senate Foreign Relations Committee and one of the administration's and CTBT's most vocal detractors, observed:

> Bill Cohen himself made [similar arguments] when he was a United States senator from Maine. Bill Cohen vigorously opposed efforts to kill the US nuclear testing program when he was in the Senate. And I remember sitting there and listening to him and marveling at the way he stated his case. Now, the letter from six secretaries are bound to be a devastating -- former secretaries -- bound to be devastating to the White House.

Helms' implication was that there was not a single current or former head of the Defense Department that stood in support of the treaty. In a similar vein, Senator John Warner (R-VA), chair of the Armed Services Committee and another leader in senate efforts to defeat the treaty, noted in an October 6, 1999, hearing that Secretary Cohen had altered his former stance on the need for testing to enhance the safety of the American nuclear arsenal. Senator Warner stated:

> Let me emphasize, most of those problems were related to safety, safety of the stockpile. I recall a very able senator from Maine who, along with me, was a principal sponsor of an amendment in 1992 which initiated an aggressive nuclear testing campaign to ensure that all our nuclear weapons were safe. That senator, former senator, sits before this committee today.

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[388] 106 Cong. Rec. S12272 (daily ed. October 8, 1999) (statement of Sen. Inhofe).

Three prominent treaty opponents thus were able to successfully undermine the credibility, at least in their eyes and that of their caucus, of one of the administration's leading witnesses for ratification.

Secretary Cohen and his supporters clearly anticipated this strategy, and offered several responses to the contention that he was not a sincere advocate for the CTBT, both in the committee hearings and on the Senate floor. While being questioned by Senator Inhofe, Cohen offered advanced arguments. First, he noted that several other current treaty proponents, including Dr. Sydney Drell of Stanford University has also changed their position on the treaty. Such a claim on face appears to be unconvincing, since it begs the question of whether Dr. Drell's position switch was also principled. At best, this argument seems to imply that persons without direct ties to the administration could also alter their positions, but it does not address the claim by Inhofe that Cohen himself had switched positions because he was now working for a White House that supported a comprehensive test ban. Second, Cohen noted that his safety concerns were no longer valid because the "unsafe" weapons had been removed from the American nuclear arsenal. In his opening statement before the Armed Services Committee, he observes that

> But a lot has changed in the last seven years, much more so than my simply moving my desk over to the Pentagon. As we have reduced our arsenal, these older weapons in the stockpile have been retired, and they have eased my concerns.[389]

However, this claim by itself does not address Inhofe and Warner's larger argument about arsenal reliability and the need to add additional safety features as they become available, nor does Cohen's argument address the fundamental claim that he altered his position for political reasons. Cohen's third and fourth arguments attempted to distinguish his opposition to a

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[389] Cohen, "Testimony."

testing moratorium from his support for a comprehensive test ban, noting that he supported a universal treaty because, seemingly, it would create the same reliability problems for all nuclear powers. Inhofe found even the safety claims to be less than convincing, noting that his research about the arsenal indicated that the nuclear stockpile "shows the same dangers that are there and the necessity for testing."[390] In the end, Cohen ended up relying on his own credibility with the senators, claiming in a press conference held after the hearing that ". . . I simply, as Secretary of Defense, could never recommend to the Senate that it give its advice and consent to this treaty if we didn't have high confidence that we could maintain our own nuclear deterrent."[391] Senator Arlen Specter later comes to Cohen's defense during the Senate floor debate, noting this his personal relationship with Cohen proves Specter has faith in the secretary's integrity, stating that "I am satisfied that Bill Cohen, with whom I worked in this body for some 16 years, would not put America at risk if he didn't believe what he said, that this Comprehensive Test Ban Treaty, balancing all considerations, was appropriate."[392]

Secretary Cohen was not alone in having his expertise questioned by CTBT opponents. General Hugh Shelton, who was the country's highest-ranking military officer in his capacity as Chair of the Joint Chiefs of Staff, was subtly attacked under questioning by Senator Jeff Sessions (R-AL) during the same Armed Services Committee hearing. Sessions began the line of questioning by pointing out that the general was neither a nuclear engineer nor scientist, and thus the general's testimony in support of the viability of the Stockpile Stewardship Program was based on the statements of the lab leaders. Shelton admitted that he was "not a rocket scientist or a nuclear engineer" stating that he was a "layman" who had to rely on the judgments of the

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[390] Inhofe, "Statement."
[391] William Cohen, "Remarks Urging the Senate to Pass the Comprehensive Test Ban Treaty," October 6, 1999, accessed July 20, 2009, http://www.fas.org/nuke/control/ctbt/text/100699nobel.htm.
[392] 106 Cong. Rec. S12264 (daily ed. October 8, 1999) (statement of Sen. Specter).

experts in the field.[393] Sessions then asked the general whether he was "aware that other experts who have been in charge of maintaining our stockpile have stated they believe we cannot ensure its reliability without physical testing?"[394] Shelton was forced to respond that he was placed in a position to choose between a "variety of opinions, depending on who you talk to."[395] Sessions used this opening to speculate that "we've got to be wondering who we should rely on in this most critical area, and I am concerned." The clear implication of Sessions's statement, as indicated by his subsequent arguments in the floor debate, is that the judgment of General Shelton and other treaty proponents about the effectiveness of the SSP is based on a selective reading of the opinions of experts, not on their own personal experience and expertise, and that the senate should consider the opinions of the lab leaders and other officials within the nuclear production and testing complex in formulating the Senate's judgment about the merits of the SSP.

During the floor debate Senator Hutchison also questioned the credibility of General John Shalikashvili, a former Chair of the Joint Chiefs of Staff and a very public advocate of the test ban treaty. Hutchison directly referred to Shalikashvili's testimony from a March 5, 1997, hearing, where he stated:

> With each year that goes by and we are further and further away from having done the last test, it will become more and more difficult. That is why it is very important that we do not allow the energy budget to slip, but continue working on this science-based stockpile verification program and that we get this thing operating. But even then, Senator, we won't know whether that will be sufficient not to have to test. What we are talking about is the best judgment by scientists that they will be able to determine the reliability through these technical methods.[396]

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[393] Shelton, "Testimony."
[394] Jeff Sessions, "Statement before the Senate Armed Services Committee," October 6, 1999, Lexis-Nexis Academic.
[395] Shelton, "Testimony."
[396] 106 Cong. Rec. S12273 (daily ed. October 8, 1999) (statement of Sen. Hutchison).

After being asked by Hutchison whether further testing would be necessary to validate the assumptions of the SSP, Shalikashvili responded:

> I don't know. I won't pretend to understand the physics of this enough. But I did meet with the nuclear laboratory directors and we talked about it at great length. They are all convinced that you can do that. But when I ask them for a guarantee, they cannot give it to you until all of the pieces are stood up.[397]

Hutchison used Shalikashvili's 1997 testimony to both question his credibility on the subject, citing his own 1997 statement that we should "mark one Senator down as skeptical," and stating on the Senate floor "Mr. President, 'Just don't know' is being unsure. Close is not good enough. It is not good enough when you are talking about a permanent treaty and when it comes to nuclear safety."[398] Hutchison went so far as to enter the entirety of Shalikashvili's 1997 testimony into the Congressional Record.[399]

Finally, the credibility of President Clinton himself was roundly attacked by the CTBT's opponents, especially by Senator Helms, who throughout Clinton's term demonstrated a degree of hostility, and almost contempt, for the President. On the first day of the Senate debate, Senator Helms claimed that the CTBT was not being pushed by the administration because of the agreements own merits, but instead, that

> . . . the CTBT is the product of a mad scramble to: (1) Create an arms control 'legacy' for the Clinton-Gore administration; or (2) provide an excuse for this administration's lack of any nonproliferation policy; or (3) obscure the fact that this administration presided over the collapse of the single most significant reduction in nuclear weapons with Russia ever negotiated— the START II Treaty—which would have eliminated all MIRVed ICBMs and the SS–18 missile. (The likelihood is that all three played a major role in the administration's decision to try to ram through this Senate this unwise and dangerous treaty.)[400]

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[397] Ibid.
[398] Ibid.
[399] 106 Cong. Rec. S12521-2 (daily ed. October 13, 1999) (statement of Sen. Hutchison).
[400] 106 Cong. Rec. S12311 (daily ed. October 8, 1999) (statement of Sen. Helms).

Clinton, already politically hamstrung by the aftermath of the Lewinsky scandal and subsequent House impeachment and Senate trial and Republican obstructionist tactics in both the House and Senate. actually engaged in little direct lobbying on behalf of the treaty. Senator Richard Lugar (R-IN), one of the Senate's leading foreign policy experts and an important player in the outcome of the Senate debate, claimed that "Presidential leadership has been almost entirely absent on the issue . . . the administration has declined to initiate the type of advocacy campaign that should accompany any treaty of this magnitude."[401]

3.3.4   Presumption for Deterrence

Presumption also played an important role in shaping both the form and the outcome of the Senate deliberations over the CTBT. Virtually all players in the debate assumed that American foreign policy interests were best served by a strong military deterrent, that a robust and capable nuclear arsenal was a vital component of successful American deterrence policy during the Cold War, and that nuclear weapons would continue to play a vital role in defending American interests in a post-Cold War world. As a result, much of the public debate over the merits of the CTBT centered on whether the treaty would enhance or undermine the effectiveness of the US nuclear deterrent relative to that of other states. The controversy then centered on two major points of contention: first, whether the US could maintain an effective deterrent without continued explosive testing; and second, whether the treaty would constrain the development of new nuclear capabilities by existing nuclear weapons states (vertical proliferation) and by limiting the ability of new states to develop capable nuclear forces. The presumptive utility of

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[401] 106 Cong. Rec. S12313 (daily ed. October 8, 1999) (statement of Sen. Lugar).

nuclear weapons thus framed much of the Senate's debate over the treaty. Every single senator who discussed deterrence policy did so favorably, universally hailing it as vital to the nation's defense, and no small number of senators invoked its importance during the Senate's hearings and floor debate. The pro-deterrence perspective of the vast majority of Senators is perhaps best summarized by a floor statement by Senator Helms at the end of the floor debate:

> Mr. President, in the post-cold-war world, many of us have assumed that the US nuclear deterrent is less relevant than before. I contend that it is more important than ever. The level of threat posed by another nation has two parts—the nation's capabilities to inflict damage upon us, and the intent to do so. Since the end of the cold war, Russia's intent, clearly, is peaceful. This has not changed Russian nuclear capabilities, however. If Russia's government were to change to a hostile one tomorrow, the level of threat posed by Moscow would be even greater than it was during the cold war.
>
> Unlike the United States, Russia has not stopped improving on its nuclear arsenal. The Russians have continued to modernize their nuclear arsenal with new warheads and new delivery systems, despite the end of the cold war. This modernization has been at tremendous economic expense and has probably entailed continued nuclear testing. I might also add that Russian nuclear doctrine has continued to evolve since the end of the cold war, and now Moscow relies even more on its nuclear deterrent for defense than it did before.
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> But, Russian is not the only potential threat. The greater danger may come, ultimately, from China. As you know, Chinese espionage has yielded great fruit, including United States nuclear weapons designs and codes, as well as intelligence on our strategic nuclear submarine force. China continued nuclear testing long after the United States undertook a self-imposed nuclear test moratorium in 1992. And, undoubtedly, it can continue secret nuclear testing without our being able to detect it.
>
> Other threats also abound. One of the most serious is from North Korea, which remains in noncompliance with the Nuclear Nonproliferation Treaty and is continuing to build missiles that can be used for nuclear weapons delivery. In this uncertain world, it is not enough to simply retain a nuclear arsenal. We need a true nuclear deterrent. A nuclear arsenal becomes a nuclear deterrent only when we have convinced potential enemies that we will use that arsenal against them if they attack us or our allies with weapons of mass destruction. This means we must do two things. First, we must maintain the arsenal in workable, reliable condition. Second, we must clearly communicate our willingness to use the arsenal. We must not forget: a weapon does not deter if your enemy knows that you won't use the weapon.[402]

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[402] 106 Cong. Rec. S12544 (daily ed. October 13, 1999) (statement of Sen. Helms).

Presumption was also invoked by treaty opponents as necessitating a rejection of the treaty if a "reasonable doubt" could be raised that the CTBT could either not meet its nonproliferation objectives or would undermine the effectiveness of the American nuclear arsenal. Treaty opponents clearly argued that the burden of proof was on CTBT advocates. In an October 6, 1999 press conference following an Armed Services committee hearing, Senator Jon Kyl (R-AZ) stated that "the administration has the burden of demonstrating why a treaty should be approved," continuing that "it is our judgment that the administration has not borne that burden of proof."[403] These statements echo claims made by Senator Warner in the hearing that day, who, when addressing Secretary Cohen and General Shelton, argued that "I believe the burden is on the administration . . . to prove almost beyond a reasonable doubt that ratification of this treaty is in the national security interest of the United States today, tomorrow, and decades hence."[404] For Warner, this presumption against change was rooted in the twin belief that a nuclear deterrent was vital to American security, and that nuclear explosive testing was the only way to ensure the reliability of the nuclear arsenal. Warner described that maintenance of the deterrent is "one of the top national security priorities of every American president,"[405] and later that he was concerned because the Clinton administration was "asking this nation to forego a program that has worked..."[406] Kyl argued that the administration and other treaty advocates had failed to make the case that "over the long term, the United States can ensure the nuclear stockpile without nuclear testing."[407] Senator Sessions (R-AL) made similar comments when

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[403] "U.S. Senator Jesse Helms (R-NC) Holds Press Conference with Senators John Warner (R-VA) and Jon Kyl (R-ZA) on Comprehensive Test Ban Treaty," *FDCH Political Transcripts*, October 6, 1999, Lexis-Nexis Academic.
[404] John Warner, "Statement before the Senate Armed Services Committee" October 6, 1999, Lexis-Nexis Academic.
[405] Warner, "Senate Armed Services."
[406] "U.S. Senator Jesse Helms (R-NC) Holds."
[407] "U.S. Senator Jesse Helms (R-NC) Holds."

questioning Secretary Cohen, worrying about imposing a permanent ban on the only activity that he was certain could ensure the reliability of the arsenal.[408]

This framing of the criteria guiding Senate decision making was clearly accepted by the Clinton White House, to the dismay of many anti-nuclear advocates. Administration witnesses before the Senate committees were very careful to distance themselves from any claims that the CTBT would promote eventual global or American nuclear disarmament. Secretary of Defense William Cohen fended off claims that the treaty would promote nuclear disarmament, framing his testimony around how the treaty would preclude other states from acquiring nuclear weapons while still leaving the US with the ability to indefinitely maintain its arsenal using the Stockpile Stewardship Program.[409] Cohen's stance was mirrored by Secretary Albright, General Hugh Shelton, and other Clinton administration witnesses before the Senate Foreign Relations and Armed Services committees.

Allowing the debate to play out while accepting a key role for deterrence limited the effectiveness of the administration's ratification campaign for at least two reasons. First, centering Senate deliberations on deterrence forced individual Senators to make judgments about very complex technical questions concerning the effectiveness of verification regimes, the utility and long-term prognosis of American efforts to lengthen the lifespan of the US's nuclear arsenal, the intentions and capabilities of perceived and potential adversaries, and the efficacy of international norms and the persuasive power of US leadership in dissuading states from either acquiring nuclear weapons or new nuclear capabilities. This technical focus forced the Senate to rely on the judgments of alleged experts on questions of deterrence and diplomacy, many of whom were themselves tied to important interest groups that favored a robust American nuclear

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[408] Sessions, "Statement."
[409] Cohen, "Testimony."

policy and a relatively aggressive US foreign policy stance that was highly distrustful of the intentions of other states.

Second, unquestioning acceptance of the desirability of deterrence denied advocates access to a number potentially compelling arguments about the desirability of a nuclear free world. As demonstrated by both the strong, positive public and international reception to the Obama administration's recently announced intentions to work towards a nuclear-free world and widespread public support for the aims (if not necessarily the methods) of the nuclear freeze movement in the 1980s, and the overwhelming public support for eventual disarmament evidenced in public polling data, there are large components of the body politic who can, at a minimum, be persuaded that taking deliberate steps towards nuclear disarmament is in the interests of both the United States and the world. The administration's efforts to distance themselves from the CTBT's aspirational, if not actual, role in achieving a world without nuclear weapons placed advocates in the position of proving that the United States could maintain its nuclear arsenal, without testing, in perpetuity. This stance only aided treaty opponents, who played upon fears of uncertainty in both the technical (the US's ability to maintain a reliable arsenal) and geopolitical (intentions of potentially dangerous states) realms to lobby senators to oppose a "permanent" treaty and lent credibility to the "do nothing, no risk" policy of maintaining the US's testing moratorium. The CTBT was thus sold by opponents as a ticket to unilateral American disarmament, and the administration denied itself the opportunity to defend the treaty as part of a larger, gradual process towards a global disarmament that would still protect important American security interests

3.3.5 Role of Secret Evidence

Although much of the Senate's deliberations about the CTBT occurred in a public forum in the form of open hearings and a floor debate that received extensive print coverage and was broadcast on CSPAN, both evidence and debate outside of public spaces played an important part in shaping the deliberations and their outcome. For example, at least one classified hearing was held by the Senate Armed Services Committee. Although the witness list and exact content of the testimony offered at this hearing is not part of any publicly accessible record, public statements by Senator and Committee Chair John Warner and others indicate that this hearing focused on the ability of the Central Intelligence Committee to successfully verify compliance with the treaty by other parties, presumably through national technical means (NTM). Senator Warner's presentation at the outset of the sole Foreign Relations Committee hearing on October 7, 1999, focuses extensively both on the importance of this "secret" evidence and its probative value in demonstrating the verification shortcomings of the CTBT. Warner went so far as to offer access to this evidence to any senator that was interested in reviewing the information that Warner claimed undergirded his judgment against the treaty. Senator Warner even claimed that this classified information had been developed after the Clinton administration had concluded negotiations on the treaty, and that the treaty itself would have been far different if this information had been known in 1996. This data, Senator Warner claimed, had even forced an impromptu revision of the national intelligence estimate (NIE) on the ability of the United States to monitor nuclear testing.[410] Warner's comments were echoed by Senator Shelby, the chair of the Senate Intelligence Committee, who noted that "it is my considered judgment, as Chairman

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[410] 106 Cong. Rec. S12235 (daily ed. October 8, 1999) (statement of Sen. Warner).

of the Intelligence Committee, that it is impossible to monitor compliance with this treaty," arguing even the 1997 NIE "identified numerous challenges, difficulties, and credible evasion scenarios that affect the intelligence community's confidence in its ability to monitor compliance."[411] This secret evidence was effective in swinging the Senate ratification vote, as several previously fence-sitting Senators and a number of their anti-CTBT colleagues cited both the secret evidence from the Armed Services Committee and other classified material offered in off-the-record briefings as being a determining factor in their decision to vote against the treaty's ratification.[412]

Efforts to refute the implications of this secret data in public were stymied, constrained by secrecy rules, and an inability to publicly contest the issue. Senator Kyl even chastised Senator Biden for referring to this classified data during the floor debate, reminding Biden that "it is important for Senators to quote only open source material . . . and never to refer to matters in the Intelligence Committee which are classified," further citing Senate rules that prohibited Biden from quoting classified material.[413] Senator Levin was simply able to argue that Defense Secretary Cohen and Joint Chiefs Chair Shelton had reviewed the same data and concluded that the CTBT was verifiable.[414]

Many scholars and policy analysts have warned of the pernicious effects of closed deliberations and the use of secret data to guide policy decisions. Benjamin H. Friedman, a research fellow with the libertarian Cato Institute, argues that "because the public cannot hold their representatives accountable for secret acts, secret government is undemocratic." Secrecy, Friedman observes, is designed to protect "government agencies and elected officials from the

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[411] 106 Cong. Rec. S12526 (daily ed. October 13, 1999) (statement of Sen. Shelby).
[412] For examples, see 106 Cong. Rec. S12235 (daily ed. October 8, 1999) (statement of Sen. Warner) and 106 Cong. Rec. S12526 (daily ed. October 13, 1999) (statement of Sen. Shelby).
[413] 106 Cong. Rec. S12293 (daily ed. October 8, 1999) (statement of Sen Kyl).
[414] Levin, "Statement."

consequences of reckless or immoral decisions." Restrictions on the use of secret data also restricts the influence and power of Congress, Friedman notes, while limiting debate, which he claims is important because it "reveals hidden assumptions and sloppy thinking." Friedman claims that the use of secret evidence and proliferation of secret programs threatens the American system of separation of powers, which "divides power over national security to produce dissent, debate, and compromise – critical elements of a healthy democracy."[415]

Other commentators have contextualized these concerns in the field of debate about nuclear weapons and deterrence policies. Morton Halperin, a former deputy assistant secretary for defense and a staff member of the National Security Council, wrote in 1985 that "only an informed public, free to engage in open debate and armed with adequate information, can keep the administration from pursuing dangerous policies."[416] A committee of the National Academy of Sciences, in discussing the political engagement of the US's nuclear weapons laboratories, noted that "openness serves not only scientific advancement, but also policy formation in the national security sphere." The report notes that "secrecy can make it difficult for policy makers … and the public to whom they are accountable to know what they need to know in order to make sensible judgments on important public matters bearing on national security."[417] Annette Schaper, a nuclear policy analyst, similarly argues that "secrecy is principally an undemocratic attitude. Secrecy within a society reduces the number of decision makers and excludes others from taking part." Schaper also cautions that "secrecy may be abused by certain constituencies to

[415] Benjamin H. Friedman, "Obama's Disappointing Secrecy," *Christian Science Monitor*, July 21, 2009, accessed October 7, 2009, http://www.cato.org/pub_display.php?pub_id=10374.

[416] Morton Halperin,"Secrecy and National Security," *Bulletin of the Atomic Scientist*s, (August 1985): 117.

[417] Committee on Balancing Scientific Openness and National Security, National Academy of Sciences, National Academy of Engineering, and the Institute of Medicine, *Balancing Scientific Openness and National Security Controls at the Nuclear Weapons Laboratories*, (1999): 6.

set agendas that serve their special interests . . . to maximize their power-through-knowledge, and to avoid scrutiny by competitors or publics."[418]

The use of classified evidence to steer the outcome of the Senate's decision raises serious concerns about both the legitimacy of the deliberations themselves and the desirability of the policy direction chosen by the Senate, for a number of reasons. First, it calls into question the legitimacy of these deliberations, because the public(s) purportedly represented by the Senators in the debate are unable to render judgments about the quality of their representation. Second, the use of secret evidence undermines public accountability on at least two levels. Not only is it more difficult to hold administration officials and government bureaucrats to task because the veracity of evidence and testimony that these persons provide to the Senate is never publicly vetted, but the Senators themselves can distance themselves from responsibility for their decisions by placing blame on the executive officials who provided the secret information. Third, the use of secrecy deters the public from actively participating in the debate, both because any judgment rendered by a member of the public is necessarily incomplete because that person lacks access to the privileged information, and because members of the public who do advance an opinion about the treaty open themselves to the ready rejoinder that their opinions are uninformed when compared to the "expert" judgments of senators and administration officials who are privy to the secret information.

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[418] Annette Schaper, "Transparency and Secrecy in Nuclear Weapons," *Weapons of Mass Destruction Commission 34* (August 2005), accessed October 7, 2009, http://www.wmdcommission.org/.

3.3.6 Concluding Thoughts

The Senate's deliberations on the merits of the Comprehensive Test Ban Treaty represented a watershed moment for both the Clinton administration and the global nonproliferation regime. The treaty's defeat drew condemnation from around the world, and was seen in allied capitols as a signal that the United States was retreating from its historical leadership role in arms control initiatives. The Senate vote also represented a crushing defeat for the anti-nuclear movement in the United States, one whose repercussions continue to this day as the US Senate wrangles with yet another arms control treaty, the New START. The failure to ratify the treaty showed that key US policy makers remained committed to a policy of robust nuclear deterrence. This fact goes to the heart of this study's rationale, namely how the nuclear establishment "won" the CTBT debate and defended itself and its policies, maintaining a continuity with Cold War-era deterrence doctrines.

The preceding sections reveal that a number of important structural framing devices yielded a distinctive argument pattern in the Senate debate between the security and risk management frame, which in turn fostered strong conditions unfavorable to the treaty's ratification. Section 2 clearly demonstrates that these frames were deployed widely in the Senate's deliberations, to the extent that they crowded out alternative perspectives on nuclear weapons policy. Technical concerns about the effect of the treaty's ratification on the reliability of the US arsenal, efforts to modernize an aging nuclear weapons infrastructure, and the effectiveness of the global nonproliferation measures dominated the Senate's deliberations. Very few members of the Senate voiced any concerns about the merits of nuclear deterrence policies, or the intrinsic dangers posed by nuclear weapons. The senators' skirmish over whether the CTBT's advocates were advancing a subversive disarmament agenda revealed both the

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precarious position occupied by nuclear abolitionists in public debates and the deadlock that deterrence doctrines hold over the political imaginations of our leaders. Accepting that nuclear deterrence was both necessary and inevitable suggested only two possible decisions for the senators. Either the treaty bolstered American primacy relative to its peers, the position of the treaty's proponents, or the treaty threatened the US's nuclear superiority. No other decision calculus made sense within that framework.

Key structural factors solidified the place of this decision calculus. As noted earlier, most members of the Senate had little direct experience with nuclear weapons or nuclear policy, and were thus forced to rely upon the competing judgments of expert witnesses and the arguments of researchers from politically aligned think tanks for information about the relative merits of the treaty. The fact that every single witness to testify before the Senate was themselves a proponent of a strong American deterrent is telling. Although one might reasonably argue that such pro-deterrence perspectives dominate mainstream thinking on national security issues, and thus should be disproportionately represented in the Senate's fact finding experts, the desirability of nuclear deterrence remains an open question, one that is hotly debated among scholars, think tank researchers, and advocates. The anti-nuclear community has a strong presence in Washington, and any number of highly experienced and credible witnesses could have been called before the Senate. None were, and important, dissenting views on the utility of nuclear weapons were structurally excluded from the Senate's deliberations. Instead, the presumption that nuclear deterrence was effective at protecting American interests during the Cold War, and could thus be relied upon to offer similar security benefits into the immediate future, was largely unchallenged. Senate debate thus pitted those who framed nuclear weapons as invaluable guardians (security frame) and those who framed nuclear weapons as tools that could be

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effectively used to promote US security objectives through proper policy choice (risk management frame).

The narrow decision making window offered by the Republican leadership in the Senate both contributed to the dearth of alternative perspectives offered in the committee hearing process and created enormous pressures on the Senators to default to the policy status quo, continuing the current testing moratorium while deferring on whether to make testing prohibitions permanent to a future Senate. Many members of the Senate decried the truncated deliberations, drawing highly unfavorable comparisons to previous arms control debates that includes dozens of committee hearings, extensive witness lists, lengthy floor debates, and ample opportunities for members of the Senate to solicit input from both their constituents and trusted policy advisors. None of these features were evident in the CTBT deliberations. The accelerated debate calendar limited the Senate to a mere four committee hearings, permitting barely enough time for high-ranking Clinton administration officials and the witnesses highly preferred by the treaty's opponents to offer their testimony. Senate deliberations were so sparse that sixty-two members of the body implored the Senate leadership to delay the vote. The senators were also isolated from their constituents, tethered to Washington to both follow the CTBT deliberations and to address other items on the Senate's crowded post-Labor Day calendar. This conspired to provide little opportunity for anti-nuclear advocacy groups to leverage the broad, but relatively shallow, public support for the treaty into meaningful pressure on fence-sitting members of the Senate. Likewise, the relative lack of information both magnified the influence of important opinion leaders like Senator Lugar and provided waivering senators with a ready excuse to explain their "nay" votes. Such senators were able to convincingly argue that they were not voting against the treaty per se, but rather were deferring their judgment to a time when the full

merits of the CTBT could be considered by the Senate. The use of "secret" evidence to discredit the treaty's verification regime and conflicting testimony from experts and government officials, many of whom had their own credibility problems, also provided ready rationales for additional study and deliberation at a later date.

Understanding how the Clinton administration and treaty proponents failed to secure the Senate's advice and consent for the CTBT is valuable on its own merits, as the preceding paragraphs suggest. However, it may be true that the real outcome of the Senate's deliberations was less about the failure of the CTBT, where at least there were advocates speaking in favor of the treaty, and more in the calcification of pro-nuclear norms in American political discussions about the role of nuclear weapons. Both sides stridently distanced themselves from disarmament as anything more than an aspirational policy option, and even the treaty's supporters rested their case on the defensive claim that the treaty's entry-into-force would constrain the nuclear arsenals of America's adversaries more than it would the arsenal of the United States. The public debate about the CTBT was thus significant in constituting evolving argument norms that were favorable to a continuation of Cold War deterrence postures and force structures.

4.0   THE 2001 NUCLEAR POSTURE REVIEW

The Bush administration's Nuclear Posture Review (NPR) was submitted to the United States Congress on December 31, 2001. The product of nearly a year's worth of study and debate, the congressionally-ordered document claimed to lay out a new vision for the role of nuclear weapons in the strategic policy of the United States, one that shifted from tired and dated Cold War deterrence doctrines directed at a single enemy towards a posture that reflected the new realities of a changed geopolitical security environment.

In this chapter, I argue that the 2001 NPR was designed by the Bush administration to re-frame the public's and policy makers' understanding of nuclear weapons to justify a robust role for the nuclear establishment and nuclear arsenal in post-Cold War American security policy.[1] Although one could justifiably view the 2001 NPR as simply a memo between bureaucrats, or perhaps a planning document designed to provide direction to the implementers of policy, a closer reading of the review itself and analysis of the political controversy surrounding the document's vision for a "new" nuclear policy reveals that the NPR can be productively seen as a rhetorical tool, one intended to transform the way that American policy makers and military

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[1] The text has not been released to the public on the basis of national security concerns. A secrecy-friendly synopsis was released to the public in early January of 2002 and an analysis has been conducted by the NRDC. See Department of Defense, *Nuclear Posture Review Report,* January 20, 2002, accessed January 17, 2010, http://www.defenselink.mil/news/Jan2002/d20020109npr.pdf; Natural Resources Defense Council, "Faking Nuclear Restraint: The Bush Administration's Secret Plan for Strengthening US Nuclear Forces," February 2002, accessed January 17, 2010, http://www.nrdc.org/nuclear/restraint.asp; and Michelle Ciarrocca, "The Nuclear Posture Review: Reading Between the Lines," *Common Dreams Newscenter,* January 17, 2002, accessed January 17, 2010, http://www.commondreams.org/views02/0117-10.htm.

force planners viewed nuclear weapons. Accordingly, the document offered a compelling interpretive narrative of the US's place in a changed world and the role of nuclear weapons in safeguarding American interests. This was accomplished by justifying old and new roles for nuclear weapons around a security frame, one that played on perceptions that nuclear weapons serve as the ultimate guarantors of American security. Within this frame, nuclear weapons are portrayed as both a shield against the threats posed by a dangerous world, and as the most effective and strongest weapons in the US arsenals, ones that can be relied upon to deter, and if necessary, defeat even the most implacable enemy.

The NPR served four purposes for the administration. First, it was an aspirational text, a vision of a policy ideal to which public, congressional, and executive branch audiences should aspire. It represented an end-state towards which policy decisions should be directed, as well as a statement of intent about the place of the US in the world and the importance of nuclear weapons in securing that place. Second, the NPR was a roadmap for decision makers within the administration. It expressed a set of policy goals, and placed them within a conceptual framework that related those goals to one another. In this way, it functioned as a blueprint that Defense Department officials, the leadership of the nuclear laboratories, and military commanders could use to implement the executive's vision of America's nuclear policy. Third, the NPR was a persuasive appeal directed at decision makers outside of the executive branch, especially members of Congress. Numerous elements of the document were designed to appeal to the administration's political allies and to blunt criticism from political opponents, Finally, the NPR served as a statement of intent to foreign governments, allies, adversaries, and neutrals alike about how the Bush administration envisioned American foreign policy interests, the

policies the administration would use in promoting those interests, and the role that nuclear and conventional weapons would play in a new American security policy.

Its reception amply demonstrates that the NPR was a domestically and internationally significant document. Although there was only a moderate amount of media attention paid to the NPR in domestic political circles, the document sparked considerable controversy in other nations and among domestic anti-nuclear groups. These groups were largely unsuccessful in generating widespread public debate on this radical new direction for American defense policy. Analyzing the arguments offered both for and against the 2001 NPR allows us to assess the resiliency of pro-nuclear discourses and policies, and enriches our understanding of post-Cold War discourse about nuclear weapons for several reasons. First, the debate is itself a discursive practice and, along with the War on Terror, was a dominant foreign policy controversy during the Bush administration. It represents a declared attempt to shape US foreign policy for the next twenty years. The stakes alone justify analysis. Second, and perhaps more importantly, nuclear advocates have characterized the 2001 NPR as an effort to make a clean break with Cold War nuclear doctrines, a claim contested by anti-nuclear critics. The policies contained within the NPR and the public arguments used to support this contention provide a fruitful opportunity to assess whether Cold War nuclear logics continue to dominate nuclear force planning. Likewise, the criticisms leveled against the plan and the Bush administration's response to these arguments promise to reveal continuities and changes from Cold War nuclear argument forms. In sum, the 2001 NPR is an opportunity to determine whether the limiting metaphors, technostrategic discourse, and exclusive deliberative norms that characterized so many Cold War-era nuclear deliberations continue to color post-Cold War nuclear debates.

As is the case with nuclear dissent and the CTBT, there is a considerable body of primary source materials documenting policy debate on the NPR. One noteworthy element of the public controversy surrounding the NPR is that the vast majority of its recommendations and analysis remain classified.[2] However, there have been a number of official statements from government officials on the issue, in the form of press conferences, news show appearances, and testimony before Congress.[3] The NPR has also been subject to considerable commentary from military and private-sector defense analysts.[4] These texts are useful in assessing the nature of institutional arguments offered in support of the policy document. Of particular interest are the links between the 2001 Nuclear Posture Review and a recent National Institute on Public Policy (NIPP) nuclear force study.[5] The NIPP project was headed by Keith B. Payne, who is not only a long-time advisor of then-Defense Secretary Donald Rumsfeld, but was also a vocal NUTS advocate during the latter stages of the Cold War. Finally, the 2001 NPR has also been roundly criticized by the usual line-up of anti-nuclear advocates. Analyzing the arguments these activists voice against the NPR represents a chance to explore how anti-nuclear advocacy has chosen to respond to institutional arguments favoring nuclear deterrence.

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[2] Both the NPR's executive summary and excerpts from the document have been widely circulated on the internet. See "Excerpts from the Nuclear Posture Review," Global Security, December 31, 2001, accessed January 18, 2010, http://www.globalsecurity.org/wmd/library/policy/dod/npr.htm.

[3] A representative sample may be found in: Donald H. Rumsfeld, "Official Cover Letter to Congress Accompanying the Nuclear Posture Review," January 2002, accessed January 17, 2010, http://www.defenselink.mil/news/Jan2002/d20020109npr.pdf; J. D. Crouch, "Special Briefing on the Nuclear Posture Review," January 9, 2002, accessed January 17, 2010, http://www.defenselink.mil/news/Jan2002/t01092002_t0109npr.html; and *Hearing on the Nuclear Posture Review: Senate Armed Services Committee*. 107th Cong., 2nd

sess. (February 14, 2002. Witnesses included Hon. Douglas J. Feith, Undersecretary of Defense for Policy, John A. Gordon, Under Secretary for Nuclear Security & Administrator, National Nuclear Security Administration, DOE, and James O. Ellis, USN, Commander in Chief, United States Strategic Command.

[4] A representative sample may be found in: William D. Hartung and Jonathan Reingold, "About Face: The Role of the Arms Lobby in the Bush Administration's Radical Reversal of Two Debates of US Nuclear Policy," *World Policy Institute Special Report* (May 2002), accessed January 18, 2010, http://www.worldpolicy.org/projects/arms/reports/reportaboutface.html; Natural Resources Defense Council, "Faking Nuclear Restraint,"; and "The Shape of Things to Come: The Nuclear Posture Review, Missile Defense, and the Dangers of a New Arms Race," *WSLF Special Report* (April 2002), accessed January 18, 2010, http://www.wslfweb.org/docs/shape.pdf.

[5] See *Rationale and Requirements for US Nuclear Forces and Arms Control*, volume 1, Executive Report (Fairfax, VA: National Institute for Public Policy, January 2001), accessed January 17, 2010, http://www.nipp.org/Adobe/volume%201%20complete.pdf.

My analysis proceeds in four sections. First, I lay out important background information about the Nuclear Posture Review itself and the political and strategic context in which it was crafted and then debated. This section discusses the actors involved in drafting the review and selling the NPR to its various audiences, as well as outlining important factors that shaped the rationale behind the document itself, the formulation of its persuasive appeals, and the reception it met from policy makers, analysts, mainstream media outlets, and anti-nuclear activists. Second, I catalogue and analyze the arguments contained within the NPR, detailing both its desired policy outcomes and the form and style of appeals used to persuade its readers to accept the authors' view of both a changed post Cold War security environment and the proposed role of nuclear weapons in achieving important American foreign policy and security interests. This section highlights the key role played by the security frame in justifying the policy vision espoused by the NPR. Third, I analyze the NPR's reception by important audiences, including the responses by members of Congress, the defense analyst community, foreign governments, the mainstream press both domestically and abroad, and the treatment of the NPR's vision for American nuclear policy by foreign governments. This section contains an evaluation of the utilization of the risk management frame by administration critics as they attempted to discredit the review. Finally, I assess the impact and implications of the review, both from the perspective of the inferable goals of the NPR's authors and he within the larger context of how the American public and policy makers understand the purpose of nuclear weapons in US foreign and defense policy.

4.1   CONTROVERSY IN CONTEXT

As we were reminded by ongoing press reports and the occasional press-leaked bureaucratic spat surrounding the 2010 Nuclear Posture Review as it was being written within the Obama administration, such a review is a long, highly-formalized process that involves a large number of actors and interest groups, and thus is shaped by and reflects sometimes competing policy interests.[6] A review is also a reflection of its context, or at the very least, the context as the report's authors understand it to be. The 2001 NPR was propelled by at least two exigencies.[7] First, the NPR was a response to a bureaucratic imperative: the report was required to be completed by Congress. In this way, the NPR can be seen as an exercise of bureaucratic oversight, a compulsory document to be provided by professional subordinates to their elected masters. The NPR was mandated by an amendment to the 2001 National Defense Authorization Act, which required "the incoming administration to complete a formal nuclear posture review (NPR) by December 2001, the first such review in over six years."[8] However, within this bureaucratic imperative there is a separate, second exigency, one embedded within the Congressional mandate that calls upon the report's authors to translate their vision for an ideal nuclear and defense policy into one that matches the security environment of a post-Cold War world. Against this backdrop, I analyze the NPR as a persuasive attempt by the defense

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[6] See David E. Hoffman, "Reviewing the Review," *Foreign Policy*, April 6, 2010, accessed November 28, 2010, http://www.foreignpolicy.com/articles/2010/04/06/reviewing_the_review; Anya Loukianova, "The Nuclear Posture Review Debate," *Issue Brief*, Monterey Institute for International Studies, James Martin Center for Nonproliferation Studies, August 19, 2009, accessed November 28, 2010, http://www.nti.org/e_research/e3_nuclear_posture_review_debate.html; Morton H. Halperin, "A New Nuclear Posture," *Arms Control Today* (May 2010), accessed November 28, 2010, http:///www.armscontrol.org/act/2010_05/Halperin; and Peter Beaumont, "Barack Obama Orders New Nuclear Review Amid Growing Feud," *The Observer*, February 28, 2010, accessed November 28, 2010, http://www.guardian.co.uk/world/2010/feb/28/barack-obama-nuclear-review.

[7] See Lloyd Bitzer, "The Rhetorical Situation," *Philosophy and Rhetoric* 1 (January 1960): 1-14.

[8] Janne E. Nolan, "Preparing for the 2001 Nuclear Posture Review," *Arms Control Today* (November 2000), accessed August 9, 2009, http://www.armscontrol.org/act/2000_11/nolan.

establishment to sway the views of political decision makers and re-shape the public's views about the nature of the post-Cold War world and the appropriate role of nuclear weapons in addressing the security challenges in the new millennium.[9]

From the perspective of the NPR's leading authors, the world had changed indeed. At least four fundamental geopolitical transformations influenced the arguments and appeals of the review, and compelled its authors to develop new interpretive frames that justified a continued role for nuclear weapons. First, the Russian military was now seen as weak, a hollow edifice of its former Soviet instantiation. An economic collapse signaled by the massive devaluation of the ruble in August 1998; a series of seemingly bumbling, weak, ineffectual leaders; the withdrawal of almost all military forces from Eastern Europe; the hollowing of the Red Army; the decay of Russia's strategic nuclear forces; and the discrediting of the Stalinist-Leninist ideology removed both the United States' greatest enemy and the center of its foreign and defense policies from the global stage. Any threat posed by Russia now seemed to be more a function of its weakness, such as the potential risks rising from a political collapse or the leakage of nuclear materials, not a product of its strength. The Russian government was engaging in a series of overtures to the United States, seeking to expand cooperation and trade, and it appeared to many policy makers, security analysts, and the public that the Russians needed the cooperation and goodwill of the United States government more than the US needed the Russians. The Cold War was over, and America had won.

Second, the end of the Cold War and collapse of the Soviet Union also shattered the relatively simplistic interpretive frame of the Cold War era, one that divided the world into us (the US and its allies), them (the Soviet bloc), and neutrals (a field upon which both superpowers

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[9] Nolan, "Preparing."

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played for influence). Enemies had now become friends, in the case of the former Eastern European members of the Warsaw Pact, and the competition for material and ideological influence that characterized the Cold War had evaporated. The erosion of the threat of "Big Communism" did not, despite Fukuyama's admonishments, mean the end of history and a world safe for America.[10] Instead, from the perspective of the NPR's authors, the world was changing rapidly and the potential threat environment was highly fluid, making it difficult to determine exactly from where security threats might emanate. Conflicts had begun to boil over in some areas where they were previously held in check by the Cold War (South Asia, Taiwan), or developed as a result of Cold War-era states who did not survive into the new era (the former Yugoslavia). Vestiges of Cold War conflicts also threatened to spark anew, particularly in the form of a nuclearizing North Korea on the divided Korean peninsula. So-called "failed states" were now seen as a growing threat, as was the spread of nuclear, chemical, and biological weapons and their delivery systems to both states inimical to American interests and to sub-state actors that threatened the American-led international order. [11] The new geopolitical landscape offered ample resources for the invention of new narratives authorizing a strong sense of impending danger and a strong role for the military in safeguarding the American people.

The third great transformation was the perceived rise of American unipolarity, which dominated the thinking of the NPR's planners. As noted in the analysis of the CTBT debate, many policy makers, including those who helped draft the 2001 Nuclear Posture Review, were obsessed with how American power could be used to defend its global interests. The geopolitical vision that dominated the 2001 NPR was that of the "neoconservative" (neocon) movement,

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[10] See Francis Fukuyama, *The End of History and the Last Man* (New York: Penguin Books, 1992).
[11] For a balanced, backwards-looking analysis, see Lian Sun Wyler, "Wea and Failing States: Evolving Security Threats and US Policy," *CRS Report for Congress*, August 28, 2008, accessed November 28, 2010, http://www.fas.org/sgp/crs/row/RL34253.pdf.

which had a number of adherents in the American administration and called for the use of military and economic levers to promote American-style democratic and economic institutions throughout the world.

The final geopolitical transformation was perhaps the most important, and the one that most immediately and climactically preceded the drafting and release of the NPR, namely the attacks on September 11, 2001, and the sudden realization in Washington that the United States was not invulnerable and that sub-state actors could strike at the very heart of US power. American policy makers feared that organizations such as Al Qaeda, with or without the support of nation-states, could launch deadly asymmetrical attacks on the US and its allies. Many analysts speculate that this national tragedy was an even more transformational event for the members of the Bush White House, especially the President himself, Vice President Cheney, and Secretary of Defense Rumsfeld.[12] A milquetoast commitment to democratization, free trade and pro-business domestic agenda was swept aside by an all-consuming "War on Terrorism." Domestic politics and media coverage were dominated by the twin figures of a bearded Osama bin Laden and the ruins of the Twin Towers of the World Trade Center enshrouded in smoke. The Bush administration quickly invaded Afghanistan and overthrew its Taliban government, which the US government blamed for harboring Al Qaeda operatives and training camps, making it the first move in a global struggle against a terrorist enemy that the Bush administration

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[12] See Fred I. Greenstein, "The Changing Leadership of George W. Bush: A Pre-and Post 9-11 Comparison," *Presidential Studies Quarterly* 32:2 (June 2002): 387-396.

described as "the long war."[13] The United States had seemingly found a new enemy to replace the Soviet threat, a struggle against the global threat posed by "Islamofascism."[14]

The NPR was also crafted within a domestic political and military context, one characterized by the slow drawdown of the nuclear laboratories, a legacy of a downsizing of the nuclear arsenal from its halcyon days of the early Reagan administration, and an end to nuclear testing and weapons development, largely a result of the 1992 moratorium on explosive testing. Just as the foreign policy establishment was looking for a new doctrine to govern American activity in the larger world, the military and nuclear laboratories sought new missions, both to safeguard what they saw as America's vital interests and to defend their own budgets. Two members of the laboratories even published widely commented-upon papers seeking to outline a new rationale for American nuclear policy that included calls for some new missions and capabilities, sparking a controversy over the merits of "mini-nukes" that is the subject of the next chapter.[15] The surge in military spending following 9/11, coupled with a spike in interest in foreign affairs and security issues from the administration and members of Congress afforded the Department of Defense and nuclear laboratories the opportunity to pitch new programs and budget lines. The NPR also reflected Secretary of Defense Rumsfeld's vision for a "transformed" US military, a leaner, high-tech force that focused on building capabilities that could respond to any emergent threats.

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[13] See Department of Defense, *Quadrennial Defense Review Report*, 2006, 9, accessed November 11, 2008http://www.defense.gov/qdr/report/report20060203.pdf.

[14] See George W. Bush, "President Discusses War on Terror at National Endowment for Demcoracy," Ronald Regan Building and International Trade Center, October 6, 2005, accessed November 28, 2010, http://georgewbush-whitehouse.archives.gov/news/releases/2005/10/20051006-3.html.

[15] Stephen M. Younger, "Nuclear Weapons on the Twenty-First Century," *Los Alamos National Laboratory LAUR-00-2850* (June 27, 2000), accessed November 4, 2010, http://www.fas.org/nuke/guide/usa/doctrine/doe/younger.htm, and C. Paul Robinson, "Pursuing a New Nuclear Weapons Policy for the 21st Century," *Sandia National Laboratories White Paper* (March 22, 2001), accessed November 4, 2010, http://www.sandia.gov/media/whitepaper/2001-04-Robinson.htm.

The actual authorship of the NPR is somewhat ambiguous, as is the case with many government reports. Ultimately, the document functions as a statement by President George W. Bush, under whose name the review was conducted. J.D. Crouch, an assistant secretary of defense, claimed in a January 9, 2002, press briefing that he was responsible for chairing a "senior steering group," along with the "director for Strategic Plans in the Joint Staff . . . . " Crouch told reporters that the steering group was also co-chaired by Dr. John Gordon of the National Nuclear Security Administration (NNSA), and that the Office of the Secretary of Defense (OSD) was responsible for the report, with input from "all the individual services, Strategic Command, and all other commands, as appropriate." Crouch characterized the review as having "a very broad-based participation."[16] The forwarding document for the NPR was signed by Secretary of Defense Donald Rumsfeld, and we can presume that he played a critical role in shaping the report's final conclusions because of his position as the administration's point-person within the Defense Department. John A. Gordon, Assistant Secretary of Defense (Policy), Douglas J. Feith, and STRATCOM Commander James O. Ellis (Adm-USN) were tasked with the defending the report and its conclusions before Congress.[17] Other members of the administration, including Secretary of State Colin Powell and National Security Advisor Condoleezza Rice, were also questioned about the NPR, especially after the leak and publication of the so-called "nuclear hit list" on March 9, 2002.[18]

Narrowly read, the Nuclear Posture Review is an argument for both a particular set of goals, and the policy changes necessary to accomplish those goals. Viewed in this way, the NPR

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[16] Crouch, "Special Briefing."
[17] Senate Armed Services Committee, "Hearing on the Nuclear Posture Review."
[18] See Edward Helmore and Kamal Ahmed, "Outrage as Pentagon Nuclear Hit List Revealted," *The Observer*, March 10, 2002, accessed April 7, 2009, http://www.commondreams.org/headlines02/0310-03.htm; Madeleine Bunting, "America's Long Shadow," *The Guardian*, March 11, 2002, accessed April 7, 2009, http://www.guardian.co.uk/world/2002/mar/11/september11.usa3; and Stephen I. Schwartz, "Nukes You Can Use," *Bulletin of the Atomic Scientists* 58:3 (May 2002): 18-19.

is little more than a bureaucratic exercise where officials at the top of a hierarchy provide direction to their subordinates. However, a much more useful understanding of the NPR arises from situating it as a persuasive text designed to shift the opinions (and potentially behavior) of set of diverse audiences. Viewing the NPR as a persuasive text suggests that rhetorical analysis is an especially useful tool in exploring the text and its significance. It is within the context of these different intended audiences that we can fully appreciate the review as a text and argument designed to shift the course of American nuclear policy and fulfill a larger vision of America's role in shaping world events.

4.2   BREAK WITH THE COLD WAR

The NPR attempted to justify its policy prescriptions by persuading its assorted audiences that these policies best matched the realities of the post-Cold War security environment. In doing so, it deployed a security frame, which played upon public and policy maker beliefs about the guardianship function of nuclear weaponry, to justify a continued reliance on nuclear deterrence as the bulwark shielding the American people and the most effective weapons to deter America's enemies and defeat any adversaries foolish enough to challenge vital American interests. The NPR included persuasive appeals that framed nuclear policy around an insecure "us" that was threatened by an array of potentially dangerous "others." In doing so, the NPR emphasized that the post-Cold War world was highly unpredictable, full of uncertainty, and contained any number of bad actors that wanted to strike against the United States. The NPR and its proponents took advantage of the tendency of non-expert members of the public and Congress to try to understand the world in interpersonal terms, characterizing other countries and international

actors as either good or bad, friendly or malevolent, and framed its justification for a robust

nuclear arsenal around securing the United States against the threats posed by these bad actors.

These threats were often portrayed in apocalyptic terms, and the effectiveness of fear appeals

was underscored by public anxiety arising from the attack of September 11, 2001. The world was

portrayed as being on the verge of any number of new crises, the potential for which was used to

undercut the significance of any long-term drawbacks to a reliance on nuclear weapons with

appeals to the necessity of addressing the current crisis. Finally, the NPR attempted to inoculate

its many highly-provocative policy prescriptions through the deployment of "bureaucratizing"

and "domesticating" discourses, deploying euphemism and "strategic naming" to advance their

"values and beliefs without . . . having to defend such values and beliefs explicitly."[19]

The NPR's fundamental argument was relatively straightforward. It stated that the binary

superpower versus superpower competition that characterized the Cold War was over, and that

the new threat environment necessitated adapting the nation's defense policies, particularly those

relating to the size, composition, and capabilities of its nuclear arsenal, to reflect this new

geopolitical reality. According to the authors, the biggest proposed policy change within the

review was a step away from directing the nation's deterrent at Russia. The forward, signed by

Secretary Rumsfeld, stated that the review jumpstarted the process of shifting the nation's

defense policies away from a Cold War mindset, something not accomplished under the Clinton

administration:

> First and foremost, the Nuclear Posture Review puts the Cold War practices
> related to planning for strategic forces behind us. In the decade since the collapse
> of the Soviet Union, planning for the employment of U.S. nuclear forces has
> undergone only modest revision, despite the new relationship between the U.S.
> and Russia. Few changes had been made to the size or composition of the

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[19] Edward Schiappa, "Naming as Argument by Definition: The Case of 'Nukespeak,'" in *Defining Reality: Definitions and the Politics of Meaning*, (Carbondale, IL: Southern Illinois University Press, 2003), 130.

strategic nuclear force beyond those required by the START Treaty. At the same time, plans and funding for sustaining some critical elements of that force have been inadequate.[20]

The dual claims that Russia was no longer an imminent threat and that America's nuclear posture needed to be shifted away from winning the battles of the Cold War towards a "twenty-first century" reality of deterrence recur throughout the document. Russia was now a much weaker state and sometime ally, while a host of new threats had emerged to challenge American security interests.

What were these new threats? First and foremost, the spread of weapons of mass destruction (WMD) to new, potentially hostile states and non-state actors, such as organizations like Al Qaeda, allegedly posed the greatest challenge to American security interests. This claim underscored both the 2001 National Security Strategy and the Nuclear Posture Review. However, instead of identifying specific threats that must be addressed by the nation's nuclear arsenal, a hallmark of Cold War-era planning, the NPR instead argued for the adoption of a "capabilities-based" approach to formulating the structure for an effective nuclear deterrent. The review called for defense planners to engage in contingency planning, anticipating situations in which the United States would require a nuclear deterrent to prevent the outbreak of a larger conflict, prevent adversaries from using weapons of mass destruction against the United States or its allies, or minimize the consequences of a likely WMD attack. The NPR divided these contingencies into three categories:

> In setting requirements for nuclear strike capabilities, distinctions can be made among the contingencies for which the United States must be prepared. Contingencies can be categorized as immediate, potential or unexpected.[21]

[20] Donald Rumsfeld, *Nuclear Posture Review*, December 31, 2001, accessed July 25, 2009, http://www.globalsecurity.org/wmd/library/policy/dod/npr.htm.

[21] See "The National Security Strategy of the United States," September 2002, esp. 5-7, accessed November 29, 2010, http://www.globalsecurity.org/military/library/policy/national/nss-020920.pdf, and "Nuclear Posture Review [Excerpts]," December 31, 2001, 16, accessed July 25, 2009, http://www.globalsecurity.org/wmd/library/policy/dod/npr.htm,

US nuclear weapons were offered as both a means of shielding the American people from this litany of emerging and potential threats and of defeating prospective adversaries. A review of the range of contingencies within the NPR reveals that the authors portrayed the world as quite dangerous indeed, offering any number of scenarios where regional WMD proliferation and use could pose an immediate and existential threat to the American homeland. Immediate contingencies were identified as "well-recognized current dangers," and included "an Iraqi attack on Israel or its neighbors, a North Korea attack on South Korea, or a military confrontation over the status of Taiwan."[22] Immediate threats emanated from both East Asia and the Middle East, and planners were called upon to prepare for potential conflicts in those areas. The category of "potential contingencies" was even broader. These problems were described as "plausible but not immediate dangers," and although vague in description, were potentially menacing. They included "the emergence of a new, hostile military coalition against the United States or its allies, in which one or more members possesses WMD and the means of delivery . . . ."[23] Thus, any state that had ambitions of challenging American preponderance and had either the intention or potential to develop *any* weapon of mass destruction and threaten their use in a conflict is a target of American defense planning. The third category, "unexpected contingencies, was even broader and more ambiguous, including any "sudden and unpredicted security challenges." These include "sudden regime change by which an existing nuclear arsenal comes into the hands of a new, hostile leadership group, or an opponent's surprise unveiling of WMD capabilities."[24] Potentially unstable nuclear weapons states, such as Pakistan and Russia, or any hostile state that

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[22] "Nuclear Posture Review [Excerpts]," 16.
[23] Ibid.
[24] Ibid.

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could develop a WMD arsenal, which could be stretched to include potentially dozens of states, were thus of interest to American defense policy.

In a move that raised the ire of leaders throughout the world, the NPR provided a list of states that that raised immediate, potential, and/or unexpected threats to the United States—North Korea, Iraq, Iran, Syria, and Libya. This list was not exhaustive, since the NPR described them as "among the countries" that might pose a threat.[25]   These states all share three characteristics: first, they demonstrated "longstanding hostility towards the United States and its security partners," they were all involved in terrorist activities, and they "all have active WMD and missile programs."[26] Again, East Asia and the Middle East were seen as potential hotspots that demanded American involvement and a robust nuclear deterrent capacity to promote critical American security interests.

The NPR thus ascribed the potential capacity to inflict significant harm on the United States to a large number of state and non-state actors. The euphemistic nature of the term "emergent threats" intentionally left the exact contours and nature of these threats vague and open-ended, permitting the interpretation of the NPR's claims of existential risk in light of the most salient and familiar international threats perceived by various audiences. The review also emphasized the unpredictable nature of these emergent threats, both magnifying their potential impact and excusing administration advocates from the need to provide concrete evidence about the actual nature of those threats. The NPR's authors established for the administration a very low bar for providing adequate proof of a threat to the US, requiring simply the articulation of anti-American motives on the part of foreign leaders (many of whom domestic audiences had been already primed to expect the worst of) and a merely plausible narrative for how these

[25] Ibid.
[26] "Ibid.

leaders could potentially acquire weapons of mass destruction. Under this rubric, all but the most trusted ally could be framed as a potential source of mass terror. This deployment of "nukespeak" reflects similar uses during the Cold War, when US leaders used inflated depictions of the "Soviet threat" to justify provocative nuclear policies.[27]

However, the list of contingent security threats was not confined to only revisionist states. Both Russia and China were described as nations that, in some circumstances, could pose a threat to the United States and its citizens. The NPR thus carried forward a Cold War interpretive frame that viewed geopolitical competition and the potential for a world-ending great power conflict as one of the greatest threats to the existence of the US The authors worked to re-articulate this frame to both account for undeniable changes to the nature of the Russian state and military capabilities and to train its audiences to accept the possibility that a new geopolitical rivalry could replace the US-Soviet confrontation. In particular, China was described as potentially being "involved in an immediate or potential contingency," likely alluding to a potential crisis in the Taiwan straits, and is identified as a potential threat because of its "still developing strategic objectives and its ongoing modernization of its nuclear and nonnuclear forces."[28] China was thus seen as a danger because of its potential military strength and yet-to-be determined intentions, although the NPR's authors failed to provide any detail about any potential contingencies outside of a confrontation over Taiwan.

Despite claiming that Russia no longer posed an immediate threat to American security, the NPR described the place of Russia in American defense planning in relatively modest terms:

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[27] See Edward Schiappa, "Naming as Argument: The Rhetoric of Nukespeak," *Communication Monographs* 56 (1989): 251-272; Carol Cohn, "Slick'ems, Glick'ems, Christmas Trees, and Cookie Cutters: Nuclear Language," *Bulletin of the Atomic Scientists* 43:5 (June 1987): 17-24; and Carol Cohn, "Sex and Death in the Rational World of Defense Intellectuals," *Signs: Journal of Women and Culture in Society* 12 (1987): 687-718.
[28] "Nuclear Posture Review [Excerpts]," 16-17.

> Russia maintains the most formidable nuclear forces, aside from the United States, and substantial, if less impressive, conventional capabilities. There now are, however, no ideological sources of conflict with Moscow, as there were during the Cold War. The United States seeks a more cooperative relationship with Russia and a move away from the balance-of-terror policy framework, which by definition is an expression of mutual distrust and hostility. As a result, a contingency involving Russia, while plausible, is not expected.[29]

A nuclear conflict with Russia was portrayed as at least a plausible contingency, a strong enough possibility that it should inform future force planning and weapons posture. This statement seemed at odds with a following statement, which held that "adjusting US immediate nuclear force requirements in recognition of the changed relationship with Russia is a critical step away from the Cold War policy of mutual vulnerability and toward more cooperative relations."[30] The report attempted to reconcile this tension by observing that today's sunny relations between the two powers cannot reasonably be presumed to be a permanent state of affairs, since "Russia faces many strategic problems around its periphery and its future course cannot be charted with certainty."[31] Such a downturn in relations may force the US "to revise its nuclear force levels and posture."[32] As with the "emergent threats" discussed earlier, the NPR established that the mere potential of a nuclear threat from Russia or China necessitated a strong policy response.

This new, uncertain threat environment demanded a new nuclear posture, one that purportedly de-emphasized the role of nuclear weapons by incorporating conventional platforms for particular strategic missions, undergirded by a change in force planning from a "threat-based approach" to one that attempted to assess the ways that strategic weapons would be useful in the three contingency categories, and then structured the arsenal so that it afforded the mission capabilities that maximize the probability of a desirable outcome in each of those contingencies,

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[29] Ibid., 17.
[30] Ibid.
[31] Ibid.
[32] Ibid.

a "capabilities-based" model of nuclear planning. The NPR's forward summarizes this policy

change in stating that

> As a result of this review, the U.S. will no longer plan, size or sustain its forces as though Russia presented merely a smaller version of the threat posed by the former Soviet Union. Following the direction laid down for U.S. defense planning in the Quadrennial Defense Review, the Nuclear Posture Review shifts planning for America's strategic forces from the threat-based approach of the Cold War to a capabilities-based approach. This new approach should provide, over the coming decades, a credible deterrent at the lowest level of nuclear weapons consistent with U.S. and allied security.[33]

A capabilities-based approach was justified by the NPR's reading of the threat

environment. The review argued that since "the assets most valued by the spectrum of potential

adversaries in the new security environment" vary, the US arsenal would "require the capability

to hold at risk a wide range of target types."[34] This "spectrum of potential adversaries" was an

empty, bureaucratized linguistic shell which, as noted above, audience members could fill with

their worst fears about the new geopolitical order. The NPR also suggested nuclear attack

options would have to "vary in scale, scope and purpose" as they "complement other military

capabilities." The Defense Department should thus strive for a weapons mix that "can provide

the range of options needed to pose a credible deterrent to adversaries whose values and

calculations of risk and of gain and loss may be very different from and more difficult to discern

than those of past adversaries."[35] This chosen phrasing obscured the fact that the NPR is

recommending a new nuclear doctrine that imagines the use of nuclear weapons in a much

broader range of circumstances than even imagined during the Cold War. And as explained in

section 4.4, this "capabilities-based approach" provided the administration with a proverbial

blank check in inventing justifications for nuclear force levels and weapons designs, with the

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[33] Rumsfeld, *Nuclear Posture Review.*
[34] "Nuclear Posture Review [Excerpts]," 7.
[35] Ibid.

only limit being the imaginative capacity of force and scenario planners to construct plausible, if ultimately unrealistic, threats.

Nuclear forces alone, according to the NPR, would be inadequate to meet all of these needs, because the "United States and allied interests may not require nuclear strikes." The report suggested that the nation required a "new mix of nuclear, non-nuclear, and defensive capabilities" to meet "the diverse set of potential adversaries and unexpected threats."[36] This new approach to strategic posture was summarized in the NPR's forward:

> we have concluded that a strategic posture that relies solely on offensive nuclear forces is inappropriate for deterring the potential adversaries we will face in the 21st century. Terrorists or rogue states armed with weapons of mass destruction will likely test America's security commitments to its allies and friends. In response, we will need a range of capabilities to assure friend and foe alike of U.S. resolve. A broader array of capability is needed to dissuade states from undertaking political, military, or technical courses of action that would threaten U.S. and allied security. U.S. forces must pose a credible deterrent to potential adversaries who have access to modern military technology, including NBC weapons and the means to deliver them over long distances. Finally, U.S. strategic forces need to provide the President with a range of options to defeat any aggressor."[37]

The NPR's "capabilities-based" vision for the nuclear arsenal and its "New Triad" policy framework deployed what Schiappa describes as "bureaucratizing" forms of nukespeak, intentional efforts to either "sanitize" potentially dangerous nuclear concepts and doctrines so that they appear "neutral and inoffensive," or to "technologize" the policies "by applying technical terms or acronyms that only insiders or "experts" can "really" understand." The purpose of bureaucratization is, according to Schiappa, "to mystify—to render nuclear policy irrelevant or inaccessible to public investigation and deliberation."[38] The NPR's defense of its new nuclear doctrine was also insulated from criticism by the use of "domesticating" discourses,

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[36] Ibid.
[37] Rumsfeld, *Nuclear Posture Review.*
[38] Schiappa, "Naming as Argument," 134.

"the use of everyday language to describe the extraordinary in ordinary terms" through "the use of 'friendly' metaphors drawn from ordinary language to name otherwise objectionable nuclear weapons, strategy, and war." Coupled with the threat-based appeals of the security frame, domesticating and bureaucratizing nukespeak crafted a potently persuasive case for the NPR's suggested nuclear policy. Several other instances of nukespeak are identified in the following paragraphs.

This new version of deterrence required a new force structure, a "New Triad" that replaced the old triad of the Cold War (submarine-launched ballistic missiles, intercontinental ballistic missiles, nuclear bombers) with one that was capable of protecting the United States in the new threat environment. The suggested "New Triad" had three components. The first leg consisted of "offensive strike capabilities," which included all of the components of the old triad (ICBMs, ballistic missile submarines, bombers) and new conventional precision weapon capabilities, which would likely include the re-tasking of some formerly-nuclear weapons delivery systems. Rumsfeld described the utility of such a move, noting:

> To meet the nation's defense goals in the 21st century, the first leg of the New Triad, the offensive strike leg, will go beyond the Cold War triad of intercontinental ballistic missiles (ICBMs), submarine-launched ballistic missiles (SLBMs), and long-range nuclear-armed bombers. ICBMs, SLBMs, bombers and nuclear weapons will, of course, continue to play a vital role. However, they will be just part of the first leg of the New Triad, integrated with new non-nuclear strategic capabilities that strengthen the credibility of our offensive deterrence.[39]

This new offensive strike leg, which welded together formerly conceptually distinct nuclear and conventional capabilities, was intended to be used by mission planners to "produce a variety of

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[39] Rumsfeld, *Nuclear Posture Review.*

flexible, pre-planned non-nuclear and nuclear options" that also includes "sufficient adaptability to support the timely construction of additional options in a crisis or unexpected conflict."[40]

Later in the review, potentially controversial missions were laid out for the offensive strike force. First, the Department of Defense would be required to "implement a program to improve significantly the means to locate, identify, characterize, and target adversarial hard and deeply buried targets."[41] Second, the DOD should be required to increase its ability to track and destroy mobile targets.[42] Third, the strike force should develop Agent Defeat Weapon (ADW) concepts designed to "deny access to, immobilize, neutralize, or destroy chemical or biological weapons." Although the report did not specify the use of nuclear weapons as a means to destroy chemical or biological weapons or facilities, it noted that a number of ADW concepts were "[u]nder study, including thermal, chemical, or radiological neutralization of chemical/biological materials in production or storage facilities . . . ."[43] Finally, the offensive strike force was tasked with potentially destroying adversaries' WMD arsenals, using "variable and reduced yields, high accuracy, and timely employment" to "help deter enemy use of WMD or limit collateral damage. . . ."[44] The DOD and National Nuclear Security Administration were tasked by the review to "evaluate nuclear weapon options to increase weapon system effectiveness and flexibility to limit collateral damage."[45]

The phrases "offensive strike systems" and "offensive strike leg" and other bureaucratic euphemisms serve two important purposes for the NPR's authors. First, they shrouded the fact that the NPR's policy intentionally blurred the line between the use of nuclear and conventional

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[40] "Nuclear Posture Review [Excerpts]," 11.
[41] Ibid., 24-5
[42] Ibid., 47-8
[43] Ibid., 48
[44] Ibid.
[45] Ibid., 4.

weapons. Defining the two weapons types as occupying the same part of the New Triad creates an equivalency between nuclear and conventional weapons by positing that strategists should view the weapons as existing along a capabilities-based spectrum, with the weapons distinguished based upon the type of mission that they best fulfill rather than the type of explosive used in the warhead. In other words, a warhead is a warhead is a warhead, distinguished only by destructive potential. This equivalency was a direct challenge to the traditional "firebreak" in force and mission planning between conventional and nuclear weapons, which held that the weapons were distinct because of the effects that their use would have on the psychological state of the participants in the conflict, even if the destructive potential of very small nuclear weapons and very large conventional bombs may be roughly the same. The suggestion that the US deploy ADWs to defeat "chem.-bio" threats masks the fact that the NPR calls for the United States to use nuclear weapons to destroy, perhaps preemptively, the chemical and biological weapons arsenals and production facilities of other states, a major policy break with the "calculated ambiguity" of the Cold War.

Second, these terms obscure the intended purpose of such systems, the intentional (and potential first) use of nuclear weapons in combat. It is much more palatable for force planners, policy makers, and the public to contemplate using "offensive strike systems" as a response to "emerging threats," than it is to accept that United States policy has committed itself to inflicting massive death and destruction, and potentially long-term environmental harm, on both foreign soldiers and potentially, innocent civilians, which the NPR reduces to "collateral damage" that is to be limited through the use of more advanced weapons systems. The term "offensive strike systems" does the work of Schiappa's bureaucratizing euphemism, sanitizing the actual

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consequences of the use of nuclear weapons behind an official-sounding label that makes the policy seem "neutral and inoffensive."[46]

The second leg of the New Triad was made up of "active and passive defenses." This concept attempted to anchor in both policy and doctrine a long-held tenet of conservative arms control theories, namely that defensive systems, such as missile defenses, should be an integral component of nuclear deterrence policy. The NPR worked to elevate missile defenses to the same hallowed rhetorical position as nuclear weapons, which were lauded as protecting the United States from Soviet domination during the Cold War. The proffered equivalency between nuclear weapons and missile defenses was designed to blunt criticism of the missile defense schemes by demonstrating that trusted deterrence doctrines could only be effective if coupled with "active defense." Rumsfeld's forward claimed that the inclusion of defensive systems in the New Triad was based on "a recognition that offensive capabilities alone may not deter aggression in the new security environment," and, although imperfect, a combination of "active and passive defenses" could, "by denying or reducing the effectiveness of limited attacks," "discourage attacks, provide new capabilities for managing crises, and provide insurance against the failure of traditional deterrence."[47] These new defenses, according to the body of the report, would "help provide deterrence and protection against attack, preserve US freedom of action, and strengthen the credibility of US alliance commitments."[48] The report also asserted that current missile defense technologies were already adequately effective, being "capable of providing active defense against short- to medium-range threats."[49] The NPR harkened back to President Reagan's original rationale for missile defenses as an impetus for arms control, arguing

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[46] Schiappa, "Naming as Argument," 134.
[47] Rumsfeld, *Nuclear Posture Review.*
[48] "Nuclear Posture Review [Excerpts]," 7.
[49] Ibid., 11.

that such defenses "may reduce the need for nuclear weapons to hold at risk an adversaries launchers."[50] The document later detailed a vision of a robust, layered missile defense system that potentially includes a wide range of platforms and technologies.[51]

The third and final leg of the New Triad was described as a "responsive defense infrastructure." This term is designed to promote a whole range of potentially provocative policy prescriptions designed to modernize both the US nuclear arsenal and expand the ability of the United States to develop, deploy, and ultimately use a whole new generation of nuclear weapons. These policies, including the development of low-yield weapons, the resumption of explosive nuclear testing, and the development of a new scientific infrastructure potentially capable of developing new "exotic" nuclear weapons (including so-called "clean" fusion warheads) and novel applications for nuclear weaponry (including their use in imagined space-deployed weaponry). One immediate project tasked to the "responsive infrastructure" was the development and potential deployment of "low-yield" bunker-busting nuclear weapons, the controversy surrounding which is the subject of Chapter 5.

Rumsfeld's introduction to the NPR cautioned that in recent years, "the US defense infrastructure has contracted and our nuclear infrastructure has atrophied."[52] The report warned that deficits in current weapons maintenance and production capacity would result in unacceptable delays in the development of new weapons systems, and cautions that the nuclear infrastructure "needs to be repaired to increase confidence in the deployed forces, eliminate unneeded weapons, and mitigate the risks of technological surprise." Rumsfeld argued that these changes, in addition to bolstering the credibility of the US deterrent, would have the additional

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[50] Ibid., 9.
[51] Ibid., 28.
[52] Rumsfeld, *Nuclear Posture Review*.

benefit of "permit[ting] us to reduce our nuclear arsenal" while "at the same time, dissuade adversaries from starting a competition in nuclear armaments."[53] This claim is clearly intended to appeal to audiences interested in decreasing the role of nuclear weapons, and the dissuasion argument is likely intended to foil critics' claims that the new research programs suggested later in the document would spur a new arms race. Rumsfeld had deployed this co-optive strategy before, serving as a vehicle for the Reagan administration's defense of the Strategic Defense Initiative as "abolition through missile defense."[54] One vital component of this responsive infrastructure would be the capacity to modernize nuclear forces. The body of the review stated that:

> In addition, the technology base and production readiness infrastructures of both DoD and NNSA must be modernized so that the United States will be able to adjust to rapidly changing situations ....adjustments may be needed to match capabilities of the remaining nuclear forces to new missions... a need may arise to modify, upgrade, or replace portions of the extant nuclear force or develop concepts for follow-on nuclear weapons better suited is the nation's needs. It is unlikely that a reduced version of the Cold War nuclear arsenal will be precisely the nuclear force that the United States will require in 2012 and beyond.[55]

Likewise, the report warned that a failure to "revitalize" the nuclear infrastructure threatened the future viability of the arsenal, cautioning that, in the event of new-found reliability problems, "future options to refurbish or replace existing designs will be limited."[56] The report also cautioned that the United States should be ready to re-initiate the explosive testing of nuclear weapons, stating that the US government should "maintain readiness to resume underground testing if required."[57]

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[53] Ibid.
[54] See Gordon R. Mitchell, *Strategic Deception: Rhetoric, Science, and Politics in Missile Defense Advocacy* (East Lansing: Michigan State University Press, 2000), especially Chapter 2.
[55] "Nuclear Posture Review [Excerpts]," 23.
[56] Ibid., 30.
[57] Ibid.

According to the NPR, the policy recommendations contained in the document would accomplish the goal of de-emphasizing the role of nuclear weapons in security policy. These claims of "de-emphasis" are highly misleading, since the NPR envisioned a much broader role for nuclear weapons in both deterrence and potential combat roles. Rumsfeld highlighted two justifications for this claim in the forward. First, the addition of defenses to the New Triad meant "that the US will no longer be as heavily dependent on offensive strike forces to enforce deterrence . . ." This claim ignored the fact that other sections of the NPR explicitly assigned new missions, including the countering of chemical and biological forces, to nuclear weapons. Second, adding conventional forces and capabilities to the newly-conceived strategic arsenal dictated that "the US will be less dependent than it has been in the past on nuclear forces to provide its offensive deterrent capability." In Rumsfeld's eyes, the new American emphasis on both *offensive* and *defensive* nuclear deterrents would enhance strategic stability while decreasing the role of nuclear weapons. The forward noted that the "new capabilities that make up the New Triad" will facilitate Bush's announced plan to decrease the number of "operationally deployed strategic nuclear warheads" to between 1,700 and 2,200.[58] However, the NPR itself cautioned that, even in a reduced role, nuclear weapons continue to be vital to American security:

> Nuclear weapons play a critical role in the defense capabilities of the United States, its allies and friends. They provide credible military options to deter a wide range of threats, including WMD and large-scale conventional military force. These nuclear capabilities possess unique properties that give the United States options to hold at risk classes of targets [that are] important to achieve strategic and political objectives.[59]

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[58] Rumsfeld, *Nuclear Posture Review.*
[59] "Nuclear Posture Review [Excerpts]," 7.

Thus, although nuclear weapons would not enjoy the sole "pride of place" status as strategic weapons that they held during the Cold War, they remain a centerpiece, along with missile defenses and precision guided conventional forces, of America's deterrent for the foreseeable future.

Bush's announced strategic weapons drawdown target was both included and justified in the NPR. The review stated that the administration's "goal of reducing . . . operationally deployed strategic forces . . . provides a degree of flexibility necessary to accommodate changes in the security environment that could affect US nuclear requirements."[60] This force level, according to the review, was necessary to address "US defense goals in the context of immediate and unexpected contingencies,"[61] alluding to the threat scenarios detailed previously. However, the administration proposed to address "surprise" contingencies (such as a resurgent Russia) with the creation of a new category of nuclear warheads, a "responsive force" that is "intended to provide a capability to augment the operationally deployed force to meet potential contingencies."[62] The report claimed that these weapons would be available for contingencies within as short a timeframe as weeks or months. Such weapons are also anticipated as serving as replacements in case "operationally deployed" weapons are shown to experience "reliability problems."[63] Later in the report, plans for a reserve force were justified "because the United States will not have, for a decade or more, the capability to produce certain new components for warheads."[64] Later testimony and public statements from administration officials revealed that

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[60] Ibid., 15.
[61] Ibid., 17.
[62] Ibid.
[63] Ibid.
[64] Ibid., 31.

this reserve force could contain several thousand warheads.[65] As noted below, this "hedge force" was mere bureaucratic sleight-of-hand designed to mask the fact that the NPR committed the United States to maintaining very large numbers of nuclear weapons for the foreseeable future.

Many commentators have observed that the Nuclear Posture Review's recommendations closely mirror the policy preferences of a cadre of former administration officials and think tank researchers whose ties to the defense and nuclear establishments date back to the 1970s. As detailed in World Policy Institute analyst William Hartung's 2002 report "About Face," the NPR "draws on an extremely narrow set of unilateralist assumptions championed by conservative think tanks like the National Institute for Public Policy (NIPP) and the Center or Security Policy (CSP)."[66] In addition to being concerned about the role played in formulating the new nuclear policy by defense lobbies and nuclear laboratory officials, both of whom stand to materially benefit from new weapons research and procurement programs, Hartung argued that a "hardline conservative network—revolving around corporate-backed think tanks like CSP and NIPP—has re-emerged with newfound influence" in the Bush administration.[67] Hartung described the NIPP's influence on the NPR as "grounded" in a January 2001 report, Rational and Requirements for US Nuclear Forces and Arms Control. Hartung stated that the NPR "follows not only the basic logic, but also many of the specific recommendations contained in the NIPP."[68] A review of the NIPP study indicates that Hartung's claims are well-founded. The executive summary of the report stated that "this study concludes that an important priority for the United States is to preserve its capability to adapt US offensive and defensive forces to

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[65] See Douglas J. Feith, "Testimony before the Senate Armed Services Committee on the Nuclear Posture Review," February 14, 2002, accessed January 17, 2010, http://armed-services.senate.gov/statemnt/2002/Feith.pdf.
[66] Hartung and Reingold, "About Face."
[67] Ibid.
[68] Ibid.

rapidly changing strategic conditions."[69] The NIPP report described virtually the same threat

environment as the NPR, stating that "even the most basic variables concerning US nuclear force

posture requirements . . . may change rapidly" and that "the currently relatively benign

conditions cannot be predicted with any confidence to pertain into the future."[70] The body of the

NIPP report claimed that "it is not now possible . . . to anticipate with confidence the

requirements for nuclear deterrence over the course of the coming two or three decades."[71] The

NIPP also suggested that the US will need to be able to destroy hardened and mobile targets; that

the nuclear arsenal should be supplemented with advanced conventional capabilities; that the US

anticipate damage limitations and other "deterrence failure" missions; that the US adopt a

dynamic, adaptable deterrence and planning posture; and that the US develop a reactive

infrastructure that allows the development of new weapons types.[72] The NIPP report also

paralleled the NPR's stance on arms control, arguing that it should "focus on close consultation,

coordination, and transparency," rather than "locking in" ceilings that may soon be excessive or

inadequate."[73]

These personal connections between the drafters of the 2001 Nuclear Posture Review and

the NIPP help explain the strong continuity between the nuclear policies of the Cold War and the

post-Cold War policy recommendations of the NPR. Although the demise of the Soviet Union

and the rise of "emerging threats" likely influenced the thinking of Rumsfeld, Payne, and other

"Cold Warrior" veterans of previous Republican administrations, the above analysis strongly

suggests that they and the NPR's other architects still viewed nuclear weapons as the surest and

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[69] Keith B. Payne, preface to *Rationale and Requirements for US Nuclear Forces and Arms Control*, volume 1, Executive Report (Fairfax, VA: National Institute for Public Policy, January 2001), accessed January 17, 2010, http://www.nipp.org/Adobe/volume%201%20complete.pdf.
[70] *Rationale and Requirements*, vii.
[71] Ibid., 3.
[72] *Rationale and Requirements*, 6, 7, 10-12
[73] Payne, "Preface."

most effective means of securing American interests. The NPR was packaged as a "clean break" with the nuclear policies of the Cold War, adapting America's strategic policies and arsenal to match the uncertain realities of a new world. However, the NPR's defense utilized a security frame that shared many elements with the justifications for nuclear deterrence proffered by the nuclear establishment during the Cold War. The threat changed, demanding modifications to the US's security policy, but the primal power of American nuclear weapons endured. This line of analysis is carried forward in the next sections, which asseses the NPR's reception by skeptical analysts within the arms control community.

4.3   RECEPTION AND RESPONSE

Critics of the Bush administration, both inside and outside of government, found much to dislike in the Nuclear Posture Review. In the weeks after its initial release in early 2002, particularly after Assistant Defense Secretary Crouch's briefing on January 9, 2002, most critics directed their concerns towards four aspects of the review. This section analyzes the policy skirmishes between the Bush administration and its allies and critics among the arms control community. A close reading of these exchanges highlights key aspects of the security and risk management frames, and allows an assessment of their deployment "in action" as the Bush administration worked to overcome resistance to important elements of the Nuclear Posture Review.

Critical responses to the 2001 NPR illustrate a number of characteristics with the risk management frame. Most commentators viewed nuclear weapons themselves as potential sources of risk, and emphasized the unintentional and widely shared consequences of their use on everyone, including the United States. They also framed the goal of nuclear policy as

reducing insecurity, and viewed nuclear weapons as only one of many mechanisms through which this risk reduction could be achieved. The risk management response to the NPR also emphasized the importance of the processes used to achieve security goals, linking arms control measures to both short- and long-term security benefits and positing that security was a public good that could most readily be achieved through collective action.

This section analyzes four major objections to the 2001 NPR. First, many detractors questioned the desirability of erasing the lines between conventional and nuclear weapons as a part of the NPR's strategy of expanding the strategic arsenal to include all "offensive strike" weapons, claiming that this policy would increase the likelihood of nuclear weapons use in the event of a crisis. This threat of increased nuclear use was exacerbated by the tasking of nuclear weapons, including potential new designs, to new deterrence roles, such as destroying deeply buried and/or hardened targets and as a preemptive response to potential biological and chemical weapons threats. Second, critics were highly critical of the NPR's reconfiguration of its arms control policy, arguing that an abandonment of formal negotiations with verifiable targets risked reversing the security gains accomplished via the START process. Critics expressed particular concern about the administration's creation of a new "reserve force" of "downloaded" weapons, claiming such a move made a mockery of the administration's claimed weapons cuts. Third, administration critics also contested whether the NPR really represented a break with Cold War thinking, questioning why the United States would maintain a large retaliatory nuclear arsenal for any reason other than to deter a Russian attack, belying the administration's claims that Russia was no longer viewed as an adversary. Finally, many critics argued that the alleged "nuclear hit list" contained in the Nuclear Posture Review was both unnecessarily provocative and undermined the ability of the United States to develop strong, cooperative relations with

states on the list and actually encouraged these states to accelerate their WMD development and modernization programs.

4.3.1 Capabilities-Based Force Structure

Arguably the biggest controversy surrounding the newly-released NPR was its shift towards a capabilities-based force structure and the seeming "demotion" of nuclear weapons to the status of an "offensive strike weapon," no different from strategic conventional weapons. In Bush's NPR, both nuclear and conventional weapons would be utilized in a range of old and new missions designed to meet the threats embodied in a "dynamic" post-Cold War threat environment. According to analyst Philipp C. Bleek, the review focused on achieving "greater flexibility" as the cornerstone of maintaining a "credible deterrent."[74] William Arkin, a senior fellow at Johns Hopkins School of Advanced International Studies (SAIS), characterized this new approach as an extension of the "now familiar post-Afghanistan model—with nuclear capability added," an extension of the Defense Department's "so-called 'adaptive' nuclear capabilities" as a part of a larger effort that "redefines nuclear requirements in hurried post-September 11 terms."[75] Joseph Cirincione, the Director of the Carnegie Endowment's Nonproliferation Project, claimed that the new emphasis on capabilities "picks up on a disturbing trend in other defense department programs—to abandon a "threat based" planning in favor of "capabilities-based planning . . . essentially allow[ing] for the development of any size force or

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[74] Philipp C. Bleek, "Nuclear Posture Review Leaks; Outlines Targets, Contingencies," *Arms Control Today* (April 2002), accessed August 9, 2009, http://www.armscontrol.org/act/2002_04/nprapril02.
[75] William Arkin, "Secret Plan Outlines the Unthinkable," *Los Angeles Times*, March 9, 2002, accessed August 5, 2009, http://www.commondreams.org/views02/0309-04.htm.

any weapons system that is politically attractive, whether or not the threat justifies these capabilities."[76]

Administration critics immediately saw the dangers of creating a "linguistic equivalency" between nuclear and conventional weapons as such an equivalency played out in policy implementation. NPR skeptics were highly critical of the review's vision of the "fusing" of nuclear and conventional weapons, arguing that this would erode the "firewall" between nuclear and other weapons, and increase the likelihood of their use. A maladjusted nuclear posture could increase the probability that they were used, meaning that the US nuclear arsenal actually posed a threat to America's interests. This threat cited by the administration's critics highlights the importance of rhetorical analysis, which explains how language is a constituent feature of nuclear policy. Criticisms of "nukespeak" show how the bureaucratic fusing of nuclear and conventional weapons under the label of "offensive strike systems" serve as a "terministic screen." The NPR facilitates this fusion by emphasizing the common characteristics of the weapons, their innate capacity to destroy enemy targets, while obfuscating the the fact that nuclear weapons are enormously more destructive and destabilizing than are conventional munitions.

Cirincione argued that the NPR was "a great leap backward to the discredited nuclear policies of the 1950s," where nuclear weapons are seen "as simply another weapon as part of a continuum of military options merging seamlessly with advanced precision-guided munitions."[77] Young and Gronlund claimed that "maintaining and strengthening the firebreak against the use

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[76] Joseph Cirincione, "Testimony before the Senate Foreign Relations Committee," May 16, 2002, accessed August 10, 2009, http://www.carnegieendowment.org/publications/index.cfm?fa=view&id=988.
[77] Cirincione, "Testimony."

of nuclear weapons by all countries should be a paramount concern."[78] Mendelsohn urged analysts to recognize "that there are qualitative differences—such as radiative effects or political, legal, or moral inhibitions--not just quantified ones that distinguish precision-guided conventional munitions and low-yield weapons," fearing that the NPR's blurring of the line between such weapons "is part and parcel of the long-term effort to make the use of nuclear weapons seem more acceptable and/or credible in other than a deterrence or retaliatory mode."[79] Mendelsohn also cautioned that "elevating long-range precision strike conventional weapons to a strategic role" would also make "it easier to claim that 'gaps' exist that require new, more accurate, smaller-yield, specialized (preferably nuclear) weapons."[80] This anxiety about the "erasing" of the nuclear/conventional "firewall" reveals that the risk management frame holds that nuclear weapons themselves are potential sources of risk, and proponents of the frame are loathe to endorse policies that seemingly increase the likelihood that any nuclear weapons would potentially be used in combat.

Critics also expressed concern that the new missions envisioned for the joint conventional/nuclear offensive strike force would require nuclear explosive testing to validate new nuclear weapons designs. The risk management frame viewed both the recommended new missions and new weapons as unnecessarily provocative. Administration critics feared that a renewal of US nuclear testing would further unravel the tattered global arms control framework, potentially erasing decades of careful negotiation and diplomatic give-and-take designed to constrain the development and potential use of nuclear weapons. The NPR and administration's stance did little to allay their fears, openly denying the possibility of ratifying the CTBT and

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[78] Stephen Young and Lisbeth Gronlund, "A Review of the 2002 US Nuclear Posture Review," *Working Paper*, Union of Concerned Scientists, May 14, 2002, accessed July 21, 2009, http://www.ucsusa.org/assets/documents/nwgs/npr_review.pdf.
[79] Jack Mendelsohn, "The US Nuclear Posture Review: Plus ca change, plus c'est la mem chose," *Disarmament Diplomacy* 64 (May-June 2002), accessed August 9, 2009, http://www.acronym.org.uk/dd/dd64/64op1.htm.
[80] Mendelsohn, "US Nuclear Posture Review."

warning that it may not be possible to continue to maintain the stockpile without additional testing.[81] The NPR also called upon the nuclear complex to shorten the amount of lead time it would need to re-start nuclear testing, directing "the Department of Energy to be able to resume testing within 12 to 18 months from the time it is directed to do so,"[82] a shift from the current policy that envisioned any renewing of testing as occurring within a three-year window.[83] The NPR aimed to achieve this objective by proposing "substantial funding increases for the nuclear laboratories to enhance test readiness, train new and existing personnel, conduct new field experiments and a variety of other projects it terms urgent."[84] Young and Gronlund also warned that "some Bush administration officials are actively seeking to repudiate formally the US signature to the CTBT to free the United States from its international legal obligation . . . to not take actions contrary to the treaty's basic purpose."[85]

Administration representatives defended the broadening of the US's concept of strategic forces to include non-nuclear systems. Admiral Ellis advanced two security-grounded rationales for the NPR's recommendation. First, Ellis countered that the move would "raise the nuclear threshold by providing . . . strategic options in a crisis or conflict that do not rely solely on nuclear weapons . . ." According to Ellis, offering non-nuclear alternatives would decrease the probability that nuclear weapons would ever be used while still allowing the US to "convey the Nation's resolve and determination."[86] Second, Ellis claimed housing both conventional and nuclear munitions under the "offensive strike forces" umbrella would improve mission planning

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[81] Ibid.
[82] Ibid.
[83] Charles D. Ferguson, "Nuclear Posture Review," Issue Brief, Center for Nonproliferation Studies, Monterey Institute for International Studies (August 2002), accessed July 22, 2009, http://www.nti.org/e_research/e3_15a.html.
[84] Cirincione, "Testimony."
[85] Young and Gronlund, "A Review."
[86] James O. Ellis, "Testimony before the Senate Armed Services Committee on the Nuclear Posture Review," February 14, 2002, accessed August 10, 2009, http://armed-services.senate.gov/statemnt/2002/Ellis.pdf.

and weapons development, creating the "potential to seamlessly integrate existing or projected enhancements to non-nuclear capabilities . . ." This "integration" of previously separated "conventional capabilities into national strategic plans allows for the development of responsive, adaptive, and interoperable joint forces that can be employed in a wider range of contingencies." Ellis offered that there were "challenges" inherent in this approach, an apparent nod to the NPR's critics, but that the "benefits far outweigh the concerns."[87] Kurt Guthe, an analyst with the Center for Strategic and Budgetary Assessments, claimed that these new conventional weapons will decrease the probability of attacks against the homeland, claiming that "sustained nonnuclear attacks . . . would place the enemy at an increasing military disadvantage" and increase the chance that "the enemy could sue for terms," but only as long as the "counter-threat of nuclear retaliation" was available.[88] Therefore, the merging of conventional and nuclear weapons in strike planning may be provocative, but it would ultimately enhance US security by narrowing the range of contingencies in which nuclear weapons might be used and through enhancing the deterrence and dissuasion functions of the nuclear arsenal.

Douglas J. Feith, Undersecretary of Defense for Policy, defended this vision of a more "flexible" strategic force in testimony before the Senate Armed Services Committee six weeks after the NPR's release by highlighting how emerging and unpredictable threats necessitated a more robust and adaptable nuclear force. Feith argued that "we must transform our forces and planning to meet the dramatically different conditions of the new security environment." Feith claimed that this new environment requires new capabilities, and "the flexibility to tailor military capabilities to a wide spectrum of contingencies, to address the unexpected." According to Feith,

[87] Ellis, "Testimony."
[88] Kurt Guthe, "The Nuclear Posture Review: How is the "New Triad" New?" Center for Strategic and Budgetary Assessments, 2002, accessed September 12, 2009, http://www.csbaonline.org/4Publications/PubLibrary/R.20020729.Nuclear_Posture_Review/R.20020729.Nuclear_Posture_Review.pdf.

"we can no longer approach our military requirements by conveniently defining . . . the specified "threat," and "sizing our military capabilities" accordingly, "because, in an era of uncertainty, the precise source of 'the threat' is unpredictable." Feith argued that "a capabilities based approach . . . will look more at the broad range of capabilities and contingencies that the United States may confront in the future, as opposed to planning against a fixed set of opponents defined as a threat." Feith placed considerable emphasis on the need for the United States to possess "options to defend itself, its allies and friends against attacks that cannot be deterred." [89] He described "the sources of the threats that face us as much more diverse and even unpredictable, as the September 11 attacks showed," highlighting the threats posed by WMD and missile proliferation while claiming that "our defensive capabilities must take these new post-Cold War realities into account."[90] Here again, the post-Cold War world remained unpredictable, future threats were uncertain, and the United States must rely on a capable nuclear force as "insurance" against unknown but imminent threats.

This strong take on the security frame was adopted by the administration's allies in the defense and think tank communities. In a presentation about the implications of the NPR for the US nuclear extended deterrent, Baker Spring of the Heritage Foundation observed that this shift "was originally explained in the Quadrennial Defense Review (QDR) and has now been applied more specifically to nuclear weapons in the NPR," stating that "the capabilities-based approach represents an effort to make US defense policy relevant to the post-Cold War environment." According to Spring, "the US can no longer focus on a single and relatively familiar threat represented by a specific country," and instead that "certain capabilities that are in the hands of a variety of countries potentially hostile to the US and its allies are necessarily the focus of

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[89] Feith, "Testimony."
[90] Ibid.

concern."[91] Laurence Stein, a US Navy commander, contrasted this with the 1994 NPR, which he claims envisioned that a "strategic nuclear force was sized using a threat-based approach and centered on nuclear offensive forces."[92] Guthe provides an illuminating analogy of the merits of this approach, claiming:

> With its multiple elements, the New Triad evokes not the "law of the instrument," but what might be called the "law of the toolbox." The law of the instrument says, "Give a small boy a hammer, and he will find that everything he encounters needs pounding."60 The law of the toolbox suggests that if a skilled adult is given a diverse set of tools, he will use them separately or in combination to accomplish the task at hand in an effective and efficient manner.[93]

Administration representatives also defended the NPR's decision to bolster test readiness. In testimony before the Senate Armed Services Committee, Undersecretary of Energy for Nuclear Security and Administration John A. Gordon argued that although "President Bush supports a continued moratorium on underground testing," the US needs to be prepared to test because of the possibility of failures in the Stockpile Stewardship Program. Gordon observed that "there are no guarantees," continuing that "it is only prudent to continue to hedge for the possibility that we may in the future uncover a safety or reliability problem . . . that could not be fixed without nuclear testing."[94] Gordon also argued that a long timeframe on test readiness might make it difficult to retain key personnel "as more and more experienced test personnel retire," in turn making it "more difficult to train new people in these techniques." According to Gordon, "this argued for an approach in which key capabilities required to conduct nuclear tests and identified and exercised regularly" as part of a test readiness program. Further, Gordon

[91] Baker Spring, "The Implications of the Nuclear Posture Review for Extended Deterrence," Statement before The Conference of Monterey Institute of International Studies, on US-Japan Cooperation on Arms Control, Disarmament, Non-Proliferation, and Verification, March 27, 2002, accessed August 11, 2009, http://cns.miis.edu/pubs/dc/track2/2nd/baker.pdf.

[92] Lawrence J. Stein, "The 2002 Nuclear Posture Review: A First Step in Transformation of Just a Paper Tiger," Strategy Research Project, December 9, 2002, accessed December 1, 2010, http://www.dtic.mil/cgi-bin/GetTRDoc?Location=U2&doc=GetTRDoc.pdf&AD=ADA416302.

[93] Guthe, "Nuclear Posture Review."

[94] John A. Gordon, "Testimony before the Senate Armed Services Committee," February 14, 2002, accessed August 20, 2009, http://armed-services.senate.gov/statemnt/2002/Gordon.pdf.

maintained that the two- to three-year posture would be too long in the case of a newly uncovered defect. The NPR thus endorsed an existing National Nuclear Security Administration (NNSA) "proposal to enhance test readiness by reducing the lead-time to prepare for and conduct an underground nuclear test."[95] Spring claimed that these efforts were necessary to avoid the creation of "an atrophied force that undermines the US deterrent posture."[96]

4.3.2   Reconfiguration of Arms Control

Second, critics expressed deep skepticism about the administration's new approach to arms control. Many blasted the administration for abandoning decades of progress on strategic arms limitations, accusing the Bush White House of endangering vital norms and accords that both constrained the ability of nuclear states to brandish their weapons and undergirded the NPT's "'grand bargain' that constrained the growth of the "nuclear club." Andrew Lichterman and Jacqueline Cabasso, analysts with the Western States Legal Foundation, claimed that the NPR "repudiated most of the existing and pending treaties whose purpose is to prevent further nuclear arms competition" in its efforts to move beyond the "requirement for Cold War-style treaties."[97] Cirincione claimed in congressional testimony that administration claims to "liquidate the legacy of the Cold War" were inaccurate, because neither the review nor the subsequent Moscow Treaty would "liquidate any weapons." Cirincione argued that upon the treaty's expiration in 2012, "the large deployed nuclear forces we inherited from the Cold War will still be very much with us." He maintained that the weapons systems maintained by the treaty, "conceived, designed, and

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[95] Gordon, "Testimony."
[96] Spring, "Implications."
[97] Andrew Lichterman and Jacqueline Cabasso, "Retreat from Disarmament: The Role of Nuclear Weapons in US Plans for Global Military Dominance," *Information Bulletin*, Western States Legal Foundation (Spring 2002): 1, accessed July 21, 2009, http://www.wslfweb.org/docs/nprbrief.pdf.

built to deter or wage global thermonuclear war" would even be replaced as they "reach[ed] the end of their operational lives" because the NPR "calls for the production of a new generation of missiles, bombers and submarines."[98] In the eyes of Charles Ferguson, an arms analyst with the Monterey Institute for International Studies' Center for Nonproliferation Studies, the new NPR chose to sacrifice the stability offered by arms control agreements for a dubious "maximum flexibility" in achieving vague deterrence objectives.[99] Mark Bromley, an analyst with the British American Security Information Council, cautioned that "this radical new approach by Washington poses a serious challenge to current forms of multilateral arms control supported by many US allies."[100]

Critics were particularly skeptical of the new administration distinction between the "operationally deployed" and the "downloaded" reserve forces. These categories were mere bureaucratic distinctions without a meaningful policy difference, designed to obfuscate the Bush administration's commitment to maintaining an enormous strategic nuclear force. This deception was identified and castigated by many critics. Jack Mendelsohn, a retired State Department official who served in the US Arms Control and Disarmament Agency, claimed that this new definitional structure "would replace the current counting rule approach used in the . . . START agreements," threatening their "verification and compliance" systems, which were based on the number of "missile and bomber delivery systems."[101] Mendelsohn described Feith's testimony as "worthy of George Orwell," arguing that the reserve force "will leave the United States with a significant capability to 'breakout' and reconstitute its strike force." According to Mendelsohn, the new accounting scheme would leave "at least 1,600 empty spaces" to be available to

[98] Cirincione, "Testimony."
[99] Ferguson, "Nuclear Posture Review."
[100] Mark Bromley, "Planning to be Surprised: The US Nuclear Posture Review and its Implications for Arms Control," *BASIC Papers 39* (April 2002), accessed August 10, 2009, http://www.basicint.org/pubs/Papers/BP39.htm.
[101] Mendelsohn, "US Nuclear Posture Review."

"upload" ICBM and SLBM missile forces, with "an unknown but substantial number of additional weapons" available to be "redeployed in the bomber force."[102] Here an administration critic accuses the Bush White House of engaging in "doublespeak," suggesting that the "hedge force" serves as a linguistic sleight of hand, making it appear to lay audiences, including many members of Congress, that the Bush administration is proposing deep nuclear cuts as a break from Cold War nuclear force structures, when in actuality a much, much larger part of this force would remain in the American arsenal.

Supporters of the administration's arms control vision countered that the NPR had chosen to abandon an "adversarial style of arms control negotiation," one that was based fundamentally on a mistrust of the Russian government.[103] Administration advocates argued that the US nuclear arsenal should be explicitly tailored to match the threat environment, and that the "guardian" function of nuclear weapons should not be subjected to the artificial constraints imposed by unnecessary and unwieldy arms control accords. Undersecretary of Defense Douglas Feith argued that "the NPR moves us beyond the essentially hostile and competitive negotiations of the Cold War because such negotiations no longer reflect the reality of US-Russian relations." He drew parallels between the emerging, cooperative relationship between the US and Russia with that between the US and its French and British allies, with whom "We do not negotiate . . . with regard to the permitted features of our respective nuclear capabilities."[104] Feith claimed that waiting until a deal with the Russians was "hammered out" would make it impossible to make "the reductions we plan over the next decade." He maintained that it was unnecessary to view weapons systems as "bargaining chips" because Russian drawdowns would be inevitable without

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[102] Ibid.
[103] Feith, "Testimony."
[104] Ibid.

a negotiated agreement because of changes to the security environment.[105] Feith also advanced the claim that "rigid, legal constructs" such as arms control treaties were counterproductive because the "highly dynamic security environment" could change so rapidly, making it "highly imprudent now to rigidly fix our capacity to respond and shape such an environment by extending the negotiating practice of the Cold War into the future."[106] In the same hearing, Admiral James O. Ellis, head of STRATCOM, elaborated on these claims, arguing that the NPR "provided new concepts that can both allow us to reduce our deployed nuclear weapons inventory and strengthen our national security" by allowing us to "begin shifting our focus from the number of launchers and weapons platforms stipulated by previous treaties," and instead "move towards significantly lower numbers of operationally deployed nuclear weapons" on the basis of "our new relationship with Russia."[107]

Guthe claimed that "this path to arms reduction seems better attuned than Cold War-style treaties to the security challenges of the 21st century," suggesting that "reductions that are reached unilaterally, reciprocated by the other side, and, if necessary, recorded in simple agreements, can produce real cuts in nuclear arms without unduly restricting future US options." Guthe drew parallels between the administration's approach and that of George H.W. Bush, who successfully engaged in informal tactical nuclear weapons drawdowns in the form of the Presidential Nuclear Initiatives (PNIs) during the early 1990s.[108]

Some of most vehement defenses of the NPR's approach to nuclear negotiations came from Frank J. Gaffney, a former Reagan-era official and the current head of the right-leaning Center for Security Policy. Gaffney described defenses of Cold War-era arms control as

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[105] Ibid.
[106] Ibid.
[107] Ellis, "Testimony."
[108] Guthe, "Nuclear Posture Review."

"theological" and "disconnected from reality," chastising the NPR's opponents for an "increasingly shrill response." Gaffney argued that the NPR would accomplish "dramatic reductions in America's nuclear arsenal and do so without waiting for the cumbersome and time-consuming process of negotiating arms-control treaties with the Kremlin." Gaffney was not above a bit of Cold War-style red baiting, noting that "the Left is now feverishly attacking these aspects of the NPR" in conjunction with a "Kremlin" that is "echoing, and thereby helping to legitimate, these criticisms." According to Gaffney, the anti-NPR crowd should "be grateful" because they have "championed such ideas for decades" in the process of "demanding the wholesale and unilateral "denuclearization" of the United States." In the end, Gaffney believes that critics like Carl Levin, the "hard-Left chairman of the Senate Armed Services Committee" was simply making demands that "fly in the face of common sense." For Gaffney, the shift in arms control focus and the development of the hedge force should be seen as insurance policies" that "make eminent sense."[109]

4.3.3   Russia and the Cold War Hangover

Third, NPR and administration critics maintained that the review did little to alter the underlying purpose of the nuclear arsenal, and that a careful analysis of the document proved that the envisioned nuclear policy was still directed at Russia. Cirincione noted that "the greatest disappointment in the [NPR] is its failure to break with Cold War doctrines." He claimed that the administration still planned on "maintaining a substantial force of high-alert nuclear weapons for the indefinite future," which not only makes a mockery of administration claims that the nuclear

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[109] Frank J. Gaffney, "Alternative Arms-Control Reality," *National Review*, January 21, 2002, accessed August 9, 2009, http://www.nationalreview.com/contributors/gaffney012102.shtml.

weapons arsenal is no longer focused on Russia, but also "encourages other nations, particularly Russia, to maintain or construct larger forces then they otherwise would."[110] Young and Gronlund argued that the administration claim that it had put "the Cold War practices related to planning for strategic forces behind us" was a "fallacy," noting that the NPR still calls for a large number of deployed weapons, "as well as thousands of additional warheads in storage for rapid deployment." They claimed that the "only conceivable justification for such an arsenal" is to maintain counterforce missions against the Russians. According to their analysis of the NPR, the Bush administration thus retained "the primary role assigned to nuclear weapons during the Cold War."[111] J. Peter Scoblic, editor of Arms Control Today, echoed these claims, maintaining that the NPR "reaffirms the cold-war nuclear status quo," citing the "large nuclear reserve force, "ground-penetrating nuclear weapons, and a revitalization of the US nuclear weapons infrastructure" as evidence that "the Bush administration is institutionalizing a strong reliance on nuclear weapons for the indefinite future."[112] Cirincione summarized these arguments in his Senate testimony, observing:

> There is no strategic justification for maintaining thousands of weapons on high alert and a reserve force of thousands more weapons ready for re-deployment other than to target Russia. Other target sets are added on to, not substituted for, the Russian targets. The real mark of a new relationship with Russia will not be when we no longer sign arms control agreements, but when we no longer maintain elaborate plans to target and destroy Russian military, political and industrial sites—and when Russia no longer does the same for US targets.[113]

In his statement before the Senate, Feith disputed these claims. He argued "the current review recognizes that the United States and Russia have a new relationship, and that the proliferation of nuclear weapons and ballistic missiles has created new challenges for

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[110] Cirinione, "Testimony."
[111] Young and Gronlund, "A Review."
[112] J. Peter Scoblic, "Think Anew About US Nukes," *Christian Science Monitor*, March 19, 2002, accessed August 10, 2009, http://www.csmonitor.com/2002/0319/p09s02-coop.html.
[113] Cirincione, "Testimony."

deterrence." He continues that the NPR "recognizes that Russia . . . is not an enemy. There is [sic] grounds for mutual cooperation," and the NPR showed that "the United States is seeking to move beyond outdated Cold War nuclear confrontation to develop a new strategic framework with Russia."[114] Crouch described the NPR as occurring "against the backdrop" of larger administration efforts to improve relations with Russia, which has already "borne a great deal of fruit in terms of cooperative activities."[115] Ellis echoed these arguments, observing that "Russia is not the Soviet Union, nor is it an enemy," and argued that "we now seek a new strategic framework with Russia to replace the Cold War's balance of terror."[116]

Administration advocates also offered a ready defense of the response force. Feith's testimony claim that the plan would "prudently preserve[s] our option to respond to the possible emergence of new threats," describing the NPR approach as "a reasonable way to both reduce nuclear forces and prudently preserve our capability to adjust to the shifting requirements of a dynamic security environment."[117] In response to critics' claims that the creation of a reserve force made the administration's claimed cuts a "subterfuge," Feith argued that the NPR would still continue with the destruction of some weapons, while allowing the administration to size the arsenal according to threats as they emerge. He also defended the reserve force as being a necessary corrective to a production infrastructure that would be unable to produce new nuclear weapons for several years, creating a need for potential replacements. Feith offered the possibility that improving the nuclear infrastructure "may well permit us to reduce the size of the nuclear stockpile needed to support the responsive force."[118] Feith described the new accounting

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[114] Feith, "Testimony."
[115] Crouch, Special Briefing.
[116] Ellis, Congressional Testimony, February 14, 2002.
[117] Feith, "Testimony."
[118] Ibid.

approach as "truth in advertising," again claiming that it "is the only prudent path to deep reductions given the realities of the threat environment we face."[119]

4.3.4   The "Nuclear Hit-List"

The leak of the Nuclear Posture Review and the publication of excerpts in the *Los Angeles Times* on March 9, 2002, generated considerable additional controversy about the NPR and the Bush administration's new nuclear policies. The portion of the NPR that received the greatest adverse attention was the so-called "nuclear hit list" outlined in the "contingencies" section of the document. As noted earlier, the NPR anticipated the possibility of using conventional and/or nuclear weapons in a range of contingencies against both established powers China and Russia, and potential revisionist states Iraq, Iran, Libya, North Korea, and Syria. Critics also expressed concern for the list of "scenarios"[120] included in the document, especially the use of weapons in the event of a conflict in the Taiwan Straits, the Korean peninsula, or in the defense of Israel. Other analysts were incensed that the NPR anticipated the potential use of nuclear weapons against non-nuclear weapons states, particularly Iraq, Iran, Syria, and Libya. These plans contravened "negative security assurances" that the US had previously offered to parties to the Nuclear Nonproliferation Treaty (NPT), and that doing so could undermine the incentives to join and adhere to the treaty.[121] Analysts also opposed the language of "surprising military

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[119] Ibid.
[120] Arkin, "Secret Plan."
[121] Michael D. Intriligator, "US Nuclear Weapons Policy Under the Bush Administration," A Presentation to the GRAD Conference on Regional Cooperation and Global Security, International Business School, Budapest, June 30-July 4, 2004, accessed August 2, 2009, http://www.wagingpeace.org/articles/2004/07/00_intriligator_us-policy-bush.htm.

developments" as a potential justification for nuclear weapons use, arguing that this provided a carte blanche for American nuclear use in any conflict. [122]

Administration supporters in the defense think tank community defended the use of contingency planning. Mackubin Thomas Owens, a professor at the Naval War College, described concerns as "much ado about nothing (or at least very little)," claiming that "the Pentagon is constantly planning for a wide range of contingencies." Dr. Owens claimed that the Pentagon already had scenarios for every possible contingency already, and that doing so "can contribute to deterrence" by increasing "an adversary's perception" that the US had both the "capability and will" to carry through with its threats, observing that "the more realistic the plan, the more it enhances deterrence."[123] Defense analyst Andrew Krepinevich made similar argument, claiming that contingency planning was far from "provocative," and that "it has long been the Pentagon's task to prepare war plans for a range of plausible contingencies," claiming that the potential threat emanating from each of the seven states justified contingency plans.[124] James Robbins of the National Review observed that "the seven largest potential adversary states measured by military expenditures are—you guessed it—Russia, China, Iran, North Korea, Iraq, Libya, and Syria."[125]

International reaction was almost entirely negative. The Foreign Ministry of the People's Republic of China stated that they were "deeply shocked" by the contingency plans, and that they would "hold the United States responsible for an explanation," and described the new policy

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[122] Arkin, "Secret Plan."

[123] Mackubin Thomas Owens, "Posturing: What Will Deter a Saddam Hussein or an Osama bin Laden from Using Chemical, Biological, or Nuclear Weapons," *National Review*, March 14, 2002, accessed August 9, 2009, http://www.nationalreview.com/comment/comment-owens031402.shtml.

[124] Andrew Krepinevich, "The Real Problems with Our Nuclear Posture," *The New York Times*, March 14, 2002, accessed August 10, 2009, http://www.csbaonline.org/4Publications/PubLibrary/H.20020314.The_Real_Problems_/H.20020314.The_Real_Problems_.php.

[125] James S. Robbins, "Why the Leak?" *National Review Online*, March 15, 2002, http://www.nationalreview.com/contributors/robbins031502.shtml, accessed August 9, 2009.

as a "cold-war mentality" that "could only lead to failure".[126] The Iranian government compared the Bush administration to terrorists, claiming that "those who resort to the logic of force follow exactly the same logic as terrorists, although they are in the position of power."[127] The Russian Foreign Ministry said that the leak "can cause regret and anxiety, not only in Russia, but also in the whole international community," expressing concern that the new policy "seriously weakens the nuclear nonproliferation regime".[128]

The official response by the Department of Defense to the leaking of the document amounted to "no comment." A press release from March 9, 2002, observed that the NPR "is required by law" and "does not provide operational guidance on nuclear targeting or planning." The press release also emphasized that the NPR decreases operationally deployed weapons, and defended the new force structure as "essential to meet the deterrence requirements of the 21st century."[129] Cirincione observed that "senior administration officials" also "downplayed the significance of the review," citing a statement by Vice President Cheney describing the review as "routine."[130] Stephen Schwartz, the publisher of the *Bulletin of the Atomic Scientists*, claimed that the leak had "caught [the administration] off guard," forcing them to "portray the NPR as nothing more than prudent planning, sidestepping its more controversial aspects." Schwartz portrayed the response of National Security Advisor Condoleezza Rice and other administration officials as emphasizing the idea that the NPR would make nuclear weapons use less likely.[131]

[126] Sun Yuxi, "Press Briefing," Chinese Ministry of Foreign Affairs Website, March 12, 2002, accessed August 9, 2009, http://www.basicint.org/nuclear/US_Policy/NPRreactions-0402.htm#China.

[127] Abdollah Ramezanzadeh, "Nuke Plan Angers "Targeted Countries"," *China Daily*, March 13, 2002, accessed August 9, 2009, http://www.basicint.org/nuclear/US_Policy/NPRreactions-0402.htm#China.

[128] Alexander Yakovenko, Russian Ministry of Foreign Affairs, *Daily News Bulletin*, March 13, 2002, accessed August 9, 2009, http://www.basicint.org/nuclear/US_Policy/NPRreactions-0402.htm#China.

[129] Department of Defense, "Statement on the Nuclear Posture Review," March 9, 2002, accessed August 5, 2009, http://www.defense.gov/Releases/Release.aspx?ReleaseID=3264.

[130] Cirincione testimony

[131] Stephen I. Schwartz, "Nukes You Can Use," *Bulletin of the Atomic Scientists* 58:3 (May/June 2002), Academic Search Premier.

Ferguson claimed that the Bush White House defended the review as "largely represent[ing] a continuation of past nuclear policy." These claims by the Bush administration belied the claims from the NPR that the document would "revitalize" America's strategic policy.

4.4   CONCLUDING THOUGHTS

As a policy document designed to shape the future of American nuclear policy for at least the next decade, the effectiveness of the 2001 NPR must be judged as somewhat mixed. Several important parts of the policy vision contained in the document became a reality. The restriction-free, "post-Cold War" approach to arms control advocated by the NPR was manifested in the 2003 Strategic Offensive Reductions Treaty (SORT, also called the Moscow Treaty), which largely eschewed Cold War-style verification and accounting schemes. The Bush administration was able to use the opening afforded by SORT to alter the rules for how warheads were counted, implementing a two-tiered arsenal that included "active" weapons whose limits were determined by the arms control process and a "reserve" force of nuclear weapons that could be deployed in a matter of days (or weeks or months, depending on the system) that existed outside of official arms control accounting schemes. The administration was also largely effective in replacing the "old" nuclear triad with its New Triad, with the limited exception of missile defense deployments. The administration was also at least partially successful in its efforts to reinvigorate the nuclear maintenance, research, and production functions of the nuclear complex, successfully lobbying for increased funding, an expansion of nuclear weapons research and "dual purpose" civilian/military research programs, and an improved capacity of the complex to re-

initiate nuclear testing on short notice. Thus, with only a few exceptions, the administration was able to implement its "capabilities-based" approach to nuclear force structure and use policy.

However, these exceptions include some important victories for foes of the nuclear complex. The Bush administration lost the battle for the elimination of congressionally-imposed funding restrictions on the development of low- and extremely-low-yield nuclear weapons. This highly-charged political controversy lasted for nearly five years, until a combination of congressional recalcitrance and a shift in administration priorities forced the White House to shelve its efforts to develop more "usable" nuclear weapons, a process detailed in the next chapter. The Bush administration also faced stiff resistance to its plans to pour funding into missile defense research and deployment programs as a part of the "defensive" leg of the New Triad, eventually finding itself forced to accept a limited missile defense scheme that included two domestic missile systems, a partially funded system intended for Eastern Europe (later abandoned by the Obama administration), and a number of smaller, collaborative research and limited-deployment agreements with a number of allies, particularly Australia, Japan, and the Republic of Korea. Finally, the administration met with some resistance in its efforts to develop a new generation of precision-guided conventional weapons, particularly in its efforts to convert portions of its Trident and Minuteman II missile forces into conventionally-armed weapons systems designed to replace at least some of the functions previously assigned to the country's nuclear arsenal.

Most importantly, the NPR can be largely judged effective as a rhetorical tool for the policy changes it forestalled and the political pressures it defused, because it helped shield the nuclear establishment from calls to de-emphasize the role of nuclear weapons in American security policy by crafting new roles for nuclear weapons and nuclear deterrence that, in many

ways, mirrored the function of those weapons and policies during the Cold War, through the effective deployment of the security frame. The NPR was sold by its proponents as a break with the "tired" thinking of Cold War deterrence policies while carrying forward the core elements of force structures and weapons postures of that era well into the foreseeable future. From some perspectives, one would argue that the 2001 NPR simply failed to fulfill its own criteria of initiating a "break" with the nuclear deterrence and overall security postures of the Cold War. However, a more careful reading of the document suggests that the NPR never intended to downplay the roles played by nuclear weapons and nuclear deterrence, and was instead designed to propel key Cold War-era policies into the post-Cold War world. An analysis of key features of the NPR demonstrates that its purpose was to solidify the central place of nuclear weapons in the nation's security policy framework.

First and foremost, nuclear weapons continue to play a vital role in the NPR's vision of America's security policy, contrary to claims made both in the document's preamble and by members of the administration and its supporters. The security frame held that nuclear weapons served as the guardians of the American people, and the NPR included a robust role for those weapons. The preamble is clear in its declaration that nuclear weapons and nuclear deterrence remain the most important, and final, guarantor of the security of the United States. Although there may be some changes around the edges of declaratory policy, the NPR stated explicitly that the US remained committed to using nuclear weapons in the defense of its vital interests, a posture unchanged from the Cold War. Indeed, the NPR's failure to consider (or even refute) alternative declarative postures, such as no first-use, demonstrates that the administration remained committed to the nuclear deterrence as the ultimate protector of America's security. The policy of "calculated ambiguity," which had characterized America's declaratory posture

since the height of the Cold War, remained intact. As noted by Cirincione, "the review advocates maintaining a substantial force of high-alert nuclear weapons for the indefinite future."[132]

Further, the strategic weapons cuts envisioned in the NPR did nothing to alter the underlying "balance of terror" between the United States and Russia, with each country able to destroy its adversary many times over and able to inflict untold destruction upon the earth's biosphere. The NPR obfuscated the fact that deep cuts in the Russia Federation's strategic forces were inevitable because of budget constraints and the deterioration of key components of that nation's strategic arsenal, and instead set the stage for the administration to claim credit for exercising foresight and leadership in leading the world towards substantial cuts in strategic nuclear weapons arsenals. Meanwhile, "MAD" continued to characterize the strategic balance between the US and Russia Federation, and the United States government continued to eschew any legal restrictions on its ability to use nuclear weapons in the defense of its allies or national interests, while insisting on the right to define those interests as it saw fit.

Additionally, the NPR defended an expanded role for nuclear weapons, increasing the potential missions in which nuclear weapons could be relied upon to "secure" the American homeland. The NPR's discussion of "emerging" WMD threats from revisionist powers opened the possibility of the return of the "nuclear warfighting" doctrines that received so much attention from American force planners and were favored by many right-leaning policy analysts at the height of the Cold War.[133] The NPR proposed and justified a new security frame, one centered on unknowable and unpredictable threats from weak power and sub-state actors, to replace the unknowable and unpredictable threats from the Soviet bear. This new security frame

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[132] Cirincione, "Testimony."
[133] Including Keith B. Payne. See Keith B. Payne and Colin Gray, "Victory is Possible, *Foreign Affairs 36* (Summer 1980): 14-27.

is potentially even more dangerous to open public debate and meaningful deliberation because its own logic necessitates preemptive action to neutralize even an emerging threat. The Bush administration's success in steamrolling criticism during its campaign to drive the US to war in Iraq demonstrates that the potent mixture of half-truths, rabid fear-mongering, and the power of the presidential pulpit can readily drown out dissent and drive even reluctant policy makers to authorize the use of overwhelming force to nullify even potential threats. The dangers to American democracy and the future of the world are only heightened when those with their fingers on the proverbial "button" have persuaded themselves and the public that a nuclear strike is both "safe" and "necessary" to protect vital American interests.

Finally, the NPR suggested that the nuclear deterrence would be a permanent feature of America's security framework for the foreseeable future. The report failed to discuss even the possibility of any progress towards the elimination of the United States' or other arsenals. Even negotiated disarmament measures were implicitly off the table. The NPR's silence on this question arises from and further entrenches the sense that nuclear weapons have become a permanent feature of contemporary politics. The security frame depends on a sense of technological inevitability, holding that the capacity to develop a weapon ensures its deployment by either the US or its rivals. To even refute alternative security frameworks or envisioned uses for nuclear weapons would only serve to legitimize them as potential policy options. Instead, the NPR's architects chose to exclude abolition from the realm of "possible" perspectives on the proper role of nuclear weapons, continuing the nuclear establishment's strategy of pushing anti-nuclear views to the margins. Abolitionists are then easily portrayed as seditious, weak, and/or delusional. The NPR did not even anticipate any role for the de-emphasis of American nuclear weapons in forestalling emerging WMD threats, ignoring the claim from critics that nascent

WMD programs are driven by fear of the size and capabilities of the American nuclear arsenals. None of these results are surprising, considering the likely authorship of the document.

Threat discourse played an important role in justifying the 2001 NPR's policy vision. The security frame's threat environment, as outlined by the NPR, continued the Cold War tradition of utilizing existential threats from fearsome enemies as a means of justifying a continued reliance on nuclear weapons and arsenals, while adding on new layers of external security threats that justified an expansion of the roles and missions of the American nuclear arsenal. The security frame's justification for nuclear weapons depends upon fear, both of alleged consequences of an enemy attack and the unknown intentions and capabilities of potential adversaries, to compel the public to accept the dangers of a large nuclear arsenal as a minor price to be paid in the defense of the nation against threats to the nation's very existence. The threat environment portrayed in the NPR and communicated to the American people is even more dangerous than that faced by the United States during the Cold War, with new, non-specific WMD threats from states such as Iran, Iraq, and North Korea added to the potential threat of nuclear Armageddon posed by the Russian (and potentially future Chinese) arsenal.

According to the NPR, the magnitude of the potential threat posed by the Russian nuclear arsenal is the equivalent of that posed by the Soviet Union. Only the conditions under which that arsenal might pose a threat to the United States had changed. The NPR replaces the key deterrence frame of the Cold War, namely one that portrayed the Soviet Union and its weapons as an existential threat aimed at the destruction of the United States, with one that described the Russia Federation as (only) a potential threat of the same magnitude. The NPR's authors use the possibility of either the emergence of a resurgent Russian nationalism or backsliding into communist authoritarianism in arguing that the new Russia justifies an equivalent level of

"nuclear insurance" as did the Soviet Union. Namely, the policy of a minimum of nuclear parity, expressed both in terms of nuclear force levels and capabilities, remains in place. As Cirincione observes, "there is no strategic justification for maintaining thousands of weapons on high alert and a reserve force of thousands more weapons ready for re-deployment other than to target Russia."[134]

The NPR's emphasis on "surprise" threats and the problems posed by potential WMD developments among revisionist states further entrenched the role of nuclear weapons in American security thinking and policy. Again, the potential magnitude of the threat posed by the possession and use of WMD arsenals by "rogue" states is used within the security frame to justify a robust American nuclear arsenal, regardless of how probable the emergence of such a threat might be. The NPR placed great emphasis in demonstrating that the emergence of sudden threats from such states could seriously compromise American interests, while devoting virtually no space to demonstrating that such threats are likely, or even possible, outside the imagination of war game designers.

The NPR and its suggested approach to arms control also represented a step backwards in terms of the ability of governments to constrain both the development of nuclear force and missions and the potential for the intentional or inadvertent use of nuclear weapons in a future conflict. What the NPR described as "progress" in moving away from the "adversarial style of arms control" that characterized US-Soviet relations actually freed the United States government from critical restraints on the development and disposition of its nuclear forces. [135] Not only did the NPR reject the possibility of US ratification of the CTBT, which would impose serious limitations on the ability of the United States to modernize its nuclear arsenal, but it also called

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[134] Cirincione, "Testimony."
[135] Feith, "Testimony."

for the development of missile defense systems that clearly violated American commitments under the Anti-Ballistic Missile (ABM) Treaty. The NPR also implicitly rejected the CTBT's objective of constraining the modernization of nuclear forces by existing nuclear powers by calling for the "revitalization" of the US's nuclear infrastructure as a part of implementing the "responsive infrastructure" leg of the New Triad. Nor did the NPR assess or defend the potentially provocative nature of its call to explore the possibility of new nuclear weapons for new missions, a policy that many critics argued provides a proliferation spur for many "rogue" nations. Instead, the NPR proposed supplanting both the global nuclear arms control and Cold War-era bilateral arms control systems with a series of non-binding, bilateral agreements between the US and other nuclear powers that eschewed rigorous verification schemes and posed few actual limits on American nuclear weapons postures or activities.

Additionally, the NPR's claim that it represented a clean break with the deterrence policies of the Cold War is belied by the structure and defense of its proposed New Triad. As many commentators cited earlier observed, this New Triad, which adds "responsive infrastructure" and "defense" components to the existing "old Triad" of sea, land, and air-deliverable nuclear weapons, in reality extends the "overwhelming nuclear punishment" posture of MAD into post-Cold War nuclear policy while incorporating new nuclear and non-nuclear missions that threaten to lower the threshold for America's use of nuclear weapons in a conflict. Although the NPR did not explicitly endorse the overkill strategies that characterized US deterrence policy in the 1960s, 70s, and 80s, its call for nuclear parity with the Russian Federation and its insistence on the maintenance of a "nuclear hedge" in the face of unexpected contingencies indicate that the review's architects saw the need for a nuclear force large enough to both absorb a first strike from a major nuclear power (most likely a resurgent or backsliding

Russia) and to threaten to inflict a debilitating second strike on any potential current *or* future adversary. There is simply no policy-based justification for maintaining an online strategic force of 2200 weapons and a reserve force numbering in the thousands unless force planners anticipated the need to maintain an overwhelming second strike capability. MAD lived on in the NPR, if one reads between the document's lines.

Perhaps even more dangerously, the marriage of conventional and nuclear weapons envisioned by the NPR did not represent a de-emphasis of the role of nuclear weapons, as the review's advocates suggest, but rather served to expand both the range of missions for which nuclear weapons could be used and increased the probability that those weapons would be used. As observed by many of the administration's critics, the anticipated "new missions" suggested in the NPR, many of which center on the alleged need to use nuclear weapons to destroy hardened, deep, and buried targets and call for research into the development of new nuclear weapons designs, represented both an expansion of the role of nuclear weapons in US mission planning and the actualization of a long-held objective of "nuclear warfighting" advocates, such as Payne and other persons who played key roles in the drafting of the NPR. I explore this argument in greater detail in Chapter 5. Further, the much-lauded future shift of missions from nuclear weapons to precision-guided conventional munitions was, as noted by many of the administration's critics, merely window-dressing, because the NPR still commits the United States to the use of nuclear weapons in the fulfillment of those roles, both while the proposed conventional systems are being developed and in the event of their failure in fulfilling their missions. Perhaps even more dangerously, the NPR worked to rhetorically erase the conceptual distinction between nuclear and conventional weapons by placing them on a continuum of weapons, and envisioning them as equivalent tools designed for the same purpose. These

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"thinkability" concerns dominated much of the criticism of the NPR generated by nuclear abolition advocates after the report's release.

The administration proponents of the 2001 NPR and their supporters in the advocacy and research communities accomplished this carrying forward of key Cold War deterrence concepts through a potent capacity to dictate the form and content of the debate about the future of American nuclear policy in ways that largely dispelled opposition to the policy proposals contained in the review. Many of these stratagems feature prominently in the other case studies, and I explore these convergent argument strategies in the concluding chapter. In brief, NPR advocates deployed at least four strategies in their defense of both the review itself and its vision for the future of American nuclear policy, many of which were present in the Cold War advocacy of nuclear deterrence policies. First, access to both formal and informal deliberative settings that addressed the NPR and the wisdom of its policy recommendations was tightly controlled. The crafting of the document itself was shrouded in secrecy, to the extent that we cannot even say with absolute certainty who authored the document. However, we can safely conclude that neither outspoken critics of a reliance on nuclear weaponry and nuclear deterrence policies nor members of the general public were included in the bureaucratic tussles that likely characterized the construction of the document. Instead, the NPR was created in secret, and the full text of the document was classified. The document was delivered as a *fait accompli* to both Congress, which requested the review, and to the American public. Even access to the Congressional hearings on the NPR was tightly controlled, with the witness list largely limited to members of the Bush administration and their allies within the research and advocacy communities. Critics of the NPR's policy recommendations within the Congress were instead forced to rely on short opening statements during the committee hearings and their ability to

badger administration witnesses in voicing their objections, and they were largely denied a public platform that they could use to draw attention to their arguments against the review.

Further, secrecy and the use of classified information were effectively deployed as a method of squelching public debate. The NPR itself was classified, with only the executive summary, signed by Secretary Rumsfeld, made public upon the review's delivery to Congress. Although the administration provided a special press briefing in January of 2002, it was not until components of the NPR were leaked and published in the Los Angeles Times and other publications that the NPR received serious attention from the mainstream news media and dissenting voices found any national outlet for their concerns about the policy directions suggested by the review. Although the "nuclear hit list" received considerable and sustained attention from several foreign media sources, the stories generated by the leak only survived a few news cycles, both because of the media's focus on the administration's nascent campaign for war against Iraq and, again, because of the classified nature of the NPR text and its construction. Administration officials were able to credibly argue that the selective leaks misrepresented the purpose and intent of the review, and that, based upon their knowledge of the full vision of the NPR, the document did indeed accomplish its dual objectives of making a break with Cold War deterrence doctrines and de-emphasizing the role of nuclear weapons in American security policy. The administration's public advocates were also able to argue that the classified nature of the NPR prevented them from fully disclosing the palliative aspects of the policy, and insisted that the press and public should trust their judgment about the merits of the review's conclusions. Similarly, the public defense of the NPR was carried out by administration functionaries, and the potential controversy surrounding the leak never became a full-blown national political issue, nor

did it require a public defense by President Bush. Instead, even Secretary Rumsfeld was able to largely dismiss questions about the NPR's content.

Third, the NPR's defenders were able to effectively deploy an array of potential WMD threats to drown out dissenting voices. As noted above, the NPR itself and its advocacy campaign concluded that the post-Cold War (and particularly, post-9/11) world was a very dangerous place for the United States and its national interests. A weakened but still dangerous Russia, which still posed an existential threat, was joined by an emerging power in the People's Republic of China and the members of Bush's "Axis of Evil," namely Iran, Iraq, and North Korea, as deadly security challenges that could only be met with a robust nuclear arsenal. This process is outlined in greater detail in the preceding section.

Fourth, the public debate about the merits of the NPR and its suggested nuclear policies played out largely in the highly technical and jargonistic language that characterized Cold War nuclear policy discussions. As noted earlier, the deployment of euphemisms and bureaucratic terminology like "emerging threats" and "New Triad," the "linguistic equivalency" between nuclear and conventional weapons, and "offensive strike systems" were used by administration advocates to both foster a sense of fear and urgency about the need to craft a new nuclear policy and to distract critical focus from many of the more provocative and potentially dangerous policy recommendations contained in the text. Only a person deeply familiar with the language and logic of nuclear deterrence policy would be able to effectively navigate the prescriptions contained in the NPR, and recognize that the review's policy prescriptions actually included an enhanced role for nuclear weapons in US security policy.

Critics of the 2001 Nuclear Posture Review levied an array of arguments against the Bush administration's nuclear policy recommendations, and vigorously participated in public debate

about the merits of those recommendations. Many reporters and members of Congress seemed to find these arguments persuasive, as evidenced by press coverage and the strong resistance from public officials like Senators Carl Levin (D-MI) and Jack Reed (D-RI) and Representative David Hobson (R-OH).[136] However, the convergence of factors identified in the preceding paragraphs ensured that anti-nuclear advocates and scholars faced considerable barriers in their efforts to generate a serious public outcry about the policies endorsed by the NPR, and thus exert pressure on members of Congress and the administration to forestall implementation of those policies.

Other structural factors posed substantial obstacles for critics of the policy. Most members of the public feel considerable distance and some degree of alienation from many aspects of nuclear policy, and thus defer (and have been persuaded to entrust) decision making about nuclear weapons to government nuclear experts, the so-called nuclear priesthood. The public's ready deference to the nuclear establishment confounds the ongoing efforts of anti-nuclear advocates to re-create the broad public mobilization that characterized the anti-nuclear movements of the 1970s and 1980s. Although there is widespread public support for the de-emphasis of nuclear weapons and eventual nuclear disarmament, as expressed in a number of public opinion polls, this support for the abolitionist agenda is relatively shallow, meaning that the expressed policy preferences do not translate into a sense of urgency on the part of the public to push their leaders to adopt policies that will lead to a nuclear-free world. The task of anti-nuclear advocates is thus to foster an enhanced awareness of the dangers posed by nuclear deterrence postures and large nuclear arsenals among the public, sparking the types of informal

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[136] See especially Carl Levin and Jack Reed, "A Democratic View: Toward a More Responsible Nuclear Nonproliferation Strategy," *Arms Control Today* (January/February 2004), accessed November 28, 2010, http://www.armscontrol.org/act/2004_01-02/LevinReed.

dialogue and deliberations that percolate upwards and create pressure for policy change in more formal deliberative spaces.

The 2001 NPR represents an important transitional document, building rhetorical and policy bridges between the discourses and postures of the Cold War and those of the post-Soviet era. The NPR argued that the world remained dangerous, and that the security of the homeland could only be protected by nuclear weapons. Although the names and identities of many of the identified threats had changed, there was a remarkable degree of continuity between the nature of these threats. Faceless, irrational, and/or ideologically motivated extremists were committed to developing and using weapons of such enormous destructive potential that they threatened the very survival of the United States, and only the threat of an overwhelming nuclear response could force "rogue" and revisionist states to place a check on their destabilizing agendas. Nuclear weapons remained the ultimate guardian, both of the American homeland and of the nation's ideals, which were increasingly under siege by "Islamofascists" who purportedly wanted to destroy the United States and everything for which it stood. The "old" triad of the Cold War was a necessary, but by itself insufficient, response to this threat. Instead, the Bush administration argued that new capabilities, including ones that blurred the line between conventional and nuclear weapons, and between offensive and defensive strategic systems, were needed to respond to these new threats. The policies of the Cold War thus remained in place, supplemented by a provocative preemption doctrine and a willingness to consider the use of nuclear weapons in "warfighting" roles.

5.0　　"MINI-NUKES" & "BUNKER BUSTERS"

The final case study is an analysis of the debate over the desirability of developing low-yield nuclear weapons, so-called "mini-nukes." The merits of these weapons were bitterly contested among activist and think thank analysts, and sparked a heated controversy on Capitol Hill. Efforts to expand funding for research and development of "mini-nukes" and earth penetrating weapons (EPWs) pitted the Bush White House against congressional Democrats and some members of his own party, including Representative David Hobson (R-OH), the chair of the House Appropriations Subcommittee where funding authorization for the nuclear laboratories originated.

The political battle over a new generation of "usable" nuclear weapons mirrored debates among members of the US nuclear laboratories and the arms control communities. Proponents of mini-nukes development argued that new warheads were necessary both to deter potential adversaries from developing nuclear, chemical, and biological weapons, and to destroy facilities involved in the production of such weapons before they could be used.[1] Critics of the program maintained that a commitment to fielding a new generation of nuclear weapons risked

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[1] See Stephen M. Younger, "Nuclear Weapons in the Twenty-First Century," *Los Alamos National Laboratory LAUR-00-2850* (June 27, 2000), accessed November 4, 2010, http://www.fas.org/nuke/guide/usa/doctrine/doe/younger.htm; and C. Paul Robinson, "Pursuing a New Nuclear Weapons Policy for the 21st Century," *Sandia National Laboratories White Paper* (March 22, 2001), accessed June 1, 2010, http://www.sandia.gov/media/whitepaper/2001-04-Robinson.htm.

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undermining the U.S.'s nonproliferation credibility and blurring the threshold between nuclear and conventional weapons.[2]

Analyzing the political and technical debates about low-yield weapons is important for three reasons. First, the dispute is a contemporary controversy, facilitating the drawing of connections between earlier episodes of nuclear weapons discourse to a more recent political climate. In particular, the case study allows us to make comparisons between the deployment of the security and risk management frames in this controversy with its earlier use in the CTBT and NPR debates. Second, the contested desirability of the mini-nuke program is intertwined with larger debates about the utility of the Bush pre-emption doctrine. The debate thus offers a window into one of the central controversies in contemporary American foreign policy, one whose consequences continue to reverberate today as the US continues to field tens of thousands of troops in Afghanistan and Iraq. Finally, analyzing the highly technical aspects of the mini-nukes controversy, when compared and contrasted with similar elements in the debate over the CTBT and NPR, aids in making generalizations about both the norms of technical argument in contemporary nuclear policy deliberations and their influence upon deliberations in broader public spheres.

This chapter proceeds in four sections. First, I detail the political and security context around the mini-nuke controversy. I then outline the Bush administration's case for the development of low-yield weapons, analyzing it as an example of the application of the security frame to contemporary nuclear policy making. Third, I discuss objections to the administration's case for mini-nukes, assessing the effectiveness of the risk management frame in highlighting the

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[2] See Charles V. Pena, "Mini-Nukes and Preemptive Policy: A Dangerous Combination," *Policy Analysis 499* (November 19, 2003), accessed November 29, 2010, http://cato.org/pubs/pas/pa499.pdf ;and Robert W. Nelson, "Low-Yield Earth-Penetrating Nuclear Weapons," *FAS Public Interest Report 54* (January/February 2001), accessed November 30, 2010, http://www.fas.org/faspir/2001/v54n1/weapons.htm.

dangers of low-yield weapons development. The final section then situates the mini-nuke controversy within the broader context of public debates about the appropriate role of nuclear weapons and deterrence in a post-Cold War world.

5.1 CONTROVERSY IN CONTEXT

The Bush administration's campaign to seek authorization for the development of low-yield and earth penetrating weapons mobilized political appointees within the Defense and Energy Departments, members of the nuclear laboratories, and researchers from think tanks and institutes aligned with the administration's vision for an appropriate post-Cold War foreign policy and the role of nuclear deterrence within that policy framework. These advocates justified the development of such weapons through the deployment of the nuclear security frame, which took advantage of public and policy maker beliefs that nuclear weapons functioned as both a shield that protected that United States and as the most effective weapons in the US arsenal. Administration advocates deployed a series of fear appeals centered on a dangerous and unpredictable world to justify the development of a new generation of nuclear warheads designed to address these emerging threats. The most frequently cited mission for low-yield weapons was to destroy "hardened and deeply buried targets" (HDBT), which analysts and force planners argued could be used by the nation's adversaries to develop clandestine WMD programs targeted at the US. The planned weapons would have yields of only a few kilotons of TNT or less, far smaller than even the weapon used by the United States against Hiroshima, and program advocates argued that these lower yields would substantially decrease the fallout and resulting civilian causalities from the use of such weapons, opening the possibility of using these

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bombs near urban areas. The administration called for the development of mini-nukes despite the presence of a large number of earth penetrating weapons in the arsenal, including conventional bombs (the GBU-29 and GBU-37) capable of destroying "shallow hardened targets" and nuclear bombs (approximately fifty B6-11 bombs), which some analysts claimed were capable of destroying targets of depths up to seventy meters under hard rock or concrete.[3]

5.1.1   Mini-nukes as a Recurring Controversy

Although the Bush administration's push for congressional authorization and funding of mini-nukes was certainly a novel chapter in the history of US nuclear policy, it was also the culmination of a controversy over the desirability of the development of "small" nuclear weapons that went back several decades. Small nuclear weapons had been a part of the US arsenal since the 1950s. The military deployed thousands of "nonstrategic" or "tactical" nuclear weapons throughout the Cold War, including nuclear landmines, artillery shells, and short-range rockets designed for use on the imagined nuclear battlefields of a feared Third World War. Benjamin Friedman of the Center for Defense Information observed that "while such roles for nuclear weapons may seem revolutionary . . . the United States has had thousands of nuclear weapons designed for warfighting for decades."[4] According Christopher Paine, a nuclear analyst with the Natural Resources Defense Council, the United States had deployed some earth penetrating nuclear designs since the 1950s, including the Mark 8 and Mark 11 bombs, intended to penetrate reinforced concrete, hard sand, clay, and armor plate while utilizing delayed fuses to

[3] Lisbeth Gronlund, David Wright, and Robert W. Nelson, "Earth Penetrating Weapons," Union of Concerned Scientists, May 2005, accessed October 8, 2009,
http://www.ucsusa.org/nuclear_weapons_and_global_security/nuclear_weapons/technical_issue/earth-penetrating-weapons.html.
[4] Benjamin Friedman, "Mini-Nukes, Bunker-Busters, and Deterrence: Framing the Debate," Center for Defense Information, April 26, 2002, accessed June 1, 2010, http://www.cdi.org/terrorism/mininukes.cfm.

ensure detonation after the bombs had penetrated their targets.[5] Charles Ferguson of the Monterey Institute's Center for Nonproliferation Studies noted that administration advocates used the historical continuity between Cold War missions and its mini-nukes proposal as a justification for pursuing research into new low-yield weapons, claiming that such weapons did not depart from previous mission profiles for weapons in the US arsenal.[6] Friedman argued that what was "revolutionary" about the Bush proposal was "the idea of reducing the yield of tactical weapons to levels approaching those of conventional explosives . . . which would theoretically bridge the gap between a conventional and a nuclear weapon."[7]

An early entrant into the controversy over the needs for low-yield weapons to be used against underground targets was a 1991 paper by Thomas Dowler and Joseph Howard II, two weapons scientists at the Los Alamos National Laboratory. Dowler and Howard argued that the US should explore the development of very small warheads, some having an explosive yield as small as ten tons of TNT, for use against hardened and deeply buried targets. They claimed that the US needed to develop a "proportional" response to "tyrants," who threatened to use chemical and biological weapons (CBWs) against American forces, because the problem of self-deterrence, or the fear of negative consequences of using the current, large weapons in the US arsenal in retaliation, would dissuade US policymakers from making any response. The paper suggested the exploration of three new potential weapons packages, including a "micronuke" designed to destroy bunkers, a "mininuke" intended to counter ballistic missiles, and a "tinynuke" for battlefield use. They claimed that the development of such weapons "could provide an effective response for countering the enemy in such a crisis, while not violating the

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[5] Christopher E. Paine, "Countering Proliferation, or Compounding It? The Bush Administration's Quest for Earth-Penetrating and Low-Yield Nuclear Weapons," Natural Resources Defense Council, May 2003, 2.
[6] Charles D. Ferguson, "Mini-Nuclear Weapons and the US Nuclear Posture Review," James Martin Center for Nonproliferation Studies, Research Story of the Week, April 8, 2002, accessed June 2, 2010, http://cns.miis.edu/stories/020408.htm.
[7] Friedman, "Mini-Nukes."

principle of proportionality."[8] Robert W. Nelson, a research physicist at Princeton University and a leading critic of low-yield weapons, credited the Dowler/Howard paper with renewing government interest in tactical nuclear weapons, which had increasingly been seen as unseemly relics of an improbable, imagined ground conflict between NATO and Warsaw Pact forces.[9] Ferguson observed that at the time of Dowler/Howard paper's release, "on the political front . . . the trend was away from the development of new weapons," as evidenced by the U.S.'s elimination of "ground-based tactical nuclear weapons" and the 1992 moratorium on US nuclear testing.[10]

Dowler and Howard were not alone among military and DoE officials in their early interest in low-yield weapons. Dick Cheney, in his capacity as Secretary of Defense under President George H.W. Bush, was also a proponent of low-yield weapons, submitting a January 1993 report to congress entitled "Defense Strategy for the 1990s: The Regional Deterrence Strategy." This paper argued that "we must adopt the right combination of deterrent forces, tactical and strategic, while creating the proper balance between offense and active defense to mitigate the risk from weapons of mass destruction and their means of delivery, whatever the source."[11] Research on low-yield weapons continued in the nuclear laboratories despite the "publicly declared policy of no 'new' designs".[12] Designers were primarily focused on making "nuclear weapons more usable," pursuing research along several related lines: "modification of

[8] Thomas Dowler and Joseph Howard II, "Countering the Threat of the Well-Armed Tyrant: A Modest Proposal for Small Nuclear Weapons," *Strategic Review*, Fall 1991, p. 34-40.
[9] Nelson, "Low Yield."
[10] Ferguson, "Mini-Nuclear Weapons."
[11] Dick Cheney, "Defense Strategy for the 1990s: The Regional Defense Strategy," January 1993, accessed September 4, 2010, http://www.informationclearinghouse.info/pdf/naarpr_Defense.pdf.
[12] Andrew M. Lichterman, "Looking for New Ways to Use Nuclear Weapons: US Counterproliferation Programs, Weapons Effects Research, and "Mini-Nuke" Development," *Information Bulletin*, Western States Legal Foundation, Winter 2001, accessed June 20, 2009, http://www.wslfweb.org/docs/mininuke.pdf.

existing nuclear weapons for lower yields . . . and research on the effects of nuclear weapons when used or delivered in innovative ways."[13]

William Arkin, a nuclear policy analyst, noted in a 1993 article in the *Bulletin of the Atomic Scientists* that "support for them has spread like a virus, infecting the nuclear laboratories, and air force and the navy, Strategic Command . . . the Defense Nuclear Agency, and the Central and European Commands." Arkin was particularly concerned by the lack of accountability and public scrutiny, observing, "now that public fear of nuclear war has practically disappeared . . . planning for this new generation of nuclear weapons has managed to evade close scrutiny, and the weapons have acquired a false legitimacy inside nuclear circles." He noted that this interest in low-yield weapons was already complicating strategic relations with other nuclear powers, with the "seemingly harmless doodling of US nuclear scientists" being used as justification for "similar programs in Russia." Arkin also foreshadowed the "blurring" argument leveled against Bush-era mini-nukes, cautioning that such weapons "would be practically conventional" and that "proponents . . . claim their small size should eliminate any nagging political problems associated with their use."[14]

5.1.2   Hard and Deeply Buried Targets

Research into low-yield and earth penetrating weapons was at least partially justified by concerns over the spread of buried facilities, which many analysts claimed could facilitate clandestine WMD development. A number of intelligence reports, congressional briefings, and papers from the nuclear laboratory and defense research communities provided argumentation

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[13] Lichterman, "Looking for New Ways."
[14] William M. Arkin, "Nuclear Junkies: Those Lovable Little Bombs," *Bulletin of the Atomic Scientists* 49:6 (July/August 1993): 22.

ammunition for later Bush administration lobbying efforts. The reports served to validate a renewed interest in the development of low-yield weapons by providing a plausible justification for terminating statutory prohibitions on the research and development of new nuclear weapons. These findings were used to support the administration's narrative of a very dangerous post-Cold War world full of "emerging" and "unpredictable" threats that could only be addressed by expanding the capacity of the existent nuclear arsenal to safeguard vital American interests. The most prominent of these reports are summarized in the following paragraphs.

Concerns over hardened targets arose in the aftermath of the first Gulf War, where "the US military found in that conflict that it wanted new weapons to attack certain difficult to destroy targets, especially deeply buried, hardened facilities and chemical and biological weapons, which pose a danger if dispersed rather than destroyed."[15] The *Report to Congress on the Defeat of Hard and Deeply Buried Targets* (HDBT Report), submitted to Congress in July 2001 under the signatures of the Secretaries of Defense and Energy, cautioned lawmakers that HDBT were being used by "many nations" who had "located critical operations at these facilities." The report argued that even though such facilities were common among Warsaw Pact and NATO nations during the Cold War, "the Persian Gulf War and the series of conflicts in the Balkans revealed that facility protection . . . remains an effective response to the technology advantages in intelligence enjoyed by the United States and its allies." As a result, "rogue nations" were shifting to using deep bunkers in "serious efforts to protect these lethal WMD resources." The report cited intelligence reports claiming that there were over 10,000 such facilities, "and their numbers will increase in the next 10 years." The spread of HDBTs allegedly threatened US deterrence capabilities because current conventional and nuclear options in the US

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[15] Lichterman, "Looking for New Ways."

arsenals "are not only challenged by the depths of burial and redundancies in critical functional systems, but also by sophisticated camouflage, concealment and deception (CCD) techniques, and some collocation of HDBTs in civilian areas."[16] The report cautioned that not only are "our potential adversary's . . . WMD, long-range missiles, modern air defenses, most sophisticated command and control systems, national leadership in wartime, and a variety of tactical arms . . . increasingly concealed and protected" by these facilities, but that if the US lacked "the means to defeat these facilities and the threatening assets that protect, adversaries may perceive that they have a sanctuary from which to coerce or attack the United States . . . with threats much more powerful than in past conflicts." The report suggested that "nuclear weapons have a unique ability to destroy both agent containers and chemical and biological weapon agents."[17]

The HDBT Report was accompanied by lobbying efforts from members of the nuclear laboratories to promote new research authorization and funding for low-yield weapons. A June 2000 paper from Stephen Younger of Los Alamos proposed a "re-thinking" of the purpose of the US nuclear arsenal in a post-Cold War world. Younger claimed that the new threat environment might require using nuclear weapons outside of "cases of *extremis*," and that "geopolitical change and the evolution of military technology suggest that the composition of our nuclear forces and our strategy for their employment may be different in the twenty-first century." According to Younger, "the time is right for a fundamental rethinking of our expectations and requirements for these unique weapons." Although nuclear weapons were likely to remain "the ultimate deterrent to aggression and the ultimate destructive force in combat," Younger warned that "the composition of our nuclear arsenal may undergo significant modification to respond to

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[16] *Report to Congress on the Defeat of Hard and Deeply Buried Targets*, Submitted by the Secretary of Defense in conjunction with the Secretary of Energy, in response to Section 1044 of the Floyd D. Spence National Defense Authorization Act for Fiscal Year 2001, PL 106-398, July 2001, 8-9, accessed June 2, 2010, http://www.nukewatch.org/facts/nwd/HiRes_Report_to_Congress_on_the_Defeat.pdf.
[17] *Report to Congress*, 10.

changing conditions, changing military needs, and changes in our confidence in our ability to maintain credible nuclear forces." The paper advocated additional research on "mini" nuclear weapons, suggesting that a 5-kiloton yield weapon (approximately one-half the size of the bomb used on Hiroshima) could be used to destroy the door of a missile silo, neutralizing the site. Younger suggested that "with precision delivery, many hard targets might be defeated with nuclear explosives having lower yield than we might currently employ."[18]

C. Paul Robinson, the President and Laboratories Director of Sandia National Laboratories also proposed expanding research efforts into smaller nuclear weapons. In a 2001 White Paper, Robinson agreed with Younger, noting that the "steady proliferation of nuclear weapons and other weapons of mass destruction by other nations around the globe" created a significant threat to the US and its allies, because "some new proliferants already are exhibiting hostile behavior, while others have the potential to become aggressors toward the U.S., our allies, and our international interests."[19] Robinson suggested that nuclear weapons would serve two purposes in the post-Cold War world, namely central deterrence, protecting against attack from the Russian Federation and future, massively armed nuclear powers, and the deterrence of "wider threats," those emanating from newly-armed WMD states. Robinson argued that effective deterrence of wider threats would require efforts to decrease "collateral damage" from potential strikes, because "the fact that civilians in these nations have no voice in developing the policies of their government would make their slaughter abhorrent to Americans," meaning that the US would need the ability to strike "the leadership, along with military forces and military capabilities" as "the appropriate targets that should be held at risk by any US deterrent policy." He also claimed that deterrence threats could only be credible as long as the US could

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[18] Younger, "Nuclear Weapons in the Twenty First Century."
[19] Robinson, "Pursuing a New Nuclear Weapons Policy."

demonstrate "that we have the national will, as well as the full means, to carry out our intended actions." Accordingly, Robinson suggested that "we would desire primarily low-yield weapons with highly accurate delivery systems for deterrence in the non-Russian world . . ." which he described not as "mini-nukes" in the sub-kiloton range, "but devices in the low-kiloton regime, in order to contemplate the destruction of some buried or hidden targets, while being mindful of the need to minimize collateral damage."[20]

The arguments advanced the HDBT Report both resonated with many policymakers and made appearances in the arguments offered by other advocates of low-yield weapons development. Younger's paper identified an array of new threats, and categorized them in three groups: "major power conflicts, especially those involving Russia and China; regional conflicts, including potential nuclear states such as Iran, Iraq, or North Korea; and conflicts involving terrorist groups and other nonstate organizations." A 2003 report from the Republican majority's House Policy Committee entitled "Differentiation and Defense: An Agenda for the Nuclear Weapons Program" (House Policy Committee Report) argued that the "nuclear weapons and ballistic missiles programs of countries such as North Korea, Iran, and Iraq" posed a considerable threat to the United States. This report also identified "a new and virulent form of terrorism" as a deadly threat to "our way of life," claiming that "sub-state and non-state entities have few of the inhibitions of states," and should be seen as "fanatics, determined to kill and destroy." The report also cautioned that the continued spread of nuclear weapons meant "there are multiple potential opponents and sources of conflict that could affect America's vital

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[20] Ibid.

interests."[21] These descriptions of "deadly enemies" are familiar to Ivie and other analysts familiar with depictions of the "Russian threat" during the Cold War.[22]

The arguments of Robinson and Younger were also taken up in a 2003 paper by several research scientists from Los Alamos, published in *Comparative Strategy*, a journal published by Keith B. Payne's National Institute for Public Policy. The Los Alamos scientists' paper argued that the US needed to "focus on the characteristics of future weapons systems needed to help ensure that the United States achieves its defense objectives of assurance, dissuasion, and deterrence more effectively," a formulation lifted from the Nuclear Posture Review. The authors claimed that future systems would focus on RCD (reduced collateral damage) as a means of limiting the problems posed by self-deterrence, and that such research strongly supported the development of low-yield nuclear weapons with earth penetrating capabilities.[23] The authors also argued that "the security challenges faced by the United States have changed significantly since the end of the Cold War," with the rise of "a complex array of diverse, less predictable threats."[24]

Although there is little evidence that Robinson, Younger, or other nuclear scientists who argued for the development of low-yield weapons were solely, or even primarily, motivated by institutional interests in crafting and promoting their arguments, there can be little doubt that the needs of the nuclear laboratories for both a post-Cold War rationale and the resources to check shrinking budgets played at least some role. In a 2000 address, Robinson said he feared that the explosive testing limits imposed by the 1992 moratorium, which could be made permanent by

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[21] House Policy Committee, Subcommittee on National Security and Foreign Affairs, *Differentiation and Defense: An Agenda for the Nuclear Weapons Program*, February 2003, p. 2.
[22] See See Robert L. Ivie, "Cold War Motives and the Rhetorical Metaphor: A Framework of Criticism," in *Cold War Rhetoric: Strategy, Metaphor and Ideology,* ed. Martin J. Medhurst, Robert L. Ivie, Philip Wander & Robert L. Scott (Westport, CT: Greenwood Press, 1990): 71-80.
[23] Bryan L. Fearey et al., "An Analysis of Reduced Collateral Damage Nuclear Weapons," *Comparative Strategy* 22:4 (October/November 2003): 306.
[24] Fearey et al., "An Analysis," 305.

US ratification of the CTBT, risked rendering "the US nuclear laboratories the losers on both sides; even the far right neglects the importance of an offense retaliatory force." Robinson argued that "we must not lose sight of the role of the laboratories, and we must find ways to strengthen and revitalize these institutions to fulfill their missions under changing circumstances." He claimed that "the United States will undoubtedly require a new nuclear weapon . . . because . . . the yields of the weapons left over from the Cold War are too high for addressing the deterrence requirements of a multipolar, widely proliferated world."[25] Nelson said "a more cynical interpretation . . . is that the laboratory staff and leadership simply feel threatened by the current restrictions on their activities, and want to generate a new mission (and the associated funding) to keep them in operation indefinitely." Nelson argued that the CTBT and testing moratorium were especially threatening for the laboratories, since they would "limit the labs to maintaining the stockpile of weapons already in our arsenal," which would make it very difficult to recruit and retain new scientists who were not interested in "the relatively mundane task of assuring reliability." As a result, "there is tremendous pressure to create a new mission that justifies a new development program."[26]

5.1.3   2001 Defense Authorization Bill

One barrier faced by advocates of research into low-yield weapons was a law that prohibited "the national laboratories from research and development leading to a precision, low-yield weapon," the result of an amendment included in the 1994 Defense Authorization Bill by Representatives

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[25] C. Paul Robinson, President and Laboratories Director, Sandia National Laboratories, "Maintaining a Viable Nuclear Weapons Program in a Test Ban Environment: A Strong Technical Foundation in the Laboratories," Presentation at the Nuclear Security Decisionmakers Forum, Albuquerque, NM, March 28, 2000, accessed June 1, 2010, http://www.sandia.gov/media/speeches/NSDMF2000.doc.
[26] Nelson, "Low-Yield."

Elizabeth Furse and John Spratt and enacted into law in November 1993. The law barred the Secretary of Energy from engaging in "research and development which could lead to the production by the United States of a new low-yield nuclear weapon," and defined such a weapon as having "a yield less than five kilotons."[27] The repeal of the so-called Spratt-Furse Amendment was the focal point for much of the administration's efforts in developing mini-nukes.

Critics of the administration's push for mini-nukes described it as part of a broader "resurgence of Republican interest" in such weapons. Paine tied it to the so-called "Precision Low Yield Weapons Development (PLYWD/Plywood)" scheme, which was initiated by Senator John Warner, the Republican chair of the Senate Armed Services Committee and Wayne Allard, the chair of the Armed Services Committee's Strategic Forces Subcommittee.[28] These Senators successfully "buried a small provision in the 2001 Defense Authorization Bill" which was designed to overturn the Furse-Spratt restrictions on research into low-yield nuclear weapons. Nelson noted that "although the language in the final Act was watered down, the Energy and Defense Departments are still required to undertake a study of low-yield nuclear weapons that could penetrate deep into the earth before detonating so as to 'threaten hard and deeply buried targets'."[29] According to Ferguson, the Warner-Allard Amendment "did not explicitly override the Furse-Spratt" Amendment, but it did constitute "a major step toward reversing" the "political trend" against the use of low-yield warheads in the US nuclear arsenal.[30] Paine claimed that the Warner-Allard initiative was "provoked" by new defense reports, presumably the HDBT Report, warning of "a rapid increase in the number of hardened and deeply buried facilities" that were

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[27] Paine, "Countering Proliferation," iv.
[28] Paine, "Countering Proliferation," 14.
[29] Nelson, "Low-Yield."
[30] Ferguson, "Mini-Nuclear Weapons."

"suspected of shielding . . . nuclear-biological-chemical weapon facilities, ballistic missile basing, leadership, or top echelon command and control."[31]

5.1.4   Implementing the 2001 Nuclear Posture Review

The release of the 2001 Nuclear Posture Review and subsequent leaking of several sections of report announced an escalation of the campaign to develop low-yield weapons, and spurred additional resistance and concern among the administration's critics. As noted by Ferguson, under the heading of "Advanced Concepts Initiative," the NPR called for "improved earth penetrating weapons (EPWs) to counter the increased use by potential adversaries of hardened and deeply buried facilities."[32] Gronlund and Young said that "in keeping with its stated interest in increasing the roles for US nuclear weapons, the NPR also states that the review lead the National Nuclear Security Administration (NNSA) to undertake several initiatives to explore new kinds of weapons."[33] Arkin also observed that "in addition to the new weapons systems, the review calls for incorporation of 'nuclear capability' into many of the conventional systems now under development."[34] According to Lichterman, the NPR suggested "that the US was prepared to use nuclear weapons in a wide range of circumstances against a number of countries, including Iraq and North Korea," and that the following Department of Energy budget request, "called for 'advanced warheads concepts teams' at the nuclear laboratories to study various new

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[31] Paine, "Countering Proliferation," 14.

[32] "Nuclear Posture Review [Excerpts]," December 31, 2001, accessed June 25, 2009, http://www.globalsecurity.org/wmd/library/policy/dod/npr.htm and Ferguson, "Mini-Nuclear Weapons."

[33] Stephen Young and Lisbeth Gronlund, "A Review of the 2002 US Nuclear Posture Review," *Working Paper*, Union of Concerned Scientists, May 14, 2002, accessed July 21, 2009, http://www.ucsusa.org/assets/documents/nwgs/npr_review.pdf.

[34] William M. Arkin, "Secret Plan Outlines the Unthinkable," *Los Angeles Times*, March 9, 2002, accessed August 5, 2009, http://www.commondreams.org/views02/0309-04.htm.

nuclear weapons ideas."[35] These teams would permit the training of a "new generation" of weapons designers and engineers and permit research into new nuclear capabilities.[36] Henry Kelly, the President of the Federation of American Scientists, wrote in an editorial not long after the leaking of the NPR text that the NPR "suggests dramatic and dangerous changes in policy. Congress should reject a key result of it—the request for funds to study a new earth-penetrating nuclear weapon."[37]

The NPR was unprecedented in that it *explicitly* linked "nuclear weapons targeting with deterring the use of weapons of mass destruction," a move that was resisted by Bush's predecessors, who instead maintained a policy of "calculated ambiguity" that remained largely silent on the potential use of nuclear weapons by the United States in response to a chemical or biological weapons attack.[38] The NPR expressed many of the concerns laid out in the HDBT Report, noting that both likely and potential threats to the United States could utilize deeply buried bunkers to both develop and stockpile deadly chemical and biological weapons arsenals.[39] The call for research into new weapons designs and the modification of existing nuclear warheads was explicitly justified on the grounds that new nuclear (and conventional) capabilities were needed to deal with this threat.

The Bush administration brought the NPR's case for the development of new nuclear weapons and the potential modification of existing weapons for EPW missions before congress during both nuclear policy and appropriations hearings. John A. Gordon, the head of the NNSA,

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[35] Andrew Lichterman, "Sliding Towards the Brink: More Useable Nuclear Weapons and the Dangerous Illusions of High-Tech War," *Information Bulletin*, Western States Legal Foundation, March 2003, accessed August 9, 2009, http://www.wslfweb.org/docs/nucpreppdf.pdf.

[36] Phillip C. Bleek, "Energy Department to Study Modifying Nuclear Weapons," *Arms Control Today* (April 2002), accessed August 9, 2009, http://www.armscontrol.org/act/2002_04/nucapril02.

[37] Henry C. Kelly and Michael Levi,, "Nix the Mini-Nukes," *Christian Science Monitor*, March 28, 2002, accessed August 4, 2009, http://www.csmonitor.com/2002/0328/p09s01-coop.html.

[38] Janne E. Nolan, "Parsing the Nuclear Posture Review," Panel of the Arms Control Association, January 22, 2002, published in *Arms Control Today* (March 2009), accessed August 9, 2009, http://www.armscontrol.org/act/2002_03/panelmarch02.

[39] "Nuclear Posture Review [Excerpts]."

served as an administration point person during the 2002 hearings cycle. Gordon echoed the NPR's argument that the "character of the Nation's nuclear forces out to reflect the reality that the Cold War is over and that required deterrent capabilities may need to be different in the future." He further stated "current weapons in the stockpile cannot hold at risk a growing category of potential targets deeply buried in tunnel facilities, possibly containing chemical, biological, or command and control facilities." Gordon argued for funding of the Advanced Concepts Initiative, which "could provide the Nation with options that could be considered for future production and deployment." This research could only be successful, he cautioned, if Congress removed restrictions on the activities of the laboratories, arguing that the research "must be done in a manner that fosters intellectual creativity." He predicted a potential research snowball, since "studies tend to beget additional studies as designers investigate and better understand what kinds of nuclear weapons are technologically possible." Such research, Gordon suggested, would not only prove a "greater understanding of what is possible," but would also make it possible for "designers to become more creative in their approaches to defining new concepts (for new or modified nuclear weapons) that are responsive to emerging national security needs, and provides us insurance against technological surprise by new weapons development in other countries." According to Gordon, a focus of the program would be the RNEP, and he pushed for funding for a three-year feasibility study, and argued that such research would be in compliance with Furse-Spratt.[40]

Administration proponents were particularly critical of the Furse-Spratt limitations, which they argued had a "chilling effect" on potentially productive lines of inquiry by the national nuclear laboratories. In his testimony, Gordon argued that limits "could have a chilling

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[40] John A. Gordon, "Testimony before the Senate Armed Services Committee, Subcommittee on Military Procurement," June 12, 2002, accessed June 2, 2010, http://www.nnsa.energy.gov/mediaroom/congressionaltestimony/06.12.02.

effect on research and development activities associated with maintaining the stockpile," and Gordon's successor at the NNSA, Ambassador Linton Brooks, argued that this chilling effect "has hampered our scientists' ability to explore technical options of any yield because such options 'could lead to' designs of less than five kilotons." Brooks claimed that the laboratories "need the freedom to explore new concepts both to maintain and exercise their intellectual capabilities and to respond to needs that one day might be articulated by this or a future President."[41] Other advocates claimed that the funding requests were only for a "modest study," and that congressional objections to the proposal were, in the words of Payne, representative of the Left's "inability to move with the times."[42] A failure to initiate new research was especially dangerous, Younger cautioned, because "new technologies take at least a decade to move from the concept stage to the point where we can rely on them for our nation's defense." Younger concluded by arguing that "prudent thought given to this crucial subject will reap great dividends for the United States and for peace in the world."[43]

The program's critics were highly skeptical of this "chilling effect" argument. Paine argued both that the negative effects of the research outweighed any potential security gains and that such research was unnecessary. He noted "there is a yawning gap between the Pentagon and NNSA's assertions and the underlying technical realities" and "sufficient data already exists from decades of nuclear weapons experimentation to make definitive determinations regarding the military efficacy and moral acceptability of such weapons as instruments of preemptive

[41] Gordon, "Testimony" and Linton Brooks, "Testimony before the Senate Armed Services Committee, Subcommittee on Strategic Forces," March 24, 2004, accessed June 2, 2010, http://www.nnsa.energy.gov/mediaroom/congressionaltestimony/03.24.04.

[42] Keith B. Payne, "The Nuclear Jitters," *National Review*, June 30, 2003, accessed June 2, 2010, http://www.nipp.org/Publication/Downloads/Publication%20Archive%20PDF/the%20nuclear%20jitters.pdf.

[43] Younger, "Nuclear Weapons in the Twenty-First Century."

counter-proliferation." From Paine's perspective, "a new research effort in this area is not needed, and merely constitutes 'workfare' for the NNSA's nuclear weapons laboratories."[44]

The Bush administration lobbied heavily for both the removal of the Furse-Spratt research limitations and funding for research into both new low-yield weapons designs and the modification of existing warheads for use as lower-yield earth penetrating weapons, as evidenced by the budget requests in the FY2003, FY2004, FY2005, and FY2006 Department of Energy budgets. However, the administration met with unexpected resistance on Capitol Hill from both members of the democratic minority and key members of its own party. A particularly vocal and effective congressional critic of the administration's plans was Representative David L. Hobson (R-OH), the chair of the House Appropriations Subcommittee on Energy and Water. Hobson's committee oversaw funding requests for the Department of Energy, and he succeeded in 2005 in stripping out all money for these programs.[45] No funding was requested in the FY2007 budget, and the National Nuclear Security Administration announced that it had closed out the RNEP project.[46]

5.2   THE ADMINISTRATION'S CASE

The case for the development of earth penetrating and low-yield nuclear weapons rested upon three basic claims, each operant in the security frame. First, the administration argued that the post-Cold War threat environment contained a number of new threats, particularly from "rogue

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[44] Paine, "Countering Proliferation," 4.
[45] See Walter Pincus, "Rumsfeld Seeks to Revive Burrowing Nuclear Bomb," *Washington Post*, February 1, 2005, A2 and Jonathan Medalia, ""Bunker Busters": Robust Nuclear Earth Penetrator Issues, FY2005-FY2007," *CRS Report for Congress RL 32347*, February 21, 2006, 1.
[46] See Medalia, "Bunker Busters," 1.

states" and sub-state actors that could not be necessarily either deterred or defeated by existing weapons in the American conventional and nuclear weapons arsenals. The risks posed by hard and deeply buried targets were highlighted, as was the threat entailed by the rapid spread of nuclear, chemical, and biological weapons to new states and non-state actors. These arguments played upon the themes of "unpredictable" and "emergent" threats promulgated by the 2001 NPR, inciting fear of the unknown among the administration's audience. Second, the administration claimed that even if some weapons in the current arsenal *could* be used to "neutralize" such targets, either through massive yields, exotic yield effects, or the disabling of key bunker support infrastructure, the president and other policy makers would be unlikely to use such weapons in a crisis. Instead, the threat of large volumes of nuclear fallout and the subsequent potential for massive civilian casualties, coupled with the negative reputational effects of a seemingly disproportionate response, created a problem of "self-deterrence," undermining the credibility of US deterrence threats. The current arsenal was framed as unable to adequately perform its guardianship role, necessitating a switch to action to solidify America's nuclear dominance. Third, mini-nuke and bunker buster supporters argued that easing research restrictions and providing funding for "advanced concepts" research would lead to the relatively rapid development of low-yield and earth penetrating weapons. This minor policy change would restore confidence in America's nuclear shield, allowing the nation to defeat the threat posed by HDBTs while avoiding the trap of self-deterrence. Program proponents imagined deeply-penetrating, extremely low-yield weapons that could "surgically" remove dangerous elements of the weapons production and storage complexes of potential adversaries, an extension of "smart weapon" warfare from the conventional realm into that of nuclear warfighting. Nuclear weaponry would thus experience a "capability revolution" similar to that experienced by

conventional weaponry, restoring the American nuclear arsenal to its place at the pinnacle of modern military technology. This section summarizes and assesses each of these arguments in turn.

5.2.1 New Threats

The Los Alamos scientists' paper argued that "in a dramatically changing security environment, and with the new US strategy for responding to it, nuclear weapons remain critical to US national security as well as international security."[47] Although the supporters of low-yield weapons development saw a very dangerous geopolitical landscape that demanded a robust nuclear deterrent in all of its forms, they foregrounded the risks posed by the spread of biological and chemical weapons to revisionist states that they viewed as being on a collision course with the United States. Potential warfighting roles directed at the Russian (and later Chinese) arsenals, predominantly silo-busting, were sometimes mentioned as secondary rationales for low-yield weapons development, but typically either in footnotes or buried in the middle of longer technical papers or written testimony presented before Congress.[48] Although states such as Cuba, Libya, and Syria were mentioned as potential threats, most attention (and column space) was devoted to the "Axis of Evil" of President Bush's 2002 State of the Union Address: Iran, Iraq, and North Korea.

These emergent WMD capabilities were situated as a serious threat to American security. The Los Alamos scientists' paper claimed that there was a "growing potential for rogue states to develop, stockpile, and threaten to use chemical and biological weapons, and perhaps nuclear

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[47] Fearey et al., "An Analysis," 321.
[48] Robinson, "Pursuing a New Nuclear Weapons Policy."

weapons, in order to offset the overwhelming conventional military superiority of the United States."[49] Gordon's testimony suggested that these "threats from rogue states make it difficult to predict future deterrence requirements," meaning that the US "must be able to adapt its nuclear forces to changing strategic conditions."[50] As noted above, the House Policy Committee Report claimed that "rogue states" and terrorist "fanatics" were bent on using WMD against the US.[51] The Los Alamos scientists' paper predicted that "rogue state" and terrorist WMD "threats, or their implementation, could be designed to delay or disrupt coalition military operations," or to "intimidate or coerce regional states and allies." They feared that WMD "may be seen by some as a means to provide them the capability and leverage to exercise a degree of strategic deterrence against the United States and its allies."[52]

Force planners and nuclear scientists had warned about the potential risks posed by deeply buried targets for many years. The Robinson, Younger, and earlier Dowler/Howard papers all posited such bunkers as potentially requiring the development of new nuclear weapons.[53] An Air War College paper voiced similar concerns, noting that "deeply buried facilities have significant implications for national security, particularly in terms of giving a state an effective sanctuary for protecting its weapons or command and control functions from attacks with modern precision guided weapons."[54] However, the 2001 HDBT Report consolidated lingering concerns in the nuclear establishment about the dangers posed by the dual spread of WMD and advanced drilling technologies, and served to legitimize fears about the potential

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[49] Fearey et al., "An Analysis," 309.
[50] John A. Gordon, "Testimony before the Senate Armed Services Committee, February 14, 2002, accessed August 10, 2009, http://armed-services.senate.gov/statemnt/2002/Gordon.pdf.
[51] House Policy Committee, *Differentiation and Defense*, 3.
[52] Fearey et al., "An Analysis," 310.
[53] See Robinson, "Pursuing a New Nuclear Weapons Policy," Younger, "Nuclear Weapons in the Twenty First Century," and Dowler and Howard, "Countering the Threat."
[54] Eric M. Sepp, "Deeply Buried Facilities: Implications for Military Operations," *Occasional Paper 14*, Center for Strategy and Technology, Air War College, Air University, Maxwell Air Force Base, May 2000, accessed June 4, 2010, http://www.au.af.mil/au/awc/awcgate/cst/csat14.pdf.

threat posed by deeply buried targets and fuel arguments for the development of nuclear weapons tailored to address this threat. For example, the House Policy Committee Report cited the HDBT Report paper in arguing that "our potential enemies are burrowing in their chemical weapons capability, their conventional capability, their command and control, biological and nuclear weapons programs," which was particularly dangerous because "our current weapons systems cannot destroy targets that are deeply buried in tunnels" because "they were not designed to do so."[55]

Government officials, including Secretary Rumsfeld, represented these targets as a deadly threat, and argued in congressional testimony that the potential of new weapons designs justified research into the viability of the RNEP and other "bunker busting" weapons.

> The world is experiencing an enormous amount of underground tunneling and activities; activities underground that are for production, that are for manufacturing, that are for development, for storage. And the problem of not having visibility into them, and when one has visibility, not having the ability to penetrate and reach them, creates a very serious obstacle to the U.S. national security. And to the extent we say to ourselves, well, that's going to be the ultimate solution, we're unwilling to even study the idea of penetrating capability, and therefore, we make it advantageous for people to engage in that type of tunneling, I think that it would create an incentive rather than a disincentive.[56]

Testifying in his capacity as the administrator of the National Nuclear Security Administration, Brooks argued that the NPR "identified a number of capabilities shortfalls in the existing arsenal that could undermine deterrence in the future," identifying explosive yields as "too high" and claiming "that our systems are not capable against hard and deeply buried targets" and "they do

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[55] House Policy Committee, *Differentiation and Defense*, 7.
[56] Donald Rumsfeld, "Testimony before the Senate Armed Services Committee," February 13, 2003, accessed June 3, 2010, http://www.fcnl.org/issues/item.php?item_id=101&issue_id=48.

not lend themselves to reduced collateral damage and they are unsuited for defeat of biological and chemical munitions."[57]

Although defenders of low-yield weapons development expressed concern about the wide range of potential uses for deeply buried facilities, most advocates emphasized the dangers of the intersection of CBW proliferation and HDBTs. The HDBT Report claimed that "concern is growing about the use of HDBTs to protect WMD production and deployment, especially chemical and biological weapons," and that these "problems closely overlap" because such facilities "can hide research, production, weaponization, and storage functions related to CBW agents."[58] Former House Speaker Newt Gingrich constructed a scenario where the United States knew that an enemy state had developed chemical or biological weapons, but they were just out of reach, posing an unacceptable danger to the American people. Gingrich argued that "as tunneling technology improves," these potential adversaries "get closer to an ability to create a weapons-of-mass-death facility that is simply out of our reach." He claimed that "we must have the capability to destroy those sites," and that "the most promising option is a very accurate, limited and reliable low-yield nuclear weapon."[59] The Report to Congress argued that even if weapons in the current arsenal could physically destroy the facilities, it may not be enough "if a biological agent stored inside the facility—remains viable or is released into the environment."[60] The Air War College paper identified the potential presence of chemical or biological weapons as "most worrisome," and feared "that the destruction of these facilities may lead to the release

[57] Linton F. Brooks, "Testimony before the Senate Armed Services Committee, Subcommittee on Strategic Forces, April 4, 2005, accessed June 2, 2010, http://www.nnsa.energy.gov/mediaroom/congressionaltestimony/04.04.05.
[58] *Report to Congress*, 12.
[59] Newt Gingrich, "Consider Enemy Threat," *USA Today*, August 13, 2003, accessed June 2, 2010, http://www.aei.org/article/19021.
[60] *Report to Congress*, 9.

of these agents with devastating environmental and political consequences."[61] These threats were portrayed as particularly repulsive, particularly bioweapons, because their anonymous and self-replicating nature meant that any infected person would become a carrier of mass death and a small cadre of dedicated professionals could thus inflict mass death on innocent civilians.

5.2.2   Arsenal Deficiencies and Self-Deterrence

Mini-nuke advocates claimed that America's nuclear guardians were paradoxically limited in their effectiveness in addressing these new threats because of their massive capacity for destruction. Fear of potential negative consequences could constrain the president from credibly threatening a nuclear response to an attack against the homeland, undermining the guardianship function of nuclear weapons. Robinson and other proponents of low-yield weapons research and deployment saw self-deterrence as a serious threat to the credibility of the US nuclear deterrent, and argued that the development of low-yield weapons was necessary "because it is realized that the yields of the weapons left over from the Cold War are too high." [62] The Los Alamos scientists' paper posited that "legacy nuclear systems are not optimally designed for the new and emerging contingencies of this environment."[63] In arguing for their RCD (reduced collateral damage) strategy, which called for the development of low-yield weapons, the Los Alamos scientists asserted that "it has long been an axiom of US policy that any use of force, including nuclear force, should be accomplished in a manner that minimizes the collateral consequences of use."[64]

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[61] Sepp, "Deeply Buried Facilities."
[62] Robinson, "Maintaining a Viable."
[63] Fearey et al., "An Analysis," 321.
[64] Ibid.

Keith B. Payne, a former undersecretary of defense, a primary architect of the 2001 Nuclear Posture Review, and a long-time advocate of "tailored" deterrence strategies, argued that even permitting research into low-yield weapons would immediately bolster the effectiveness of the arsenal. He noted that opponents to the program "fail to grasp the most basic realities of deterrence," namely that "a deterrent threat must be believable" else they will not work. Research would thus enhance deterrence because it "may contribute to a deterrent that is believable, i.e. a deterrent that works." Payne identified potential self-deterrence as a primary barrier to the believability of American deterrence threats, arguing that "our existing arsenal's generally high yields and limited precision could inflict so many innocent casualties that enemies may believe the US president would be paralyzed." Payne likewise posited that low-yield weapons would serve as a cure to the problem of self-deterrence, noting that "precision, low-yield weapons that would inflict a much lower level of civilian casualties will appear much more credible to some opponents, and thus constitute a better deterrent to war."[65]

Mackubin Thomas Owens, a professor at the Naval War College concurred, arguing that "weapons in the current arsenal are too powerful to be used against even an adversary who employs WMD." He argued that deficiencies in US conventional capabilities against such hardened targets created an incentive for adversaries "to harden and bury installations so that they cannot be destroyed by conventional means—assuming that US planners will judge the use of high-yield nuclear weapons to be disproportionate." Owens claimed that "the only way to

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[65] Payne, "The Nuclear Jitters."

threaten such gadgets would be to use lower-yield nuclear weapons delivered by extremely accurate means."[66]

5.2.3   Promise of New Weapons

Supporters of additional research argued strongly that the program was necessary to bolster the American deterrent. The arsenal required an infusion of new technology and capabilities so that it could continue to serve as America's last line of defense. Payne claimed that the development of low-yield nuclear weapons would enhance two important deterrence functions. First, he argued that permitting "our scientists the freedom to study" this type of weapon would help "deter weapon of mass destruction (WMD) attacks on us and our allies." Payne argued that the program's critics were simply wrong, and failed to understand the basics of deterrence. He maintained that the believability of a deterrent threat is vital to its credibility. Payne wrote that "Threats that are known—or thought—to be empty just don't work; ask any parent or police officer." Research into low-yield weapons, Payne claimed, "may contribute to a deterrent that is believable, i.e. a deterrent that works." The current arsenal, he maintained, had only weapons that were so big that "enemies may believe the US president would be paralyzed by self deterrence" at the prospect of significant civilian casualties.

Second, Payne harkened to the NPR in arguing that low-yield weapons research would service the goal of "dissuasion," functioning to "reduce the incentives for rogue states to acquire WMD." Payne castigated critics who claimed that the US should "lead by example" and eschew the development of such weapons, instead claiming that the states developing WMD capabilities

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[66] Mackubin Thomas Owens, "Posturing: What Will Deter a Saddam Hussein or an Osama bin Laden from Using Chemical, Biological, or Nuclear Weapons," *National Review*, March 14, 2002, accessed August 9, 2009, http://www.nationalreview.com/comment/comment-owens031402.shtml.

were called "rogues" for a reason, "because they engage in the most egregious behavior and flout international norms when it suits them." Payne argued that such states would not avoid acquiring WMD because it was "really naughty of them" to acquire such weapons "simply because our scientists are barred from doing research on low-yield weapons." Payne advanced the realist claim that states acquire weapons to serve their own interests, observing that aspiring proliferators "have calculated that WMD can serve their political and military purposes," and that "if we gave up on nuclear research, or even our entire nuclear arsenal, rogues would still have the same incentives to acquire WMD." He concluded by arguing that a functional bunker buster "can help to devalue rogue WMD, by credibly threatening a costly reply if those WMD were ever used." Payne also described efforts to characterize his call for low-yield weapons research as a return to "nuclear warfighting" as "Cold War-vintage scare-mongering."[67] In Payne's eyes, his critics and those of low-yield weapons research initiatives were still living in the past, stating that their "core arguments . . . have not moved since the Cold War." He characterized such criticism as being drawn from the same "old set of talking points," applied to "contemporary events" in ways that "often sound absurd." Payne described the response to calls for new weapons designs and missions in the Nuclear Posture Review as being full of "overheated, partisan rhetoric, intended to frighten and politicize the unsuspecting." From his perspective, the arguments of the program's critics were "all nonsense . . . but scary nonsense— which is the point."[68]

According to the Los Alamos scientists' paper, RCD weapons, which include low-yield warheads, "clearly have the potential to enhance the credibility of deterrence, and in turn increase the likelihood that deterrence will succeed." They also dismissed concerns that the

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[67] Payne, "The Nuclear Jitters."
[68] Ibid.

development of such weapons would spur copycat or fear-driven proliferation, claiming that only a small number of RCD weapons would be developed and "small builds, or the demonstrated capability to produce them, should enhance deterrence and dissuasion of our adversaries and strengthen assurance of our allies."[69] The paper succinctly summarized what it saw as the deterrence-based case for low-yield weapons development, stating that such weapons would "enhance dissuasion and deterrence of WMD-capable adversaries by providing credible nuclear response options; increase the flexibility of nuclear strike forces for addressing diverse and uncertain threats; and better address the US policy objective to minimize collateral damage."[70]

Other pro-nuclear analysts supported these conclusions. Mark B. Schneider, a researcher for Payne's National Institute for Public Policy, recently argued that "only nuclear weapons can be used" effectively "against hard and deeply buried targets." He claimed that the U.S.'s failure to develop low-yield weapons "and the fact that existing ground-burst nuclear bombs cannot destroy all hard and deeply buried targets would affect both deterrence and, if deterrence failed, damage limitation."[71] These arguments also found their way into official Washington discourse and were advocated by administration officials. For example, Linton Brooks of the NNSA argued before an audience at the Carnegie Endowment that "deterrence requires we be able to hold at risk things which an opponent values," and that "since more and more we see potential opponents putting important military facilities underground," it is necessary to "determine the potential effectiveness" of low-yield weapons to "reflect a continued emphasis on enhancing deterrence."[72]

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[69] Fearey et al., "An Analysis," 322.
[70] Ibid., 313.
[71] Mark B. Schneider, "Prevention through Strength? Is Nuclear Superiority Enough?" *Comparative Strategy* 27:2 (April 2009), Academic Search Premier.
[72] Linton Brooks, "Undersecretary for Nuclear Security, before the Carnegie Endowment for International Peace," *Federal News Service*, June 21, 2004, Lexis-Nexis Academic..

The House Policy Committee Report opened by asserting that even though the geopolitical landscape had changed, that "deterrence—the capacity to dissuade others from taking action contrary to our vital interests by maintaining overwhelming power—will continue to be a vital part of our security strategy." However, the report argued that deterrence would only be effective if the US could "hold at risk things which are of value in each non-allied state that has nuclear weapons," and that this "differentiated" view of deterrence compelled the US to "maintain a variety of capabilities and options," which in turn would enhance the capacity of US leaders to "avoid war, control the escalation of a conflict, or end a conflict on terms acceptable to us."[73] The simple act of opening up research would, according to the report, help protect the US against the potential threats emanating from new adversaries, advising that "it is wise to have an active program considering these potential challenges and how we might address them."[74]

5.3   THE CRITICS RESPOND

An array of scholars, activists, and policy makers expressed their opposition to the Bush administration's campaign to develop low-yield and earth penetrating nuclear weapons. My survey of the controversy surrounding mini-nuke funding and development reveals that five major arguments were leveled by the administration's critics. First, they claimed that such weapons would not achieve their intended purpose, claiming that a combination of the "laws of physics" and the intrinsic limits of materials science conspired to make it impossible for any weapon to penetrate deeply enough to reliably destroy deeply buried facilities. Second, critics

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[73] House Policy Committee, *Differentiation and Defense*, 1.
[74] Ibid., 8..

argued that even successful mini-nukes would still create enormous fallout, risking significant numbers of civilian casualties and compromising the weapons' promised ability to address the problem of self-deterrence. Third, many advocates feared that even research efforts, and certainly deployments, would actually accelerate horizontal and vertical weapons proliferation as other states worked either to acquire a nuclear arsenal with which to deter an attack or modernized their arsenals, both to protect strategic weapons against US "bunker busters" and to mirror America's newfound nuclear capabilities. Fourth, critics maintained that the development and deployment of mini-nukes risked increasing the threat of nuclear conflict, positing that such weapons, which they alleged "blurred" the "firewall" between conventional and nuclear weapons, when combined with the Bush administration's preemption doctrine, significantly increased the probability of US nuclear strikes.. Finally, anti-administration advocates argued that other options, including conventional weapons, diplomacy, and multilateral arms control initiatives would be more effective in addressing the risks posed by WMD proliferation than would low-yield weapons. I argue that these arguments against the administration's proposal operated within the nuclear risk management frame, holding that nuclear weapons were themselves a potential source of instability and emphasizing the need to use collaborative security frameworks to decrease the threat posed by nuclear weapons and other potential sources of instability. This section details each of these arguments in turn in light of the responses from administration and outside defenders of the mini-nuke research initiative.

5.3.1 Deterrence Failure

Most critics of low-yield weapons believed that the program should not be pursued because the weapons themselves would not serve their designated purpose. If there was no operational or

deterrence benefit to be gained from deploying such weapons, even a small probability of downside risks would militate against their use. Critics argued that low-yield weapons could only be justified if they improved on existing conventional capabilities. This claim operated solidly within the risk management frame, which views nuclear weapons as imperfect tools that can be used to accomplish many, but not all, American security objectives. According to Nelson, the "maximum penetration depth" of even nuclear weapons "is severely limited if the missile casing is to remain intact." His calculations indicated that the "upper bound to the penetration depth" of a missile was "roughly 10 times the missile length" in theory, and that "in actual practice the impact velocity and penetration depth must be well below this to ensure the missile and its contents are not severely damaged." A paper authored by a number of luminary nuclear scientists led by Sidney Drell, a professor emeritus at Stanford, suggested that "taking into account realistic material depths, about 50 feet is the maximum depth to which a warhead dropped from the air into dry rock soil could maintain its integrity until detonated. This is true even with impact at supersonic speeds."[75] This meant that it would be impossible to develop a kinetic energy weapon that could "penetrate deeply enough into the earth to contain a nuclear explosion."[76] Similar conclusions were reached by many other researchers.[77]

These arguments served to blunt the administration's claim that low-yield nuclear weapons could surpass the ability of conventional weapons in holding HDBT at risk. A study sponsored by the Union of Concerned Scientists argued that "an earth penetrating weapon using the 1.2 megaton B83 warhead—the highest-yield weapon in the US nuclear stockpile—could

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[75] Sidney Drell et al., "A Strategic Choice: New Bunker Busters Versus Nonprolfieration," *Arms Control Today* (March 2003), accessed June 2, 2010, http://www.armscontrol.org/act/2003_03/drelletal_mar03.
[76] Nelson, "Low-Yield."
[77] See Paine, "Countering Proliferation," vi; Benjamin Phelan, "Buried Truth: Debunking the Nuclear 'Bunker Buster,'" *Harper's*, December 2004, accessed June 2, 2010, http://www.harpers.org/archive/2004/12/0080324; and Gronlund, Wright and Nelson, "Earth Penetrating Weapons."

crush underground bunkers to a depth of about 1,000 feet. Deeper bunkers could be constructed with modern tunneling equipment, and are essentially invulnerable to nuclear attack."[78] An exposé on "bunker busters" published in *Harper's* claimed that "even if earth penetrators could be made to perform at their theoretical limit, the only gain would be a temporary advantage over countries that have not yet dug bunkers at a depth that no weapon, no matter how massive, could ever reach." The article concluded that "as soon as that comparatively easy engineering feat is completed, the nuclear weapon that spurred it on will have brought about its own obsolescence."[79] Charles V. Pena, an analyst with the libertarian Cato Institute, claimed that this would end in an offense/defense contest that the bunker builder was likely to win, where "the United States could find itself in a continuous and potentially expensive action-reaction cycle with no real military or deterrence benefit."[80]

Critics even argued that the development of new nuclear weapons would actually increase the nuclear threat posed to the U.S., confounding advocates' deterrence claims. Pena argued that if the realist assumptions of low-yield weapons proponents were correct, "the acquisition of nuclear weapons" might be "thought to be the only way to deter the United States from engaging in preemptive regime change." States may even, in the face of a perceived inevitable attack, come to view "alliances with terrorist organizations . . . and possibly supplying terrorists with WMD—as the only way to retaliate against the United States." Even if they do not turn to ties with terrorist groups, states "may feel they have nothing to lose by striking first at the United States (knowing that waiting means certain defeat)."[81]

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[78] Gronlund, Wright and Nelson, "Earth Penetrating Weapons."
[79] Phelan, "Buried Truth."
[80] Pena, "Mini-Nukes."
[81] Ibid.

Program critics also contested whether low-yield weapons were necessary to dissuade and deter chemical and biological weapons development and use. A report for the Union of Concerned Scientists (UCS), authored by Nelson, Lisbeth Gronlund, and David Wright of MIT's Security Studies program maintained that "a nuclear EPW would also likely be ineffective against underground bunkers containing chemical or biological weapons," arguing that a nuclear attack would not incinerate the CBW agents, but instead "could release active agents into the environment," which in turn "could kill thousands of unprotected civilian or military personnel in a large area downwind—in addition to expected casualties from radioactive fallout, which could number in the millions."[82] This is the case because a nuclear warhead "would have to detonate very close to the actual containers," an event that "is highly unlikely given that in most cases the bunker location and underground geometry would not be known with any precision." In other words, "simply blowing up a bunker filled with chemical or biological agents—even using a nuclear weapon--may thus have the undesirable effect of dispersing the agents, rather than destroying them."[83] A blue-ribbon panel at the National Academy of Sciences concluded that only a direct hit would accomplish the desired goal, stating "an attack by a nuclear weapon would be effective in destroying the agent only if detonated in the chamber where agents are stored," and that "if the agents are not in a single room . . . not more than a region of a single tunnel could be irradiated by a single nuclear explosion."[84] Phelan argued that there was no certainty that even a direct hit would produce the desired results, claiming that "a well-designed granite bunker could withstand four times the shock produced by such an explosion," and "in the likely event that a canister is ruptured and not destroyed, the chemical agent would escape . . .

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[82] Gronlund, Wright, and Nelson, "Earth Penetrating Weapons."

[83] Ibid.

[84] National Academy of Sciences, National Research Council, Division on Engineering and Physical Sciences, *Committee on the Effects of Nuclear Earth-Penetrator and Other Weapons* (Washington: National Academies Press, 2005) (prepublication copy), 111-112.

into the earth; a split second later it would be blasted into the air, carried away in the fallout cloud."[85] Paine concluded that the costs outweighed any potential benefits, noting that "no US military interest in responding to or averting a chemical or biological attack on its combat forces . . . would justify the disproportionate harm likely to be inflicted on non-combatants and the natural environment from the use of a nuclear weapon," describing the preemptive use of nuclear weapons against potential CBW threats as "morally abhorrent" and "constituting an anticipatory breach of international humanitarian law."[86] Lichterman identified an additional danger, arguing that this new emphasis on the use of nuclear weapons to deter CBWs could inspire other states to follow suit, providing an "increased motivation to acquire nuclear arsenals," and that low-yield weapons "could damage the nuclear nonproliferation consensus throughout the world."[87]

Most of the responses to these arguments offered by supporters of mini-nuke research and deployment are outlined in the above section. Researchers such as Payne claimed that Nelson and other critics were overly skeptical in their assessments of the ability to penetrate to great depths and destroy deeply buried facilities, arguing that advancements in material sciences and warhead design made any "physical laws" fungible as they applied to earth penetrating weapons. However, perhaps the most effective rejoinders addressed the risk calculus of potential adversaries, with administration supporters arguing that even modestly enhanced "bunker busting" capabilities would serve to dissuade many leaders from pursuing WMD programs in the first place, and that the prospect of future advances in US HDBT-destruction capabilities would only enhance this dissuasive effect. As Payne emphasized, deterrence threats simply needed to

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[85] Phelan, "Buried Truth."
[86] Paine, "Countering Proliferation," 17.
[87] Lichterman, "Looking for New Ways."

be believable to be effective, and in the judgment of program supporters, low-yield and earth penetrating weapons would act as a substantial deterrent to many revisionist states.

5.3.2   Fallout and "Collateral Damage"

Low-yield weapons critics disputed the claim that such weapons would be "cleaner" than other nuclear weapons, arguing that any nuclear weapon with earth penetrating capabilities would produce massive fallout and a correspondingly high level of environmental contamination and potential for civilian deaths. This objection spoke strongly to the downside risks of nuclear deterrence posited by the risk management frame, highlighting the potential dangers of an overly aggressive nuclear weapons posture. Drell et al. maintained that even a one-kiloton warhead, "detonated at a depth of 20-50 feet," would potentially "eject more than 1 million cubic feet of radioactive debris from a crater about the size of ground zero at the World Trade Center—bigger than a football field." They argued that this quantity of fallout dwarfed that of the much larger Hiroshima bomb, which was detonated at altitude "in order to minimize radioactive fallout by not digging any crater."[88] Paine noted that the more likely shallow earth penetration outcome "actually increases the amount of fallout for a given yield, at and even beyond probably achievable penetration depths."[89]

Administration critics also contested the claim that low-yield weapons would not produce any "collateral damage." Nelson argued that "the use of any nuclear weapons capable of destroying a buried target that is otherwise immune to conventional attack will necessarily produce enormous numbers of civilian casualties." He claimed that because it is impossible to

[88] Drell et al., "A Strategic Choice."
[89] Paine, "Countering Proliferation," 4-6.

create an earth penetrating missile that can dig deep enough to contain even a small nuclear explosion, it would "simply blow out a massive crater of radioactive dirt, which rains down on the local region with especially intense and deadly fallout."[90] Nelson pointed to the 1960s-era Ploughshare program to illustrate this claim. Ploughshare was an effort "to investigate the possible use of nuclear explosives for excavation purposes." According to Nelson, "in addition to the immediate effects of blast, air shock, and thermal radiation, shallow nuclear explosions produce especially intense radioactive fallout," noting that "in the Ploughshare tests, roughly fifty percent of the total radioactivity produced in the explosion was distributed as local fallout."[91] Nelson claimed that the DoE's own practices at the Nevada Test Site (NTS) substantiated his fallout claims, because the NTS buried its tests at great depths for even small explosions ("650 feet for a 5 kiloton explosive – 1300 feet for a 100-kiloton explosive") to avoid surface contamination.[92] Nelson concluded that even a "best case" scenario was potentially deadly, noting "even if an earth penetrating missile were somehow able to drill hundreds of feet into the ground and then detonate, the explosion would likely shower the surrounding region with highly radioactive dust and gas."[93]

Most administration critics claimed that any fallout and casualty figures should be viewed as highly conservative, because they assumed much smaller warhead yields than would be needed in practice. Proving that the use of such weapons would produce large numbers of civilian casualties would not only blunt the effectiveness of low-yield weapons in overcoming self-deterrence problems, but also demonstrate that nuclear weapons were far more dangerous than their conventional counterparts. The Drell et al. paper argued that "against really deep

[90] Nelson, "Low-Yield."
[91] Ibid.
[92] Ibid.
[93] Ibid.

targets, yields in the hundreds of kilotons would be required." They observed that "even at the low-yield end of the repertoire, there will be major collateral damage because the blast will eject radioactive debris."[94] The NSA agreed, claiming that nuclear warheads would have to become considerably bigger as bunker depth increased, with "the calculated limit for holding hard and deeply buried targets at risk of destruction with high probability using a nuclear EPW is approximately 200 meters for a 300 kiloton weapon and 300 meters for a 1 megaton weapon."[95] The Harper's report described the idea that low-yield weapons could be "clean" bombs as a "fantasy," claiming the use of such weapons risked "expelling a hot fallout cloud in what is known as a "base surge'", which "are more dangerous that traditional fallout clouds because they are more toxic, containing irradiated particles" and "spread more quickly, sweeping across the surface of the earth in every direction, outward rather than upward."[96]

The NAS study also contested the administration's claim that blast effects could be contained, concluding that "current experience and empirical predictions indicate that earth-penetrator weapons cannot penetrate to depths required for total containment of the effects of a nuclear explosion."[97] Paine agreed with this assessment, claiming that "an EPW at any yield and penetration depth will create an open crater or pathway through which radioactive gases and debris from an explosion would be dispersed into the above-ground environment." He argued that "the laws of physics confound the claims . . . that significant technical potential exists for the development of a militarily effective . . . EPW with 'acceptable' collateral damage characteristics."[98] The NAS concluded that casualties would be tremendous if low-yield weapons were to be used in urban areas, stating that "the number of casualties can range from thousands

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[94] Drell et al., "A Strategic Choice."
[95] National Academy of Sciences, *Committee on the Effects*, 110.
[96] Phelan, "Buried Truth."
[97] National Academy of Sciences, *Committee on the Effects*, 110.
[98] Paine, "Countering Proliferation," 1.

to more than a million, depending primarily on weapon yield."[99] The more recent study by Nelson, Gronlund, and Wright argued that this fallout would cause substantial casualties, especially in densely populated areas, with "the number of deaths" potentially "exceed[ing] a million, and the number of people with increased cancer risks could exceed 10 million."[100]

Nelson's findings about the physical limitations of low-yield weapons and their delivery systems also implied that any low-yield weapon could not be used "without causing massive radioactive contamination," making it likely that "no American president would elect to use nuclear weapons in this situation—unless another country had already used nuclear weapons against us."[101] Paine argued that "the intense fallout from a US preemptive strike on an HDBT . . . is likely to cause severe environmental damage, irrespective of the immediate extent of death and injury to surrounding populations . . . and this damage alone is a violation of the laws of war," meaning that the use of low-yield weapons would likely produce the same negative reputational effects as the use of larger weapons currently in the US arsenal.[102]

Administration advocates contested these arguments, claiming that low-yield weapons were far superior to any options in the current US arsenal and would be far less likely to cause significant civilian deaths. They argued that the nuclear arsenal was currently deficient, a problem that could only be addressed by adding new weapons to the arsenal. Many supporters claimed that the fallout effects were overblown, and that deeply-penetrating weapons would be much smaller than current alternatives and that the blast effects would be largely contained within the target bunker. The Los Alamos scientists' paper, for example, conceded that there would be some volume of fallout, but noted that "the degree of contamination and resulting

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[99] National Academy of Sciences, *Committee on the Effects*, 111.
[100] Gronlund, Wright and Nelson, "Earth Penetrating Weapons."
[101] Nelson, "Low-Yield."
[102] Paine, "Countering Proliferation," 17.

radiation dose must be put in perspective." They argued that the "radius of certain lethality from a buried detonation" would be far less than for a surface detonation that produced the same effect and that "the area contaminated by fallout would be about 15 times less." The scientists concluded that low-yield weapons should not be seen "as an alternative to conventional weapons, but rather to meet US policy to minimize collateral damage while working to increase the credibility of nuclear deterrence and dissuasion."[103]

5.3.3   Proliferation

Administration critics argued that the development of low-yield weapons would disrupt critical arms control initiatives designed to check the spread of nuclear weapons and thus increase the security challenges faced by the United States. These critics argued that the risks posed by nuclear weapons were better managed by diplomacy and international cooperation than through an enhanced threat of force. Here again, nuclear weapons are a tool used to protect some American interests, and the risks and benefits of the use of such weapons must be carefully weighed against both their potential drawbacks and other policy alternatives.

A study sponsored by the Union of Concerned Scientists (UCS) highlighted the proliferation risks of low-yield weapons development, arguing that if a powerful nation like the United States, "with unquestioned conventional superiority, chooses to rely on nuclear weapons, then weaker states . . . would apparently have a far greater need for nuclear weapons." The UCS authors claimed that low-yield weapons are self-defeating, because "ultimately, this policy of

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[103] Fearey et al., "An Analysis," 318.

first use will encourage the proliferation of nuclear weapons."[104] Lichterman echoed these concerns, claiming that efforts to develop low-yield weapons threaten the global nonproliferation regime "by calling into question the sincerity of the US commitment to its Nuclear Non-proliferation Treaty obligations to 'pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race.'"[105] The UCS study contended that by these efforts, "the United States would undermine the continued viability of the NPT," imposing enormous security costs on the US. The Drell et al. paper concluded that the consequences of undermining the NPT regime outweighed any positive deterrence effects, arguing that "rather than developing nuclear devices for new tactical missions, the focus of the US nuclear weapons program should continue to be maintaining a credible strategic deterrent and preventing the spread of nuclear weapons to other countries," and that "a weakening or collapse of the worldwide cooperative effort to counter nuclear proliferation would hurt US interests more than any gains from testing and building new low-yield nuclear weapons would help."[106] Drell et al. were particularly concerned that the development of low-yield weapons would require explosive testing, arguing that "a decision to resume testing . . . could deal the regime a fatal blow while providing the United States with a capability of questionable military value."[107] These concerns were shared by many other analysts.[108]

Additionally, Jonathan Granoff, President of the Global Security Initiative, claimed that "the lowered threshold for using nuclear weapons undercuts the moral prohibition against any

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[104] Gronlund, Wright and Nelson, "Earth Penetrating Weapons."
[105] Lichterman, "Looking for New Ways."
[106] Drell et al., "A Strategic Choice."
[107] Ibid. See also Nelson, "Low-Yield," and Andrew Lichterman, "Sliding Towards."
[108] See Paine, "Countering Proliferation," and Phelan, "Buried Truth," and Pena, "Mini-Nukes."

such use."[109] Pena concluded "that mininukes would threaten international arms control and nonproliferation efforts."[110] Lichterman even argued that other states would find the need to match the new US capabilities, and that as "other militaries . . . demand expanded weapons programs to offset the possibility of an insurmountable US advantage . . . the conditions for a renewed arms race are in place."[111] Paine contended that the deployment of low-yield weapons would "prompt US military planners to identify a range of shallow-buried targets . . . all the while ignoring the fact that such actions will tend to legitimize nuclear proliferation, and encourage other countries to make similar deterrent threats to employ nuclear weapons."[112]

"Bunker buster" advocates questioned whether the development and deployment of such weapons will increase the threat posed by the proliferation of weapons of mass destruction. They claimed that US nuclear policy had little effect on the weapons policies of other states, and that the dangers posed by "rogues" could only be addressed through a strong and capable nuclear deterrent. Brooks argued that "our efforts aren't likely to have any impact on states whose proliferation activities seem to march forward independently of the US nuclear program." He pointed to the current drawdown in US nuclear forces, coupled with a relative lack of US modernization, and claimed that "there is no evidence at all that these developments have caused North Korea or Iran to slow down their programs to acquire capabilities to produce nuclear weapons."[113] Payne claimed that the development of low-yield weapons would do nothing to increase proliferation incentives, arguing that "potential enemies want WMD for their very own reasons," and that "if we gave up nuclear research, or even our entire nuclear arsenal, rogues

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[109] Jonathan Granoff, "Pentagon Report Reveals Dangerous Shift in US Nuclear Doctrine," Global Security Institute, March 12, 2002, accessed August 5, 2009, http://www.gsinstitute.org/archives/000086.shtml#000086.
[110] Pena, "Mini-Nukes."
[111] Lichterman, "Looking for New Ways."
[112] Paine, "Countering Proliferation," 3.
[113] Brooks, "Undersecretary."

would still have the same incentives to acquire WMD."[114] The Los Alamos scientists likewise concluded that the positive effects of low-yield weapons more than outweighed any drawbacks, arguing that "if US allies and friends are assured of America's willingness and capability to back up its security assurances regarding WMD attacks, they are much less likely to feel the need to respond to possible security concerns by proliferating." They also claimed that adversaries were more likely to be dissuaded because mini-nukes would change their risk calculus, "mak[ing] the risk of a nuclear response unacceptable to any adversary contemplating WMD acquisition or use." They concluded that "RCD nuclear weapons clearly can enhance this [deterrence] credibility in the eyes of an ally and create disincentives regarding an adversary's interest in pursuing (or using) WMD."[115]

5.3.4   Thinkability and Preemption

Critics of efforts to develop low-yield weapons contended that their development "simply makes their eventual use more likely." Low-yield weapons were even more dangerous than the weapons currently in the arsenal precisely because they were more likely to be used, with unpredictable and potentially catastrophic consequences. These dangers suggested to the administration's critics that the development of low-yield weapons was "too risky," and that the government should pursue alternative means of addressing WMD-related security threats. For example, Nelson noted that the original 1994 law that prohibited laboratories from conducting research on weapons with yields less than 5 kilotons (KT) did so because such weapons "blur the distinction between nuclear and conventional war." Such a move, Nelson contended, would "risk blurring

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[114] Payne, "Nuclear Jitters."
[115] Fearey et al., "An Analysis," 321.

the now sharp line separating nuclear and conventional warfare, and provide legitimacy for other nations to similarly consider using nuclear weapons in regional wars."[116] The UCS argued that low-yield weapons confounded the "sole purpose of nuclear weapons," which "should be to deter the use of nuclear weapons and, if necessary, respond to nuclear attacks.[117] Andrew Lichterman, an analyst with the Western States Legal Foundation, contended that research into "more useable" weapons designed "to destroy or disable hardened targets" runs the risk of blurring "the distinction between conventional and nuclear warfare by lowering the political obstacles to the use of nuclear weapons." Lichterman maintains that the addition of low-yield weapons to the US arsenal "makes it more likely that nuclear weapons will be used against states that do not possess nuclear weapons," particularly in situations where "military and political decision makers believe those troops are threatened by chemical or biological warfare."[118] Nelson argued that these claims are designed to render small nuclear weapons as "acceptable tools to be used like conventional weapons."[119] Henry Kelly and Michael Levi of the Federation of American Scientists worried that a US nuclear strike against WMD facilities "would destroy . . . US moral leadership," increasing the "probability that nuclear arms would be used against it."[120]

Pena maintained that low-yield weapons have "no other purpose . . . than to be used, especially in a preemptive fashion," raising the prospect of nuclear first strikes being a regular component of the implementation of the Bush Doctrine. Pena argued that the threat of "preemptive use of mini-nukes" runs the risk of "changing the nuclear or other WMD calculus and threshold of other countries," who, worrying that "the United States has no compunction about using nuclear weapons preemptively," might "have less incentive to be restrained in their

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[116] Nelson, "Low-Yield."
[117] Gronlund, Wright and Nelson, "Earth Penetrating Weapons."
[118] Lichterman, "Looking for New Ways."
[119] Nelson, "Low-Yield."
[120] Kelly and Levin, "Nix the Mini-Nukes." See also Paine, "Countering Proliferation," vi.

actions," creating a deadly "nothing-to lose" position that "could precipitate the first use of WMD (the very action that advocates of mini-nukes claim such weapons are intended to deter) in an effort to avoid having their WMD destroyed by a US preemptive attack."[121] Kelly also cautioned that administration claims about the "safer" nature of low-yield weapons was fundamentally flawed, arguing that "the idea is that a nuclear weapon could penetrate so deep that its explosion would be contained . . . and a nuclear weapon that kills fewer people is somehow less nuclear. This is wrong—a nuke is a nuke."[122] Paine concluded that an effective low-yield arsenal would create "use or lose" pressures for "rogue" and terrorist adversaries, and thus perversely increase the likelihood that such weapons would be targeted at the United States.[123]

Pena described the combination of the Bush doctrine and low-yield weapons development as a toxic mixture that would leave the United States "vulnerable to potentially catastrophic attacks that can neither be deterred nor adequately defended against." Pena also cited Stanford University's Scott Sagan in arguing that low-yield weapons can create a "commitment trap," where concerns about "maintaining the reputation for honoring one's commitments" might lead a future president to see low-yield weapons as more usable and "feel it is easier to use them to honor a commitment, even when the use of such weapons is not otherwise warranted." Pena was also concerned that mini-nukes might actually "encourage nuclear planners to identify shallower targets and lesser contingencies for 'credibly' threatening the use of nuclear weapons."[124]

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[121] Pena, "Mini-Nukes."
[122] Kelly and Levin, "Nix the Mini-Nukes." See also Paine, "Countering Proliferation," vi.
[123] Pena, "Mini-Nukes."
[124] Ibid.

Supporters of research and development efforts in the field of low-yield weapons contested the claim that their development would lower the threshold for the use of nuclear weapons in a conflict. In a *Contemporary Strategy* article, Payne argued that his critics had made "the mistake of not distinguishing the question of threat credibility, which is in the opponent's eyes, with the question of whether a President believes a nuclear weapon actually should be employed." He claimed that the "two issues are wholly unconnected: whether a threat appears credible to an opponent need have little to do with a President's willingness actually to use the weapon." Payne pointed to the behavior of Saddam Hussein during the first Gulf War, arguing that Hussein failed to carry through on threats to use chemical and biological weapons because he "perceived a credible nuclear threat when US leaders had no interest in using nuclear force." For Payne, "credibility" and "usability" "are not synonymous."[125] Payne also argued that the US had had low-yield weapons in past decades, and that the possession of such weapons had not lowered the nuclear threshold. He stated, "We must not reject deterrent threat options that may be more credible to an opponent in the mistaken belief that because a threat may be more credible to an opponent, a President would correspondingly be more likely to execute that threat."[126] The Los Alamos scientists' paper argued that "the possession of RCD capabilities would likely be more effective than today's stockpile in preventing the occurrence of circumstances under which a President would be forced to consider nuclear options." They also claimed that the threshold for nuclear use would remain high, addressing their opponents' "preemption" claims, and noting that "any decision to use nuclear weapons has always been and will always continue to be an agonizing one for any US President, even in the direst of

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[125] Keith B. Payne, "The Nuclear Posture Review and Deterrence for a New Age," *Comparative Strategy 23:4-5* (October 2004), Academic Search Premier.
[126] Payne, "The Nuclear Posture Review."

circumstances."[127] Brooks mirrored these claims, stating that "US research weapons won't blur the line between conventional and nuclear weapons or make nuclear use more likely," claiming that this argument was not based on "just an assertion," but on "data," pointing to the existence of "very low yield" weapons in the US stockpile since the 1950s. According to Brooks, "there is simply not evidence that simple possession of these weapons made nuclear use by the United States more likely." He also disputed the idea that the "president would be inclined to employ any nuclear weapon . . . in anything but the gravest of circumstances," asserting that "the nuclear threshold for the United States has been, is, and always will be very high."[128]

5.3.5 Alternatives

Finally, critics of the mini-nukes scheme deployed the risk management frame in arguing that a number of alternatives were far superior to low-yield weapons development in addressing the problems of proliferation of WMD and the spread of advanced mining technologies. As noted earlier in this section, many advocates, including Drell et al. and others, believed that the negative effects of low-yield weapons research on global nonproliferation norms far outstripped any deterrence benefits. Arms control processes were more effective at addressing the threats posed by WMD proliferation than were any incremental gains in the U.S.'s ability to destroy deeply buried bunkers. Other critics, including Nelson, argued that the US already had the conventional GBU-29 in its arsenals, which could already destroy "hardened targets buried within approximately 50 feet of the surface," noting that the "precision, penetrating capability, and explosive power of these conventional weapons has improved dramatically over the last

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[127] Fearey et al., "An Analysis," 320.
[128] Brooks, "Undersecretary."

decade, and these trends will certainly continue." He concluded that "in the near future, the United States will deploy new classes of hard target penetrators which can land within one or two meters of their targets."[129] Additionally, Paine and other advocates argued that prospective weapons designs were unlikely to improve on the existing B61-11 nuclear warhead, noting that smaller weapons might "create relatively less, but still very substantial levels of fallout over a wide area," while very small weapons could not destroy any more targets than the B61-11.[130]

Schneider and other supporters of low-yield weapons contested the assertion that conventional weapons could serve as an adequate replacement for nuclear warheads. Schneider cited the NAS study, which concluded that "conventional weapons are not likely to be effective against targets that the penetrator cannot reach," and cited the inability of conventional munitions during Operation Allied Force "to destroy an underground airbase." Schneider even claimed that leaders like Kim Jong Il of North Korea would be "likely to take considerable notice of either the presence or absence of a US capability that could effectively attack leadership protection facilities." Schneider also cited a study from the Defense Science Board, which identified considerable deficiencies in conventional weapons, including their "lack of sufficient lethality," their potential to "cause excessive collateral damage when attacking WMD," the fact that they "are less robust to inadequate target information and less forgiving to delivery inaccuracies than desired," their potential inability to operate reliably "in nuclear and EMP environments," and their inability to "penetrate deeply enough."[131] The Younger paper argued that simple countermeasures would readily defeat most potential conventional weapons, including "steel

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[129] Nelson, "Low-Yield."
[130] Paine, "Countering Proliferation," 9-10.
[131] Schneider, "Preventing Through Strength?"

netting, boulder field, or decoys."[132] The Los Alamos scientists' paper claimed that conventional weapons could not address the problem of potential dispersal of CBW agents," while weapons in the current arsenal were too large to be usable. They also claimed that the B61-11 was ineffective because it "cannot survive delivery into certain types of terrain in which such facilities may be located."[133]

5.4   AN ASSESSMENT

Two aspects of the mini-nukes controversy warrant additional analysis. First, the case study highlights the importance of "nukespeak" as a persuasive tool used by members of the nuclear establishment to justify potentially provocative nuclear policies. Numerous instances of "nukespeak" appear in administration defenses of the mini-nuke program, the analysis of which permits us to draw parallels with Cold War and post-Cold War nuclear advocacy strategies. Second, the mini-nuke dispute highlights several important aspects of the security frame's deployment of threat discourse. In particular, the mini-nuke debate witnesses something of a debut of post-9/11 "terroristic threats" as a justification for a continued reliance on nuclear weapons.

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[132] Younger, "Nuclear Weapons in the Twenty-First Century."
[133] Fearey et al., "An Analysis," 311-312.

5.4.1   Nukespeak

The mini-nuke controversy witnessed the deployment of numerous examples of nukespeak, euphemisms and metaphors that render discussion of nuclear weapons more palatable for public audiences and for planners and policy makers who would otherwise be forced to confront the harsh realities involved in contemplating the actual use of nuclear weapons. Such language was used frequently by nuclear force planners during the Cold War, and my analysis of the CTBT and 2001 NPR controversies suggests that this practice continues to this day.

"Domesticating" terms and metaphors were used by administration advocates throughout the mini-nuke debate. Schiappa describes "domestication" as the use of everyday language to describe the extraordinary in ordinary terms."[134] In the context of nuclear weapons, domesticating terms and metaphors are used to make "otherwise objectionable nuclear weapons, strategy, and war" seem "friendly," a process that renders the procurement of such weapons "as the result of public policy decisions which are made more acceptable."[135] Schiappa cautioned that we should be wary of the deployment of domesticating terminology, because it "combines some of the most potent trivializing sources available in a culture, and, hence, is a powerful rhetorical strategy."[136]

Perhaps the most obvious domesticating term is "mini-nuke" itself. The choice of "mini" over other, potentially more accurate, diminutives such as "small" or "less destructive" cannot be accidental. In our vernacular, an object is deemed "mini" only when it is a very small, sometimes a cartoonish or comic facsimile of the "real" or "authentic" item. Just as "miniskirts" are skirts

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[134] Schiappa, "Naming as Argument," 132.
[135] Ibid., 132-3
[136] Ibid., 132.

which do not really leave much to the imagination about the wearer's legs, and "Mini-Coopers" are tiny, seemingly almost clown-sized cars to persons normalized to American taste in automobiles, and "Mini-Me" is the undersized, comic sidekick of the incompetent super villain in the Austin Powers series of spy spoof films, a "mini-nuke" is intended to be "less" than a "regular" or "real" nuclear weapon. Mini-nukes are intended to be thought of as less dangerous, less destructive, and less destabilizing. The term itself helps persuades its users and audience members that there is a meaningful difference between such weapons and "real" nuclear bombs, and that the development and even use of mini-nukes can be pursued with far less risk. Other rhetorical scholars, including Schiappa, have argued that the term "nuke" domesticates nuclear weapons, making them appear less alienating and their potential use less threatening.[137] "Mini-nuke" is thus a potent rhetorical package.

"Bunker buster" is another, potentially dangerous, domesticating term. Bunkers are likely familiar to most members of Congress and the public, whether from portrayals in World War Two movies and books or from real-life experience derived from air- or nuclear-attack drills during height of the Cold War. The term "bunker" is likely to connote a small cavern, natural or human made, accessible through a relatively short tunnel and buried a few feet, or perhaps tens of feet, underground. Such an image departs significantly from the reality of the military targets that "bunker busting" nuclear bombs are intended to destroy, which are often drilled hundreds of feet underground into solid basalt, accessible through narrow and protected access corridors, and which frequently involve enormous complexes designed to survive for months, or even years, without outside supply. It is easy for a lay audience to imagine that a relatively small explosion could destroy a conventional bunker, which belies the fact that it requires absolutely enormous

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[137] See Schiappa, "Naming as Argument," and Schiappa, "Rhetoric of Nukespeak."

explosion-induced shockwaves to harm deeply buried bunkers. Labeling mini-nukes as "bunker busters" or serving a "bunker busting" function misleads about the sheer size of the explosive forces generated by such weapons.

Bureaucratizing discourse, which "sanitizes or technologizes nuclear concepts," was also used frequently in the mini-nuke debate. The alleged, "emergent" threat itself was frequently described in terms of an imposing acronym, a "HDBT" (hard and deeply buried target), which were both labeled as intrinsically threatening because of their capacity to harbor WMD research labs, production facilities, and stockpiles, and whose destruction was authorized and sanitized by the application of a military-sounding label. The use of the acronym obscured the fact that these "targets" were facilities that were staffed by real human beings, and that these facilities themselves may, or may not, be involved in nefarious activities designed to threaten the American homeland. The bureaucratic shorthand reduced thousands of diverse facilities down to a single category, constituting a single category of threat, a threat that could only be addressed via a single response, namely the detonation of a nuclear weapon.

Another euphemism use commonly during the administration's campaign was "fallout," a seemingly innocuous term used to describe the environmental and irradiative effects of the detonation of a nuclear weapon. The term was used to shield the public and nuclear advocates from the harsh reality of the detonation of even a "tiny" nuclear weapon, which administration critics argued would produce enormous mushroom clouds, vaporize craters the size of football fields, and spread deadly radiation over tens and hundreds of square miles. Describing the effects of the use of a mini-nuke in terms of "fallout" made it easier for advocates and force planners to ignore that the use of such weapons would have devastating local environmental effects, and

would likely increase the background levels of human-created radiation that all life has been subjected to since the first nuclear explosion at Trinity, New Mexico, in 1945.

A similar function was served by describing mini-nukes as "clean" weapons, which screened policy makers and the public from the harsh reality that there is no such thing as a "clean" or safe nuclear explosion. Even a very small detonation involves the release of enormous physical energies and causes enormous blast damage and radioactive contamination over wide areas. Describing some nuclear bombs as "clean" allowed the administration's advocates to draw sharp contrasts, both implicit and explicit depending on the circumstances, with the so-called "dirty" bombs already in the American arsenal. This ignores the physical reality that the detonation of even a "clean" bomb is horribly destructive, and only "better" than a "dirty" bomb by matter of degrees. A key component of the administration's case for the development of mini-nukes is that the negative repercussions from using "dirty" bombs would self-deter policy makers from destroying enemy facilities during a crisis. Therefore, labeling mini-nukes as "clean" or "cleaner" weapons made it easier for policy makers to justify the development of these potentially provocative and destabilizing weapons, and contemplate their actual use. Similar language was used to describe the highly controversial "neutron bomb" during the 1970s.

Even the term "low-yield weapon" is itself highly misleading. The baseline against which the phrase "low-yield" is justified includes only nuclear weapons, the smallest of which still have enormous destructive capacity. Nuclear weapons by their very nature are larger and have far greater destructive potential than virtually any conventional weapon. When compared to a conventional bomb, even the smallest-yield nuclear weapon envisioned by the Dowler/Howard paper is still very large. It has only been within the last ten years that a conventional bomb approaching the explosive size of a nuclear warhead was developed, the GBU-43B, a 21,000

pound "Massive Ordinance Air Blast" bomb, or "Mother of All Bombs" (MOAB), and even this weapon has a very small explosive yield by nuclear standards.[138] When compared to the earth penetrating conventional munitions that the "low-yield" weapons were likely to replace, these bombs are enormously destructive. The acronym "RNEP" and corresponding term "robust nuclear earth penetrator" do similar work, sanitizing potentially enormous destructive weapons that are billed as being the functional (and linguistic) equivalents of familiar conventional bombs.

The debate about the operational "blurring" of conventional and nuclear weapons also contained a distinctly rhetorical element as well. The "operational continuum" of conventional and nuclear weapons as part of the 2001 NPR's proposed "offensive strike forces," of which mini-nukes were an important element, suggested to policy makers that the only difference between tasking a conventional or nuclear warhead to a particular mission was based on the weapon's effectiveness. If a conventional bomb would accomplish the mission, one should be used, and if a nuclear bomb was called for by the circumstances, then ordering a nuclear strike was justified. Similarly, the use of terms like "low-yield" and "mini-nuke" suggested to force planners and policy makers that there was no real distinction between "high-yield" or "very large" conventional munitions and a very small nuclear bomb.

The mini-nuke debate also saw the deployment of two favorite military euphemisms, "civilian causalities" and "collateral damage," which were used to describe the likely death toll from the detonation of a nuclear weapon against an underground bunker. How to address the question of the potential deaths of innocent people in an American nuclear strike was particularly pertinent in this case because a large percentage of the likely targets of mini-nukes were located

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[138] See Global Security, GBU-43/B "Mother of All Bombs", accessed November 12, 2010, http://www.globalsecurity.org/military/systems/munitions/moab.htm.

in densely populated areas. Labeling innocent persons whose deaths were knowingly risked by any US policy maker as "civilian casualties" makes it easier for persons in power to order the use of nuclear weapons, and also likely makes it more palatable for members of Congress to authorize the development and deployment of such weapons. The entire mini-nuke program was sold as a way of granting policy makers access to the "benefits" of nuclear weapons' enormous destructive potential without incurring the downside risks of killing enormous numbers, perhaps hundreds of thousands, of people. The Los Alamos scientists' paper is illustrative of this point, with their entire argument centering on the desirability of deploying "reduced collateral damage" (RCD) weapons. What these scientists failed to tell policy makers, and what Bush administration advocates failed to tell Congress and the American people, is that the use of even one mini-nuke would kill enormous numbers of people, likely including many persons who had nothing to do with alleged threats against the United States.

The consequences of the deployment of such rhetoric cannot be overstated. Schiappa cautions that "nukespeak is a potentially dangerous terministic screen for those in positions of policy making and in the military establishment." Citing the ethnographic work of Cohn and others, Schiappa alerts us that "nukespeakers will tend to understand nuclear weapons, strategy, and war as benign or beneficial rather than repulsive and horrifying."[139] The use of nukespeak increases the probability that nuclear weapons will be used because it "influences speakers in ways that separate the technical possibilities from related moral and ethical concerns." A policy maker who can envision a "clean" low-yield nuclear warhead destroying a "HDBT" that threatens "WMD" use against the American people with minimal "fallout" and only a smattering of "collateral damage" is much more likely to contemplate and order the use of such a weapon,

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[139] Schiappa, "Naming as Argument," 136.

even though the reality of the use of such a weapon may be far more deadly than imagined. Schiappa warns that "once the nukespeaker turns technician, the issue is no longer whether or not an action should be taken, but simply a question of logistics."[140] The discourse used to "sell" a new generation of nuclear weapons to Congress and the American people may actually have increased the probability that such weapons would be used if they were ever developed.

5.4.2 The Security Frame

The nuclear establishment's use of the security frame and its highly provocative threat discourse in its defense of mini-nuke development and deployment included both continuities and divergences from Cold War-era argument patterns. The greatest similarity is the utilization of an existential threat to justify the pursuit of mini-nukes, with the Russian Federation playing the role of a more erratic, slightly weakened stand-in for the Soviet Union. Analysts, especially Paine, were eager to demonstrate that the dangers posed by the Russian nuclear arsenal largely mirrored those of the Soviet Union in terms of their potential to threaten the very existence of the United States. From the perspective of "overkill" deterrence (MAD), 2,200 strategic warheads are just as deadly as 10,000 or more. Likewise, nuclear weapons, including mini-nukes, continued to serve a similar purpose, namely to threaten enough retaliatory damage to deter Russian leaders from using their weapons against the US.

The nature of the Russian/Soviet threat had changed, with the looming threat of a Soviet Union bent on worldwide domination replaced by a weakened Russian state that was dangerous because of its own weakness. Severe economic problems and drastic military budget cuts

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[140] Ibid., 138.

conspired to spur a significant deterioration in both the Russian nuclear command-and-control and early systems, heightening the threat of an accidental or miscalculated nuclear attack against the United States or the theft and use of Russian strategic weapons by domestic or international groups desiring to inflict enormous damage upon the United States. Russia's economic and government weakness also allegedly increased the threat of a resurgence of Russian nationalism, which in turn increased the likelihood of a Cold War-style confrontation between the United States and the Russian bear in any number of theaters, from Eastern Europe through the Caucasus to Central Asia, regions where the US was carefully cultivating military and economic ties with states newly liberated from the Soviet empire.

The mini-nuke campaign anticipated and defended a new purpose for nuclear weapons, specifically their use in more credible damage limitation counterforce strikes designed to disable Russian nuclear missile silos in the event of a low-level nuclear war. These damage limitation strikes were intended both to deter Russian nuclear adventurism by demonstrating an American capacity to destroy large parts of the Russian arsenal, and to limit the escalation of an existing nuclear conflict by eliminating Russian strategic nuclear assets. Although the US arsenal was officially tasked with counterforce duties during the Cold War, this role was assigned to high- and variable-yield strategic warheads, which Paine and other critics of MAD posed as significant self-deterrence risks, and thus lacked sufficient credibility. Low-yield weapons, as noted earlier, allegedly avoided the problems of self-deterrence because they would limit the amount of radioactive fallout and resulting environmental contamination and civilian causalities, and thus be more likely to be used by US policy makers, and hence more credible.

Perhaps the most significant difference between Cold War and post-Cold War justifications for nuclear weapons, as evidenced in the mini-nuke debate, is the new emphasis on

the posited threat posed by sub-state actors, particularly Al Qaeda, and revisionist states with actual and alleged WMD development programs. The threat of the potential use of nuclear, chemical, or biological weapons by Al Qaeda against either American forces stationed overseas or on the US mainland was underscored by reports from the Bush administration that Al Qaeda had been seeking to purchase both complete nuclear warheads and the precursors to nuclear bombs prior to the September 11, 2001 attacks.[141] Osama bin Laden and his network of operatives were portrayed as desperately seeking nuclear or other weapons of mass destruction, and intelligence reports suggested that such operations were being directed out of underground complexes along the mountainous Afghanistan-Pakistan border. Al Qaeda was an empty vessel into which administration advocates could pour collective public anxieties about the unknown, unpredictable threats of the new age. Al Qaeda and other groups were often described by government officials and their proxies as "undeterrable," so bent on wreaking the greatest possible destruction on the United States that they were immune to the cost/benefit calculations of a rational human being. The exigency of WMD-terrorism thus demanded an overwhelming, preemptive military response. Mini-nuke advocates were able to harness the enormous sense of fear and vulnerability among the public and members of Congress in applying political pressure to both authorize and fund mini-nuke weapon development.

5.4.3   Concluding Thoughts

The controversy surrounding the proposed development and deployment of mini-nukes demonstrates both the effectiveness of the 2001 NPR in driving public debates about the role of

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[141] See Rolf Mowatt-Larssen, "Al Qaeda Weapons of Mass Destruction Threat: Hype or Reality?" Paper, Belfer Center for Science and International Affairs, Kennedy School of Government, Harvard University, January 2010, accessed November 4, 2010, http://belfercenter.ksg.harvard.edu/publication/19852/al_qaeda_weapons_of_mass_destruction_threat.html.

nuclear weapons in US security policy and important continuities in pro-nuclear advocacy across the case studies. Two of the most prominent similarities are highlighted in the preceding section, which discusses the key role played by nuclear jargon in insulating pro-nuclear arguments from outside scrutiny and the importance of the security frame in shaping public and policy maker perceptions about both the nature of the post-Cold War world and the capacity of nuclear weapons to secure American interests in an allegedly threatening and highly volatile environment. Similar concerns about emerging WMD threats emanating from rogue states, the prospect of a nationalist, increasingly revisionist Russia, and the dangers posed by nuclear terrorism played varying roles in the controversies surrounding official responses to abolitionists like General Butler, the merits of the Comprehensive Test Ban Treaty, and the implementation of the Bush administration's NPR.

The mini-nuke controversy also exhibits the same type of technical disputes that characterized the Senate's deliberations on the CTBT. Further, the mini-nuke debate was framed in the same "security" versus "risk management" terms as the CTBT debate. Public figures simply ignored the possibility of eliminating nuclear weapons as a means of encouraging other states to give up their own nuclear arsenals, and instead chose to contest the effectiveness of the "old" nuclear arsenal relative to the alleged benefits of developing new, low-yield nuclear weapons. As with the CTBT and NPR, nuclear weaponry was viewed as the default response to potential security threats, and little attention was paid by decision makers to broader questions about the utility of nuclear weapons as tools of statecraft and the possibilities of security frameworks based on something other than nuclear deterrence.

The debate around the desirability of mini-nuke development is closely tied to the broader policy dispute about the merits of the Bush administration's proposed preemption

doctrine, which was articulated in a National Security Strategy statement and manifested itself in the administration's campaign for war against Saddam Hussein's Iraq.[142] Although a thorough assessment of the controversy surrounding the Bush Doctrine is well outside the scope of this study, it remains important to note that public debates about nuclear weapons development and use doctrines have much broader implications for national security debates as a whole. A great deal of the public and international criticism of the Bush Doctrine was directed at the possibility of America's use of nuclear weapons as part of a "disarming" preventive first strike, a policy suggested by the 2001 NPR and facilitated by administration efforts to push for authorization of the development of low-yield weapons. The potential diplomatic and security consequences of breaking the nuclear taboo and the prospect of other nuclear states utilizing an American nuclear preemption doctrine as a justification for adopting their own preemption policies likely helped foil Bush administration efforts to extend the Bush Doctrine beyond Iraq.

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[142] "The National Security Strategy of the United States," September 2002, accessed November 29, 2010, http://www.globalsecurity.org/military/library/policy/national/nss-020920.

6.0   CONCLUSION

The final chapter revisits the rationale for the study, weaves common themes between the conclusions of the case studies, and broaches broader theoretical and practical questions posed by the research project, including possible implications for public sphere theory, public argument scholarship, and the future of public debate on nuclear policy. The chapter is organized into four sections. The first section discusses important aspects of the argumentation strategies used by anti-nuclear advocates in response to the end of the Cold War as part of a broader effort to de-emphasize nuclear weapons in American security policy. The second section discusses how the case studies reveal a considerable degree of consistency in the arguments used by proponents of US nuclear deterrence policies, and explores how these arguments were able to justify a robust role for nuclear weapons absent the menace of the Soviet threat. The third section outlines the major implications of this study, while the last section discusses the limitations of the study and its implications for both future research and the theories deployed and developed in this project moving forward.

6.1   ANTI-NUCLEAR ADVOCACY AND THE END OF THE COLD WAR

The end of the Cold War and demise of the Soviet threat seemingly offered anti-nuclear advocates an enormous opportunity to challenge what they saw as the dangerous and provocative

nuclear force structures and postures that characterized American deterrence policy. These advocates chose to challenge the assumption that nuclear weapons should continue to be the centerpiece of American security policy in a post-Cold War world on multiple fronts. One type of challenge was led by General George Lee Butler and other disarmament advocates, who advocated for the complete abolition of the world's nuclear arsenals. Butler and his allies situated their arguments within an "abolition frame," which argued that nuclear weapons themselves were inherently dangerous, and that the very future of humanity demanded their rapid elimination. A second set of arguments centered on a "risk management" frame, which argues that nuclear weapons were themselves neither beneficial nor harmful on their own merits; rather, their worth was to be judged within the context of the purposes for which they were used. Many defenders of a risk management approach to nuclear weapons argued that the policies of the Cold War were unnecessarily provocative, and that American security interests would be best served by a de-emphasis on nuclear weapons. This section will highlight some important aspects of these frames, focusing on their similarities and differences.

Both the abolition and risk management frames agreed that the end of the Cold War radically altered the threat environment faced by the United States, opening the possibility of the de-emphasis, and even potential elimination, of nuclear weapons. Butler himself argued that the "excesses" of Cold War deterrence policies made some sense within the context of the American-Soviet confrontation, but that the easing of international tensions, arising from the collapse of communism and the ascendance of the United States as a sole superpower that could project force with purely conventional military assets, created a window of opportunity for the negotiation of a rapid reduction in the world's nuclear arms. Similarly, proponents of the CTBT argued that the end of the Cold War created an opportunity for both existing and potential

nuclear powers to agree on a permanent prohibition on explosive nuclear tests, which in turn would substantially slow the spread and development of nuclear weapons. Both frames argued that a continuation of Cold War-vintage deterrence policies was both unnecessarily provocative and dangerous, antagonizing nations who felt threatened by American conventional and nuclear primacy and risking a renewal of the destabilizing arms racing that characterized the Cold War.

The abolition and risk management frames also share an emphasis on the processes used to enhance security and decrease risk, distinguishing them from the security frame, which emphasizes security as a product derived from strength, and views nuclear weapons as the ultimate source of national power. As a result, both the abolition and risk management frames defend the de-emphasis of nuclear weapons in American security policy as a way of decreasing both the risks posed by the US arsenal and as a means of enhancing US and global nonproliferation diplomacy and collective security building, which are seen as potentially more effective means of providing the "security goods" offered by possessing a large nuclear arsenal. Butler's emphasis on the need to negotiate and implement a global, verifiable abolition regime, the defense of the CTBT as a new bulwark in the world's nonproliferation regime, and objections to the Bush NPR and mini-nuke policies as unnecessarily provocative and a potential threat to the stability of the NPT and other arms control agreements all share a commitment to utilizing diplomacy and international agreements to obviate the security-based justifications for possessing nuclear weapons.

In contrast with the security frame that predominated pro-nuclear arguments, both the risk management and abolition frames believe that nuclear weapons possess strong downside risks. Whereas the abolitionist frame tends to emphasize the inherent dangers of nuclear weapons, foregrounding the risks of cataclysmic nuclear accidents, the growing potential for an

inadvertent or miscalculated nuclear conflict, and the potential civilization-ending impact of any nuclear exchange, the risk management frame tends to focus on how overly aggressive nuclear postures confound American foreign policy and security objectives. Nuclear weapons are seen as potentially undermining US diplomatic efforts and confounding international cooperation to limit the spread of nuclear weapons and other dangerous weapons technologies. Although abolitionists agree that aggressive nuclear postures can be self-defeating in the sense that the actually increase the dangers of nuclear proliferation that they seek to contain, abolitionists center their arguments on the dangers posed by nuclear weapons themselves.

The risk management and abolition frames also agree that a nuclear war would have devastating consequences. They differ markedly in both how they portray the implications of such a conflict and in their policy prescriptions directed at preventing a nuclear conflict from occurring. Both frames posit that the magnitude of a nuclear war could be absolute—resulting in the destruction of civilization and potentially the extinction of humankind and most life on earth. The abolitionist frame argues that this threat is so great that any action possible must be taken to avoid it, and, given the inherent dangers posed by nuclear arsenals, only global disarmament can avert the destruction of all humanity.[1] Such arguments are often expressed in ethical terms, such as when Butler discusses the irresponsibility of nuclear deterrence policies and the immorality of Soviet and American decision makers who chose to threaten the lives of everyone on the planet in the pursuit of their own narrow security objectives. Other abolitionists have described nuclear deterrence as a form of hostage-taking, where rival governments hold the lives of their adversaries at stake, conditioned on the good behavior of their counterparts.[2] Nuclear weapons

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[1] See Michael Allen Fox, "Nuclear Weapons and the Ultimate Environmental Crisis," *Environmental Ethics* 9:2 (1987): 159-179.
[2] See Steven Lee, "The Morality of Nuclear Deterrence: Hostage Holding and Consequences," *Ethics* 95:3 (1985): 549-566.

are seen as both immoral and the ultimate threat to human security, and therefore must be abolished.

While accepting the dangers of a nuclear conflict, the risk management frame tends to balance the positive and negative consequences of the possession of nuclear weapons. Nuclear conflict obviously cannot occur if nuclear weapons do not themselves exist, but the problems associated with crafting an effective international anti-nuclear regime, coupled with the short-term benefits of possessing at least some nuclear weapons, suggests a potentially positive, or at least necessary, short-term role for nuclear weapons to even many anti-nuclear advocates. Goodpaster and Turner, both of whom advocate minimal deterrence postures as part of a transition to eventual disarmament, fall into this camp. Likewise, many critics of Cold War-style deterrence policies accept some degree of inevitability concerning the existence of nuclear weapons as a role of statecraft and attempt to craft more moderate nuclear force levels and postures that mitigate the downside risks of nuclear weapons while maximizing their potential benefits. The Senate proponents of the CTBT are typical of this line of thinking, accepting the necessity of deterrence while arguing that American ratification of the treaty would both enhance the US's relative nuclear advantage while slowing the vertical and horizontal proliferation of nuclear weapons and capabilities. Many critics of both the Bush NPR and the push to develop mini-nukes also accepted the inevitability of the need for some level of nuclear deterrence, but argued that the claimed security benefits offered by mini-nukes or an NPR-envisioned strategic arsenal would be better achieved through either diplomacy or the development and deployment of conventional weapons sytems. The risk management frame upholds the eventual elimination of nuclear weapons as an ideal towards which to strive, but not at the expense of short-term

security interests, and, in contract with the abolition frame, does not envision disarmament as a short-term security imperative.

6.2   PRO-NUCLEAR MOMENTUM SUSTAINED

A number of factors explain the resiliency of pro-nuclear discourses despite the end of the Cold War, and many such factors emerge from my assessment of the case studies. This section outlines four such factors: the prevalence and seeming persuasiveness of the security frame; the tendency of representatives of the nuclear establishment to cast themselves as hard-headed realists and anti-nuclear activists as dangerous idealists; the deployment of a rhetoric of American exceptionalism to differentiate the US arsenal from that of other, allegedly dangerous states; and the appropriation and co-optation of arguments from anti-nuclear advocates. I consider each of these in turn.

First, the security frame dominated the nuclear establishment's defense of a continuation of Cold War-era nuclear policies and the expansion of nuclear weapons into new security roles in the post-Soviet world. The security frame plays upon widely held perceptions that nuclear weapons have served as the ultimate guarantor, or guardian, of American security. Nuclear weapons are thus portrayed as either a shield that serves a protective function and acts as an insurance policy against the failure of other American military assets and/or serves as the most effective and strongest weapon in the arsenal. Nuclear weapons are portrayed as part of a continuum of American military capabilities, and thus are often viewed as being similar to very, very effective nuclear weapons. Emphasis on the guardian function of nuclear weapons was evidence in each of the case studies. Payne and the INSS's retort to Butler's disarmament

campaign rested on the assertion that nuclear weapons had guaranteed stability during the Cold War and would likely do so for the foreseeable future. Payne in particular emphasized that the proper application of nuclear weapons and carefully crafted use policies could dissuade adversaries from developing nuclear or chemical biological arsenals, deter states with existing arsenals from using their weapons to threaten American interests, and to disarm high-risk adversaries with preemptive attacks. The entirety of the Senate's deliberations on the CTBT turned on the question of whether a permanent test ban would undermine the "protective" function of the US deterrent, and Senators who voted against the treaty framed the justification for their "no" vote around various technical concerns about the ability of the United States to maintain nuclear superiority under such a ban. The Bush administration's campaign for the new nuclear vision embodied in the 2001 Nuclear Posture Review called for a permanent extension of nuclear deterrence policies, anticipating both a continuation of the core deterrence mission and the expansion of nuclear weapons to act as shields against "emergent" WMD threats from "rogue" nations. The wedding of nuclear and conventional forces in the "offensive strike" leg of the New Triad made explicit the assertion that nuclear weapons were nothing more than extraordinarily effective bombs, no different in kind than conventional counterparts. The need for an enhanced nuclear guardian was foregrounded in the debate about the need for mini-nukes, with nuclear advocates arguing that the current arsenal was unable to protect the American people from state and sub-state nuclear, biological, and chemical weapons. The problem of self-deterrence necessitated the development of a new generation of nuclear weapons, ones capable of protecting the homeland from "rogues" and terrorists bent on America's destruction. Within the context of the security frame, security is a product that is derived from strength, and nuclear weapons are the ultimate source of national power. Security is portrayed as an either/or state; we

are either secure, or we are not, and the United States and its citizens cannot be secure as long as other states hold the capacity to use weapons of mass destruction against the American homeland, its overseas military forces, or America's global network of allies.

The security frame also centered nuclear policy debates around an insecure "us" and a potentially dangerous "other," emphasizing that the world was unpredictable, full of uncertainty, and populated with individuals and states who wanted to attack the United States and thwart its interests. Other states and actors were personified, given labels of "good" or "bad;" "friendly" or "malevolent." The use of such metaphors, Ivie suggests, helped audiences understand the world in interpersonal terms and magnified the effectiveness of pro-nuclear arguments.[3] Such an "us/them" formulation made it very difficult to establish the viability of a "we," short-circuiting the collective security-based arguments of many anti-nuclear advocates. Threat claims abounded in the case studies explored in greater detail in this chapter's "implications" section. Briefly, Butler's critics argued that the post-Cold War world was characterized by a series of otherwise weak states, such as Iran, Iraq, and North Korea, and sub-state actors, such as Al Qaeda, who were committed to destroying American influence and attacking the homeland, and would use WMD in a series of asymmetric attacks to accomplish their objectives. Similar arguments were leveraged against the CTBT, with treaty critics arguing that both great powers like Russia and China and lesser states such as the above "rogue" nations and others would use loopholes within the treaty and gaps in the verification scheme to cheat the system and either modernize their nuclear arsenals or develop simple nuclear weapons. Each of these actors was ascribed with various anti-American motives, whether challenging the US for global dominance or disrupting

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[33] See Robert L. Ivie, "Cold War Motives and the Rhetorical Metaphor: A Framework of Criticism," in *Cold War Rhetoric: Strategy, Metaphor and Ideology,* ed. Martin J. Medhurst, Robert L. Ivie, Philip Wander & Robert L. Scott (Westport, CT: Greenwood Press, 1990): 71-80.

American influence in their backyards. The campaign for the nuclear policy proposed by the NPR, including the development of mini-nukes, was coupled with the Bush administration's efforts to mobilize public support for swift, preemptive action against the "Axis of Evil;" again, Iran, Iraq, and North Korea. These threats were tied to strong fear appeals, describing Russia, China, Al Qaeda and its ilk, and the "rogues" as potentially threatening the very survival of the United States. Appeals to existential fear impelled audiences to fear for their own and their families' safety, narrowing their view of the world and priming them for arguments about the possibly dangerous intentions of others. Particularly in the aftermath of the September 11, 2001, attacks, the American public was inclined to assume the worst about other states and international actors. Fear was used to overcome appeals to "ethics" and a "common humanity," as seen in the institutional response to Butler, and was frequently used to dismiss potential longer-term consequences as irrelevant because of the threat posed by the current "emergency" situation, a ploy evidenced by the Bush administration's defense of its preemption policy and the potential role of mini-nukes in disarming conventional and nuclear first strikes.

Second, nuclear deterrence proponents effectively characterized themselves as "realists" who were merely reacting to a dangerous world, while portraying anti-nuclear advocates as hopeless "idealists" whose calls for de-nuclearization ignored a number of deadly threats. This argument strategy neatly played upon the "rhetoric versus reality" formulation featured in many American policy debates, depicting the aspirations for a nuclear-free world, or even one where nuclear weapons played a less prominent role, as "mere" rhetoric that ignored "real" problems that could only be addressed by nuclear weapons. Several examples jump out from the case studies. Most strikingly, Butler's defense of abolition was described by Payne as simply "cotton candy," implying that it was pleasant, but also lacking in substance and ultimately dangerous to

one's health. Butler was also described as "unrealistic" by the INSS report, which argued that the technical "reality" dictated that nuclear weapons could not be "disinvented," and the world would thus have to learn to live with the threat of the bomb. CTBT opponents also played upon this realism/idealism distinction, claiming that treaty opponents had misdiagnosed the intentions of Russia, China, and "rogue" states, believing that such nations would be constrained by international norms when, in reality, only the United States and other "law-abiding" nations would adhere to the CTBT's restrictions. Other countries would attempt to maximize their power relative to others, and gaps in the verification scheme ensured cheating. Likewise, the Bush administration's defense of pre-emption as a part of the NPR and mini-nuke advocacy campaigns featured accusations that the administration's critics consistently failed to recognize the reality of the threat posed by "Islamofascists" and other entities committed to doing irreparable harm to the United States. In many ways, these arguments replicate important aspects of the competition between "realist" and "idealist" (or "constructivist") schools of thought among international relations scholars, with realists accusing their idealist counterparts of ignoring the unchanging nature of the global order and placing too much faith in norms, regimes, and rules to constrain the security-seeking, competitive behavior of states.

The establishment's defense of a continuation and expansion of the role of nuclear deterrence included potent appeals to a rhetoric of "American exceptionalism," holding that the country's unique purpose and role in the world at the same time justified its continued deployment of enormously destructive weaponry in the cause of global freedom while warranting deep suspicion about the capabilities and intentions of other WMD-armed states. Although the logic that nuclear weapons were "safer" if wielded by American policy makers undergirded pro-nuclear arguments across the case studies, two particular instances stand out.

First, during the Senate's deliberations on the CTBT, Senator Kyl and others argued that the United States had a "special duty" to promote stability throughout the world, and that nuclear weapons played a vital role in fulfilling that duty. As noted in Chapter Three, this sense of exceptionalism was closely tied to the geopolitical ascendancy of the United States after the Cold War, and provided a framework within which policy makers could articulate their foreign policy goals and objectives, which in the mainstream of American political discourse almost always assumed that stability throughout the world depended upon the US as the "indispensable" nation. Similarly, criticisms of Butler's calls for disarmament claimed that the bomb was safe in American hands, as proven by history. Krauthammer argued that the US had "used the bomb to end a war, not to start . . . new ones." American nuclear weapons were a force for stability, while nuclear weapons in the hands of other states, including other established powers like Russia and China, were potentially dangerous. Sociologist Hugh Gusterson has argued that creating a contrast between the "safe, responsible" use of nuclear weapons for deterrence purposes by the established nuclear powers and the "dangerous, threatening" nature of nuclear arsenals in the hands of new nuclear powers legitimizes a form of "nuclear colonialism," justifying the continuance of a "West" versus "Third World" global hierarchy. Gusterson also observes that the focus on the alleged dangers of nuclear proliferation obscures the very real dangers of accidental, miscalculated, or intentional nuclear use by the United States and other current nuclear powers.[4]

Finally, defenders of the nuclear establishment effectively co-opted many of the critiques of Cold War deterrence postures offered by anti-nuclear advocates, crafting these objections into rationales for even more aggressive nuclear postures. Several examples of this appropriation

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[4] See Hugh Gusterson, "Nuclear Weapons and the Other in the Western Imagination," *Cultural Anthropology* 41:1 (February 1999): 111-143 and Hugh Gusterson, "A Double Standard for Nuclear Weapons?" *Audit of the Conventional Wisdom* (April 2006), accessed February 13, 2010, http://web.mit.edu/CIS/pdf/gusterson_audit.pdf.

strategy emerge from the case studies. First, many nuclear advocates packaged their policy proposals as embracing the best aspects of the anti-nuclear spirit of their opponents. The INSS report, in its response to Butler and other disarmament proponents, argued that the George H. W. Bush administration and the 1994 Nuclear Posture Review had already implemented a wide array of measures designed to de-emphasize nuclear weapons, including the virtual elimination of tactical nuclear arms, the de-alerting of the bomber force, and marked drawdowns in strategic arsenals. The INSS report was thus able to argue that the US was making progress in de-emphasizing nuclear weapons, while at the same time recommending an expansion of the potential roles for nuclear weapons. Similarly, the Bush NPR claimed to "de-emphasize" nuclear weapons by re-setting the strategic relationship with Russia and embracing deep nuclear cuts, while at the same time explicitly threatening the use of nuclear weapons in response to CBW attacks and envisioning the use of nuclear weapons in pre-emptive strikes. Second, Payne, in his defense of "tailored deterrence," along with many advocates of mini-nukes, conceded the anti-nuclear argument that MAD-style deterrence policies would fail in many post-Cold War contexts, but claimed that new nuclear weapons and postures, not abolition or de-emphasis, were the appropriate way to respond to a changing world. For example, Payne argued that the risk-averse nature of new adversaries necessitated both new capacities to threaten vital assets and the ability to engage in disarming first strikes as part of his vision of an arsenal designed to engage in nuclear warfighting, a shift away from the "all or nothing" use posture of MAD. Mini-nuke advocates claimed that the problem of self-deterrence necessitated developing "safer," "cleaner" nuclear bombs that could serve bunker-busting missions without the "fallout" of environmental contamination, civilian casualties, international condemnation, and a dangerous transgression of the nuclear taboo. Third, nuclear advocates demonstrated an ability to carve out and occupy a

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seeming middle ground between "abolition" on the one hand and a "nuclear Wild West" on the other. The INSS report deployed the admission of anti-nuclear advocates like Goodpaster and Turner, who believed that a small transitional arsenal was necessary on the path to disarmament, against Butler and other abolitionists, claiming that even more "pragmatic" critics of current nuclear policies conceded some utility for nuclear weapons. The INSS was thus able to situate its preferred nuclear policy, which largely mirrored the policy preferences of the George W. Bush administration, as a similarly pragmatic alternative to the "extreme" abolition proposal of Butler, because the INSS proposal envisioned some cuts to the strategic weapons arsenal. Similarly, in the CTBT debate, treaty opponents were able to portray their counterparts as either closeted abolitionists or dupes, and justify a vote for the CTBT as a continuation of the "moderate" policy of the current testing moratorium and a rejection of the "extreme" option of a permanent ban, which risked a crippling deterioration of the American nuclear arsenal.

6.3   SIGNIFICANT FINDINGS

This section details the more significant findings arising from the four case studies. These findings are grouped into five categories. First, I discuss the role and influence of interest group politics in driving the direction and content of nuclear policy deliberations. Second, I explore the importance of access to deliberative spaces. Third, I describe the importance of threat discourse in justifying the continuation of many provocative nuclear policies. Fourth, I explain how the presumption that nuclear deterrence had been effective during the Cold War confounded the arguments of many anti-nuclear advocates. Finally, I outline the implications for the use of technical discursive practices throughout the case studies.

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6.3.1   Institutional Interests

One of the most important findings in the case studies is that the nuclear establishment remains a powerful political and public force, one that boasts forceful advocates and deep war chests that can be deployed to sway important decision makers as it defends Cold War-sized budgets and policy priorities. Nuclear weapons production, maintenance, and deployment remain a huge business, one that is inextricably linked with larger military and commercial networks that make up the United States' military-industrial complex. These interest groups manifest in diverse forms, but remain united in support of a continued US reliance on nuclear deterrents, and were vocal advocates in each of the case studies. Three interest groups appear to be particularly important.

The group with the most obvious vested interest in maintaining a large nuclear force and a relative continuity between Cold War and post-Cold War nuclear policies are weapons design and manufacturing companies. Although many of these corporations, such as Boeing, McDonnell-Douglas, Honeywell, and TRW have downsized substantially since the massive nuclear and conventional buildup under the Reagan administration, they still claim to be a vital force in the nation's economy and command enormous influence on Capitol Hill. This political influence arises from a number of sources. First, defense contractors remain major campaign contributors, which afford industry representatives access to elected officials.[5] Second, these same contractors have close ties with both legislative offices and the departments of State and Defense, with a large number of persons switching back and forth between government

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[5] Major contributors in the 2009/10 election cycle included Boeing ($2mil), Lockheed Martin ($2mil), Raytheon ($1.7mil), Northrop Grumman ($1.4mil), and General Dynamics ($1.1mil). See "Defense," Center for Responsive Politics, last modified November 15, 2010, accessed November 21, 2010, http://www.opensecrets.org/industries/indus.php?Ind=D.

appointments and positions in the defense industry. This "revolving door" ensures corporate access to executive and legislative staffs, and potentially colors the decision making of current government officials in favor of the interests of the defense establishment as they eye relatively lucrative future employment in the private sector.[6] Third, defense companies have demonstrated a remarkable ability to spread their activities around the entire nation, locating research, manufacturing, and maintenance facilities in nearly every congressional district and in almost all fifty states. This "spreading of the wealth" of defense-related jobs ensures that elected officials will be reluctant to support military downsizing that might result in job losses in their districts.[7] Finally, many defense companies have both personal and financial ties to the burgeoning "think tank" industry in Washington D.C., lending expertise and providing funding to pro-military "research institutes" that act as mouthpieces for defense industry interests.[8] Even if one is reluctant to believe that the fellows at the Heritage Foundation, Center for Security Policy, or American Enterprise Institute are directly beholden to their corporate-tied funders, it is difficult to dispute that these and other think tanks select research staff whose views align with the

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[6] These military/private sector/think tank connections are well documented. For a scholarly treatment, see Ken Silverstein and Daniel Burton-Rose, *Private Warriors*, (London: Verso, 2000). The Center for Responsive Politics maintains an extensive database of connections between lobbying groups and government. See generally "OpenSecrets," Center for Responsive Politics, last modified 2010, accessed November 21, 2010, http://www.opensecrets.org/. The issue has also been addressed by government researchers. For a recent report, see Government Accountability Office, "Defense Contracting: Post-Government Employment of Former DOD Officials Needs Greater Transparency," May 1998, GAO-08-485, accessed November 21, 2010, http://www.govexec.com/pdfs/052108e1.pdf. For press coverage of this issue, see Timothy J. Burger, "The Lobbying Game: Why the Revolving Door Won't Close," *Time*, February 16, 2006, accessed November 21, 2010, http://www.time.com/time/nation/article/0,8599,1160453,00.html; Chuck Raasch, "Revolving Door Spins Faster than Ever in D.C.," *USA Today*, April 14, 2005, accessed November 21, 2010, http://www.usatoday.com/news/opinion/columnist/raasch/2005-04-14-raasch_x.htm; Tom Vanden Brook, Ken Dilanian and Ray Locker, "Retired Military Officers Cash in as Well-Paid Consultants," *USA Today*, November 18, 2009, accessed November 21, 2010, http://www.usatoday.com/news/military/2009-11-17-military-mentors_N.htm; and Leslie Wayne, "Pentagon Brass and Military Contractor's Gold," *The New York Times*, June 29, 2004, accessed November 21, 2010, http://query.nytimes.com/gst/fullpage.html?res=9F07E2DC1538F93AA15755C0A9629C8B63.

[7] See William D. Hartung and Jonathan Reingold, "About Face: The Role of the Arms Lobby in the Bush Administration's Radical Reversal of Two Debates of US Nuclear Policy," *World Policy Institute Special Report* (May 2002), accessed January 18, 2010, http://www.worldpolicy.org/projects/arms/reports/reportaboutface.html; Monte Paulsen, "How the Pentagon Lobbies Congress from Within," *Albion Monitor*, 1998, accessed April 6, 2010, http://www.albionmonitor.com/9808a/copyright/pentagonlobby.html; and John Basil Utler, "Left and Right Against the Military Industrial Complex," *Foreign Policy in Focus* (April 2, 2009), accessed April 5, 2010, http://www.fgfbooks.com/Utley/2009/Utley090402.html.

[8] See generally Silverstein and Burton-Rose, *Private Warriors*.

mission of the research institute, and that those missions are largely sympathetic with the interests of the defense community.

Defense contractors, who have strong financial interests in stimulating demand for new weapons systems, including submarines, missile systems, and aircraft, to be utilized by the American nuclear arsenal, are thus able to exercise both direct and indirect influence over nuclear policy debates. Defense contractor interests likely played at least some role in influencing Senate votes during the CTBT debate, and their ties with congressional staffers also influenced the witnesses called to testify before Congress. Likewise, many of these witnesses, who are disproportionately drawn from current and former government officials, have either former employment in the defense industry or may have the option of working for a defense contractor in the near future. These witnesses are seen as leading experts by members of Congress, many of whom lack direct experience with nuclear and other national security issues, and are thus reliant on the views of such experts and their own staffs in formulating and justifying their stances on nuclear weapons policies. Defense companies were also the likely beneficiaries of efforts to "modernize" the nuclear arsenal, with the Bush Nuclear Posture Review envisioning a bevy of new delivery systems. Two prominent examples of pro-nuclear spokespersons are Kathleen C. Bailey and Keith B. Payne. Both have worked in government, Payne as recently as the first term of the George W. Bush administration, and currently work for the National Institute for Public Policy, a think tank whose board is packed with current and former defense contractor executives and other persons with ties to the defense establishment and receives considerable funding from right-leaning foundations with corporate ties.[9] Bailey

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[9] See generally "National Institute for Public Policy," Right Web, last modified June 2, 2010, accessed November 21, 2010, http://www.rightweb.irc-online.org/profile/National_Institute_for_Public_Policy. Payne's and his groups ties to other right-leaning groups, officials, and advocates is documented in Silverstein and Burton-Rose, Private Warriors and Michelle Ciarrocca

was a witness called to testify before Congress about the CTBT and published a number of widely-cited reports critical of the treaty.[10] Payne was a leading voice behind the crafting of the Bush NPR and remains one of the leading critics of Butler and other disarmament advocates.[11]

The branches of the United States Armed Services are also powerful stakeholders in post-Cold War nuclear policy debates, exercising influence similar to that used during the Cold War. Two branches of the military, the Air Force and Navy, have responsibility for the US's strategic nuclear forces, with the Air Force controlling the nation's air-delivered nuclear bombs and land-based intercontinental missiles and the Navy controlling the submarine-launched ballistic missile force. There is considerable prestige and opportunity for career advancement for officers who work with the strategic forces in both the Air Force and Navy; a large number of each branch's service personnel are tasked to the strategic forces, and a substantial component of their budgets are tied to the nuclear arsenal.[12] Therefore, cuts in the nuclear arsenal and the de-emphasis of nuclear deterrence missions potentially stymies career paths of the officer corps, threatens end-strength cuts in each of the services, and offers the prospect of large cuts in each services' overall

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and William D. Hartung, "Axis of Influence: Behind the Bush Administration's Missile Defense Revival," *World Policy Institute Special Report* (July 2002), accessed November 21, 2010, http://web.archive.org/web/20070808095652/http://www.worldpolicy.org/projects/arms/reports/axisofinfluence.html.

[10] See Kathleen C. Bailey,"Testimony before the Senate Armed Services Committee," October 7, 1999, accessed July 20, 2009, http://www.fas.org/nuke/control/ctbt/conghearings/bailey.pdf; Kathleen C. Bailey, "The Comprehensive Test Ban Treaty: The Costs Outweigh the Benefits," *Policy Analysis 330*, Cato Institute (January 15, 1999): 1-31; and Kathleen C. Bailey, *The Comprehensive Test Ban Treaty: The Worst Arms Control Treaty Ever*, (Fairfax, VA: National Institute for Public Policy, September 1999), accessed May 9, 2010 http://www.nipp.org/Adobe/oppiece.pdf.

[11] See Hartung and Reingold, "About Face," Keith B. Payne, "The Truth About Nuclear Disarmament," Washington Times, December 13, 1996, p. A23; Keith B. Payne, "Why We Must Sustain Deterrence," Testimony before the Senate Armed Services Committee, Strategic Forces Subcommittee, March 31, 1998, accessed January 15, 2010, http://www.fas.org/spp/starwars/Congress/1998_h/s980331kp.htm; and Keith B. Payne, preface to *Rationale and Requirements for US Nuclear Forces and Arms Control*, volume 1, Executive Report (Fairfax, VA: National Institute for Public Policy, January 2001), accessed January 17, 2010, http://www.nipp.org/Adobe/volume%201%20complete.pdf.

[12] See generally Stephen I. Schwartz and Deepti Choubey, "How $52 Billion on Nuclear Security is Spent," *Fact Sheet*, Carnegie Endowment for International Peace, January 12, 2009, accessed November 22, 2010, http://www.carnegieendowment.org/publications/index.cfm?fa=view&id=22602; Stephen I. Schwartz and Deepti Choubey, *Nuclear Spending: Assessing Costs, Examining Priorities*, (Washington, D.C: Carnegie Endowment for International Peace, 2009). For an historic assessment of the relationships between the armed services, nuclear weapons, and defense spending, see Stephen I. Schwartz, "The Cost of US Nuclear Weapons," *Issue Brief*, James Martin Center for Nonproliferation Studies, Monterey Institute for International Studies, October 2008, accessed November 22, 2010, http://www.nti.org/e_research/e3_atomic_audit.html#fn3 and *Atomic Audit: The Costs and Consequences of US Nuclear Weapons Since 1940*, ed. Stephen I. Schwartz, (Washington D.C.: Brookings Institution Press, 1998).

operating and procurement budgets. Therefore, there are powerful institutional justifications for military resistance to decreasing the role of nuclear weapons in American security policy. Although many military officials have been supportive of cuts to the nuclear arsenal, they have generally been deeply resistant to de-emphasizing the "core" nuclear deterrence mission.[13]

The military and its leadership have attempted to thwart radical reductions in the US nuclear arsenal and nuclear missions profile through a number of channels. First, they utilized their role as "experts" to directly influence congressional debate as they offered testimony to congressional committees and penned letters and op-eds lauding the benefits of a robust nuclear arsenal. Such testimony featured prominently in the Senate deliberations about the CTBT, where the treaty's opponents pointed to opposition from current and former military leaders as justification for their vote against the accord.[14] Although the most senior leadership may align themselves with the nuclear de-emphasis policies, as was the case with General Shalikishvili during the Clinton administrations' advocacy of the CTBT, the publicly available testimony of many military officials predominantly supports a continued role for nuclear weapons in promoting American national security interests.[15] Second, many retired members of the military establishment remain pro-nuclear deterrence, as demonstrated by the large number of former generals who publicly expressed their opposition to the CTBT. These statements were featured prominently during the Senate floor debate. Third, the military sponsors large volumes of

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[13] Leaks about the infighting among Obama administration officials over potential "no first use," "sole purpose," and "calculated ambiguity" use postures in the 2010 NPR are illustrative. See Peter Feaver, "Obama's Nuke Review: A Deft Compromise or a Muddled Middle Ground?" Shadow Government Blog, *Foreign Policy*, April 6, 2010, accessed November 22, 2010, http://shadow.foreignpolicy.com/posts/2010/04/06/obama_s_nuke_review_a_deft_compromise_or_a_muddled_middle_ground, and Mary Beth Sheridan, "New Nuclear Arms Policy Shows Limits US Face," *Washington Post*, April 7, 2010, accessed November 22, 2010, http://www.washingtonpost.com/wp-dyn/content/article/2010/04/06/AR2010040601369.html.

[14] See generally James Inhofe, "Testimony Before the Senate Armed Services Committee," October 6, 1999, Lexis-Nexis Academic; 106 Cong. Rec. S12541 (daily ed. October 13, 1999) (statement of Sen. Kyl); and "US Senator Jesse Helms (R-NC) Holds Press Conference with Senators John Warner (R-VA) and Jon Kyl (R-ZA) on Comprehensive Test Ban Treaty," *FDCH Political Transcripts*, October 6, 1999, Lexis-Nexis Academic.

[15] John M. Shalikashvili, *Findings and Recommendations Concerning the Comprehensive Nuclear Test Ban Treaty* (January, 2001), accessed May 9, 2010, http://www.fas.org/nuke/control/ctbt/text/shalictbt.htm.

publicly available research from advanced training schools and research institutes. This research covers a wide array of defense policy issues, including nuclear weapons policy. The overwhelming majority of relevant research favors nuclear deterrence postures.[16] Injecting these arguments into the public sphere is not only an effective means for interested military actors to circumvent the long-standing American tradition of military non-involvement in policy disputes, but it also provides vast quantities of grist for the policy mills of Washington's hawkish think tanks. It is no coincidence that the researchers at the Heritage Foundation and other right-leaning institutes frequently used military-sponsored sources when discussing the relative threats posed by other nations or critiquing proposals to de-emphasize nuclear weapons. The INSS report critical of Butler's work, administration advocacy for the Bush NPR, and military reports citing the importance of low-yield weapons development highlight the importance of this phenomenon.[17]

The nuclear laboratories are a third institutional interest group actively involved in public deliberations about American nuclear policy. The leadership at Sandia, Lawrence Livermore, Los Alamos, the National Nuclear Security Administration, and other Department of Energy entities serve as both potential and frequent expert witnesses for congressional hearings on nuclear issues, as well as public advocates for the missions of the nuclear laboratories. There are strong financial and professional incentives for the nuclear laboratory leadership and employees

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[16] See generally Kevin Chilton and Greg Weaver, "Waging Deterrence in the 21st Century," *Strategic Studies Quarterly* (Spring 2009), accessed November 22, 2010, http://www.au.af.mil/au/ssq/2009/Spring/chilton.pdf, and Department of Energy and Department of Defense, "National Security and Nuclear Weapons in the 21st Century," September 2008, accessed November 22, 2010, http://www.defense.gov/news/nuclearweaponspolicy.pdf.

[17] For examples, see Gwendolyn M. Hall,, John T. Capello, and Stephen R. Lambert, "A Post-Cold War Nuclear Strategy Model," *INSS Occasional Paper 20*, Arms Control Series, USAF Institute for National Security Studies, July 1998; James O. Ellis, "Testimony before the Senate Armed Services Committee on the Nuclear Posture Review," February 14, 2002, accessed August 10, 2009, http://armed-services.senate.gov/statemnt/2002/Ellis.pdf; and *Report to Congress on the Defeat of Hard and Deeply Buried Targets*, Submitted by the Secretary of Defense in conjunction with the Secretary of Energy, in response to Section 1044 of the Floyd D. Spence National Defense Authorization Act for Fiscal Year 2001, PL 106-398, July 2001, accessed June 2, 2010, http://www.nukewatch.org/facts/nwd/HiRes_Report_to_Congress_on_the_Defeat.pdf.

to promote a continued reliance on nuclear deterrence. Their collective budgets, and thus their institutional prestige and livelihoods, depend on the perceived continued relevance of nuclear weapons to American national security. Laboratory representatives frequently claimed that robust funding and challenging research opportunities are necessary to attract top-shelf talent to the research institutions, and that appropriate levels of funding and research can only be maintained if the US remains committed to developing new and more effective nuclear weapons. Such concerns weighed heavily in the Senate's CTBT deliberations, and undergirded the Bush administration's advocacy campaign for the 2001 Nuclear Posture Review. The CTBT debate is highly illustrative, because the laboratory leadership conditioned their support for the treaty on a commitment to elevated funding for the nuclear laboratories. Laboratory leaders like Robinson and Young were also prominent advocates of the development of low-yield nuclear weapons.

6.3.2   Access to Deliberative Spaces

Each of the case studies also shows that the question of "who can say what and when" remains determinative in the content of official deliberations about the role of nuclear weapons after the Cold War. Access to official deliberative spaces remains as tightly controlled as ever, with little room for dissent from public advocates and "radicals" who offer perspectives on national security that differ markedly from the accepted mainstream. The case of General Butler is illuminating. Butler gained status as the "ultimate insider" during his career in the Air Force, rising through the ranks of the military side of the nuclear establishment until he became the last head of the Strategic Air Command. He was recognized as a leading expert on American nuclear weapons policy, and his counsel was sought by presidents and other policy makers. He was even entrusted by then Joint Chiefs Chair Colin Powell with crafting a post-Cold War nuclear force

structure as the superpower rivalry waned in the late 1980s and early 1990s. However, after Butler outed himself as a nuclear abolitionist, his access to Congress and the halls of power evaporated. Although Butler quickly became the darling of anti-nuclear civic organizations and advocacy groups, he found himself frozen out of most executive and legislative deliberations on nuclear policy. He has never testified before Congress on nuclear policy issues, despite a large number of hearings on nuclear alert status, force size, testing policy, the modernization of the nuclear production complex, and the interaction between conventional and nuclear deterrence. Butler's absence is striking because of his widely accepted expertise on these and other national security issues. In fact, a review of the witness list from hearings on these and other nuclear issues reveals that anti-nuclear advocates, even those who tend to support a pragmatic, gradual de-emphasis on nuclear weapons, rarely appear before Congress.

Questions of access and the narrow range of represented viewpoints also characterized the Senate hearings and floor debate about the CTBT. Not only were the witness lists at these hearings reserved solely for experts in nuclear and defense policy, and thus, by design, excluded lay opinions on issues raised by the treaty, but only one or two of the witnesses could be readily classified as an anti-nuclear advocate. Instead, the Senate chose to re-create the same echo-chamber of the Cold War, where various sects within the nuclear priesthood debated marginally different positions on deterrence postures and nuclear policy, while the much broader array opinions on nuclear issues evident in informal public spheres were excluded. Perhaps most tellingly, nuclear abolition was openly derided by both camps in the Senate floor debate, with treaty opponents claiming that the CTBT was a "backdoor" mechanism for achieving nuclear disarmament, forcing treaty proponents to both point to their pro-nuclear bonafides and distance themselves from the aspirational statements about a nuclear-free world contained in the treaty's

preamble. The Clinton administration also refused to defend even eventual nuclear abolition as an eventual policy objective. As a result, abolitionists and their arguments were systematically excluded from the Senate's debate on the "crown jewel of arms control."

6.3.3 Threat Discourse

The identification of numerous security threats, both old and new, continued to occupy pride of place in the nuclear establishment's continued advocacy of a robust nuclear weapons arsenal and a reliance on nuclear deterrence policies. During the Cold War, numerous threats emanating from the Soviet Union, including the invasion of Europe, a disarming first strike, and efforts to promote a global Communist revolution and subvert American democracy were all used to varying degrees, coupled with various weapons gaps (bombers, missiles, conventional capabilities) as justification for an ever-growing and more capable American nuclear weapons arsenal. As noted in Chapter 1, the end of the Cold War would seemingly have evaporated this rationale for nuclear deterrence, and a series of arms control agreements and force drawdowns between and by the United States and the Soviet Union and its Russian successor state indicate that the case for overwhelming nuclear deterrence has weakened. However, the case studies reveal that a variety of threats continue to be used to justify a nuclear deterrence, and even the abolition-minded Obama administration's new Nuclear Posture Review foresees a role for nuclear deterrence for many years to come.

The use of threat claims by defenders of the nuclear establishment was particularly evidence in both official and unofficial responses to Butler's apostasy. Payne, the INSS, and others challenged Butler's claim that the demise of the Soviet Union eliminated the rationale for nuclear deterrence. Butler's critics demonstrated willingness to both claim that old threats were

still with us, pointing to potential instability in the Soviet successor states and the prospects for the rise of a revisionist, aggressive government in the Russia Federation. The rise of a potential nuclear challenge from the People's Republic of China was proffered by nuclear establishment supporters as a justification for a nuclear hedging strategy by the United States, both to dissuade the Chinese from attempting to achieve nuclear parity with the US and to the deter the Chinese government from making use of nuclear threats in its bid to achieve regional and global dominance. Payne and other critics of Butler also hammered away about the existence of emerging WMD threats in "rogue" states and sub-state actors and the need for nuclear weapons to deter those threats. This combination of the Soviet nuclear legacy, the possibility of a resurgent Russia, the looming rise of a nuclear-armed China, and the proliferation of WMD replaced the threat metaphors of the Cold War era, and represent a common thread throughout the case studies.

Threats arising from the "Russian bear" and the new "Chinese dragon" featured prominently in the Senate's deliberations over the CTBT. Treaty opponents argued that Russia and China were not to be trusted, and would use evasive testing techniques to circumvent the CTBT's prohibitions in an effort to achieve a nuclear advantage over the United States. Disputes over alleged Russian nuclear tests in the Arctic were cited by several senators who voted against the treaty as evidence of the CTBT's ultimate futility. These Cold War-era bogeymen were also accompanied by a new category of state-based nuclear threats: those emanating from "rogue" states such as Iran, Iraq, and North Korea, who were interested in pursuing nuclear arsenals as a means of aggrandizing their power and thwarting American security objectives. Many treaty opponents argued that the CTBT would do little to prevent these states from building simple, Hiroshima-style nuclear weapons, and that those warheads could wreak havoc on American

interests, spurring allied proliferation and crippling the US's ability to use its conventional forces in regional conflicts. On the flip side, treaty opponents feared that the sophisticated American force would require continued testing to ensure its long-term reliability, and that a decline in American and allied confidence in the effectiveness of the arsenal could trigger a "wildfire" chain of proliferation among fearful allies and adversaries. Under these conditions, critics claimed, American power would collapse and the threat of inadvertent or adventurist nuclear conflicts would only increase.

Threats old and new also undergirded the Bush administration's 2001 NPR. Administration advocates argued that even if the old Soviet threat had receded and the prospect of cooperative relations with the Russian Federation had increased, even the threat of a future reversal in relations or the rise of a new, hostile leadership structure in Russia justified continued reliance on a large and increasingly capable nuclear arsenal. The administration short-circuited arms control measures by using the prospect of ill-defined "negative contingencies" to justify the creation of a "hedge" reserve force that made a mockery of administration claims to have affected deep cuts in the American arsenal. The NPR also explicitly identified six new states as potential nuclear threats justifying a nuclear deterrent, and called for contingency plans to be drawn in the event that American nuclear firepower was needed to either prevent an imminent nuclear attack or to respond to provocation by the members of the soon-to-be-named "Axis of Evil" and other revisionist powers. Even though the Bush NPR claimed to decrease the roles and missions of nuclear forces by calling for an increased emphasis on defenses (missile defenses), counter proliferation, and increasingly capable conventional forces, the NPR still committed itself to an open-ended policy of nuclear deterrence, due to the varied and unpredictable (and unnamed) nature of the threat presenting itself to American security analysts, and because of the

"unique" ability of nuclear weapons to act as the ultimate threat in the face of allegedly deadly and implacable adversaries. The Bush NPR may have envisioned a smaller "active" nuclear arsenal, but its preferred force composition and posture would be far more capable and threatening to potential American adversaries.

These threats became more specific in the Bush administration's campaign for congressional authorization and funding for the development of mini-nukes. Although official administration advocates did not particularly focus on the need for such weapons against Russian or Chinese threats, secondary advocates in the pro-nuclear community and various papers and statements released by members of the nuclear weapons labs suggested that small nuclear weapons could have some utility in deterring particular Russian or Chinese activities, and could be deployed as a part of Payne's "tailored deterrence" strategy. The locus of "bunker buster" advocacy centered on the potential for Axis of Evil states and other revisionist powers and sub-state groups to develop hardened nuclear, biological, and/or chemical weapons storage and production/research facilities. Bunker buster advocates argued that the current US nuclear and conventional arsenal would be incapable of destroying these targets, and that such WMD targets could only be held at risk if the United States developed new nuclear weapons specifically designed to penetrate and destroy deeply buried facilities. These arguments resonated particularly well because of concerns over disclosed nuclear, biological, and chemical weapons programs at various stages of development, particularly those of the Iraqi government. Administration advocates painted numerous scenarios where hostile states or so-called terrorist organizations could develop and then use deadly WMDs against the United States with impunity, threatening massive disease outbreaks or the destruction of whole cities. Claims of potential "mushroom clouds over Manhattan" were particularly popular.

As explained in Chapter One and Chapter Three, threat claims are especially important rhetorical resources because they are both difficult to refute and because they play upon the fears of an increasingly unsettled and insecure American public. As explained by Ivie, they deploy powerful metaphorical constructions that effectively communicate both the size and magnitude of the alleged threat. Cold War-era depictions of animalistic, brutal Soviet technocrats have been replaced by descriptions of mad, Hitler-esque dictators who have no regard for anything other than their own power, and ideologically-driven "Islamofasicts" and "Hermit Kingdom" dictators bent on the destruction of the Western world. Threat claims are also difficult to answer because they are often based upon classified information that is not available to skeptics, and because it is difficult to prove a negative—evidence of peaceful intentions in one area by a state such as North Korea does not prove that the regime is not secretly pursuing deadly WMD capabilities. Official government claims about the nature and extent of WMD threats also carry considerable weight with an increasingly passive mainstream media, and thus are often widely disseminated. Government officials, many of whom have institutional, professional, and sometimes personal ties to the nuclear establishment are also able to control the flow of threat-based information, and can screen intelligence reports for nuggets that support preferred government policies. The use of selective leaks to sympathetic (and dependent) media sources is also readily available as a means of inflaming public threat perceptions.

6.3.4   Presumption that Deterrence "Worked"

Presumption also played a critical role in the defense of policy preference of the nuclear establishment in each of the case studies. As noted in Chapter One, the existence of large nuclear arsenals, the historic reliance on nuclear deterrence as a cornerstone of American nuclear policy,

and the widely-held assumption that nuclear deterrence played an important role in keeping the Cold War from "turning hot" have provided potent fodder for defenders of the pro-nuclear orthodoxy. Even though the foundations of many of these deterrence-based claims were eroded substantially by the end of the American-Soviet confrontation, the presumption that nuclear weapons "keep the peace" and enhance American power continues to exert enormous influence in post-Cold War policy debates. Proponents of nuclear cuts and less confrontational nuclear policies are asked to, and largely accept, the burden of proving that nuclear de-emphasis is justified, neatly reversing the proposition that if the horrors of MAD were justified by the threat of Soviet domination, the continued reliance on nuclear weapons, with their attendant dangers, should themselves be justified moving forward.

In the case of Butler's dissent from the nuclear priesthood, the General's critics, particularly Payne, relied upon the assumption that nuclear deterrence prevents conflict to refute Butler's public arguments for nuclear disarmament. Payne focused his defense on two primary claims. First, he noted that the Cold War itself proved that nuclear deterrence could be stable, at least under the dyadic conditions that characterized the US-USSR conflict. The fact that Butler's predicted, miscalculated, accidental, or even intentional conflict failed to materialize during the "darkest hours" of the Cold War, such as the Cuban missile crisis, proved that these risks were far lower, and thus more acceptable, in a post-Cold War environment. Second, Payne argued that the threat of American nuclear retaliation deterred Saddam Hussein from using chemical and biological weapons against coalition forces during the 1991 Gulf War. Payne rested his case on questionable reports from Iraqi regime insiders, who claimed that Hussein would have used such weapons but for fear of an American retaliatory strike. Nuclear weapons, he maintained, were

thus necessary to ensure a credible American deterrence in the face of "rogue states" and other potential regional threats. [18]

Presumption in favor of nuclear weapons and a deterrence-centered security policy was also a lethal rhetorical resource for the opponents of American ratification of the CTBT. Although many "outsider" advocates of the treaty defended the CTBT as a vital step on the road to the eventual abolition of nuclear weapons, the Clinton administration and other treaty advocates during the Senate deliberations felt compelled, either by their own experience or political concerns, to accept the legitimacy and necessity of nuclear deterrence as a key element of US security policy, and instead fight a rearguard action against deterrence-based criticisms of the treaty. As noted in Chapter Three, not only did this decision to eschew defending eventual disarmament as a desirable goal eviscerate many of the most persuasive public arguments in favor of the CTBT, but it ensured that almost the entirety of the public, and presumably closed door, Senate deliberations about the treaty centered on its impact on deterrence and the reliability of the nuclear arsenal. Questions of whether nuclear deterrence itself was justified as a means of protecting the public's interests were largely ignored. The strategy of attempting to distance the defense of the CTBT as a policy vehicle from the treaty's larger role in global disarmament efforts failed, not only because it drove the deliberations into technical areas outside of Senator expertise, thus forcing the body to make difficult judgment calls on the reliability of competing experts, but also because treaty opponents still used the treaty's preamble and advocacy within the arms control community as evidence that the CTBT was a backdoor pathway to disarmament. Treaty proponents thus found themselves vulnerable to charges of either being

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[18] See generally Keith B. Payne, "Why We Must Sustain Deterrence," Testimony before the Senate Armed Services Committee, Strategic Forces Subcommittee, March 31, 1998, accessed January 15, 2010, http://www.fas.org/spp/starwars/Congress/1998_h/s980331kp.htm, and Keith B. Payne, "Nuclear Deterrence for a New Century," *The Journal of International Security Affairs* (Spring 2006): 49-55.

fools who were readily duped, or as persons who were deceiving the public about their aims and interests. Either way, the credibility of treaty advocates was seriously tarnished.

The inter-linked debates about the desirability of the nuclear policy vision outlined in the 2001 Nuclear Posture Review and subsequent Bush administration efforts to push the development and eventual deployment of low-yield nuclear weapons also featured the powerful presumption that nuclear deterrence protects the American public. Although the 2001 NPR described itself as a "step away" from the deterrence logics of the Cold War, it still envisioned nuclear weapons as a centerpiece of the American deterrent for the foreseeable future, and justified the development of new weapons capabilities as necessary to adapt the nuclear arsenal to the new deterrence challenges of the twenty-first century. The NPR and low-yield weapons advocacy strategies of the Bush administration argued that many features of the Cold War security environment that justified nuclear weapons remained, meaning that the weapons would still be needed to address the old threats of potential (even if unlikely) great power competition and the existence of the large Russian nuclear arsenal. The advocacy strategies also claimed that the new features of the threat environment, such as nuclear weapons proliferation, the possibility of attack by sub-state actors, and the need to deter actors who may not subscribe to the 'MAD' logic of the Cold War required nuclear weapons, but of a new variety. Thus, the defense of "tailored deterrence" offered by Payne, Rumsfeld, and his cadre of supporters in government argued that continuity in threat required some elements of the old Cold War deterrent, and that any changes simply necessitated new weapons to meet the threats, all grounded on the claim that nuclear deterrence was a successful strategy during the Cold War.

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6.3.5 Technical Discursive Practices

Each of the case studies clearly demonstrate that many of the technical norms of evaluating the desirability of nuclear deterrence and the technologized terminology describing nuclear weapons continue to dominate official discourse. This represents a critical continuity between the argument patterns that predominated during the Cold War and those that characterize deliberation in the post-Cold War era. As noted in Chapter One, the predominance of "technostrategic discourse" tends to insulate debates about nuclear weapons and their roles in public policy from public input and scrutiny, while focusing the content of these deliberations on ground found comfortable by nuclear war planners and defenders of the nuclear establishment. As noted by Cohn, Schiappa, and others, the rhetoric of "nukespeak" tends to lead audiences and nukespeak practitioners to pre-judge their deliberations in favor of deterrence-based nuclear weapons policies.[19]

Butler's critics frequently resorted to technical explanations about the subtle logics of deterrence, the inadequacies of arms control regimes, the impracticality of effective nuclear verification, and the dangers of a "nuclear breakout," which itself alludes to a jailbreak, suggesting equal helpings of lawlessness and danger. The policy prescriptions of Butler and his allies were refuted, and even overwhelmed, with technical detail and layered arguments, found in congressional testimony, public statements, and press coverage of the current cardinals of the nuclear faithful. Butler also often found himself defending his proposals in technical terms, shifting away from his ethics-based arguments into discussions about the necessity of second

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[19] See Edward Schiappa, "Naming as Argument by Definition: The Case of "Nukespeak"," in *Defining Reality: Definitions and the Politics of Meaning*, (Carbondale, IL: Southern Illinois University Press, 2003), 130-150; Edward Schiappa, "The Rhetoric of Nukespeak," *Communication Monographs 56* (1989): 251-272; Schiappa 1989; Carol Cohn, "Slick'ems, Glick'ems, Christmas Trees, and Cookie Cutters: Nuclear Language," *Bulletin of the Atomic Scientists 43:5* (June 1987): 17-24; and Carol Cohn, "Sex and Death in the Rational World of Defense Intellectuals," *Signs: Journal of Women and Culture in Society 12* (1987): 687-718

strike forces and whether accident risks are exacerbated in a world of escalation ladders. Perhaps Butler was more comfortable engaging in these debates because of his professional background, or perhaps he believed that he needed to use the language of the nuclear expert to effectively relay his profound experience with the weapons to his potential audience members. Regardless, Butler demonstrated a clear tendency to slip into "nukespeak," even when he himself framed his arguments around ethical and political objections to nuclear weapons, recognizing their persuasive appeal for lay audiences.

Similarly, the Senate deliberations on the CTBT, their coverage in the mainstream news media, and the Senate's interactions with other, informal public spheres, such as the think tank and nuclear advocacy communities, exhibited a clear concern with a series of fifteen technical questions about the impact of treaty ratification on arsenal reliability, nuclear modernization programs, and global nonproliferation efforts. The many senators who lacked expertise on the finer points of arms control, test verification, and warhead maintenance and design were compelled by the nature of the ratification process to render a momentous judgment on the future direction of American nuclear policy while grappling with the language of force planners, weapons designers, and verification specialists. Although a few members of the Senate, notably Senators Biden, Kyl, Lugar, and Warner, demonstrated a strong grasp of the details of both the treaty and American stockpile maintenance and deterrence policy, many of their colleagues conceded a lack of deep knowledge on the subject in either their comments during the Senate floor debates or while giving commentary to the press. This discomfort with rendering a judgment on these technical questions is most evident in the appeal by more than half the membership of the Senate to delay the vote to allow more time for information gathering and deliberation about the treaty. The Republican leadership's insistence on an immediate vote

placed many imperfectly-informed Senators in a position where they had to choose between the competing judgments of arms control and nuclear weapons experts, along with key opinion leaders within their own ranks. It should not be surprising that many Senators chose to vote against the treaty by casting their lot with the presumption that nuclear weapons policy was effective in promoting stability during the Cold War, and that the Senate should not act to disrupt this seemingly successful set of policies unless it was certain of the outcome.

The public debate and mainstream news coverage of the Senate debates were characterized by a battle of talking heads, with even editorial pieces offering sound-bite-length judgments on the merits of the components of the CTBT and the reliability of the SSP programs, supported by either gestures to expert agreement on the point offered of a vague and sometimes inaccurate description of a portion of the "expert debate" on the subject. Consequently, unless a member of the audience possessed the technical training, time, and expertise to locate and make sense of expert analyses of the treaty, the audience was placed in a position where it was forced to make credibility judgments based on media sources, affinity for government sources, and the seeming believability of the expert witnesses and talking heads appearing on major media outlets. As noted by Schiappa and Kovel, the prevalence of technical terminology in public discussions of nuclear policy tends to deter public engagement with those deliberations.[20] This phenomenon may explain both the relatively shallow, although broad, level of public support for the treaty and why this broad but weak support did not translate into pressure on members of the Senate to support the treaty.[21]

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[20] See Schiappa, "Rhetoric of Nukespeak;" and Joel Kovel, *Against the State of Nuclear Terror* (Boston: South End Press, 1984).
[21] See Richard Lister, "Clinton's Gamble on Test-Ban Treaty," *BBC*, October 7, 1999, accessed November 19, 2010, http://news.bbc.co.uk/2/hi/americas/468350.stm.

The leaked portions of the 2001 Nuclear Posture Review and its public defense by Bush administration officials were also rife with technical jargon, euphemism, and other forms of nukespeak. As noted in Chapter Four, the document utilized a number of euphemisms to describe nuclear system types and postures, including "offensive strikes systems," "strategic forces," and "operationally deployed forces," while outlining a number of jargon-laden missions for these forces, including to "provide assurance to security partners," to "dissuade a potential adversary from pursuing threatening capabilities," and to "defeat opponents decisively."[22] The actual physical effects of these nuclear weapons on their designated targets, or on the persons and societies that would be extinguished if these weapons were ever to be used, were never discussed. The Bush administration's expressed vision for a new American nuclear posture also included a re-branding of the "old" (and politically popular) nuclear triad of air-, land-, and sea-based delivery platforms to a "New Triad" that included *all* of the components of the Cold War-era triad while incorporating provocative conventional strike capabilities, "active and passive defenses," and an "adaptive infrastructure" for the maintenance and production of nuclear warheads and components. This re-branding represented a transparent effort by the Bush administration to shift political and public support for the "old" triad to two controversial and politically contentious initiatives: a missile defense scheme and programs to develop new nuclear warheads and capabilities.

Chapter Five's analysis of Bush administration efforts to obtain authorization and funding for the development of low-yield weapons includes the most obvious examples of nukespeak, including the naming of such weapons as "bunker-busters" and "mini-nukes." Naming something a "bunker buster" both pre-judges the effectiveness of the weapon by

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[22] See "Nuclear Posture Review [Excerpts]," December 31, 2001, accessed July 25, 2009, http://www.globalsecurity.org/wmd/library/policy/dod/npr.htm.

labeling the warhead with its intended purpose, despite the fact that many independent analysts disputed the ability of the US to develop a delivery vehicle and warhead that could actually threaten deeply buried bunkers. "Bunker buster" functioned as a bureaucratizing term that insulated a policy platform from public debate and scrutiny. Similarly, applying the name "mini-nukes" works to domesticate these weapons, adding a "cute" name as a means of making the weapons seem safer and more usable than their implied counterparts, the "full-sized nukes" of the Cold War nuclear arsenal. Unfortunately, there is nothing that is "mini" about the explosive capacity, destructive force, or lethality of so-called "mini-nukes," which are envisioned as having an explosive force ranging up to the size of the bomb that leveled Hiroshima and killed hundreds of thousands of Japanese civilians while generating enormous quantities of radioactive contamination. Many potential scenarios for the use of mini-nukes would involve an urban setting, because many prospective American adversaries are known to place sensitive research and production facilities in densely populated areas as a means of dissuading attack, ensuring enormous loss of human life in the event that US policy makers ordered the use of such weapons.

6.4   LIMITATIONS AND IMPLICATIONS

6.4.1   Study Limitations

In addition to the limitations related to all forms of qualitative research, this study faces a number of additional challenges arising from the subject matter. Public debates about nuclear weapons policy are very, very large. The number of interest groups participating in such debates, the sheer volume of written material produced by advocates, and potential for extensive media

coverage create serious challenges for the rhetorical critic. As a result, it is very difficult to both craft sufficiently narrow research questions and to ensure that the answers to those questions are relevant to broader concerns about the trajectory of nuclear policy discussions in this country. The expansive size of this study indicates that I was only partially successful in narrowing the scope of the project. One certainly risks missing the forest for the trees.

However, one could also advance an equally valid argument that the study is too small. There are several cases of "post-Cold War nuclear controversy" that are not addressed fully in the study, including the debate around the Strategic Offensive Reductions Treaty, disputes over advanced, dual-use research facilities at the nation's nuclear laboratories, "legacy concerns" deriving from the remediation of since-abandoned nuclear development and production facilities, questions about the desirability of holding nuclear weapons on high alert status, and the ongoing dispute about the merits of adopting a "no first use" nuclear posture, to name but a few. Providing a "complete" picture of policy debates about the role of nuclear weapons after the Cold War could arguably include any, or all, of these subjects. In the end, the case studies and the conclusions derived from them will stand on their own merits. The cases were selected with an eye toward broad public impact and the ability to render generalized judgments about the trajectory of American nuclear policy.

Critics could also argue that this study does not deploy a "true" case study methodology, at least as it is understood among social scientists. Although the cases demonstrate important similarities and contrasts, these aspects are not outlined or interrogated in the systematic fashion that characterized case study research in political science and the study of international relations. Instead, the case studies are framed as "episodes of controversy," which I believe shed light on the nature of post-Cold War nuclear policy deliberations. As a result, the generalizations drawn

from these studies are most productively viewed as useful but contingent, and subject to additional inquiry.

6.4.2 Implications for Rhetorical Theory

Alongside the work of many other rhetorical scholars, this study demonstrates that the tools of rhetorical criticism remain relevant to the understanding of American foreign policy in the twenty-first century and enrich our comprehension of how nuclear weapons policy is formulated, articulated, and justified. Rhetorical criticism may be even more relevant in today's interconnected world than it was during the Cold War, since communication across boundaries is an increasingly prevalent feature of policy making and policy justification, with speakers and advocates forced to consider the implications and effects of their words not just for their immediate listeners, but also for a potentially global audience.

The study also shows that Goodnight was largely correct in that the study of controversy provides a useful framework for analyzing foreign policy disputes as they are manifested in the post-Cold War political environment. Although American understandings of the world and the US's place within it were deeply impacted by the crises arising from the attacks of September 11, 2001, our political milieu continues to exhibit many of the characteristics identified by Goodnight in his 1998 essay. Policy makers and advocates are still struggling to articulate a new interpretive framework that exhibits the rigor and durability of those that dominated the Cold War. Instead, we are confronted with many compelling, and contradictory, interpretive frames that force us to make sense of an increasingly complex world. Similarly, the nuclear establishment continues to confront a "legitimation controversy" as the tenets of its existence are questioned by a marginalized, but increasingly vocal, set of advocates who question the very

necessity of nuclear deterrence.[23] The mere fact of Obama's Prague speech demonstrates that the nuclear orthodoxy will have to continue to justify itself.[24] These debates are also increasingly global, as parties around the world take an interest in American nuclear policy as they recognize our shared stake in averting an all-consuming nuclear war.

Finally, this study suggests that framing analysis can be an important component of the rhetorical critic's toolbox. Although framing theories find their roots in sociology and media criticism and exhibit an increasing popularity deriving from their use in linguistics, they provide a useful framework with which to discuss the "rhetorical impact" of complex policy debates and to explore the interactions between public speeches, formal and informal policy deliberations, and attendant media coverage. Although one could argue that framing analysis overlaps with many other approaches to rhetorical criticism, I have found that framing analysis facilitates a productive melding of the strategic, the metaphorical, and the ideological approaches to criticism. Frame analysis allows the critic to analyze the constraints faced by a speaker in a particular rhetorical situation, explore how language choices affect both audience responses and broader public reception of both those choices and the arguments they support, and tie these speech acts to their role in propagating particular descriptive and normative judgments about how the world does, and should, work.

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[23] See G. Thomas Goodnight, "Public Argument and the Study of Foreign Policy," *American Diplomacy 3:3* (1998), accessed November 25, 2010, http://www.unc.edu/depts/diplomat/AD_Issues/amdipl_8/goodnight.html.
[24] See "The President in Prague," White House website, accessed December 3, 2010, http://www.whitehouse.gov/video/The-President-in-Prague/.

6.4.3 Implications for Future Research

The future trajectory of American and global nuclear policy is not set in stone. The Obama administration's release of a new Nuclear Posture Review in April 2010 represents both an important opportunity to track the course of pro- and anti-nuclear deterrence argumentation and to analyze whether the argument formations and justification burdens that undergirded Bush-era nuclear policy will confound the implementation of the new NPR's vision for a de-emphasis of nuclear weapons in American security policy and Obama's broader objective of leading the world to a nuclear-free future.

The Obama NPR does show promise. It proposes sweeping changes to both the structure and purpose of the American nuclear arsenal, attempting to stem the tide of nuclear proliferation and decrease the threat of nuclear terrorism through policies that reduce the role of nuclear weapons, attempt to maintain a stable deterrent at lower force levels, and render deterrence more stable at the regional level by bolstering American alliances. Importantly, the NPR only commits the United States to sustaining a nuclear arsenal so long as other countries do as well, leaving the door open to eventual nuclear disarmament.[25] However, the current controversy in the Senate over the New START treaty and the lack of progress on important administration arms control initiatives like the CTBT and a Fissile Material Cutoff Treaty show that many powerful interest groups remain committed to a strong nuclear deterrence policy. Using the insights derived from this study to analyze these ongoing debates promises to both enhance our understanding of these controversies as they play out and provide guidance for critical interventions into these nuclear policy debates.

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[25] See Department of Defense, "2010 Nuclear Posture Review (NPR) Fact Sheet," April 6, 2010, accessed December 3, 2010, http://www.defense.gov/npr/docs/NPR%20FACT%20SHEET%20April%202010.pdf.

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