

Stanton Nuclear Security Fellows Seminar

1. Matthew Kroenig, CFR

Nuclear Superiority or the Balance of Resolve? Explaining Nuclear Crisis Outcomes

This research poses a fundamental question in international politics: What determines the outcomes of crises between nuclear-armed states? The relationship between nuclear force posture and the causes and outcomes of nuclear crises is of extreme real-world importance as the United States considers the advantages and disadvantages of significantly reducing the size of its nuclear arsenal.

The outcome of conflict between nuclear-armed countries is the subject of an intense intellectual debate. Many scholars argue that nuclear superiority provides states with an advantage in a crisis, while others argue that nuclear crises are “competitions in risk taking” and that the state with the greatest political stake in the conflict will prevail. Yet, neither set of theoretical claims has been subjected to systematic empirical investigation.

I argue that nuclear crises are competitions in risk taking, but that nuclear superiority – defined as an advantage in the size of a state’s nuclear arsenal relative to that of its opponent – increases the level of risk that a state is willing to run in a crisis. Drawing from a standard nuclear brinkmanship model, I demonstrate that states that enjoy a nuclear advantage over their opponents possess higher levels of effective resolve. More resolved states are willing to push harder in a nuclear crisis, improving their prospects of victory. While the cost of a nuclear exchange is unacceptable for all states, nuclear superior states are more likely to win nuclear crises because they are willing to hang on a bit longer in a crisis than their nuclear inferior opponents. According to the theoretical setup, therefore, nuclear superiority and nuclear brinkmanship theory are complementary, not competing, explanations.

Employing a new data set of fifty-four nuclear crises, I examine the impact of nuclear superiority and political stakes on nuclear crisis outcomes. I find a powerful relationship between nuclear superiority and victory in nuclear crises. In contrast, explanations that emphasize a state’s stakes in a crisis do not find support in the data. These findings hold even after controlling for conventional military capabilities and for selection into nuclear crises. Next, in careful case studies of the U.S.-U.S.S.R, and the India-Pakistan nuclear relationships over time, I show that policymakers in nuclear superior states were encouraged to push harder in crises, while leaders in nuclear inferior states felt pressure to capitulate early.

The results of this research have important policy implications. On February 19, 2009, the International Atomic Energy Agency assessed that Iran had produced enough uranium to produce its first nuclear weapon if the uranium were enriched to higher levels. As it appeared increasingly likely that Iran might join the nuclear club, analysts struggled to grasp the meaning of Iran’s nuclear ascendancy for U.S. national security. Some claimed that a nuclear Iran would not pose a serious threat because Iran could

be deterred from using nuclear weapons. Others argued that the United States would be placed at a distinct disadvantage in nuclear crises against Iran because, in the most likely conflict scenarios, the balance of political stakes would favor Tehran. The brinkmanship approach adopted in this project concurs that proliferation in Iran would disadvantage the United States by forcing it to compete with Iran in risk taking, rather than in more traditional arenas. On the other hand, the findings of this research also suggest that the United States could fare well in future nuclear crises. As long as the United States maintains nuclear superiority over Iran, a prospect that seems highly likely for years to come, Washington will frequently be able to achieve its basic goals in nuclear confrontations with Tehran.

On April 8, 2010, U.S. President Barak Obama and Russian President Dmitri A. Medvedev signed an historic arms control agreement, vowing to reduce the total number of deployed strategic nuclear warheads in each country to 1,550, down from a previous high of 2,200. Proponents celebrated the agreement as a step toward a safer world, while critics argued that the reductions could weaken America's nuclear deterrent. The findings of this research suggest that the United States should be cautious as it moves to reduce the size of its nuclear arsenal. Nuclear superiority has provided the United States with a strategic advantage in the past and in a competitive international system in which additional countries are entering the nuclear club, nuclear crises may become an increasingly important means of settling international disputes in the future. Policymakers should avoid potentially catastrophic nuclear crises, but if they happen to find themselves in a dangerous nuclear standoff, they will want to be sure that they have positioned themselves to prevail.

2. Gary Schaub, Jr., RAND

Rethinking the Unthinkable: Doctrine for Minimum Nuclear Deterrence

Introduction

Nuclear weapons enable the United States to achieve certain political objectives, including maintaining strategic stability, strategic deterrence, extended deterrence, and reassuring allies that they need not procure their own nuclear deterrent forces. The United States has steadily reduced the number of nuclear weapons in its arsenal for two decades and intends to reduce it further. Doing so while retaining the ability to achieve these political objectives requires better doctrinal guidance than currently available at the operational and strategic level.

I chose this topic because current doctrine perpetuates a fundamental gap between the threat and use of military force and the attainment of political ends, particularly with regard to nuclear weapons. Most American military doctrine is apolitical. It is pitched at the operational level, where goals are assumed to have been set by political authorities, where destruction of targets is presumed to facilitate the achievement of these objectives, and the primary concern is to achieve this destruction in the most efficient and effective manner possible. How military means lead to the attainment of political ends is the very purpose of their existence and use, yet this relationship has not been well-explored or codified by the U.S. military.

I propose to bridge this gap in the nuclear realm by building on the Deterrence Operations Joint Operating Concept, a doctrine document to which I contributed, to produce guidance for revising American joint and service doctrine that addresses deterrence in both the conventional and nuclear realm. The intended audiences for this research will be defense policy elites serving in and out of government and officers commanding and serving at STRATCOM and in USAF and Joint Staff doctrine directorates.

Methodology/Approach

In order to do so, I will analyze how the U.S. military has conceptualized deterrence at the nuclear and conventional level, including capabilities and ways in which they have been and could be used to achieve their objectives. These objectives have included strategic stability between the United States and other nuclear powers, conventional deterrence in regional contingencies, and reassurance of allies so as to reduce their incentives for self-help in the nuclear realm. American military (and policy) conceptions of deterrence have emphasized capability analysis and therefore I will utilize a dynamic assessment methodology to determine how well forces in being have historically met these objectives. I will then argue that such analyses are apolitical as they assume, rather than delineate, a link between military and political outcomes and develop one based upon the international and domestic considerations facing the leaders of states and non-state organizations.

Assumptions

In order to facilitate the development of my framework to link military means to political ends, I assume that political outcomes are determined by the decisions made by the leaders of states and nonstate organizations, that these leaders base their decision upon estimates of the potential costs and benefits

of various courses of action available to them, and that these consequences derive from the actual and potential actions of the deterring state, other international actors, and domestic audiences. I further assume that it is possible for external observers, such as military intelligence analysts, to make assessments of how these leaders weigh the consequences of their possible actions and for these assessments to shape the manner in which deterrent actions, be they communications or uses of force, are utilized.

Hypothesis/Expected Findings

I expect to find that dynamic analyses of the interaction of American and other states' nuclear and conventional military forces will indicate that strategic stability between the United States and Russia has declined during the past two decades, that the United States has strategic superiority vis-à-vis other nuclear actors, that American conventional superiority has allowed it to base its deterrence doctrine on escalation dominance rather than stability, and that American nuclear and conventional superiority has reassured allies and suppressed incentives to acquire their own nuclear capabilities. I also expect to not find consistent arguments put forth within military and policy circles as to why these outcomes occurred, which will be indicative of a lack of understanding of how military means cause political outcomes.

I believe the results of my research will contribute to the policy process by convincing key military officers—particularly at the USAF Doctrine Center, the Joint Staff, and STRATCOM—and some policy makers that devoting the resources required to understand the foreign and domestic inputs to a potential adversary's decision calculus is worthwhile, that it can lead to more effective and efficient uses of military resources, and thereby facilitate a balanced approach to adjusting the means, ways, and ends of American deterrence policies, be they nuclear or conventional.

3. Todd Sechser, CFR

Nuclear Weapons and Coercive Diplomacy

What are the coercive effects of nuclear weapons? Nearly seventy years into the nuclear age, we still lack a complete answer to this question. In the United States, most strategic thinking about nuclear weapons has focused on deterrence – that is, using nuclear threats to prevent attacks against the nation’s territory and interests (e.g., George and Smoke 1974; Huth 1988; Goldstein 2000). However, we know comparatively little about whether nuclear weapons are useful for more offensive diplomatic purposes. Can the threat of nuclear punishment – whether explicit or implicit – bully adversaries into relinquishing possessions or changing their behavior? Can nuclear weapons be used to shield more aggressive foreign policies? Or are nuclear weapons effective mainly as instruments of deterrence?

There is little agreement about the answer. At the outset of the nuclear age, American policy makers were optimistic that nuclear threats (both explicit and unspoken) could be used to blackmail enemies into conforming with U.S. demands (Alperovitz 1965). Indeed, the belief that nuclear weapons are potentially useful tools of blackmail persists in some circles today: the 2002 U.S. National Strategy to Combat Weapons of Mass Destruction, for example, asserted that new proliferators would be able to use nuclear weapons as “tools of coercion and intimidation.” And recent statistical studies argue that the shadow of escalation can help nuclear states achieve favorable crisis outcomes – even when nuclear weapons are not explicitly invoked (Beardsley and Asal 2009).

Yet some scholars and practitioners have disputed this assessment, concluding that threats to use nuclear weapons for purposes other than self-defense are simply not credible (Schelling 1966; Jervis 1989; Mueller 2010). Robert McNamara put it bluntly, arguing in an influential article that nuclear weapons “are totally useless – except only to deter one’s opponent from using them” (1983, 79). This view asserts that nuclear threats in support of offensive foreign policy goals are costly to make and even more costly to execute: a state that resorts to nuclear blackmail for aggressive objectives might invite international outrage and prompt states to align against it (e.g., Paul 2009; Russett 2011). Nuclear weapons therefore carry little weight as coercive tools, according to this logic, since few believe that a nuclear state would be willing to endure such costs except in self-defense.

The proposal below briefly describes a book project that is intended to help resolve this debate. The book will evaluate the role of nuclear weapons in several foreign policy contexts to assess their influence on coercive diplomacy outcomes both during the Cold War and afterward. Since nuclear weapons have rarely been explicitly invoked for purposes other than deterrence (see Art 1980), a central question of the study will be whether the mere presence of nuclear weapons influences crisis bargaining.¹ The study aims to contribute to our understanding of the political effects of nuclear weapons by offering a more complete picture of their offensive utility – or lack thereof.

¹ As Henry Kissinger warned in 1956, “overt threats have become unnecessary; every calculation of risks will have to include the Soviet stockpile of atomic weapons and ballistic missiles” (351).

Existing Research on Nuclear Coercion

There is surprisingly little up-to-date research about the coercive effects of nuclear weapons. Some studies during the 1970s and 1980s evaluated the role of nuclear weapons in individual crisis episodes (e.g., Blechman and Hart 1982; Foot 1988), while others took stock of the broader record of “atomic diplomacy” during the Cold War (Bundy 1984; Betts 1987; Halperin 1987). Since the fall of the Soviet Union, however, the diplomatic effects of nuclear weapons have received little attention. Many studies have investigated coercive diplomacy in general (e.g., George and Simons 1994; Freedman 1998; Treverton 2000; Byman and Waxman 2001; Art and Cronin 2003), while other research highlights the limits of coercive military power (Zenko 2010; Sechser 2010). For the most part, however, these studies have emphasized the role of conventional military power rather than nuclear weapons. This project aims to provide the first comprehensive look at nuclear coercion in almost a quarter-century.

In addition, previous research on nuclear coercion has exhibited two important limitations. First, many studies of nuclear coercion examine coercive attempts only by nuclear states (e.g., Bundy 1984; Halperin 1987; Betts 1987). However, these studies do not compare nuclear and non-nuclear coercion; they therefore cannot tell us whether coercion succeeds more often when nuclear weapons are present. This is particularly problematic since it is commonly believed that coercion is difficult in general (e.g., George and Simons 1994; Art and Cronin 2003). The conclusion of some scholars that nuclear blackmail is ineffective therefore might simply be a reflection of the overall difficulty of coercion. Without comparing nuclear and non-nuclear cases, we cannot know.

Second, quantitative studies of nuclear coercion (e.g. Beardsley and Asal 2009) have been constrained by a lack of appropriate data. These studies tend to employ datasets, such as the International Crisis Behavior dataset, that conflate crisis “victories” achieved by brute force with those achieved by coercive diplomacy. Such data may suggest that nuclear states happen to win more wars, but they tell us little about the role of nuclear weapons in coercive diplomacy. Moreover, most cases in these datasets represent minor military encounters, such as incidents between coast guard vessels and fishing trawlers (Downes and Sechser 2012). Such cases add little to our understanding of coercive diplomacy.

Tentative Outline of the Book

• Chapter 1: Nuclear Coercion: What Do We Know?

The first chapter explains the importance of understanding the coercive effects of nuclear weapons, even though nuclear war seems to have disappeared from the public consciousness. The chapter also reviews the contributions and shortcomings of existing literature, defines the central questions of the book, and offers a justification for using primarily quantitative methods.

• Chapter 2: The Nuclear Coercion Debate

This chapter explores the two broad perspectives about nuclear coercion reviewed above: one which asserts that nuclear weapons convey significant bargaining leverage to their possessors, and a contrary view that sees nuclear weapons as ineffectual for anything other than self-defense.

- Chapter 3: Nuclear Blackmail

This chapter utilizes a new quantitative database of coercive demands that I recently compiled (Sechser 2011) to determine whether nuclear-armed states make more effective “compellent” threats.

- Chapter 4: A Shield for Aggression?

Do nuclear weapons embolden states to make more demands or act more aggressively in international relations? This chapter evaluates quantitative data on the initiation of threats and militarized conflicts to determine whether new nuclear states have been emboldened to make more demands or initiate more conflicts than other states.

- Chapter 5: Nuclear Coercion During Wartime

The central question of this chapter is whether the implicit risk of nuclear escalation can help states get better deals when negotiating with enemy combatants. I plan to collect new quantitative data on negotiated war outcomes to answer this question. I will utilize statistical models that account for the possibility that nuclear states get better “deals” in part by preventing wars that never happen in addition to achieving favorable settlements in those that do.

- Conclusion: Nuclear Weapons and U.S. Foreign Policy in the 21st Century

This chapter speculates about the types of foreign policy crises the United States is likely to experience during the 21st century, and asks whether nuclear weapons are likely to enhance U.S. leverage in these crises, in light of the book’s findings.

The Importance of Studying Nuclear Coercion

The intended audience for this book is primarily academic, but the project bears on two important policy debates. First, many in the United States and elsewhere have called for deep reductions to the American nuclear arsenal (e.g., Shultz et al. 2007), but critics contend that such measures would undermine American influence in crises (e.g., Bolton and Yoo 2010). If possessing nuclear weapons indeed helps the United States coerce its adversaries, then policy makers should be cautious about major cuts to the American arsenal. If not, however, this would strengthen the case for further arms control measures.

Second, calls for military action against proliferators often cite the possibility that new nuclear states will blackmail their adversaries. For example, some commentators argue that a nuclear-armed Iran would be able to use “intimidation and blackmail” to compel dramatic concessions from its neighbors (Podhoretz 2007, 17). Others counter that Iran would quickly discover that “nuclear bombs are simply not good for diplomatic leverage or strategic aggrandizement” (Lindsay and Takeyh 2010, 37). This is a crucial question (although certainly not the only one) in the debate about a possible preventive strike against Iran’s nuclear facilities. It is worth evaluating the historical record to determine whether fears about possible Iranian nuclear blackmail have a historical basis.

References

- Alperovitz, Gar. 1965. *Atomic Diplomacy: Hiroshima and Potsdam*. New York: Simon and Schuster.
- Art, Robert J. 1980. “To What Ends Military Power?” *International Security* 4(4): 3–35.
- Art, Robert J. and Patrick M. Cronin, eds. 2003. *The United States and Coercive Diplomacy*. Washington, D.C.: U.S. Institute of Peace.

- Beardsley, Kyle and Victor Asal. 2009. "Winning with the Bomb." *Journal of Conflict Resolution* 53(2): 278–301.
- Betts, Richard K. 1987. *Nuclear Blackmail and Nuclear Balance*. Washington, D.C.: Brookings Institution.
- Blechman, Barry M. and Douglas M. Hart. 1982. "The Political Utility of Nuclear Weapons: The 1973 Middle East Crisis." *International Security* 7(1): 132–56.
- Bolton, John R. and John Yoo. 2010. "Why the Rush to Cut Nukes?" *New York Times* (9 November).
- Bundy, McGeorge. 1984. "The Unimpressive Record of Atomic Diplomacy." In *The Choice: Nuclear Weapons Versus Security*, edited by Gwyn Prins, pp. 42–54. London: Chatto and Windus.
- Byman, Daniel and Matthew C. Waxman. 2001. *The Dynamics of Coercion: American Foreign Policy and the Limits of Military Might*. New York: Cambridge University Press.
- Downes, Alexander B. and Todd S. Sechser. 2012. "Democracies and the Credibility of Coercive Threats." *International Organization* (forthcoming).
- Foot, Rosemary J. 1988. "Nuclear Coercion and the Ending of the Korean Conflict." *International Security* 13(3): 92–112.
- Freedman, Lawrence. 1998. *Strategic Coercion: Concepts and Cases*. New York: Oxford University Press.
- George, Alexander L. and William E. Simons. 1994. *The Limits of Coercive Diplomacy*. 2nd ed. Boulder, Colo.: Westview.
- George, Alexander L. and Richard Smoke. 1974. *Deterrence in American Foreign Policy: Theory and Practice*. New York: Columbia University Press.
- Goldstein, Avery. 2000. *Deterrence and Security in the 21st Century: China, Britain, France, and the Enduring Legacy of the Nuclear Revolution*. Stanford, Calif.: Stanford University Press.
- Halperin, Morton H. 1987. *Nuclear Fallacy: Dispelling the Myth of Nuclear Strategy*. Cambridge, Mass.: Ballinger.
- Huth, Paul K. 1988. *Extended Deterrence and the Prevention of War*. New Haven: Yale University Press.
- Jervis, Robert. 1989. *The Meaning of the Nuclear Revolution: Statecraft and the Prospect of Armageddon*. Ithaca, N.Y.: Cornell University Press.
- Kissinger, Henry A. 1956. "Force and Diplomacy in the Nuclear Age." *Foreign Affairs* 34(3): 349–66.
- Lindsay, James M. and Ray Takeyh. 2010. "After Iran Gets the Bomb." *Foreign Affairs* 89(2): 33–49.
- McNamara, Robert S. 1983. "The Military Role of Nuclear Weapons: Perceptions and Misperceptions." *Foreign Affairs* 62(1): 59–80.
- Mueller, John. 2010. *Atomic Obsession: Nuclear Alarmism from Hiroshima to al-Qaeda*. New York: Oxford University Press.
- Paul, T.V. 2009. *The Tradition of Non-Use of Nuclear Weapons*. Palo Alto, Calif.: Stanford University Press.
- Podhoretz, Norman. 2007. "The Case for Bombing Iran." *Commentary* (June): 17–23.
- Russett, Bruce M. 2011. *Hegemony and Democracy*. New York: Routledge.
- Schelling, Thomas C. 1966. *Arms and Influence*. New Haven: Yale University Press.
- Sechser, Todd S. 2010. "Goliath's Curse: Coercive Threats and Asymmetric Power." *International Organization* 64(4): 627–60.
- . 2011. "Militarized Compellent Threats, 1918-2001." *Conflict Management and Peace Science* 28(4): 377–401.
- Shultz, George P., William J. Perry, Henry A. Kissinger, and Sam Nunn. 2007. "A World Free of Nuclear Weapons." *Wall Street Journal* (4 January).
- Treverton, Gregory F. 2000. *Framing Compellent Strategies*. Santa Monica, Calif.: RAND.
- Zenko, Micah. 2010. *Between Threats and War: U.S. Discrete Military Operations in the Post-Cold War World*. Stanford, Calif.: Stanford University Press.