



**PROGRAM ON STRATEGIC STABILITY EVALUATION (POSSE)**

**[www.posse.gatech.edu](http://www.posse.gatech.edu)**

---

## **Nuclear Policy and the Politics of Knowledge Production**

**POSSE Policy Memo**

Anne Harrington

“The international security environment has changed dramatically since the end of the Cold War. The threat of global nuclear war has become remote, but the risk of nuclear attack has increased...These changes in the nuclear threat environment – especially the heightened concern about nuclear terrorism and nuclear proliferation and the less dangerous strategic interaction between the United States and Russia – have not emerged overnight. They have developed over the last twenty years, and Administrations of both parties have responded with modifications of U.S. nuclear weapons policies and force posture. But those modifications have not gone far or fast enough. As the President has said, we have to ‘put an end to Cold War thinking.’” *Nuclear Posture Review Report, April 2010*

If policymakers want to “put an end to Cold War thinking” they will have to invest in creating an intellectual space for new thinking at the level of basic theory. It is not enough to ask for innovation at the level of policy. There must also be an active investment in over-turning entrenched interests among intellectual elites in maintaining existing paradigms. There is a politics of knowledge production that is relevant to the process of legitimating any large-scale policy transformation. The kinds of questions addressed at this level will not necessarily produce results that are immediately relevant to any one policy, but rather will lay the conceptual and theoretical foundations for a new program of study. There was an opening of this nature within the US academy during the 1990’s due to the failure of prominent scholars within the field of International Relations to foresee the end of the Cold War. However, that temporary opening has been replaced with a resurgence of interest in nuclear deterrence theory. The current trend is to look for ways to reduce the role of nuclear weapons while expanding the practice of deterrence to encompass cyber and space with the ultimate goal of achieving cross-domain effects.<sup>1</sup> Work

---

<sup>1</sup> For instance, these are the types of questions that are being debated at the annual *Deterrence Symposiums* hosted

on nuclear disarmament is alive and well among policy-oriented think tanks, but is still underrepresented at the level of academic theory.

At the dawn of the nuclear age, scholars found a new type of institutional support and interdisciplinary environment for an active debate at the level of theory, which yielded implementable strategic policies, and effective operational and technical systems.<sup>2</sup> As a fully mature discourse, the deterrence paradigm includes robust debate and activity at the concrete, operational level, at the level of applied ideas as realized through the strategic policies that directed those actions, and at an abstract level of theoretical analysis through which we comprehend the nature of human interactions with social and material environments, articulate what is politically possible, and make value judgments about what is desirable.

Responding to the call that US President Barack Obama made in his April 2009 speech delivered in Prague to “put an end to Cold War thinking” in US nuclear policy will require a similar shift in the relationship between means, ways and ends in nuclear strategy that occurred in response to the introduction of nuclear weapons. Creating that shift will require more than a response at the level of policy. In fact, the transformation is already underway at the operational and policy levels. It is the realm of theory that has yet to catch up. With a few notable exceptions, theoretical innovation has lagged behind changes in other realms. Entrenched institutional interests among established intellectuals make it difficult to see beyond the existing paradigm, placing limits on innovation in the academic realm and hampering the developing of a robust theoretical discourse to compete with the nuclear deterrence paradigm.

---

by STRATCOM: [www.stratcomds.com](http://www.stratcomds.com) This trend is also reflected in and reinforced by the Obama administration's 2010 Nuclear Posture Review Report. What the report makes clear is that policymakers still consider nuclear deterrence a key element of US national security, but there is an overwhelming sense that moving beyond a Cold War mindset is necessary for the US to maintain its national security. These are also the issue areas the Department of Defense is funding for social scientific study through their Minerva Initiative: <http://minerva.dtic.mil/>

<sup>2</sup> Fred M. Kaplan, *The Wizards of Armageddon* (New York: Simon and Schuster, 1983).

As Philip Taubman revealed in his book, *The Partnership*, this limitation exists even among reform minded deterrence experts. In 2010 leaders and innovators of the Cold War order, George Shultz, Henry Kissinger, William Perry, Sam Nunn and Sidney Drell, gathered a group of forward thinking defense intellectuals for another in a series of conferences held at the Hoover Institution to discuss alternatives for moving toward a new paradigm. Yet, Taubman reports that they were unable to escape the strictures of deterrence theory's foundational assumptions. They exhibited an "enduring devotion" to nuclear deterrence, ultimately succumbing to the seductive qualities of its logic. Taubman also reports that the resistance to any idea of moving beyond the current paradigm was even stronger at a 2009 gathering of defense experts convened by the directors of the Los Alamos and Livermore National Labs. There Sidney Drell and William Perry were confronted with a breed of deterrence purist that insists on maintaining a large nuclear arsenal with numbers determined exclusively by military target planners, arrived at independent of any political guidance or considerations such as treaty limitation, to which Perry replied that targeting plans do not exist independently of political guidance.

Shultz, Perry, Kissinger, Nunn, Drell and others like them understand the political character of the Cold War nuclear order and the conflict that they played an important role in guiding to a safe conclusion. They have articulated an ambitious and forward-looking policy agenda based on intuitions developed out of many years of practical experience, at the center of which is a basic hypothesis about the relationship between military deterrence, arms control and nonproliferation, and the goal of nuclear disarmament. This hypothesis is encapsulated in the following statement from their 2007 *Wall Street Journal* op-ed:

Reassertion of the vision of a world free of nuclear weapons and practical measures toward achieving that goal would be, and would be perceived as, a bold initiative consistent with

America's moral heritage. The effort could have a profoundly positive impact on the security of future generations. Without the bold vision, the actions will not be perceived as fair or urgent.

Without the actions, the vision will not be perceived as realistic or possible.<sup>3</sup>

In other words, what Shultz, Perry, Kissinger and Nunn posit is that enhancing the credibility of the US pledge to disarm is necessary (although possibly not sufficient) to motivating the cooperation of states in restricting access to sensitive nuclear technology and reducing the incidence of nuclear proliferation. This assertion is testable, but since their hypothesis is not derivable from any existing theoretical framework, efforts at testing have looked at it through an empirical lens and not yet considered the full range of hypotheses.

Developing additional conceptual tools is the first step towards having an intellectual infrastructure on which to draw to out new hypotheses and possibilities for political action. This does not necessarily mean that deterrence will be discarded, but that there will be more strategic concepts in the policymaker's toolbox. Without those resources, we are likely to return to what we know because policymakers have neither the time nor the patience to listen while concepts are built, nor should they. It simply takes too long to form a concept from a group of principles or ideas. The concept of deterrence was built and disseminated methodically over 50+ years through hundreds of briefings, thousands of conferences, millions of pages, and many lifetimes of intellectual work. It is now the intellectual tool available on short notice when they are called on to articulate three possible responses to Iran in one page or less—which brings to mind Maslow's aphoristic hammer: If all you have is the concept of deterrence, every nuclear threat

---

<sup>3</sup> George P. Shultz, William J. Perry, Henry A. Kissinger and Sam Nunn. *Wall Street Journal*. (Eastern edition). New York, N.Y.: Jan 4, 2007. pg. A.15

becomes a conversation about how many nuclear weapons are necessary to maintain a credible deterrent threat.

Today we take for granted that ‘nuclear deterrence’ can stand alone as a phrase in a one-page policy document. There is a reasonable expectation that decision makers will understand that it refers to the manipulation of nuclear threats to ensure that the costs to an adversary of military aggression will outweigh the benefits. Yet, back in 1946 when Bernard Brodie first proposed the ideas that are routinely accepted today as the foundation of deterrence theory, whether and how nuclear deterrence would work was not at all clear. The suggestion that the US would produce an entire category of weapons for the sole purpose of preventing rather than waging war was considered strange to the point of being absurd. It went against a set of foundational assumptions about the nature of the international system and the role of the military in maintaining the security of the nation.<sup>4</sup> When the civilian and military leadership in the US were still working within the existing policy paradigm and endorsing strategies to win nuclear wars through massive retaliation, Brodie was already asking a new and more fundamental set of questions. He was talking about atomic technology as revolutionizing the ends of military strategy itself, famously claiming that “Thus far the chief purpose of our military establishment has been to win wars. From now on its chief purpose must be to avert them.”<sup>5</sup>

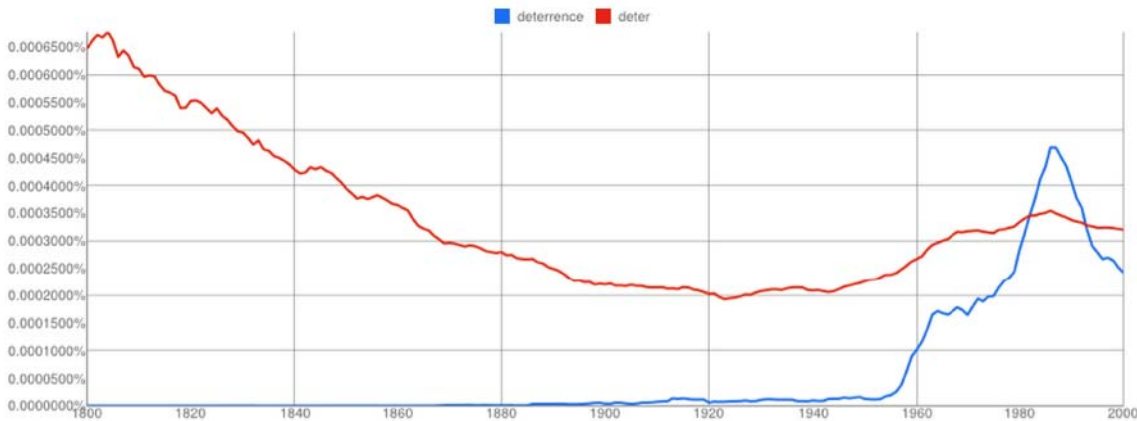
Brodie does not coin the term “deterrence” in 1946, but Arnold Wolfers comes up with “determent” in the same edited volume saying, “the atomic age the threat of retaliation is

---

<sup>4</sup> Marc Trachtenberg, *History and Strategy* (Princeton: Princeton University Press, 1991), 152.

<sup>5</sup> Dunn, et al., 1946.

probably the strongest single means of deterrent.”<sup>6</sup> In fact, as you can see from the following NGram, the term deterrence is not in widespread usage until almost 1960:



This Ngram maps the frequency of deterrence (in blue) vs. deter (in red). The use of the verb “deter” declines gradually across most of the 19th century, while “deterrence” as a noun appears for the first time in the 20th century, spiking at the height of the Cold War. Regardless of what nuclear deterrence purists recommend on the basis of their theories, the fact of the matter is that deterrence is an historically specific techno-political and international diplomatic practice that is enabled and constrained by the human capacities for surveillance and destruction. Deterrence—not simply as a tactic, but as a national security strategy—gives rise to new forms of power politics in which states play out international conflicts by bargaining over the use and possession of armaments. As the institutional and technological context changes, so will the possibilities for nuclear disarmament.

Building the conceptual architecture that will help us move the debate about nuclear policy forward will require going beyond the current nuclear deterrence paradigm by bringing together a group of scholars that are working at the margins of their disciplines on ideas that are usually

<sup>6</sup> “Atomic Age: Absolute Weapon?” *Time*, June 10, 1946; Arnold Wolfers, “The Atomic Bomb in Soviet-American Relations,” in *The Absolute Weapon: Atomic Power and World Order*, ed. Bernard Brodie (New York: Harcourt, Brace and Company, 1946), 134.

considered too strange or radical to be part of the mainstream. In other words, this kind of work needs an institutional home for policy research akin to the Defense Advanced Research Projects Agency (another of William Perry's visionary innovations), or similar to the one that RAND provided for the development of the deterrence paradigm. These are institutional spaces that exhibit a commitment to critical inquiry and interdisciplinary research, accept a high rate of failure, and do not strangle nascent research programs in the name of sacrificing conceptual innovation in favor of short-term policy relevance. There are institutional spaces that and funding programs exhibit some of these aspects, promoting and developing those programs, even in an era of budget austerity, should be a component of the US nuclear security policy.