

# On Creating the Conditions for Nuclear Disarmament: Past Lessons, Future Prospects

At the center of the international policy debate about nuclear disarmament are some quite basic questions: What are the conditions that would enable the nuclear-armed states to safely disarm and then the world community to live safely in a post-nuclear world? Is it possible to create those conditions? If so, when? If not, what should be done?

In surveying the history of the policy debate, it is clear that serious interest in these questions is at best episodic. Today, however, they are back in discussion—for a variety of reasons. One is the 2020 review conference of states parties to the Nuclear Non-Proliferation Treaty (NPT). The upcoming conference promises to be even more fractious than most of its predecessors, not least because it comes on the occasion of major questions about the durability of the existing international nuclear order. Another reason is the campaign for signature, ratification, and entry into force of the Treaty for the Prohibition of Nuclear Weapons (TPNW), which has cast a bright light on the absence of any real answers in the treaty to the enduring challenges of disarmament. A third reason is the Trump administration's

---

Brad Roberts is director of the Center for Global Security Research at Lawrence Livermore National Laboratory. From 2009 to 2013, he served as Deputy Assistant Secretary of Defense for Nuclear and Missile Defense Policy, and in that capacity was policy co-director of the Obama administration's Nuclear Posture Review and Ballistic Missile Defense Review. He can be contacted at [roberts86@llnl.gov](mailto:roberts86@llnl.gov). The views expressed here are his personal views and should not be attributed to any organization with which he is or has been affiliated. The author is grateful for useful commentary on these arguments by participants in various seminars and lectures and especially for comments on earlier drafts of this essay by Lewis Dunn, Christopher Ford, Frank Rose, Gary Samore, and Heather Williams.

---

© 2019 The Elliott School of International Affairs  
*The Washington Quarterly* • 42:2 pp. 7–30  
<https://doi.org/10.1080/0163660X.2019.1621650>

proposal for “a new disarmament discourse” focused on creating the conditions for nuclear disarmament. Dr. Christopher Ford, Assistant Secretary of State for International Security and Nonproliferation, sketched out this proposal in April 2018 and subsequently called for creating a new international working group to identify and catalogue the necessary conditions.<sup>1</sup> A fourth reason is the renewal of nuclear policy debate in the U.S. Congress driven in part by the Democratic Party leadership’s call for a “reset” of nuclear policy with a strong disarmament focus and the impact of that debate in energizing the United States and wider NGO community.<sup>2</sup>

Occasionally in the past, these questions have risen to the top of the U.S. policy agenda. They did in 1946 with the development of what became the Baruch plan as proposed to the United Nations, which called for the United States to turn over its nuclear weapons to the UN on the condition that all other countries agree not to produce them and also agree to an adequate enforcement mechanism. At that time, the requirements of nuclear disarmament were well understood, but the necessary transparency and enforcement mechanisms, as well as the more fundamental geopolitical enablers, proved beyond political reach. These questions resurfaced at the top of the U.S. policy agenda in 1995, when decisions had to be taken about whether to extend the NPT, and if so, for how long and with what conditions. At that time, there was considerable new optimism, given the end of the Cold War and nuclear arms race, but also some new pessimism, given the emergence of regional challengers in Southwest and Northeast Asia arming themselves with weapons of mass destruction and long-range missiles.

And these questions again resurfaced in 2009, when President Barack Obama chose to deliver a major speech in Prague early in his tenure, setting out his commitments to the long-term disarmament goal, to near-term practical steps toward that end, and to the maintenance of a safe, secure, and effective nuclear deterrence so long as nuclear weapons remain (and extending that benefit to U.S. allies). Subsequently, the administration constructed a broad nuclear policy agenda to accomplish these tasks and expended significant political capital toward those ends.<sup>3</sup> On disarmament, its strategy was shaped by two key presidential commitments: (1) to take some “concrete steps” in the near term to reduce the role and number of U.S. nuclear weapons in U.S. defense strategy and (2) to try to create the conditions over the expected two terms that would allow other nuclear-armed states to join in next steps. The results were largely disappointing, as the world proved resistant to Obama administration efforts.

The experience of the Obama administration can and should help inform the debate about the pathway forward for nuclear disarmament. But it has largely been dismissed by critics on both the right and left. The core criticism of the right was that the Obama administration was mindlessly pursuing Global Zero—that is, the complete elimination of nuclear weapons as a near term priority.<sup>4</sup> The core

criticism of the left was that the administration simply lacked the resolve and necessary zeal for the disarmament agenda and was constantly foiled by nuclear hardliners in the Pentagon.<sup>5</sup> These reactions owe something to the fact that the Obama administration had less and less to say about the Prague agenda as the disappointments mounted, and did not, in its endgame, take stock in a public way of the lessons of that experience.

To probe a bit more deeply into the meaning of the Obama administration's experience aiming to create the conditions for nuclear disarmament and the current project to rethink U.S. policy now beginning in the U.S. Congress, this essay begins with a review of the administration's approach, and then surveys the results. It then turns to a discussion of lessons and implications for next steps in disarmament diplomacy.

**The Obama administration did not take stock in a public way of the lessons of its experience.**

### **The Obama Administration's Disarmament Strategy**

The April 2009 Prague speech set high expectations for the renewal of U.S. disarmament diplomacy and for the "movement away from Cold War thinking"<sup>6</sup> in U.S. deterrence strategy. The actual scope of the speech was quickly forgotten. As a broad speech on nuclear policy, it set out four main policy pillars: preventing nuclear terrorism and promoting nuclear security, strengthening the nonproliferation regime, supporting the peaceful use of nuclear energy, and reducing the role of nuclear weapons.

President Obama also set clear expectations within his administration that his 2010 Nuclear Posture Review (NPR) would generate practical action on a broad agenda aligned with all of his Prague commitments. The resulting strategy encompassed more than 100 actions to support five major policy goals.<sup>7</sup> On disarmament, the NPR Report reflected the following leadership assessments:

- "By working to reduce the salience of nuclear weapons in international affairs and moving step by step toward eliminating them, we can reverse the growing expectations that we are destined to live in a world with more nuclear-armed states."<sup>8</sup>
- "Even as we seek a future world free of nuclear weapons, we are realistic about the world around us, recognizing that this goal will be a long-term effort, not the work of one administration."<sup>9</sup>
- "The conditions that would ultimately permit the United States and others to give up their nuclear weapons without risking greater international

instability are very demanding. Among those are the resolution of regional disputes that can motivate rival states to acquire and maintain nuclear weapons, success in halting the proliferation of nuclear weapons, much greater transparency in the programs and capabilities of key countries of concern, verification methods and technologies capable of detecting violations of disarmament obligations, and enforcement measures strong and credible enough to deter such violations. Clearly, such conditions do not exist today. But we can—and must—work actively to create those conditions.”<sup>10</sup>

The administration had the humility to recognize that it could not identify all necessary conditions. But it had the confidence to assert that the conditions could in fact be created over the long term.

In the internal process of turning these objectives into practical steps, the administration was guided by two key documents. The first was the Obama administration’s National Security Strategy, which reflected the Cabinet’s view of a troubled security environment and its commitments to strong U.S. leadership of the rules-based international order, to try to renew cooperation with Russia and China, to reinvigorate international institutions, and to renew cooperation with allies.<sup>11</sup> Each of these commitments puts its mark on the NPR. The second was the report of the Congressional Commission on the Strategic Posture of the United States, also known as the Perry-Schlesinger commission for its chair and vice-chair. That report argued that U.S. nuclear strategy must be implemented consistently over decades and thus has a special requirement for sustained bipartisan support—which would be possible, argued the commission, only if each administration pursued a strategy that balances the use of political, diplomatic, and economic measures to reduce and eliminate nuclear dangers with military

**Every step needed to ‘maintain’ strategic stability and ‘strengthen’ extended deterrence and assurance.**

measures to deter threats to the United States and its allies so long as nuclear weapons remain.<sup>12</sup> Many bold new ideas for nuclear policy were measured in 2009 and 2010 against this metric.

The internal process was also driven by the requirement to accomplish objectives other than those associated with the disarmament ambition. The President had also committed at Prague to ensure that deterrence would remain effective so long as nuclear weapons

remain and to extend that protection to U.S. allies. So, every possible concrete step toward the disarmament goal needed to be considered not just in terms of its disarmament value but also in terms of its impact on the presidential

commitments to “maintain” strategic stability and “strengthen” extended deterrence and assurance of allies. Those verbs were carefully chosen at senior levels. The result was a deep exploration of the benefits, costs, and risks of different policy initiatives and a constant search for the right balance.

The review resulted in decisions to implement some unilateral measures to reduce the role and number of weapons in the U.S. arsenal. For example, declaratory policy was revised to narrow the role of nuclear weapons. And plans were made to reduce the number of types of weapons in the arsenal. Additionally, the administration committed to new transparency measures, including the first-ever official statement of the size of the total U.S. nuclear arsenal.<sup>13</sup>

The review also set out a series of objectives for the presumed two-term run that, if achieved, would allow additional steps by the United States to reduce nuclear roles and numbers while bringing other nuclear-armed states into the process of reducing their weapons and also increasing their transparency. Think of these as stretch goals: ambitious but not implausible (from the 2009 vantage point). The administration sought:

1. *To engage Russia in a two-step arms control process.* The first would be a quick replacement to the rapidly expiring START I treaty, which had significantly reduced the nuclear arsenals of the United States and Russia after the Cold War. The resulting step was the New START Treaty of 2011. The second step would be a successor agreement that would accomplish deeper reductions, come to terms with nonstrategic and non-deployed weapons, and lay the foundation for a broader transformation of the strategic military and political relationship. Toward that end, the administration hoped that bilateral talks focused on strategic stability would ensure the needed common vision to enable action.
2. *To engage China in a dialogue process that might, over time, produce new forms of restraint and transparency.* Toward that end, the administration proposed bilateral talks focused on strategic stability, with the hope that a convergence of thinking about the strategic military relationship might emerge that would reinforce Chinese restraint and transparency.
3. *To roll back nuclear proliferation to regional challengers such as Iran and North Korea.* In an effort to reach that goal, President Obama promised in his 2009 inaugural address an “open hand” and a willingness to talk.
4. *To reduce the role of nuclear weapons in regional deterrence architectures while also strengthening those architectures and adapting them to new challenges.* Toward that end, the administration renewed nuclear dialogue with NATO allies and created new dialogue mechanisms with its East Asian allies.

5. *To create the conditions that would allow a shift in declaratory policy to the 'sole purpose' formulation.* This bears on the distinction between fundamental purpose and sole purpose. The 2010 NPR Report repeated the formulation of every U.S. administration that the *fundamental* purpose of nuclear weapons is to deter a nuclear attack on the United States and its allies, and added that it would only consider employing such weapons in extreme circumstances when its vital interests, or those of an ally, are in jeopardy. But it was unwilling to state that this is their *sole* purpose. This followed from an assessment that there then existed a narrow range of circumstances not involving an enemy nuclear attack that could jeopardize the vital interests of the United States and its allies for which U.S. nuclear threats could be credible deterrents. Accordingly, the administration set out to address the chemical and biological threats posed by potential adversaries and to ensure regional balances of conventional forces favoring the United States and its allies.
6. *To reinvigorate the NPT and the broader regime.* In pursuit of that goal, the administration set out a comprehensive agenda, including ratification of the nuclear test ban treaty, sustained high-level efforts to improve the security globally of nuclear materials, and a comprehensive national R&D program to enable effective verification of further reductions. It also committed to the development of an action plan on NPT implementation to be agreed at the 2010 review conference.
7. *To reduce reliance on nuclear weapons in U.S. military strategy.* Toward that end, it initiated, after entry into force of the New START Treaty, a review of nuclear deterrence strategy, with the aim of “moving away from Cold War thinking.”<sup>14</sup>

## **The Results of the Obama Strategy by 2016**

---

Looking back from 2016, the strategy produced some important achievements. But in terms of the ambition to create the conditions that would enable other nuclear-armed states to join the United States in future steps to reduce nuclear arsenals and dangers, the record is quite stark. Working in reverse order through the above objectives:

*The effort to reduce reliance on nuclear weapons in U.S. military strategy helped inform the new presidential nuclear employment guidance in June 2013.<sup>15</sup> That guidance increased the role of nonnuclear means (both defensive and offensive) in U.S. deterrence strategy. It reduced planning for the old problem of a major Soviet bolt-from-the-blue attack on the United States and put increased focus on “21<sup>st</sup> century contingencies” (though the unclassified Report to Congress did*

not define them). But it did not embrace minimum deterrence. It clearly articulated a need to have options to defend U.S. and allied interests if deterrence fails and to restore deterrence once struck. The process of reviewing and revising planning had revealed to administration leaders the extent to which the two preceding administrations had already covered some significant distance in moving away from Cold War thinking.

*The effort to revitalize the nonproliferation regime* produced some important successes. High among these was the successful 2010 NPT review conference and the sustained high-level process on material security. But there were many low points, including principally the failure to implement major elements of the step-by-step approach agreed in the NPT review process, including especially the failure to secure ratification and entry into force of the Comprehensive Test Ban Treaty (CTBT). In addition, the administration was blindsided by both the momentum generated by the International Humanitarian Consequences Movement, which sought to motivate understanding of the potentially profound humanitarian consequences of nuclear war, and by the successful effort to leverage that momentum to create the Treaty for the Prohibition of Nuclear Weapons (TPNW).

*The effort to create the conditions that would allow a declaration of “sole purpose”* was especially unproductive. Noncompliance with chemical and biological treaty obligations did not improve; if anything, it had grown by 2016 and become more troubling, especially given Russia’s apparent rejection of the entire arms control framework except for New START.<sup>16</sup> And the effort to ensure the needed balance of conventional forces for deterrence fell afoul of the 2011 Budget Control Act and a lack of focus on conventional deterrence by U.S. military leadership during two decades of preoccupation with counterterrorism and counterinsurgency warfare. As the 2018 report of the National Defense Strategy Commission concluded, the United States today stands to lose a regional war with Russia or China and has given up its capacity to engage in two wars simultaneously.<sup>17</sup> These results do not allow for decreased U.S. reliance on nuclear weapons.

*The effort to reduce the role of nuclear weapons in regional security architectures* while also strengthening deterrence proved especially vexing. Some reduction of the role proved possible in Northeast Asia, with a compensatory increased role in deterrence for missile defense and nonnuclear strike systems. But the effort quickly ran up against the fact that a significant number of allies in both Europe and Asia assessed that the U.S. project to move away from Cold War thinking and forces had gone far enough—indeed, argued a few, perhaps too far in light

**The United States today stands to lose a regional war with Russia or China.**

of emerging regional threats. The requirements of effective extended nuclear deterrence became a major consideration for the Obama administration and a major test of its intended pragmatism.

*The effort to roll back nuclear proliferation* by North Korea and Iran produced one big loss and one big gain. The loss was North Korea's steady progress toward an operationalized nuclear deterrent, and the gain was the Joint Comprehensive Plan of Action (JCPOA) with Iran. But of course the big gain proved short-lived, as it was repudiated by the administration's successor.

*The effort to engage China in a dialogue on strategic stability* fell well short. The administration sought a serious, sustained, and high-level dialogue among political-military leaders. The result was occasionally substantive, episodic, and largely nonmilitary. China did agree, however, to support and participate in dialogue at the Track 1.5 level (that is, mixing current and former government officials, current and former military experts, and university and think tank experts in an unofficial, off-the-record setting) on related matters. This gave China the opportunity to express its concerns and hear U.S. views on its many complaints about what it sees as U.S. insults to Chinese interests and strategic stability. But it gave the United States no opportunity to respond at the official level to Chinese concerns, which raises a question about whether Chinese officials actually seek such responses.

Lastly, *the effort to engage Russia in the two-step process* produced major disappointments. Step one resulted in only a modest reduction in the number of deployed, accountable warheads (from the Moscow Treaty lower limit of 1700 to 1550). Step two was never taken or even discussed, despite an Obama administration offer to move on a reciprocal basis to 1,000 warheads under the New START treaty. The strategic stability dialogues were episodic and unproductive. The Russians appeared to have concluded that they knew everything they needed to know about U.S. thinking on strategic stability, which they deemed hostile to Russian interests. And without some sign that the United States would address their stability concerns about missile defense, they were simply uninterested in arms control discussions. Obama administration efforts to work with Russia to develop confidence building measures on European missile defense and then to address U.S. concerns about Russia's violations of the Intermediate-Range Nuclear Forces Treaty were equally unproductive.

These results are explained by the central place of nuclear weapons in President Vladimir Putin's confrontational strategy toward the West and his repeated efforts to present a nuclear danger to the West to make it more cautious in opposing Russian interests.<sup>18</sup> In part, they are also explained by his direct linkage of nuclear weapons with the Orthodox Church as pillars of Russian integrity and sovereignty.<sup>19</sup> President Putin apparently chose to abandon some or all of Russia's arms control obligations, without exercising the right to withdrawal and

thereby doing so covertly. In one memorable exchange in a recent Track 1.5 dialogue, one Russian participant I conversed with argued: “why should we participate in confidence and security building measures in Europe when the problem is that you Americans have too much of both.” Nuclear risk reduction apparently does not fit in a strategy of “new rules or no rules.”<sup>20</sup>

In sum, the Obama administration’s efforts to create the conditions that would allow additional steps by the United States and new steps by other nuclear-armed states to reduce the role and number of nuclear weapons enjoyed some successes. The New START Treaty in particular helped bring an element of predictability and necessary transparency at a time of rising concern about Russian nuclear modernization. But the successes were few and far between. Leaders of other states were not willing to join in the process because they saw it as inconsistent with their interests.

### Political Reactions to These Results

Disappointment echoed through the Obama administration as results trickled in over eight years. This helped to ensure a near continuous high-level focus through the administration on progress, metrics, renewed efforts, etc. The nuclear policy of the Obama administration will likely go down in history as the most thoroughly and continuously deliberated of any administration. One reflection of this continuous scrutiny was a deep, wide-ranging review in the administration’s last year, the so-called internal review. It resurfaced each of the main policy objectives and each major decision with an eye to opportunities for some new way to fulfill the Prague vision.

In the end, pragmatism again won out, as the administration leadership decided that (1) the original set of conditions and strategies was sound and that (2) no new unilateral action was wise in light of the continued deterioration of the security environment. There was no credible argument that conditions had improved to make possible unilateral changes to declaratory policy or force posture. It even decided to maintain the program for modernizing aging U.S. nuclear warheads and delivery systems that had been agreed to in 2010, which was certainly the most difficult part of the administration’s legacy for its Prague-oriented leadership to own. These decisions were tinged with regret. In benedictory remarks on behalf of the administration, Vice President Biden observed cryptically that “we did not accomplish all that we had hoped.”<sup>21</sup>

**There was no credible argument that conditions had improved to make unilateral changes possible.**

Disappointment was also evident among other stakeholders in the Prague vision, including especially disarmament-focused NGOs. As the second Obama term unfolded, criticisms mounted. The administration was criticized for “falling short of Prague” in its review of nuclear employment policy,<sup>22</sup> for its continued commitment to the NPT’s step-by-step process at a time when many were giving up on it, for falling short on nuclear materials security,<sup>23</sup> for rejecting no-first-use in 2016,<sup>24</sup> for failing to withdraw U.S. nuclear weapons from Europe,<sup>25</sup> for too much “strategic patience” with North Korea,<sup>26</sup> for “missed opportunities” to engage China because of “seminal misperceptions,”<sup>27</sup> and for caving to “resistance from the nuclear industrial complex” rather than getting on with deeper cuts in the arsenal.<sup>28</sup>

The harshest judgments generally came from those who felt most betrayed—disarmament advocates who had high expectations following the president’s Prague speech and who had actively supported the ambition as they understood it (that is, stripped of its pragmatism and multiple commitments). Brookings’s Steve Pifer criticized what he saw as a reluctance so paralyzing that the administration simply “passed up opportunities to take bolder steps.”<sup>29</sup> In their frustration, some critics resorted to scapegoating the Pentagon. Nina Tannenwald, for example, blamed what she saw as Pentagon hardliners with an unyielding preference for large nuclear arsenals and an inappropriate deference to quarrelsome allies.<sup>30</sup> Some resorted to shaming. Joseph Cirincione, for example, alleged that “the biggest roadblock to making the world safer from nuclear weapons turned out to be the president’s own team” and “those, particularly in the Defense Department, who opposed, even mocked, his goals.”<sup>31</sup>

By falling back on such simplistic and false explanations for the disarmament result, such critics relieve themselves of the obligation to come to terms with

**The simplistic depiction of battles between the Pentagon and the rest distort the more complex reality.**

the complexities that confront a serious effort to create the conditions for further disarmament progress.<sup>32</sup> The simplistic depiction of battles between the Pentagon and the rest distort the more complex reality of deep debates within and across departments about how to balance the commitment to “take practical steps toward long-term goals” with the commitment to ensure effective deterrence and assurance. Many of the “bold steps” recommended by experts and NGOs were deemed by the President and his inner circle

to have little or no practical value in contributing to easing international tensions and building international trust in a manner that would allow for follow-on disarmament steps (a policy framework taken from the preamble to the NPT). Those

recommendations generally failed to take account of the administration's commitment to take only those steps that would not harm strategic stability, deterrence, extended deterrence, and assurance.

There was no interagency dispute over declaratory policy; the Departments of Defense, State, and Energy were unified in their opposition to no-first-use and the "sole purpose" formulation.<sup>33</sup> The alleged preference for large nuclear arsenals had nothing to do with a simple view that bigger-is-better and everything to do with a deterrence and assurance strategy built on the principle of second-to-none.<sup>34</sup> The only mockery that I witnessed came from NGO disarmament advocates who dismissed the pragmatism of the Obama administration. Policy is not made or implemented in a vacuum, and most of those who criticized the Obama administration for its supposed timidity gave too little credence to the real-world concerns that daily impacted the thinking of administration leaders.

In retrospect, it is obvious that expectations were set too high by the Prague speech. President Obama himself seemed to recognize this fact later that year. In his speech eight months later accepting the Nobel peace prize, he took steps to lower expectations. Arguing that "my accomplishments are slight," he focused on the realities of governing in a sometimes dangerous world, and his assessment that "this old architecture [in reference to the post-WWII security and nonproliferation architecture] is buckling under the weight of new threats."<sup>35</sup>

But the fault does not lie solely with the president or his speechwriters. The Prague speech was something like a Rorschach test for those in the nuclear policy community, as most people saw in it what they wanted to see and disregarded the rest of the President's comprehensive approach. Some saw just the commitment to practical disarmament steps; others saw just the commitment to ensure that deterrence will remain effective so long as nuclear weapons remain. The president and his administration saw both.

In its final week in January 2017, the Obama administration set out its view of its record in implementing the Prague agenda (in the Vice President's speech and the associated fact sheet). This was essentially a catalogue of actions taken, notable successes, and a few disappointments. Alas, this falls short of what would have been helpful.

The administration could have done a significant service to the national and international policy debates had it publicly set out in 2016 its assessment of the results of eight years of effort, the lessons from its policy failures, and their policy implications in the form of a revised agenda for balancing disarmament, deterrence, strategic stability, extended deterrence, and assurance in a new and different security environment. But it had run out of time and energy. Thus, it left the debate about lessons and implications to its friends and critics at home and abroad, to the cacophony of voices within the Democratic Party, and then to the surprising winner of the 2016 presidential election.

## Key Lessons of the Obama Experience

---

The experience of the Obama administration offers many lessons for each of the seven main policy objectives. But the focus here is on broader lessons. Three stand out.

First, the conditions that in 2009 seemed ambitious but potentially within reach proved by 2016 to be beyond reach. New “stretch goals” for the medium term are needed.

The leaders of other nuclear-armed states were not prepared to join with the United States in taking steps to reduce the role and number of nuclear weapons largely because they embrace nuclear weapons as uniquely relevant to protect against threats to their vital interests. In current circumstances, elimination of

**The barriers to creating the needed conditions for next steps rose rather than fell during Obama’s term.**

their weapons would only intensify their sense of insecurity. Nor were a significant number of U.S. allies prepared to support additional unilateral steps by the United States to reduce the role and number of weapons. Western experts have had a hard time accepting these facts at a time when they have seen opportunities to move away from Cold War thinking.

In fact, the barriers to success in creating the needed conditions for next steps rose rather than fell in this period. Major power rivalry

intensified. North Korea crossed over the nuclear threshold. The ban treaty emerged to put pressure on extended deterrence and to provide an NPT escape route for NPT parties unhappy with disarmament progress.

Even more troubling is the possibility, now much more clearly in focus than before, that forward momentum has petered out and that we are entering a new, much more challenging era. The international nuclear order is precarious and increasingly so. Restraint among the established nuclear weapon states is eroding in the context of intensifying rivalry, the ongoing cycle of nuclear modernization (and diversification), and most alarmingly, a rising concern that the leaders of some nuclear-armed states may believe that nuclear wars can be fought and won because they can be kept limited.

The bilateral arms control regime between the United States and Russia is breaking down under the weight of accumulating Russian violations and the more multi-domain character of strategic military competition. This breakdown is adding to the growing burdens on the nonproliferation regime. These burdens include the addition of three nuclear-armed states over the last 25 years, the inability to make headway on promised steps to implement NPT commitments,

the frustration of many states and NGOs with the lack of progress, the breakdown of consensus on how to manage the Iran nuclear challenge, and the uncertain course on the NPT charted by the Trump administration. In this context, the Ban Treaty reinforces the risk that some states might opt out of the NPT (by giving them an exit pathway that allows them to claim a continued commitment to nuclear restraint under the Ban but without the advanced safeguards of the NPT).

As if the problem were not complex enough, it has also become clearer that the stability of the international nuclear order is tied inextricably to the stability of the international political order. The international nuclear order is but one aspect of the broader rules-based international order (the architecture referred to by President Obama in his Nobel speech). That order appears to be faltering, as its challengers become more numerous, as its legitimacy declines, and as its leaders defect to more nationalist approaches. One result could be the long-feared cascade of nuclear proliferation. Alternatively, it could result in a cascade of appeasement. In the worst case, the breakdown of strategic stability could be sufficiently severe as to lead to the use of nuclear weapons by revolutionary powers interested in creating a fundamentally different international order. In retrospect, it seems clear that we have been fortunate that the only acquirers of nuclear weapons have been states interested in securing their place in the international order rather than states (or non-state actors) interested in more revolutionary uses of violence. The nuclear story cannot be separated from the story that “the jungle grows back.”<sup>36</sup>

**We as a nation have had a difficult time creating the needed new intellectual capital on this problem.**

The second main lesson is that we as a nation have spent the intellectual capital we had on this problem and have had a difficult time creating the needed new capital.

To a significant degree, disarmament advocacy inside and outside the U.S. government has been living off the intellectual capital (and political agendas) spawned by the call to action by Henry Kissinger, William Perry, George Schulz, and Sam Nunn in their famous 2007 op-ed, “A World Free of Nuclear Weapons.”<sup>37</sup> The result was a large catalogue of ideas about how to create a “joint enterprise” with other nuclear weapon states to reduce nuclear dangers, to strengthen the arms control and nonproliferation treaty regime, and to remake the deterrence policy and posture of the United States. Once the roadblocks emerged, the expert community’s primary response was “try harder.”

New intellectual capital would have served all of the stakeholders better, but proved elusive. From an Obama administration perspective, this was revealed to

be a problem of many parts. Part of the problem was inside government. In their eagerness to move away from Cold War thinking over the last three decades, policymakers stood down many of the institutions that used to do the thinking. The executive branch lost the Arms Control and Disarmament Agency. The Defense Department lost the Defense Nuclear Agency. Congress lost the Senate Arms Control Observers Group and the Office of Technology Assessment. What institutional bandwidth was left struggled with the fact that, in government, the urgent always drives out the essential. Long-range thinking typically looks a week or two into the future.

Part of the problem was outside government. Academic institutions became uninterested in matters of nuclear policy. Many foundations put their money elsewhere or focused exclusively on narrow parts of the nuclear puzzle. NGOs followed in their wake, and as disappointment mounted, put ever more emphasis on advocacy than analysis. Some academics and NGOs were overtly hostile to the efforts of nuclear weapon states to focus on the conditions enabling nuclear disarmament. International Campaign to Abolish Nuclear Weapons (ICAN) Executive Director Beatrice Fihn dismisses such efforts as merely a delaying tactic.<sup>38</sup> Other NGO disarmament advocates argue that there is too much realism guiding U.S. nuclear policy.<sup>39</sup> Some governmental leaders of the Ban Treaty process directly attacked the effort to create conditions as proof of the bad faith of the nuclear weapon states. Consider South Africa's statement at a recent NPT preparatory commission meeting, "During this PrepCom we heard statements by a few States highlighting the international security environment as deteriorating. In this regard, it was thus argued by these very few States that there is a need for the creation of a conducive conditions for nuclear disarmament . . . I must re-emphasize that Article VI of the NPT contains no such conditions for nuclear disarmament. This distortive undermining of the integrity, letter, and spirit of the NPT by the nuclear weapon states is deeply troubling to us."<sup>40</sup>

Part of the problem is the inherent complexity of the new problems. The obvious "solutions" and "quick fixes" were tried and largely failed. Strategic stability dialogues with Russia and China went almost nowhere—now what? Russia rejected a New START follow-on agreement—now what? Sound answers to complex new problems require bringing together new forms of knowledge in new constellations of expertise. For example, the next breakthrough in U.S.-Russian arms control, if there is one, is unlikely to result from a close study of how to remake strategic nuclear force postures at 1,000 accountable weapons; rather, it is likely to result from a close study of Russian leadership security perceptions and assessments of Russia's approach to regional war, of Russia's newly defined "strategic operations," of perceptions of stake and confidence, of Russian multi-domain operational capabilities, of Russian nuclear strategy—and then of all of the corresponding Western factors and interests. Much of the

necessary expertise is only being created today and the necessary constellations of expertise have not yet been brought together.

The third lesson is about the difficulty of advancing a pragmatic policy agenda in a polarized domestic political context. There was no natural political constituency at the national level for the kind of “balanced approach” recommended by the Strategic Posture Commission and pursued by the Obama administration. To the extent it enjoyed support, it was usually behind closed doors from those adopting a public posture leaning more clearly toward one end or the other of the spectrum.

The voices of moderate NGOs and governments tended to be drowned out by more ideological ones. In reaction to perceived bad faith by the U.S. government in pursuing nuclear disarmament, some advocates resorted to confrontational tactics as “to force the issue.”<sup>41</sup> In the words of one leading disarmament ambassador, “if you want to preserve the status quo, then you emphasize areas of convergence; if you want to alter the status quo your efforts must be polarizing.”<sup>42</sup> Thus, NGO disarmament advocacy sometimes polarized opposition to administration policies in a way that made them even more difficult to implement. For example, Senate opposition to ratification of the CTBT hardened rather than softened in 2010 and 2011, in part because some NGO advocates were selling the CTBT as a stepping stone to disarmament, while the Obama administration was trying to sell it as a tool for enhancing U.S. national security.

**NGO disarmament advocacy sometimes polarized opposition to administration policies like the CTBT.**

## **Implications for Future U.S. Disarmament Strategy**

The Obama administration’s disappointing results raise some basic questions about the future of U.S. disarmament strategy: Is disarmament feasible? Should it continue to guide U.S. policy as a long-term goal? Should the conditions-based approach continue? Are there viable alternatives?

### **Is Nuclear Disarmament Feasible?**

Is nuclear disarmament in fact feasible? That it is or may be feasible sometime in the future has been a general premise of U.S. policy for decades (although no administration has seen it as plausible in its present or foreseeable circumstances). It would be easy to draw the lesson from the experience of the last decade that nuclear disarmament is not in fact feasible, and thus to conclude that the

United States and others should no longer affirm that it is or might be. Notably, the Trump administration has not come to these conclusions. Rather, it re-expressed a commitment to the long-term goal.<sup>43</sup>

Regardless of where one comes out on the question of feasibility, there are some pragmatic reasons for not formally abandoning the long-term disarmament objective. The commitment to work toward that end is a necessary precondition of the

**T**here are pragmatic reasons for not formally abandoning the long-term disarmament objective.

continued functioning of the nonproliferation regime. The commitment is also necessary to sustain public support for nuclear policy more generally. After all, no one wants to live under the nuclear shadow forever, or even for a day longer than necessary. Democratic publics simply do not want to hear that they should join Dr. Strangelove in learning to love The Bomb.<sup>44</sup> And their elected leaders do not want to deliver a public message that the risk of nuclear Armageddon is something we will never escape. Without some vision of

such an escape, democracies are unlikely to show the resolve necessary to persevere with political strategies to reduce nuclear dangers or to sustain deterrence until nuclear weapons no longer exist.

A continued policy commitment to nuclear disarmament is also helpful because it keeps high-level political focus on projects to reduce nuclear dangers, including among the major powers at a time of growing friction. Deterrence strategies only mitigate those dangers to a degree. For some dangers, such as the danger of nuclear terrorism, they are irrelevant. A more comprehensive approach is needed, especially one that facilitates international cooperation.

In fact, it is not necessary to settle now the question of whether nuclear disarmament will ever prove feasible. By and large, those in the United States who disagree on that fundamental question can agree that, in the near term, we should be focused on reducing nuclear dangers and eliminating them where we can. They can also largely agree that some forms of nuclear restraint can be helpful in encouraging nuclear restraint by others. These areas of agreement provide a solid enough political foundation to enable a strong degree of long-term continuity in U.S. policy.

### **If So, What Are the Right Conditions?**

The next logical question raised by the Obama experience is whether the administration set out the right conditions? Are there other, less restrictive conditions that also serve U.S. interests? Could it have relaxed the requirements of others?

Could it have gone further in meeting their demands? Should it have? Could it have taken more unilateral action without also taking on more insecurity and risk?

The case for additional unilateral action for nuclear disarmament is made by a few influential advocates, with former Secretary of Defense William Perry chief among them (who has long advocated for moving from a triad of delivery systems to a dyad, by eliminating the ICBM force).<sup>45</sup> Such measures should not be rejected out of hand, as they have sometimes been practical and beneficial for the security of the United States and its allies. But policymakers should be suspicious of arguments that additional unilateral measures would be useful in exerting political pressure on Moscow and Beijing to adopt comparable or reciprocal measures in response. There is no evidence that leaders in either capital can be so pressured.

**T**here is no evidence that leaders in Moscow or Beijing can be pressured to reciprocate.

There is also a strong appetite within the disarmament community for relaxing and even eliminating certain specific conditions. The Obama administration took some decisions that proved unpopular with some disarmament advocates because of the importance it attached to strategic stability and extended deterrence. Decisions to maintain and modernize the triad of delivery systems, to proceed with warhead life extension, to modernize command and control, and to sustain the START framework all followed from a commitment to strategic stability—and were all widely criticized by disarmament advocates. Decisions to retain NATO's nuclear sharing arrangements and thus U.S. nuclear weapons in Europe, to reject the “sole purpose” declaratory policy, and to keep the triad rather than move to a dyad were all taken largely on the argument that they were necessary to preserve extended deterrence at a time of rising regional challenges. But these too were widely criticized. Nina Tannenwald, for example, argued that “U.S. allies stymied Obama’s nuclear goals until the very end of his tenure,” leading the White House to “relent.”<sup>46</sup>

So why not simply jettison the requirement to maintain strategic stability and strengthen extended deterrence, as some argue? Here we find an odd confluence of right and left—of those who wish to jettison U.S. allies because they do not pay their fair share and those who wish not to hold U.S. nuclear policy hostage to the requirements of a nuclear umbrella. Similar arguments are made on strategic stability, with some on the right arguing that it is a barrier to remaking the political relationships with Russia and China in useful ways (by focusing policymakers on nuclear competition) and some on the left arguing that it preserves MAD at a time when we can safely move to minimum deterrence.

In my assessment, the United States should retain its commitment to the long-term disarmament goal. It should continue to try to take practical steps in concert with others toward that end. It should take unilateral steps judiciously. But tempting though it may be for some disarmament advocates, it should not put at further risk strategic stability or the assurance of allies in the name of the long-term vision.

## Next Steps for U.S. Policy

---

The U.S. policy debate necessarily gravitates around a debate about the shortcomings of current policy and the opportunities presented by the next major policy reset. Rather than focus here on near-term policy questions, this analysis of next steps seeks to take a longer view of the next big steps in policy development. In the broader picture, Dr. Ford's attempt to focus the international community on a better understanding of the necessary conditions should serve us well.<sup>47</sup> The renewed Congressional discussion may yet prove useful in this regard as well.

Looking to the longer term, some of the biggest obstacles to policy success are on the pathway to policy development. Some of those problems are epistemological in nature. The United States, and the West more broadly, has not done the needed intellectual homework. The requisite new expertise is only slowly being created, and constellations of such expertise have not begun to come together.

**Three issues are ripe for new analysis and next steps.**

And some of those problems are rooted in a deeply divided political culture. The extremes in this debate have largely crowded and drowned out the middle, as in so many aspects of contemporary U.S. national politics. The more ideological NGOs have overshadowed the voices of the more pragmatic ones. Pragmatic

leadership has no natural constituency. These obstacles are harder to address. Yet, doing so is essential to getting our intellectual homework done, so that the next policies can proceed on a sound basis.

As this essay has suggested, the needed intellectual work covers a broad set of complex issues. But here I focus on three issues that are ripe for new analysis and corresponding implications for next steps.

The first is the challenge of multilateral disarmament enforcement. Since the Acheson-Lilienthal Plan became the Baruch Plan, policymakers have been struggling with the question of what is necessary in the collective security system to ensure the requisite compliance and effective enforcement with a future nuclear disarmament regime. In practice, this implies a collective security system capable of quickly detecting militarily significant cheating by any state (or non-state actor) and capable of responding politically and, if necessary, militarily in

a timely and effective manner. The answer will have to empower but reform the UN Security Council to this new role, including by restricting the rights to veto. The end of the Cold War opened the door to such a system, and President George H.W. Bush spoke for many in 1990 in expressing his hope that the Security Council could finally fulfill the aspirations of the UN founders by serving as an effective defender of a new world order from WMD-armed rogues.<sup>48</sup>

However, a short while later, that project lay in tatters. Over the last three decades, modern multilateral disarmament diplomacy has been in almost perpetual crisis. It has enjoyed a few wins (as for example in Iraq in the 1990s and Libya in 2003), but many more losses and draws.<sup>49</sup> The permanent five (P-5) members of the UN Security Council have now reverted to a zero-sum transactional way of business and are seen by many as an outdated nuclear aristocracy. Moreover, the inability of the Security Council as well as many members of the so-called international community to respond effectively to Syrian violations of the Chemical Weapons Convention stands in sharp contrast to the requirements of effective enforcement.

Thus, one very useful task would be to review the history of multipolar disarmament diplomacy since the Cold War and to identify lessons for improving the performance of the regime. Such a project could also usefully develop the metrics by which to gauge whether the envisaged collective security regime would be effective enough to entrust it with the nuclear disarmament project.

The second challenge is presented by the emerging multi-domain arms competition among Russia, China, and the United States. The three are modernizing and adapting their nuclear postures in a manner that is increasingly coupled among them in decision making, in the sense that they are reacting to each other, but is not highly competitive in the sense that one is trying to gain superiority over another. They are also developing new tools of competition for cyber space and outer space, usually with an express goal of domination in that domain. Loose talk of a multi-domain arms race among the three implies that somehow these countries are reverting to Cold War behaviors. But the overall dynamic is not that of an arms race—defined here as the pursuit of decisive advantage. It seems that each is competing not to fall behind and thus become the victim of new forms of coercion. But an arms race could yet emerge. If this new competition becomes truly uncontrolled, new instabilities will result and along with them the risks that military flashpoints might become armed hostility.

**The overall dynamic among Russia, China and the United States is not that of an arms race.**

Thus, a second useful task would be to characterize the dynamic elements in the strategic military relationships among the three, identify risks, and develop strategies to minimize or mitigate risks. This task would address the dynamics and risks of multi-domain strategic competition and update arms control and transparency strategies to account for them.

The third challenge is to think in broader historical terms about the requirements of strategic stability and about the benefits and risks of various forms of military restraint. American debates about nuclear deterrence, arms control and disarmament are conspicuously rooted in Cold War experience. But some pre-nuclear experience can be helpful—especially the experience of the interwar period between World Wars I and II. Disarmament was a central pillar of the diplomatic effort to rebuild international order after the calamity of World War I, and unfortunately its failures played a central role in the breakdowns that led to World War II. Experience from that time seems to imply that well-conceived arms control measures that align with political settlements can reinforce peace, while poorly conceived ones that are out of alignment with the political context can be misused and misunderstood in dangerous ways.<sup>50</sup>

Therefore, a third useful task would be to identify and examine lessons from this period and to evaluate those lessons in the contemporary context.

## **Mugged by Reality**

---

The American intellectual Irving Kristol once famously described neoconservatives as liberals who had been “mugged by reality.”<sup>51</sup> The Obama administration’s strategy for taking near-term practical steps toward the long-term nuclear disarmament goal was mugged by reality. Despite its pragmatism, the strategy reached few of its “stretch goals.” But there is little evidence of an ideological sobering among disarmament advocates who so far have sought to “try harder” in the face of new challenges.

One response to a mugging is to flee. In this case, flight would entail abandoning the disarmament project as impractical. But such a choice would serve us poorly. It would reinforce the perception of a decaying international nuclear order and contribute to the further retreat of the rules-based global order. And it would significantly increase the likelihood that the next nuclear era will be marked by unrestrained competition and significant new nuclear dangers. Moreover, abandoning the disarmament project would garner little support from democratic publics who naturally recoil from the prospect of perpetual nuclear danger.

A better response is to rise to the challenge and work on practical steps that increase safety and security. It means committing to creating the needed new expertise. It also means working to repopulate the middle in these debates and

no longer ceding the public policy discussion to the shrill extremes. And it means lifting our eyes from the debates *du jour* and focusing on broader historical perspectives as well as the larger analytical tasks that are necessary to inform the development of next steps on the disarmament project.

## Notes

1. See *Creating the Conditions for Nuclear Disarmament (CCND)*, a working paper submitted by the United States of America, Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, April 18, 2018, NPT/CONF.2020/PC.II/WP.30, <https://undocs.org/NPT/CONF.2020/PC.II/WP.30>. See also Dr. Christopher Ashley Ford, “Arms Control and International Security: Nonproliferation Policy and Priorities: A United States Perspective,” remarks delivered to the 7<sup>th</sup> European Union Nonproliferation and Disarmament Conference, Brussels, Belgium, December 18, 2018, <https://www.state.gov/t/isn/rls/rm/2018/288216.htm>.
2. Rep. Adam Smith (D-WA), incoming chair of the House Armed Services Committee, Remarks to the conference on the Future of U.S. Nuclear Policy, Ploughshares Fund, Washington, D.C., November 14, 2018, <https://www.ploughshares.org/issues-analysis/article/rep-adam-smith-future-us-nuclear-policy>.
3. For a comprehensive review and assessment of that agenda at roughly the first two-year mark, see keynote remarks by then National Security Advisor Thomas Donilon to the 2011 Carnegie International Nuclear Policy Conference, Washington, D.C., March 29, 2011, [https://carnegieendowment.org/files/Thomas\\_Donilon.pdf](https://carnegieendowment.org/files/Thomas_Donilon.pdf).
4. See for example Rebecca L. Heinrichs, “The Senate Should Forever Reject the Comprehensive Nuclear Test Ban Treaty,” Hudson Institute, as published in *Real Clear Defense*, October 27, 2015, [https://www.realcleardefense.com/articles/2015/10/28/the\\_senate\\_should\\_forever\\_reject\\_the\\_comprehensive\\_nuclear-test-ban\\_treaty\\_\\_108622.html](https://www.realcleardefense.com/articles/2015/10/28/the_senate_should_forever_reject_the_comprehensive_nuclear-test-ban_treaty__108622.html).
5. See for example Steven Pifer, “Obama’s Faltering Nuclear Legacy: The 3 R’s,” *Washington Quarterly* 38, no. 2 (2015): 101–118 and Nina Tannenwald, “The Vanishing Nuclear Taboo: How Disarmament Fell Apart,” *Foreign Affairs* 97, no. 6 (November/December 2018): 16–24.
6. Barack Obama, speech, Hradcany Square, Prague, Czech Republic, April 5, 2009.
7. *Nuclear Posture Review (NPR) Report 2010*, [https://dod.defense.gov/Portals/1/features/defenseReviews/NPR/2010\\_Nuclear\\_Posture\\_Review\\_Report.pdf](https://dod.defense.gov/Portals/1/features/defenseReviews/NPR/2010_Nuclear_Posture_Review_Report.pdf).
8. *Ibid*, vi.
9. *Ibid*, 45.
10. *Ibid*, 48–49.
11. *National Security Strategy 2010*, [https://obamawhitehouse.archives.gov/sites/default/files/rss\\_viewer/national\\_security\\_strategy.pdf](https://obamawhitehouse.archives.gov/sites/default/files/rss_viewer/national_security_strategy.pdf).
12. *America’s Strategic Posture: The Final Report of the Congressional Commission on the Strategic Posture of the United States* (Washington, D.C.: U.S. Institute of Peace, May 2009), [https://www.usip.org/sites/default/files/America%27s\\_Strategic\\_Posture\\_Auth\\_Ed\\_0.pdf](https://www.usip.org/sites/default/files/America%27s_Strategic_Posture_Auth_Ed_0.pdf).
13. “Fact Sheet: Increasing Transparency in the U.S. Nuclear Stockpile, May 3, 2010,” Department of Defense.

14. The intended scope of this review was described by then National Security Advisor Thomas Donilon in his previously cited keynote remarks to the March 2011 Carnegie International Nuclear Policy Conference.
15. The new guidance was summarized in an unclassified report to Congress. See *Report on Nuclear Employment Strategy of the United States Specified in Section 491 of 10 U.S.C.*, June 12, 2013, <https://apps.dtic.mil/dtic/tr/fulltext/u2/a590745.pdf>.
16. See official U.S. findings in the *Report on Adherence to and Compliance with Arms Control, Nonproliferation, and Disarmament Agreements and Commitments*, issued annually by the State Department's Bureau of Arms Control, Verification and Compliance, Washington, D.C., April 2019, <http://www.state.gov/documents/organization/291394.pdf>. For reports from prior years, see also <https://www.state.gov/t/avc/rls/rpt/2019/index.htm>.
17. *Providing for the Common Defense*, Report of the National Defense Strategy Commission, November 13, 2018, <https://www.usip.org/sites/default/files/2018-11/providing-for-the-common-defense.pdf>.
18. For an analysis of nuclear weapons in Russia's military strategy under President Putin, see Katarzyna Zysk, "Escalation and Nuclear Weapons in Russia's Military Strategy," *RUSI Journal* 163, no. 2 (2018): 4–15.
19. "These themes [Russian orthodoxy and nuclear deterrence] are closely connected because both the traditional faiths of the Russian Federation and Russia's nuclear shield are two things that strengthen Russian statehood and create the necessary conditions for ensuring the country's internal and external security." Vladimir Putin, Transcript of Press Conference with the Russian and Foreign Media, Round Hall, Kremlin, Moscow, February 1, 2007, <http://en.kremlin.ru/events/president/transcripts/24026>.
20. This is in reference to his 2014 Valdai club remarks. See "Meeting of the Valdai International Discussion Club," October 24, 2014, <http://en.kremlin.ru/events/president/news/46860>.
21. Remarks by the Vice President on Nuclear Security, Washington, D.C., January 11, 2017. At the same time, the White House released a fact sheet on the Prague Nuclear Security Agenda reviewing accomplishments on the four policy pillars. The Vice President's remarks included the statement that "the President and I strongly believe we have made enough progress that deterring—and if necessary, retaliating against—a nuclear attack should be the sole purpose of the U.S. nuclear arsenal." Yet they made no such change to policy—and left it standing without explanation, thus implying that their policy beliefs ran afoul of their policy logic.
22. Hans M. Kristensen, "Falling Short of Prague: Obama's Nuclear Weapons Employment Policy," *Arms Control Today*, September 4, 2013, [https://armscontrol.org/act/2013\\_09/Falling-Short-of-Prague-Obamas-Nuclear-Weapons-Employment-Policy](https://armscontrol.org/act/2013_09/Falling-Short-of-Prague-Obamas-Nuclear-Weapons-Employment-Policy). See also Ivan Oelrich and Hans M. Kristensen, *Strategic Failure: Congressional Strategic Posture Commission Report*, March 6, 2009, <https://fas.org/blogs/security/2009/05/commission-2/>.
23. R. Jeffrey Smith, "Obama's Broken Pledge on Nuclear Weapons," *Foreign Policy*, March 30, 2016, <https://foreignpolicy.com/2016/03/30/obama-nuclear-security-summit-iran-japan-south-africa/>; and William C. Potter, "Disarmament Diplomacy and the Nuclear Ban Treaty," *Survival* 59, no. 4 (2017): 75–108.
24. David E. Sanger and William J. Broad, "Obama Unlikely to Vow No First Use of Nuclear Weapons," *New York Times*, September 5, 2016, <https://www.nytimes.com/2016/09/06/science/obama-unlikely-to-vow-no-first-use-of-nuclear-weapons.html>.

25. Steve Andreasen, Isabelle Williams, and Brian Rose, *Building a Safe, Secure, and Credible NATO Nuclear Posture*, Nuclear Threat Initiative, Washington, D.C., February 15, 2018, [https://www.nti.org/documents/2252/NTI\\_NATO\\_RPT\\_Web.pdf](https://www.nti.org/documents/2252/NTI_NATO_RPT_Web.pdf).
26. Taehyung Ahn, "Patience or Lethargy: U.S. Policy toward North Korea under the Obama Administration," *North Korean Review* 8, no. 1 (Spring 2012): 67–83.
27. Gregory Kulacki, "Nuclear Weapons in U.S.-China Relations," in Li Bin and Tong Zhao, eds., *Understanding Chinese Nuclear Thinking* (Beijing and Washington, D.C.: Carnegie Endowment for International Peace, 2016): 251–266.
28. Joseph Cirincione, Testimony to the Democratic Party National Conventional Platform Committee, June 20, 2016, <https://www.ploughshares.org/sites/default/files/Cirincione%20Testimony%20to%20DNC.pdf>.
29. Pifer, "Obama's Faltering Nuclear Legacy."
30. Tannenwald, "The Vanishing Nuclear Taboo."
31. Cirincione, "Is that All There Is? Obama's Disappointing Nuclear Legacy," *Defense One*, March 6, 2016, <https://www.defenseone.com/ideas/2016/03/obama-disappointing-nuclear-weapons-legacy/127068/>.
32. A more sober analysis of the nuclear disarmament legacy of the Obama period can be found in Lewis Dunn, *Redefining the U.S. Agenda for Nuclear Disarmament*, Livermore Papers on Global Security #1 (Livermore, CA: Center for Global Security Research, 2016), [https://cgsr.llnl.gov/content/assets/docs/CGSR\\_Document\\_LLNL-TR-701463\\_103116.pdf](https://cgsr.llnl.gov/content/assets/docs/CGSR_Document_LLNL-TR-701463_103116.pdf).
33. "No First Use' Nuclear Policy Proposal Assailed by U.S. Cabinet Officials, Allies," *Wall Street Journal*, January 19, 2019, <https://www.wsj.com/articles/no-first-use-nuclear-policyproposal-assailed-by-u-s-cabinet-officials-allies-1471042014>.
34. "Second to none" is a term first used by President John F. Kennedy to signal that the United States would compete in the nuclear arms race not to gain supremacy but only enough to ensure that the Soviet Union could not. It had both quantitative and qualitative implications.
35. Barack H. Obama, "A Just and Lasting Peace," Nobel lecture, Oslo, Norway, December 10, 2009, <https://www.nobelprize.org/prizes/peace/2009/obama/26183-nobel-lecture-2009/>.
36. Robert Kagan, *The Jungle Grows Back: America and Our Imperiled World* (New York: Alfred Knopf, 2018), 153–163.
37. George P. Schulz, William J. Perry, Henry A. Kissinger, and Sam Nunn, "A World Free of Nuclear Weapons," *Wall Street Journal*, January 4, 2007, <https://www.wsj.com/articles/SB116787515251566636>.
38. Beatrice Fihn, "Time to Step off the Nuclear Tightrope," *Financial Times*, January 7, 2018, <https://www.ft.com/content/b0768482-e0da-11e7-a8a4-0a1e63a52f9c>.
39. Ward Wilson, "How Nuclear Realists Falsely Frame the Nuclear Debate," *Bulletin of the Atomic Scientists*, May 7, 2015, <https://thebulletin.org/2015/05/how-nuclear-realists-falsely-frame-the-nuclear-weapons-debate/>.
40. Statement of the Ambassador of South Africa, Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, May 4, 2018, <http://statements.unmeetings.org/media2/18559906/south-african-npt-statement-on-the-chairs-summary.pdf>.
41. Fihn, "Time to Step Off the Nuclear Tightrope."
42. The reference is to Mexico's ambassador to the Conference on Disarmament. Cited in William C. Potter, "Disarmament Diplomacy and the Nuclear Ban Treaty," *Survival* 59, no. 4 (August-September 2017): 90.

43. See “NPT Wisdom for a New Disarmament Discourse,” remarks delivered by Christopher Ford, October 26, 2017, Ploughshares Fund, Washington, D.C, <https://www.ploughshares.org/issues-analysis/article/videos-nuclear-weapons-policy-time-crisis#footnote9>. See also Ford, “Creating the Conditions for Nuclear Disarmament.”
44. This is in reference to the Stanley Kubric’s 1964 satire black comedy film, “Dr. Strangelove or How I Learned to Stop Worrying and Love the Bomb.”
45. See for example William J. Perry, “Why It’s Safe to Scrap America’s ICBMs,” *New York Times*, September 30, 2016, <https://www.nytimes.com/2016/09/30/opinion/why-its-safe-to-scrap-americas-icbms.html>.
46. Tannenwald, “The Vanishing Taboo,” 21.
47. A parallel NGO effort could contribute significantly here. For an excellent recent starting point for this effort, see George Perkovich, *Will You Listen? A Dialogue on Creating the Conditions for Nuclear Disarmament* (Washington, D.C.: Carnegie Endowment for International Peace, 2018), <https://carnegieendowment.org/2018/11/02/will-you-listen-dialogue-on-creating-conditions-for-nuclear-disarmament-pub-77614>.
48. President George H.W. Bush, Address to a Joint Session of Congress, September 11, 1990.
49. This formulation is Lewis Dunn’s. See his article “Countering Proliferation: Insights from Past ‘Wins, Losses, and Draws,’” *Nonproliferation Review* 13, no. 3 (2006).
50. See Patrick Glynn, *Closing Pandora’s Box: Arms Races, Arms Control, and the History of the Cold War* (1992) and E.H. Carr, *The 20 Years Crisis* (London: Macmillan Press, 1939).
51. Irving Kristol, *The Neoconservative Persuasion* (New York: Basic Books, 2011).