

Taking Stock: Nuclear Disarmament and U.S. Disarmament Diplomacy

- Bibliography -

August 2017

CGSR
Center for Global Security Research



LLNL-TR-736063

LAWRENCE LIVERMORE NATIONAL LABORATORY

Taking Stock: Nuclear Disarmament and U.S. Disarmament Diplomacy Workshop Bibliography

Workshop convened on May 24, 2017 by the Center for Global Security Research,
Lawrence Livermore National Laboratory in Washington, D.C.

In May 2017, the Center for Global Security Research convened a workshop on the lessons learned and recent developments in U.S. nuclear disarmament diplomacy and their implications for future shifts in U.S. nuclear policy. Compiled by Henrietta Toivanen.

1. [Disarmament Diplomacy: Lessons Learned from Recent U.S. Efforts](#)
What lessons can be learned from the disarmament diplomacy pursued by the Obama administration? How about the Global Zero movement? What are they key drivers and implications of the emerging nuclear ban movement?
2. [The Moral Discourse about Nuclear Weapons](#)
What are the moral cases for and against nuclear deterrence? What are the implications of this debate for U.S. nuclear disarmament diplomacy?
3. [The Global Zero Aspiration: What Would Make It Plausible?](#)
What conditions would be needed? What would make it plausible? In what timeframe? How would peace and security be safeguarded in a post-nuclear world?
4. [Implications for U.S. Disarmament Diplomacy](#)
Looking ahead 8-10 years, what can reasonably be accomplished? What near-term and long-term goals should be set? What response to the ban movement is necessary and appropriate? How can the bully pulpit be used to best advantage?

1. Disarmament Diplomacy: Lessons Learned from Recent U.S. Efforts

Krepon, Michael. (3 May 2016). *Unilateral or Bilateral Reductions?* Stimson Center. (<https://www.stimson.org/content/unilateral-or-bilateral-reductions>)

Krepon discusses the options that the new administration has on nuclear arms control, which include pursuing bilateral or unilateral stockpile reductions. Both of these pathways have benefits and risks, which must be considered in the prevailing international security environment. Under current conditions, unilateral reductions would not contribute to U.S. policy goals and may even be counterproductive. Instead, formal bilateral reductions with Russia following New START could prove to be more effective and achieve the goals of lower strategic force levels, involvement of other nuclear weapons states, and overall reduced nuclear risks.

Smith, Jeffrey. (30 March 2016). "Obama's Broken Pledge on Nuclear Weapons," *Foreign Policy*. (<http://foreignpolicy.com/2016/03/30/obama-nuclear-security-summit-iran-japan-south-africa/>)

The author argues that while President Obama's commitments to nuclear disarmament and security were ambitious and admirable, he ultimately failed to pursue significant achievements in these fields. His stated goals of ratifying the CTBT, pursuing an FMCT, and others went unfulfilled, partially due to the significant political and practical barriers that prevent progress in these areas.

Warren, Aiden. (2013). *The Obama Administration's Nuclear Weapon Strategy: The Promises of Prague*. Abingdon: Routledge.

The book describes the Obama administration's nuclear policy debates and decisions between 2008 and 2012, including the Nuclear Posture Review, the New START Treaty, CTBT, and regional nuclear issues. The book highlights how and why the objectives that President Obama outlined in his Prague speech have been so difficult to implement, as well as how he managed relationships with other states on nuclear issues. While President Obama reflected his ambitious nuclear policy vision through policy shifts, new initiatives, and greater multilateral engagement, the nuclear policy outcomes of his first administration have overall been more cautious and transitional, as opposed to truly transformative.

2. The Moral Discourse about Nuclear Weapons

Colby, Elbridge. (2015). "Terrible, But Justified: The U.S. A-Bomb Attacks on Hiroshima and Nagasaki," *Global Asia* Vol. 10, No. 3, Fall 2015.

The article develops a framework for assessing the justification of using nuclear weapons in Japan in 1945. Drawing from just war theory, the answer depends on the general justification of using nuclear weapons, and the justification in the specific context of their deployment. Colby argues that the use of nuclear weapons contributed to ending the total war that was started and pursued by an unflinching Japan, and minimized the losses in the conflict. Given the context and the conditions, Colby argues, the burden of costs was justifiably placed on Japan.

Dunlap, Charles. (2 August 2017). "Is the Treaty Banning Nuclear Weapons Immoral?" *War on the Rocks*.

(<https://warontherocks.com/2017/08/is-the-treaty-banning-nuclear-weapons-immoral/>)

The article challenges the ban treaty proponents' categorical assertion that the use of nuclear weapons is illegal under all circumstances; argues that there are legitimate conditions where the use of these capabilities would be compatible with Just War theory and international humanitarian law; and illustrates that there continues to be a strong rationale and support for maintaining nuclear weapons as a measure of last resort. The article argues that in the extreme circumstances where nuclear weapons use would become relevant, the stakes are so high that their destructive effects may become morally justifiable.

Freedman, Lawrence. (3 May 2013). "Disarmament and Other Nuclear Norms," *The Washington Quarterly*, 26:2, 93-108.

(<http://www.tandfonline.com/doi/abs/10.1080/0163660X.2013.791085>)

The article discusses the process of norm emergence in the international community, explains how it has been associated with nuclear weapons and the argument for their abolishment, and makes the case for why other normative approaches are more effective in preventing nuclear war. The author argues that changing the norms relating to nuclear weapons is a complex process that cannot be unilaterally pursued even through U.S. leadership, making global nuclear disarmament a demanding goal. The prevention of nuclear war is better be pursued through the norms of non-use, deterrence, and nonproliferation, which have so far been effective in preventing the use of nuclear weapons.

Hayashi, Nobuo. (2015). *On the Ethics of Nuclear Weapons: Framing a Political Consensus on the Unacceptability of Nuclear Weapons*. United Nations Institute for Disarmament Research.
(<http://www.unidir.org/files/publications/pdfs/on-the-ethics-of-nuclear-weapons-en-627.pdf>)

The paper introduces three schools of thought relating to the ethics of nuclear weapons – consequentialism, just war theory, and deontology – and argues why the last approach creates the most credible case for their immorality. Based on deontology, the author illustrates how torture emerged as a categorically rejected concept. Parallel to this, he argues, a normative prohibition of nuclear weapons could be possible on deontological grounds.

Kehler, Robert. (2016). “Nuclear Weapons & Nuclear Use,” *Daedalus* Vol. 145, Issue 4, Fall 2016, pp. 50-61.

The author recounts how nuclear deterrence emerged as a foundation for U.S. national security policy after World War II and how in the post-Cold War era the logic and ethics of nuclear deterrence has been questioned. Kehler argues that in the current international security environment, characterized by high levels of complexity and uncertainty, nuclear weapons still play a critical role in contributing to national security. Even as their role has reduced, Kehler discusses why maintaining a credible nuclear deterrent is still critical and how it is preserved in practice.

Mies, Richard. (2012). “Strategic Deterrence in the 21st Century,” *Undersea Warfare*, Spring 2012, pp. 12-19.
(http://www.public.navy.mil/subfor/underseawarfaremagazine/Issues/PDF/USW_Spring_2012.pdf)

Mies discusses how nuclear weapons have fundamentally transformed the nature of warfare from winning wars to deterring them; how this has mandated the U.S. defense community to maintain a strong strategic deterrent enterprise; and how reductions in strategic forces, inadequate modernization, and eroding expertise are threatening this enterprise. The drive towards further disarmament may be detrimental to U.S. interests, unless the causes and consequences of disarmament are fully understood.

Permanent Mission of the Holy See to the UN in Geneva, Vienna Conference on the Humanitarian Impact of Nuclear Weapons. (2014). *Nuclear Disarmament: Time for Abolition*.
(http://www.paxchristi.net/sites/default/files/documents/2014-0388-en-gl-ps_0.pdf)

The statement, given in 2014 at the Vienna Conference on the Humanitarian Impact of Nuclear Weapons (third conference convened by the Humanitarian Movement), makes the case for renewed urgency in the abolition of nuclear weapons. It also explains how the international community can establish a shared ethic for the process, and how the current nuclear architecture undermines justice and peace in societies. The statement makes the case that nuclear weapons represent an immoral source of

presumed security and that nuclear disarmament is a moral obligation for states. To achieve global abolition of nuclear weapons, the different sides in the debate must engage in a dialogue on these pressing ethical issues.

Richard, Ted and Sean Watts. (2017). “The International Legal Environment for Nuclear Deterrence,” *Just Security*.
(<https://www.justsecurity.org/39281/international-legal-environment-nuclear-deterrence/>)

The authors provide an overview of how international law relates to the use of nuclear weapons, the role of nuclear weapons in states’ security strategies, and the connection between international law and deterrence. In the context of the negotiations over a nuclear weapons ban treaty, the authors argue that it would be in the interests of the nuclear weapons states to clarify their perspectives on these legal issues. With respect to the 2017 Nuclear Posture Review, they propose the assessment and clarification of U.S. legal positions relating to nuclear weapons use.

Tannenwald, Nina. (2008). *The Nuclear Taboo: The United States and the Non-Use of Nuclear Weapons Since 1945*. Cambridge: Cambridge University Press.

The book analyzes the emergence and strengthening of the norm of the non-use of nuclear weapons and how the nuclear taboo has influenced U.S. leaders in decision-making. The analysis covers four instances where U.S. policymakers considered the use of nuclear weapons, and an explanation of how the taboo of using nuclear weapons better accounts for their behavior, contrasted with explanations based on deterrence. Overall, the book illuminates how moral reasons can be seen to explain why nuclear weapons have not been used since 1945.

Williams, Heather. (28 April 2016). “Why a Nuclear Weapons Ban is Unethical (For Now): NATO and the Humanitarian Impacts of Nuclear Weapons Initiative,” *RUSI Journal* Vol. 161, Issue 2. (<https://rusi.org/publication/rusi-journal/why-nuclear-weapons-ban-unethical-now-nato-and-humanitarian-impacts-nuclear>)

The article outlines the re-emergence of discussions on nuclear ethics in the context of NATO and the Humanitarian Impacts Initiative; illuminates how past scholarship on nuclear ethics integrated considerations of deterrence strategies to the discussions; and offers recommendations for how both NATO and the humanitarian movement could redirect their attention with respect to the ethical dimensions of nuclear policy. Williams argues that NATO can reconcile its nuclear weapons policy with the emerging dialogue on ethics, and that the humanitarian movement can develop its approach beyond its sole focus on the ban treaty.

3. The Global Zero Aspiration: What Would Make It Plausible?

Acheson, Ray. (2017). *Banning Nuclear Weapons: Prohibitions for a Nuclear Weapon Ban Treaty*. Women's International League for Peace & Freedom. (<http://www.reachingcriticalwill.org/images/documents/Publications/bnw-prohibitions.pdf>)

The discussion paper outlines the core prohibitions that Reaching Critical Will finds most important in the ban treaty, including the acquisition of nuclear weapons, their possession and stockpiling, and other actions relating to the use and deployment of nuclear weapons. The paper reflects the key motivations that are behind the nuclear ban movement, spanning from the indiscriminate effects of nuclear weapons to the environmental implications of their existence.

Feiveson, Harold, Alexander Glaser, Zia Mian, and Frank von Hippel. (2014). *Unmaking the Bomb: A Fissile Material Approach to Nuclear Disarmament and Nonproliferation*. Cambridge, MA: MIT Press.

The book argues that limiting the most critical constituent part of nuclear weapons, fissile materials, would be an effective mechanism to decrease the dangers posed by nuclear weapons. This should include controls on the production, stockpiling, and use of these materials, which will be also very important when considering mechanisms to prevent the re-establishment of nuclear weapons programs.

Ford, Christopher. (2010). *Nuclear Weapons Reconstitution and its Discontents: Challenges of "Weaponless Deterrence."* Hudson Institute. (https://www.hudson.org/content/researchattachments/attachment/840/nuclear_weapons_ford.pdf)

Ford defines the concept of countervailing reconstitution or "weaponless deterrence" (establishing deterrence on the basis of the latent capability to reconstitute nuclear arsenals); analyzes the origins of this idea and past thinking on the concept; and contributes new insights on how countervailing reconstitution relates to strategic stability and how it could operate in practice. The possibility of multilateral countervailing reconstitution has been proposed as a mechanism to deal with the risk of breakout that any nuclear abolition regime will need to solve, but Ford highlights that the concept faces several challenges and complexities that may make it impracticable, or that it may become unnecessary under future conditions. The concept may be more useful in supporting warhead reductions, but in either case, a more comprehensive study and public discussion of the concept is necessary.

Global Zero. (2010). Global Zero Action Plan.
(https://www.globalzero.org/files/gzap_6.0.pdf)

The report explains the Nuclear Zero Commission's motivation for pursuing global nuclear disarmament, lays out an action plan with four phases, and discusses the implementation of the plan. The report aims to develop a realistic timeline for the abolition effort, based on past trajectory of reductions in nuclear weapons.

Hinderstein, Corey ed. (2010). *Cultivating Confidence: Verification, Monitoring, and Enforcement for a World Free of Nuclear Weapons*. Stanford, CA: Hoover Institution Press.

The volume contains chapters on the political and legal challenges relating to nuclear disarmament verification, monitoring, and enforcement; the technical challenges of verifying fissile materials, warheads, and nonproduction of new warheads; and the confidence issues at the level of states, international institutions, and civil society. The key findings are that the international community has a good understanding of the challenges relating to nuclear disarmament; that important work has already been done to solve many of the issues; and that the remaining capability gaps are being addressed through ongoing research work.

Linhart, Michael. (2014). Pledge presented at the Vienna Conference on the Humanitarian Impact of Nuclear Weapons by Austrian Deputy Foreign Minister Michael Linhart.
(https://www.bmeia.gv.at/fileadmin/user_upload/Zentrale/Aussenpolitik/Abruestung/HINW14/HINW14_Austrian_Pledge.pdf)

The pledge outlines Austria's views on the humanitarian impacts of nuclear weapons, explains its motives to engage in the humanitarian movement conferences, and frames the country's call for pursuing effective measures to prohibit nuclear weapons. This Austrian pledge went beyond the Chair's Summary of the Vienna Conference and received recognition at the 2015 NPT Review Conference, ultimately setting the stage for the 2016 UN General Assembly resolution to negotiate a legal instrument banning nuclear weapons in 2017.

May, Michael. (October 2007). What Are Nuclear Weapons For? Forum on Physics and Society, *American Physical Society*.
(<https://www.aps.org/units/fps/newsletters/2007/october/may.html>)

The article discusses the importance of solving stockpile issues in the context of ongoing replacement and modernization efforts, the consequences of the different choices that are available, and the connection of these topics to more fundamental questions about the purpose and value of nuclear weapons. The author illuminates the different perspectives, which focus on using nuclear weapons for purely deterrent purposes, or deploying them to pursue wider foreign policy goals. The answer to the question has a profound impact on how the U.S. should formulate its nuclear policy, particularly on how it should perceive the value of nuclear disarmament.

Perkovich, George and James Acton, eds. (2009). *Abolishing Nuclear Weapons: A Debate*. Washington, DC: Carnegie Endowment.
(http://carnegieendowment.org/files/abolishing_nuclear_weapons_debate.pdf)

The first section of the volume addresses the security challenges, the verification and enforcement issues, and other considerations that shape the feasibility of nuclear abolition, inviting broad international debate on these topics; and the second section provides expert responses to the political, technical, and strategic issues relating to global disarmament. The debate evidences that the views of the proponents and opponents of nuclear disarmament diverge on the deterrent value of nuclear weapons, questions relating to justice, and several other fundamental issues, but that there are opportunities to narrow these divisions through discussing and limiting the operational role of nuclear weapons, moderating the competitive dynamics between nuclear-armed states, and understanding links between disarmament and the risks of proliferation.

Quester, George. (2015). *Nuclear Zero?: Lessons from the Last Time We Were There*. New Brunswick, NJ: Transaction Publishers.

The book reviews the concerns that are associated with global disarmament and the responses from disarmament proponents to these risks, testing both sides of the argument against historical evidence from a pre-WWII world. Quester's assessment of the historical record from when nuclear weapons were still under development shows that the concerns have merit, such as the risk of cheating in a prisoner's dilemma situation and the impulse of other states to match violations, which need to be addressed when considering future disarmament efforts.

Sagan, Scott, James Acton, et al. (2010). *Shared Responsibilities for Nuclear Disarmament: A Global Debate*. American Academy of Arts and Sciences, Occasional Paper.
(<http://carnegieendowment.org/files/saganInside.pdf>)

The collection of essays are responses to Scott Sagan's *Daedalus* essay "Shared Responsibilities for Nuclear Disarmament," in which authors from both nuclear weapons states and non-nuclear weapons states agree on the need for continued commitment to pursue global nuclear disarmament, but differ in their viewpoints on the balance of responsibilities and the implementation of the goal. The essays highlight the divides in national and personal opinions and illustrate how a debate on these questions is critical for narrowing the divides.

Sood, Rakesh, Frank von Hippel, and Morton Halperin. (1998). *The Road to Nuclear Zero: Three Approaches*. Center for the Advanced Study of India, Occasional Paper.

The paper outlines three fundamental arguments that are made against the elimination of nuclear weapons: that these capabilities provide security by enabling deterrence; that disarmament would result in a cascade of proliferation; and that deep reductions are very difficult to make due to practical challenges in establishing verification regimes and achieving stability at lower numbers. The authors argue that the only way that these concerns can be addressed and made compatible with the goal of

global disarmament, is to redefine the concept of a global zero. It must include extensive positive and negative security assurances; be based on a shared international legal framework relating to nuclear weapons; and be driven by equal reductions under a treaty on nuclear disarmament. The focus on this path towards disarmament is to prevent the reconstitution of nuclear arsenals and ultimately achieve a stable global zero, as defined by the authors.

4. Implications for U.S. Disarmament Diplomacy

Baker, John Carl. (14 December 2016). *Arms Control in the Age of Trump: Lessons from the Nuclear Freeze Movement*. Ploughshares Fund. (<http://www.ploughshares.org/issues-analysis/article/arms-control-age-trump-lessons-nuclear-freeze-movement>)

The article offers a historical parallel to the current conditions in U.S.-Russian relations from the Reagan era, illustrating how pressure from civil society influenced U.S. disarmament policies in the 1980s. The nuclear freeze movement offers an example of how social movements can challenge the official nuclear policy framework and create pressure towards disarmament, despite geopolitical tensions and uncertainties.

Dunn, Lewis. (2016). *Redefining the U.S. Agenda for Nuclear Disarmament: Analysis and Reflections*. Livermore Papers on Global Security No. 1, Center for Global Security Research. (https://cgsr.llnl.gov/content/assets/docs/CGSR_Document_LLNL-TR-701463_103116.pdf)

The paper assesses recent developments and current conditions in the global nuclear landscape, argues for the continuing importance of the U.S. disarmament efforts, establishes a future vision and strategy for these efforts, and defines specific actions and initiatives to implement them. By looking at disarmament both in the short- and long-term future, the paper identifies what is needed for the strategic elimination of nuclear weapons and defines a practical agenda for achieving these building blocks.

Ford, Christopher. (2008). "A New Paradigm: Shattering Obsolete Thinking on Arms Control and Nonproliferation," *Arms Control Today*. (https://www.armscontrol.org/act/2008_11/ford)

The article examines the Bush administration's approach towards arms control, its consequences on U.S. strategic forces and U.S.-Russian relations, and the shift towards counterproliferation in the U.S. nuclear policy agenda. Ford argues that the administration's willingness to break away from traditional Cold War paradigms allowed for important policy successes, and that the new conceptual approaches adopted by the administration provide valuable insights for the future, particularly in challenging established policy approaches.

Gottemoeller, Rose. (2016). Testimony Before the Senate Committee on Appropriations, Subcommittee on Energy and Water Development on July 13, 2016. (<https://www.appropriations.senate.gov/imo/media/doc/071316-Gottemoeller-Testimony.pdf>)

Gottemoeller makes the case for U.S. nuclear modernization as consistent with broader nuclear security objectives, including arms control and disarmament. Specifically, she discusses how the development of the long-range standoff cruise missile (LRSO) is compatible with U.S. arms control commitments, how it contributes to strategic stability in the current international security environment, and how it would enhance the credibility of U.S. extended deterrence.

Kelleher, Catherine and Judith Reppy (eds.). (2011). *Getting to Zero: The Path to Nuclear Disarmament*. Stanford, CA: Stanford University Press.

The volume covers the history of the nuclear zero movement, the perspectives of the major nuclear states towards the pressure to disarm, the role of regional powers and aspiring nuclear states, and the need for shared efforts on the path towards disarmament. The essays in the volume work under the assumption that global nuclear disarmament is possible, and focus on the question of what it means for states and existing institutions, issues, and practices. The goal is to understand how to ensure that disarmament leads to a more stable and secure world, considering the diverse viewpoints and interconnected issues related to this goal.

Meier, Oliver, Sira Cordes, and Elisabeth Suh. (9 June 2017). "What Participants in a Nuclear Weapons Ban Treaty (Do Not) Want." *Bulletin of the Atomic Scientists*. (<http://thebulletin.org/what-participants-nuclear-weapons-ban-treaty-do-not-want10829>)

The article maps the positions of the participants in the negotiations over a nuclear ban treaty and discusses the key areas of agreement (core prohibitions) and disagreement (assistance, nuclear weapons use, sharing, verification) among them. The article also illuminates how the negotiators understand the relationship between the ban treaty and other international instruments, particularly the NPT. Overall, the authors highlight how the practical outcomes of the treaty depend on the negotiating timeline, and how extending the talks beyond the summer could provide opportunities to engage those not currently involved in the process.

Michaels, Jeffrey and Heather Williams. (25 February, 2017). "The Nuclear Education of Donald J. Trump," *Contemporary Security Policy* Vol. 38, Issue 1.

The article outlines the nuclear policy landscape that President Trump inherits from the Obama administration, catalogues his comments on nuclear policy issues over the past three decades, discusses the implications of using social media as a mechanism for nuclear signaling, and analyzes the constraining effects of the Congress and other institutions. The article highlights the importance of understanding the president's personality and individual views, for example President Trump's self-identification as a deal-maker, in crafting nuclear policy and in shaping the subsequent outcomes.

Perkovich, George. (2017). “The Nuclear Ban Treaty: What Would Follow,” *Carnegie Endowment for International Peace*.
(http://carnegieendowment.org/files/CP_309_Perkovich_Nuclear_Treaty_Final_Web.pdf)

The paper examines the contentious debate over disarmament obligations and how it relates to the nuclear weapons ban treaty; explains why the treaty will be inadequate for changing the behavior of the nuclear-armed states, diminishing non-nuclear threats, or promoting the elimination of nuclear weapons; and discusses how discussions about a prototype disarmament regime and other incremental steps could help nuclear weapons states make progress towards their disarmament obligations. Addressing these issues and creating ways to solve them is the only way that genuine progress towards eliminating nuclear weapons can be made in the future.

Williams, Heather. (9 February 2017). “Does the Fight Over a Nuclear Weapons Ban Threaten Global Stability?” *Bulletin of the Atomic Scientists*.
(<http://thebulletin.org/does-fight-over-nuclear-weapons-ban-threaten-global-stability10500>)

The article explains how the nuclear ban treaty negotiations emerged, outlines the objectives of the ban movement, and offers a six-point strategy for the nuclear weapons states to manage the situation. Williams argues that the nuclear ban negotiations reflect the ongoing polarization, frustration, and mutual misunderstanding among nuclear weapons and non-nuclear weapons states. She also argues that the ban treaty may undermine the NPT framework. To prevent the ban treaty negotiations from having destabilizing effects, both the nuclear weapons states and supporters of the treaty need to be willing to make compromises and engage in finding common ground.