

Shared Responsibilities
for Nuclear Disarmament:
A Global Debate

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Shared Responsibilities for Nuclear Disarmament: A Global Debate

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Cover image: The Atomic Bomb Dome, in Hiroshima, Japan, is the only structure damaged by the August 6, 1945, bombing of Hiroshima that is still standing. It remains as a symbol against the use of nuclear weapons. Photograph © Jack Fields/Corbis

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Introduction

The pursuit of nuclear disarmament has been a central component of the nuclear nonproliferation regime, starting with the initial signing of the Nuclear Non-Proliferation Treaty (NPT) in 1968. The inclusion under Article VI of the NPT of a commitment to “pursue negotiations in good faith on effective measures relating to the cessation of the nuclear arms race at an early date and to nuclear disarmament” reflected the desire of the non-nuclear-weapons states (NNWS) not to create a regime that would allow nuclear-weapons states (NWS) to retain their weapons in perpetuity. Governments in Washington, Moscow, and London—representing the only three nuclear powers that signed the NPT in 1968—insisted, however, that no precise standards and no time-bound guarantees about when disarmament would be achieved were possible. The interest and emphasis given to nuclear disarmament by the leaders of the nuclear weapons powers have waxed and waned throughout the history of the NPT, and for much of the past decade, many governments in NNWS have complained that the disarmament goal has been given short shrift by those with nuclear weapons.

Renewed interest in arms control and restated commitments to the long-term goal of nuclear disarmament have clearly increased over recent years, most dramatically with President Barack Obama’s April 2009 speech in Prague. With that change in focus comes an opportunity for the international community to rethink how Article VI of the NPT is traditionally interpreted and to move beyond the cycle of repeated complaints from the “have-nots” that the “haves” are not doing enough to disarm themselves and repeated retorts by the “haves” that they are already taking every step that is realistic or prudent. The promise of a different approach to the commitments made under the NPT forms the basis of the Scott Sagan’s valuable article—“Shared Responsibilities for Nuclear Disarmament”—which was the concluding essay in the Fall 2009 special issue of *Daedalus* that focused on the global nuclear future. Sagan’s paper, and its call for rethinking the balance of responsibilities and the relationship between different articles in the NPT, now provides the basis for a series of invited response papers from seven distinguished authors. These international scholars and diplomats present their interpretations of the commitments made under the NPT regime and suggest new ways in which shared responsibilities for nuclear disarmament may or may not be realized in practice. Their contributions serve to expand the discussion that was started by the original *Daedalus* article—and together they are intended to spark renewed policy debates about how best to pursue global disarmament, debates that will be prominent at the May 2010 NPT Review Conference in New York City and in the years following that important meeting.

The distinguished authors in this American Academy of Arts and Sciences Occasional Paper come from a diverse set of countries and reflect a diverse and crosscutting set of perspectives on the disarmament debate. With respect to nuclear arsenals, Scott Sagan (United States) and James Acton (United Kingdom) are from NWS; Harald Müller (Germany), Jayantha Dhanapala (Sri Lanka), Mustafa Kibaroglu (Turkey), Yukio Satoh (Japan), Mohamed Shaker (Egypt), and Achilles Zaluar (Brazil) are leading specialists from NNWS. Three of these states—Germany, Turkey, and Japan—are U.S. allies and come under extended nuclear deterrence guarantees; Sri Lanka, Egypt, and Brazil, however, do not. With respect to the use of nuclear energy today, Brazil, Germany, Japan, the United States, and the United Kingdom all maintain nuclear power plants. Sri Lanka, Egypt, and Turkey are aspirant nuclear energy states and have not yet constructed the power plants that they hope to use in the future.

The differences in national perspectives and the differences in individual opinions about appropriate disarmament steps among the authors should not mask a commitment they all share. The contributors to this volume agree that new thinking and continued debate about how best to maintain momentum toward nuclear disarmament is to be welcomed. Only by seeking out, and taking into consideration, a cross section of views can progress toward the goal of a nuclear-weapons-free world continue. We hope that this Occasional Paper may therefore serve as an important contribution to a global disarmament debate that has become increasingly prominent over the past couple of years.

This Occasional Paper is part of the American Academy's Global Nuclear Future Initiative, which is guided by the Academy's Committee on International Security Studies. The Initiative examines the safety, security, and non-proliferation implications of the global spread of nuclear energy and is developing pragmatic recommendations for managing the emerging nuclear order. The Global Nuclear Future Initiative is supported by generous grants from Stephen D. Bechtel, Jr.; the S.D. Bechtel Foundation; the Carnegie Corporation of New York; the William and Flora Hewlett Foundation; the Alfred P. Sloan Foundation; the Flora Family Foundation; and the Kavli Foundation. We thank these funders for their support.

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Shared Responsibilities for Nuclear Disarmament

Scott D. Sagan

Interest in nuclear disarmament has grown rapidly in recent years.¹ Starting with the 2007 *Wall Street Journal* article by four former U.S. statesmen—George Shultz, Henry Kissinger, William Perry, and Sam Nunn—and followed by endorsements from similar sets of former leaders from the United Kingdom, Germany, Poland, Australia, and Italy, the support for global nuclear disarmament has spread.² The Japanese and Australian governments announced the creation of the International Commission on Nuclear Non-Proliferation and Disarmament in June 2008. Both Senators John McCain and Barack Obama explicitly supported the vision of a world free of nuclear weapons during the 2008 election campaign. In April 2009, at the London Summit, President Barack Obama and President Dmitri Medvedev called for pragmatic U.S. and Russian steps toward nuclear disarmament, and President Obama then dramatically reaffirmed “clearly and with conviction America’s commitment to seek the peace and security of a world without nuclear weapons” in his speech in Prague.

There is a simple explanation for these statements supporting nuclear disarmament: all states that have joined the Nuclear Non-Proliferation Treaty (NPT) are committed “to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament.” In the United States, moreover, under Clause 2 of Article 6 of the Constitution, a treaty commitment is “the supreme Law of the Land.” To

1. This essay was first published in *Daedalus* 138 (4) (Fall 2009).

2. George P. Shultz, William J. Perry, Henry A. Kissinger, and Sam Nunn, “A World Free of Nuclear Weapons,” *The Wall Street Journal*, January 4, 2007, and “Toward a Nuclear-Free World,” *The Wall Street Journal*, January 15, 2008; Douglas Hurd, Malcolm Rifkind, David Owen, and George Robinson, “Stop Worrying and Learn to Ditch the Bomb,” *The Times* (London), June 30, 2008; Alexander Kwasniewski, Tadeusz Mazowiecki, and Lech Walesa, “The Vanishing Bomb,” *The Moscow Times*, April 7, 2009; Helmut Schmidt, Richard von Weizsacher, Egon Bahr, and Hans-Dietrich Genscher, “Toward a Nuclear-Free World: A German View,” *International Herald Tribune*, January 9, 2009; Massimo D’Alema, Gianfranco Fini, Giorgio La Malfa, Arturo Parisi, and Francesco Calogero, “A World Free of Nuclear Weapons,” *Corriere Della Sera*, July 24, 2008; Malcolm Fraser, Gustav Nossal, Barry Jones, Peter Gration, John Sanderson, and Tilman Ruff, “Imagine There’s No Bomb,” *The Age*, April 8, 2009.

affirm the U.S. commitment to seek a world without nuclear weapons is therefore simply promising that the U.S. government will follow U.S. law.

A closer reading of these various declarations, however, reveals both the complexity of motives and the multiplicity of fears behind the current surge in support of nuclear disarmament. Some declarations emphasize concerns that the current behavior of nuclear-weapons states (NWS) signals to non-nuclear-weapons states (NNWS) that they, too, will need nuclear weapons in the future to meet their national security requirements. Other disarmament advocates stress the growth of global terrorism and the need to reduce the number of weapons and the amount of fissile material that could be stolen or sold to terrorist groups. Some argue that the risk of nuclear weapons accidents or launching nuclear missiles on false warning cannot be entirely eliminated, despite sustained efforts to do so, and thus believe that nuclear deterrence will inevitably fail over time, especially if large arsenals are maintained and new nuclear states, with weak command-and-control systems, emerge.

Perhaps the most widespread motivation for disarmament is the belief that future progress by the NWS to disarm will strongly influence the future willingness of the NNWS to stay within the NPT. If this is true, then the choice we face for the future is *not* between the current nuclear order of eight or nine NWS and a nuclear-weapons-free world. Rather, the choice we face is between moving toward a nuclear-weapons-free world or, to borrow Henry Rowen's phrase, "moving toward life in a nuclear armed crowd."³

There are, of course, many critics of the nuclear disarmament vision. Some critics focus on the problems of how to prevent nuclear weapons "breakout" scenarios in a future world in which many more countries are "latent" NWS because of the spread of uranium enrichment and plutonium reprocessing capabilities to meet the global demand for fuel for nuclear power reactors. Others have expressed fears that deep nuclear arms reductions will inadvertently lead to nuclear proliferation by encouraging U.S. allies currently living under "the U.S. nuclear umbrella" of extended deterrence to pursue their own nuclear weapons for national security reasons. Other critics worry about the "instability of small numbers" problem, fearing that conventional wars would break out in a nuclear disarmed world, and that this risks a rapid nuclear rearmament race by former NWS that would lead to nuclear first use and victory by the more prepared government.

Some critics of disarmament falsely complain about nonexistent proposals for U.S. *unilateral* disarmament. Frank Gaffney, for example, asserts that there has been "a 17-year-long unilateral U.S. nuclear freeze" and claims that President Obama "stands to transform the 'world's only superpower' into a nuclear

3. See Albert Wohlstetter, Thomas A. Brown, Gregory Jones, David McGarvey, Henry Rowen, Vincent Taylor, and Roberta Wohlstetter, "Moving Toward Life in a Nuclear Armed Crowd?" *Report for the Arms Control and Disarmament Agency*, April 22, 1976; <http://www.npec-web.org/Frameset.asp?PageType=Single&PDFFile=19751204-AW-EtAl-MovingTowardsLifeNuclearArmedCrowd&PDFFolder=Essays>.

impotent.”⁴ More serious critics focus on those problems—the growth and potential breakout of latent NWS, the future of extended deterrence, the enforcement of disarmament, and the potential instability of small numbers—that concern *mutual* nuclear disarmament. These legitimate concerns must be addressed in a credible manner if significant progress is to be made toward the goal of a nuclear-weapons-free world.

To address these problems adequately, the current nuclear disarmament effort must be transformed from a debate among leaders in the NWS to a coordinated global effort of shared responsibilities between NWS and NNWS. This essay outlines a new conceptual framework that is needed to encourage NWS and NNWS to share responsibilities for designing a future nuclear-fuel-cycle regime, rethinking extended deterrence, and addressing nuclear breakout dangers while simultaneously contributing to the eventual elimination of nuclear weapons.

The NPT is often described as a grand bargain between NWS and NNWS. The NNWS, it is said, agreed not to acquire nuclear weapons in exchange for the “inalienable right,” under Article IV of the Treaty, to acquire civilian nuclear power technology under international nonproliferation safeguards and the promise by the NWS, under Article VI of the Treaty, to work in good faith to eliminate eventually all of their nuclear weapons. Wolfgang Panofsky, for example, argued:

Non-nuclear Weapons States were enjoined from acquiring nuclear weapons and Nuclear Weapons States were forbidden to transfer nuclear weapons and the wherewithal to make them to an NNWS. To compensate for this obvious discriminatory division of the world’s nations, NNWS were assured that they had an “inalienable right” to the peaceful application of nuclear energy, and the NWS obligated themselves in Article VI of the treaty to work in good faith toward nuclear disarmament.⁵

In his 2009 Prague speech, President Obama similarly maintained that “the basic bargain is sound: Countries with nuclear weapons will move towards disarmament, countries without nuclear weapons will not acquire them, and all countries can access peaceful nuclear energy.”

These statements correctly highlight the important linkage between nuclear disarmament and nuclear nonproliferation. But framing the linkage in this way—with NWS seen as responsible for disarmament and NNWS responsible for accepting nonproliferation safeguards on their nuclear power programs—is historically inaccurate and politically unfortunate. It is historically inaccurate because both Article IV and Article VI were written to apply *to both* the

4. Frank Gaffney, Jr., “Peace Through Weakness,” February 16, 2009; http://www.centerforsecuritypolicy.org/p17891.xml?cat_id=120.

5. Wolfgang K. H. Panofsky, “The Nonproliferation Regime under Siege,” *Bulletin of the Atomic Scientists* (August 5, 2007); <http://www.thebulletin.org/web-edition/op-eds/the-nonproliferation-regime-under-siege>.

NWS and the NNWS. This common description of the Treaty is unfortunate because it limits the prospects for crafting a more comprehensive and more equitable implementation of the basic NPT bargains, based on shared responsibilities between NWS and NNWS, in the future.

Article IV of the NPT simply states, “Nothing in this Treaty shall be interpreted as affecting the inalienable right of all the Parties to the Treaty to develop research, production and use of nuclear energy for peaceful purposes without discrimination and in conformity with Articles I and II of this Treaty.” The expected global expansion of nuclear power, however, will lead to increasing demand for enriched uranium and reprocessed plutonium around the globe; a crucial question for future security therefore is whether the spread of nuclear power will lead to the spread of enrichment and plutonium fuel-production facilities. Mohamed ElBaradei has been particularly forceful in warning of the security risks inherent in such a world of multiple “virtual nuclear weapons states,” arguing for “a new international or multinational approach to the fuel cycle so as to avoid ending up with not just nine nuclear weapon States but another 20 or 30 States which have the capacity to develop nuclear weapons in a very short span of time.”⁶ George Perkovich and James Acton agree, noting that the NWS are unlikely to take the final steps toward complete disarmament if there are many states that could quickly get nuclear weapons material from their own national uranium or plutonium production facilities. “If no acceptable form of regulation can be established for the proliferation-sensitive activities that many states which today promote disarmament are seeking to conduct,” they argue, “the abolition of nuclear weapons may not prove possible.”⁷

Many proposals exist for different forms of multinational fuel-cycle facilities (plants owned and operated by multiple states) or international facilities (plants owned and operated by an international organization). Governments of many NNWS, however, as well as some nuclear technology exporters, argue that creating any constraints on the national production of nuclear fuels would violate the “inalienable right” mentioned in Article IV. As Albert Wohlstetter once noted, it is as if some diplomats believe that all states have “a new natural right to Life, Liberty, and the Pursuit of Plutonium.”⁸

Three important points about Article IV become clearer if one probes a little more deeply. First, this “inalienable right” is in reality a conditional right, dependent upon the state in question being “in conformity” with Articles I and II of the NPT. It is too often forgotten in the debate over the Iranian nuclear program, for example, that a state that is not behaving “in conformity”

6. Mohamed ElBaradei, “Addressing Verification Challenges,” Statements of the Director General: Symposium on International Safeguards, October 16, 2006; <http://www.iaea.org/NewsCenter/Statements/2006/ebsp2006n018.html>.

7. George Perkovich and James M. Acton, “Abolishing Nuclear Weapons,” Adelphi Paper 396 (London: International Institute for Strategic Studies, 2008), 93.

8. Albert Wohlstetter, “Spreading the Bomb without Quite Breaking the Rules,” *Foreign Policy* (Winter 1976/1977).

with its Article II commitment “not to seek or receive any assistance in the manufacture of nuclear weapons” has at least temporarily sacrificed its rights to acquire civilian nuclear technology under Article IV. The Board of Governors of the International Atomic Energy Agency (IAEA) decides whether or not a state is in compliance with its specific safeguards commitments. But the IAEA does not determine the appropriate response to a safeguards violation that is not remedied in a timely fashion; instead, it reports any such case of noncompliance to the UN Security Council and the General Assembly—as it did in 2004 with respect to Libya and in 2006 with respect to Iran—and then the Security Council must decide on appropriate responses.⁹

Second, Article IV refers to “*all the Parties to the Treaty*,” not just the NNWS. This should lead to increased opportunities to share responsibility for nonproliferation and disarmament, for it suggests that as part of their Article IV commitment, the NWS should reaffirm that international safeguards can eventually be placed on all of *their* nuclear power plants and enrichment and reprocessing facilities. Indeed, such an agreement in principle, with an exception for facilities with “direct national security significance,” was in fact made by President Lyndon Johnson in 1967, as a major compromise during the NPT negotiations.¹⁰ Reaffirming this commitment, as a responsibility under Article IV, should be easy to accept in principle; after all, if NWS are committed to working in good faith toward nuclear disarmament, at some point they would become, to coin an acronym, FNWS (former nuclear-weapons states), and the safeguard exceptions they currently maintain would no longer apply.

In practice, it would be helpful for NWS to go beyond reaffirmations and expressions of principle and pick one or more model facilities to place under advanced safeguards, to demonstrate future intentions and help create best practices. Strict safeguards on existing nuclear-fuel production facilities in the NWS are not really necessary *today* to ensure that the materials from the plants are not diverted for nuclear weapons, since NWS already have sufficient fissile materials from their military nuclear production programs. But placing new facilities under IAEA safeguards would signal equitable treatment and a long-term commitment to disarmament. Similar safeguards will also be needed if a Fissile Material Cut-off Treaty (FMCT), ending the production of materials for weapons, is successfully negotiated, though in this case the verification and safeguarding functions would be best handled (at least initially) by a new organization of inspectors from NWS, rather than the IAEA, so as to limit access into sensitive former weapons-material production facilities.

Third, responsibilities for sharing the financial support of IAEA international safeguards can be improved. Today, each IAEA member state pays into a regular budget of the Agency, from which the Safeguards Division draws funds for its inspection programs; but the Agency is strapped for funds to deal

9. Pierre Goldschmidt, “Exposing Nuclear Non-Compliance,” *Survival* 51 (1) (2009): 143–164.

10. See George Bunn, *Arms Control by Committee* (Stanford, Calif.: Stanford University Press, 1992), 101.

with the current level of inspections, and will be much more so if nuclear power continues to expand as expected and if the more intrusive regime required by the Agreed Protocol, which calls for advanced inspections, comes into force. One approach that has been advocated is to have states pay more into the IAEA safeguards budget in proportion to the number and kinds of facilities they have on their soil that are subject to inspection. This approach, however, places the financial burden only on the state that benefits from the nuclear power plant or fuel facility in question and ignores that the nonproliferation benefits of the safeguards are shared by all states. A better approach would be to have all governments—both NWS and NNWS, and both states with nuclear power programs and those without nuclear power—substantially increase their funding support for the IAEA, to enhance its future safeguards capabilities. Indeed, it would be possible to have private industry and even philanthropic organizations interested in promoting more safe and secure use of nuclear power also contribute to the IAEA safeguards budget.¹¹

Article VI of the NPT states in full, “Each of the Parties to the Treaty undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a treaty on general and complete disarmament under strict and effective international control.” Many diplomats from NNWS have complained at virtually every NPT review conference that the NWS have not done enough to meet their disarmament commitments, and the May 2009 NPT Preparatory Committee meeting was not unusual in that regard. The NNWS complaints are not without some merit, for the recent Bush administration did not follow through on some of the disarmament-related commitments (most specifically, seeking ratification of the Comprehensive Test Ban Treaty) that previous administrations had made at NPT review conferences.¹² In addition, some former U.S. government officials have unhelpfully claimed that the United States never really intended to keep its Article VI commitments. Former CIA Director John Deutch, for example, asserted in *Foreign Affairs* in 2005 that Washington was “unwise” “to commit under Article 6 of the Nonproliferation Treaty [NPT] ‘to pursue good-faith negotiations’ toward complete disarmament, a goal it has no intention of pursuing.”¹³ The Bush administration’s 2001 U.S. Nuclear Posture Review was also widely interpreted to signal movement away from the NPT commitment to nuclear disarmament because the document declared that U.S. nuclear weapons “possess unique capabilities

11. For creative ideas on increasing the size and diversity of IAEA contributions, see Thomas Shea, “Financing IAEA Verification of the NPT,” November 2006; <http://www.npec-web.org/Essays/20061113-Shea-FinancingIAEAVerification.pdf>.

12. For differing views on this, see Christopher A. Ford, “Debating Disarmament: Interpreting Article VI of the Treaty on the Non-Proliferation of Nuclear Weapons,” *The Nonproliferation Review* 14 (3) (2007): 402–428, and Scott D. Sagan, “Good Faith and Nuclear Disarmament Negotiations,” in *Abolishing Nuclear Weapons: A Debate*, ed. George Perkovich and James M. Acton (Washington, D.C.: Carnegie Endowment for International Peace, 2009), 203–212.

13. John Deutch, “A Nuclear Posture for Today,” *Foreign Affairs* (January–February 2005): 51.

. . . to hold at risk targets [that are] important to achieve strategic and political objectives”; it called for the development of new nuclear warheads; and it outlined a strategy of “dissuasion,” the policy of maintaining such a large advantage in military forces, including nuclear, that other states would be dissuaded from even considering entering into a military arms competition with the United States.

Many diplomats and scholars have spoken about the specific arms-control and disarmament steps the United States and other NWS could take to demonstrate that they are pursuing their Article VI commitments more seriously. Missing from this debate is a discussion of what the NNWS can do to help in the disarmament process. Looking at shared responsibilities points to two specific ways in which the NNWS can better honor their Article VI commitments.

First, just as NWS and NNWS should share responsibilities for funding the increasingly advanced international safeguards necessary for nuclear power facilities, the NWS and NWS should both contribute significantly to funding the necessary major research and development effort for improved monitoring and verification technologies that will be needed if nuclear disarmament is to progress to very low numbers of weapons. In October 2008, the British government invited the governments of the other NPT-recognized nuclear states—the United States, Russia, France, and China—to participate in a major technical conference examining future verification challenges and opportunities. Even more importantly, the British government recognized that R&D for disarmament verification must not occur in “splendid isolation,” and so jointly sponsored test programs with the Norwegian government laboratories to identify promising technologies that would permit Norway and other NNWS to be more directly involved in implementing and monitoring future global nuclear disarmament.¹⁴

Second, focusing on shared responsibilities helps identify a more direct and stronger linkage between Article VI and Article IV of the NPT. Because NWS will be less likely to accept deep reductions to zero (or close to zero) if there are more and more states with latent nuclear-weapons capability because of the spread of uranium enrichment and plutonium reprocessing technologies, NNWS have both an individual interest and a collective responsibility to make sure that constraints are placed on sensitive fuel-cycle facilities. In short, the NNWS should recognize that entering into negotiations about international control of the nuclear fuel cycle is an essential part of *their* Article VI commitment “to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race.”

A third common criticism of the disarmament goal is that nuclear force reductions might backfire, inadvertently encouraging nuclear proliferation, by undercutting U.S. extended deterrent commitments. In September 2008, for

14. Des Brown, “Laying the Foundation for Multilateral Disarmament,” February 5, 2008; <http://www.reachingcriticalwill.org/political/cd/speeches08/1session/Feb5UKDefSecDesBrown.pdf>.

example, Secretary of Energy Samuel Bodman and Secretary of Defense Robert Gates declared that “the United States will need to maintain a nuclear force . . . for the foreseeable future,” basing this position in part on the need to protect U.S. non-nuclear allies:

The role nuclear forces play in the deterrence of attack against allies remains an essential instrument of U.S. nonproliferation policy by significantly reducing the incentives for a number of allied countries to acquire nuclear weapons for their own. . . . In the absence of this “nuclear umbrella,” some non-nuclear allies might perceive a need to develop and deploy their own nuclear capability.¹⁵

The term “nuclear umbrella,” however, should be deleted from the strategic lexicon used by government officials and scholars alike. It connotes a defensive, passive strategy—as if Japan, South Korea, and NATO countries were protected by some kind of missile defense shield—rather than the threat of retaliation with nuclear weapons against a state that attacks a U.S. ally. Even more importantly, the nuclear umbrella term does not differentiate between two very different kinds of extended deterrence policies: a U.S. commitment to use nuclear weapons first, if necessary, to defend an ally if it is attacked by an enemy who uses conventional forces, biological or chemical weapons, or nuclear weapons; and a more tailored U.S. commitment to use U.S. nuclear weapons in retaliation against *only* a nuclear attack on an ally. The first form of extended deterrence was the U.S. Cold War policy in NATO and in East Asia and remains largely intact today despite the end of the Cold War.

Adopting the second form of extended deterrence—maintaining commitments to joint defense but limiting the threat of nuclear weapons use to retaliation against nuclear attacks on allies—would not necessarily lead to the nuclear proliferation cascade that Gates and Bodman seem to fear. Indeed, a more targeted U.S. nuclear guarantee, if implemented properly after alliance consultation, could have a number of positive strategic effects. First, such a change might be welcomed by those allies who continue to value allied conventional military commitments, but feel that first-use nuclear threats encourage nuclear proliferation elsewhere in the world. A more targeted nuclear guarantee would also make U.S. nuclear weapons doctrine consistent with Negative Security Assurances (NSAs)—commitments not to use nuclear weapons against NNWS—which all five NPT-recognized NWS have made at past NPT review conferences and at the UN Security Council in 1995. In addition, abandoning U.S. threats to use nuclear weapons in response to another state using chemical or biological weapons against the United States or our allies could be followed by more credible deterrent threats to respond with devastating conventional military retaliation, and with a commitment to isolate and overthrow any leader

15. Samuel W. Bodman and Robert M. Gates, “National Security and Nuclear Weapons in the 21st Century,” September 2008; <http://www.defenselink.mil/news/nuclearweaponspolicy.pdf>.

who uses outlawed chemical or biological weapons. Finally, limiting the role of U.S. nuclear weapons to deterrence of other states' use of nuclear weapons would signal strong support for the eventual elimination of all nuclear weapons, for if such a no-first-use nuclear doctrine became universally accepted, the existing NWS could more easily coordinate moving in tandem to lower and equal levels of nuclear weapons on the road to zero.

Such a change in U.S. and other powers' nuclear doctrine will not be easily accepted by all allies, nor will it be easy to implement within military establishments. NATO official doctrine, for example, which has not been revised since 1999, continues to assert (though it does not prove) that nuclear weapons remain critical for a variety of threat scenarios: "[T]he Alliance's conventional forces alone cannot ensure credible deterrence. Nuclear weapons make a unique contribution in rendering the risks of aggression against the Alliance incalculable and unacceptable. Thus, they remain essential to preserve peace."¹⁶ Interest in maintaining an expansive form of extended deterrence remains strong in East Asia as well. Ambassador Yukio Satoh, for example, correctly notes that the Japanese government's official "Defense Program Outline" states only that "to protect its territory and people against the threat of nuclear weapons, Japan will continue to rely on the U.S. nuclear deterrent"; but Satoh has also recommended that the United States should now threaten to retaliate with nuclear weapons if North Korea uses chemical or biological weapons in any future conflict.¹⁷

The major responsibility for reducing the roles and missions that nuclear weapons play in the doctrines of the nuclear powers clearly falls on the governments of those nations. President Obama called for precisely such doctrinal change in his 2009 Prague speech, promising that "to put an end to Cold War thinking, we will reduce the role of nuclear weapons in our national security strategy." This will require that U.S. politicians and military officers stop leaning on the crutch of nuclear weapons to shore up deterrence, even in situations in which the credibility of such threats is vanishingly thin. During the 2008 U.S. election primary campaign, for example, Senators Hillary Clinton and Christopher Dodd both criticized then Senator Obama for saying that he would not consider using U.S. nuclear weapons to attack al Qaeda targets inside Pakistan (a U.S. ally), arguing, in Clinton's words, "I don't believe that any president should make any blanket statements with respect to the use or non-use of nuclear weapons."¹⁸ In May 2009, General Kevin Chilton, the commander of the U.S. Strategic Command, took the "all options are on the

16. "The Alliance's Strategic Concept" (NATO, April 1999); <http://www.nato.int/docu/pr/1999/p99-065e.htm>.

17. See "Are the Requirements for Extended Deterrence Changing?" Carnegie Endowment for International Peace Conference, April 6, 2009; transcript available at <http://www.carnegieendowment.org/events/?fa=eventDetail&id=1299>.

18. Reuters, "Obama, Clinton in New Flap over Nuclear Weapons," August 2, 2007; <http://www.alertnet.org/thenews/newsdesk/N02381100.htm>.

table” argument to a new level, threatening U.S. nuclear retaliation in response to cyber attacks: “I think you don’t take any response options off the table from an attack on the United States of America. . . . And I don’t see any reason to treat cyber any differently. I mean, why would we tie the president’s hands?”¹⁹

While the United States and other NWS should take the first steps to reduce their reliance on nuclear weapons, there is much that NNWS can do to encourage and enable new nuclear doctrines to be adopted, in the spirit of shared responsibilities for nuclear disarmament. First, NNWS that are members of U.S. alliances can stop asking to be reassured about noncredible military options. This is not a new problem. Indeed, although the global strategic context is different, Henry Kissinger alluded to a similar dynamic when he admonished the NATO alliance back in 1979:

We must face the fact that it is absurd to base the strategy of the West on the credibility of the threat of mutual suicide. . . . Don’t you Europeans keep asking us to multiply assurances that we cannot possibly mean; and that if we mean them, we should not want to execute; and that if we execute, we’ll destroy civilization. That is our strategic dilemma, into which we have built ourselves by our own theory and by the encouragement of our allies.²⁰

Second, it would be helpful if the NNWS that are not members of U.S. alliances would spend as much time condemning states that are caught violating their commitments not to develop chemical or biological weapons as they do complaining that the NSAs offered at the NPT review conferences should be legally binding. Finally, those U.S. allies that remain concerned about conventional or chemical and biological threats to their national security should, as part of their Article VI disarmament commitment, help to develop the conventional forces and defensive systems that could wean themselves away from excessive reliance on U.S. nuclear weapons for extended deterrence.²¹

The final argument against nuclear disarmament concerns breakout scenarios and the challenge of enforcement. Harold Brown and John Deutch, for example, have argued that “[p]roliferating states, even if they abandoned these devices under resolute international pressure, would still be able to clandestinely retain a few of their existing weapons—or maintain a standby, breakout capability to acquire a few weapons quickly, if needed.”²² The breakout problem, however, applies to both new potential proliferators and former

19. Elaine M. Grossman, “U.S. General Reserves Right to Use Force, Even Nuclear, in Response to Cyber Attack,” *Global Security Newswire*, May 12, 2009; http://gsn.nti.org/gsn/nw_20090512_4977.php.

20. “Kissinger on NATO,” *Time*, September 17, 1979; <http://www.time.com/time/magazine/article/0,9171,920653,00.html>.

21. George Perkovich, “Extended Deterrence,” Draft Paper Prepared for the Evans-Kawaguchi Commission, May 2009.

22. Harold Brown and John Deutch, “The Nuclear Disarmament Fantasy,” *The Wall Street Journal*, November 19, 2007.

NWS that have disarmed in a nuclear-free world. Thomas Schelling and Charles Glaser have made similar arguments about “the instability of small numbers,” fearing nuclear use would be more likely at the final stages of disarmament or after nuclear disarmament occurs, because states would engage in arms races to get nuclear weapons in any subsequent crisis and the winner in any such arms race would use its nuclear weapons with less fear of nuclear retaliation.²³

These are legitimate concerns, and addressing the challenges of verification and enforcement of disarmament should be a high priority for future disarmament efforts. How can a vision of shared responsibility between the NWS and NNWS help address these vexing problems? First, NWS and NNWS should work together to punish the violators of currently existing nonproliferation agreements. North Korea violated its NPT commitments by secretly taking nuclear material out of the Yongbyon reactor complex in the 1990s and by covertly starting a uranium enrichment program with the assistance of Pakistan. Iran similarly was caught in violation of its NPT safeguards agreement in 2002, when the covert Natanz enrichment facility was discovered and evidence of nuclear-weapons-related research was later released by the U.S. intelligence community. Finally, Syria was caught violating its NPT commitments in 2007, when Israeli intelligence discovered a covert nuclear reactor under construction. More consistent pressure by all five permanent members of the UN Security Council (the P5 are the United States, Russia, China, France, and the United Kingdom) should be matched by more uniform support by the NNWS at the IAEA and in the UN Security Council to create stronger resolutions condemning these violations and imposing sanctions on the violators. Such a display of shared responsibilities would both help resolve these proliferation crises and set better precedents for future challenges.

Second, the NNWS and NWS need to work together more effectively to reduce the risks of nuclear weapons breakout in the future. To help deter withdrawal from the NPT, the UN Security Council could adopt a binding resolution stating that it would consider any case in which a state withdraws from the NPT, after being found to be in noncompliance with its safeguards agreements, to constitute a threat to international peace and security under the UN charter. The Nuclear Suppliers Group and the IAEA could also discourage future withdrawals from the NPT by making all future sales of sensitive nuclear facilities subject to safeguards agreements that do not lapse if a state withdraws from the NPT and including a “return to sender” clause in which the recipient state would be required to close down the facilities and return the sensitive technology and nuclear materials to the country of origin as soon as possible.²⁴

23. See Thomas C. Schelling’s essay “A world without nuclear weapons?” in *Daedalus* 138 (4) (Fall 2009) as well as Schelling, “The Role of Deterrence in Total Disarmament,” *Foreign Affairs* (April 1962). See also, Charles Glaser, “The Instability of Small Numbers Revisited,” in *Rebuilding the NPT Consensus*, ed. Michael May (Stanford, Calif.: Center for International Security and Cooperation, 2008); <http://iis-db.stanford.edu/pubs/22218/RebuildNPTConsensus.pdf>.

24. See Pierre Goldschmidt, “Concrete Steps to Improve the Nonproliferation Regime,” Nonproliferation Program Paper 100 (Washington, D.C.: Carnegie Endowment for International Peace, April 2009).

It is often forgotten, however, that there is a logical link between Article VI and Article X of the NPT. It will be difficult for the existing NWS to take the final steps of nuclear disarmament without more confidence that NNWS will not withdraw from the Treaty in the future. It will also be difficult for the NNWS to accept constraints on their Article X rights without more confidence that the existing nuclear powers will actually implement disarmament in ways that are difficult for them to reverse. At future NPT review conferences, the NWS and NNWS should therefore address how best to promote increased verification and transparency and to reduce incentives for NPT withdrawal and disarmament reversal as part of their joint responsibilities to work in good faith toward a nuclear-free world.

Efforts to prevent cheating on NPT commitments or future disarmament agreements may fail, of course, and stronger enforcement mechanisms therefore need to be considered. There are, fortunately, strong logical reasons to be optimistic about the prospects for enforcement in a nuclear-free world: in such a world, the major powers, which would include both traditional NNWS and new former NWS, would take violations more seriously because small-scale cheating would pose an even greater risk to their security than is the case now. Today, the existence of large arsenals in the United States and Russia, and arguably in other NWS as well, encourages some leaders to be complacent about the spread of nuclear weapons to new nations. Faith in the strength of nuclear deterrence leads some policy-makers to believe that North Korea or Iran, for example, will be deterred from ever using their nuclear weapons if the current negotiations fail. In a nuclear-free world, however, such deterrence optimism would be far less likely, and all major powers would share deeper fears of the emergence of new nuclear states.²⁵ The temptation for buck-passing would remain, but the faith that nuclear deterrence would constrain a violator would not, and new institutional arrangements for coordinating decision-making on sanctions and conventional military operations, perhaps through the UN Security Council, could help produce more effective enforcement of nonproliferation and disarmament.

Finally, it should be noted that in a nuclear-weapons-free world, former NWS will retain the option of withdrawing from any disarmament agreement. The possibility of rearmament, however, is both a potential problem for stability, if a conventional war or deep crisis occurs between two latent nuclear states, and a potential source of stability, for each latent nuclear state will know that if it rushes to rearm, others may do so as well. "Irreversibility" is often cited as a key objective in any nuclear disarmament agreement (for example, this goal was cited in the 13 Practical Steps agreed to at the 2000 NPT Review Conference). Yet in a world without nuclear weapons, the former NWS would be "more latent" than others who did not have their technological expertise or operational experience, and an objective in the final negotiations in

25. This argument was first made by Charles L. Glaser, "The Flawed Case for Nuclear Disarmament," *Survival* 40 (1) (Spring 1998).

the global disarmament process must be to create stronger verification and monitoring capabilities to provide confidence that one state could not start the rearmament process without others observing such actions. Nuclear deterrence would still exist in a nuclear-weapons-free world, but it would be of a much more recessed and latent form than exists today.

Some are pessimistic about the prospects for latent nuclear deterrence, believing that it is inherently less stable than the current form of active nuclear deterrence. Sir Michael Quinlan, for example, argued that “it is sometimes suggested that the very fact of this reconstitution risk would serve as a deterrent to war—weaponless deterrence, it has been called, a sort of deterrence at one remove. But that implies a worldwide and long-sighted wisdom on which it would surely be imprudent to count.”²⁶ Quinlan was certainly correct to remain skeptical about the degree we can ensure that “worldwide and long-sighted wisdom” will exist in the future world without nuclear weapons. But surely the same argument holds true, and in spades, for a future world with many states holding nuclear arsenals. We cannot design an international system in which wisdom and prudence are guaranteed. A nuclear-free world would, however, reduce the consequences of individual failures of wisdom and prudence.

The technical and political challenges that confront proponents of nuclear disarmament are complex and serious. It is therefore by no means clear that the NWS will be able to overcome these challenges to achieve the goal of complete nuclear disarmament. What *is* clear, though, is that the existing NWS cannot reach the summit of a nuclear-free world without the active partnership of the current NNWS. The NWS and NNWS have a shared responsibility for nuclear disarmament in the future, and will share a common fate if they fail to cooperate more effectively.

26. Michael Quinlan, “Abolishing Nuclear Armouries: Policy or Pipedream?” *Survival* 49 (2) (Winter 2007–2008): 12.

U.S. Allies and the Politics of Abolishing Nuclear Weapons

James M. Acton

The opening words of Article VI of the Nuclear Non-Proliferation Treaty (NPT), “Each of the Parties to the Treaty,” are frequently ignored. At first blush, it seems almost counterintuitive to suggest that the abolition of nuclear weapons is anything other than the responsibility of the states that possess them. Yet, if disarmament is viewed as more than just the mechanics of verifiably eliminating weapons—if it is viewed as the effort to create the conditions that would make a world without nuclear weapons more secure than a world with them—then those words must be taken seriously. Disarmament has to become, as Scott Sagan argues, a shared responsibility.

Shared responsibility, however, does not mean equal responsibility. Nuclear-weapons states (NWS) can and should lead the process. They can and should take steps toward abolition, such as deep cuts in their arsenals, regardless of whether non-nuclear-weapons states (NNWS) play a constructive role. But abolition will not be possible through the efforts of the NWS alone. There are some security concerns—such as preventing proliferation and managing breakout—that require the participation of NNWS.

Sagan argues that NNWS allied to the United States could play a special role in helping to shape U.S. nuclear doctrine. I agree with him. U.S. allies can make it politically feasible for the United States to work toward abolition.

It is hard to overstate the degree to which extended deterrence shapes the debate in Washington about nuclear deterrence. The United States finds it increasingly untenable to argue that, for its own defense, it needs an arsenal nearly as large or diverse as its current one or a doctrine so permissive that it reserves the right, for example, to respond to a chemical attack with nuclear weapons.¹ And although some try to defend the current U.S. force posture, or something not too dissimilar, on the grounds of self-defense, most have

1. For the argument that the United States needs a more diverse and flexible arsenal to ensure the continued relevance of nuclear deterrence in protecting U.S. interests see Keith Payne, “How Much is Enough?: A Goal-Driven Approach to Defining Key Principles,” Third Annual Conference on Strategic Weapons in the 21st Century, Washington, D.C., January 29, 2009, http://www.lanl.gov/conferences/sw/2009/docs/payne_livermore-2.pdf.

shifted their focus to U.S. allies.² At issue is not whether U.S. allies are effectively protected, but whether they believe they are. In U.S. strategic thinking, assuring allies is a task in its own right, and as experience has shown, it is much harder than successfully deterring their enemies. Assurance is also probably the single most important factor in determining the U.S. force posture—as the ongoing Nuclear Posture Review has made clear.

Perhaps the most bizarre debate within the Nuclear Posture Review has concerned the future of the nuclear-armed variant of the Tomahawk Land Attack Missile (TLAM/N).³ For the last nineteen years, the entire TLAM/N force, which was designed to be deployed on submarines, has been kept in land-based storage. Not only is it an outdated system that no longer fills a military niche, but it is probably too unreliable to use.⁴ Unsurprisingly, the U.S. Navy is arguing that the system should be dismantled in order to free up the resources currently expended on keeping it in permanent hibernation. TLAM/N has strong supporters, however, both inside and outside government, who argue that it is vital to assuring Japan. Indeed, senior Japanese officials apparently voiced this sentiment to the congressionally mandated Strategic Posture Commission, which issued its final report in May 2009.⁵

At the time of writing, the Nuclear Posture Review has not yet been completed, and the outcome of the TLAM/N debate is unknown. The fact that the United States is seriously considering not abandoning an obsolete and militarily redundant system, however, is testament to the importance of assuring allies. Assurance is also considered the most cogent argument against significant doctrinal changes, and it is an important argument against deep cuts. It is even invoked as a reason against U.S. ratification of the Comprehensive Test Ban Treaty (CTBT) on the grounds that a permanent foreclosing of the option to test might cause allies to lose confidence in the U.S. deterrent (it bears emphasizing, however, that few, if any, in President Barack Obama's administration share this view and that all U.S. allies advocate CTBT ratification).⁶

2. See, for example, Melanie Kirkpatrick, "Why We Don't Want a Nuclear-Free World: The Former Defense Secretary on the U.S. Deterrent and the Terrorist Threat," *The Wall Street Journal*, July 13, 2009, <http://online.wsj.com/article/SB124726489588925407.html>; for a more thoughtful exploration see Clark A. Murdoch et al., *Exploring the Nuclear Posture Implications of Extended Deterrence and Assurance: Workshop Proceeding and Key Takeaways* (Washington, D.C.: Center for Strategic and International Studies, 2009), http://csis.org/files/publication/091218_nuclear_posture.pdf.

3. For a more detailed description of this debate see James M. Acton, "Extended Deterrence and Communicating Resolve," *Strategic Insights* VIII (5) (December 2009), <http://www.nps.edu/Academics/centers/ccc/publications/OnlineJournal/2009/Dec/actonDec09.html>.

4. Jeffrey Lewis, "A Problem With the Nuclear Tomahawk," New America Foundation, December 1, 2009, http://www.armscontrolwonk.com/file_download/215/Tomahawk2.pdf.

5. William J. Perry et al., *America's Strategic Posture: The Final Report of the Congressional Commission on the Strategic Posture of the United States* (Washington, D.C.: United States Institute of Peace Press, 2009), 26, http://www.usip.org/files/America's_Strategic_Posture_Auth_Ed.pdf.

6. See, for example, John Kyl, "Why We Need to Test Nuclear Weapons," *The Wall Street Journal*, October 20, 2009, <http://online.wsj.com/article/SB10001424052748704500604574483224117732120.html>.

U.S. allies can help undercut this series of arguments. A large part of the challenge for them is to realize that, logically, what deters their enemies ought to be enough to assure them. They then need to engage with the United States to encourage it not to retain, for the sake of assurance, capabilities or operational plans that are unnecessary for deterrence.

The politics of the NPT Review Process is, ironically, not conducive to serious disarmament efforts. As much as extended deterrence is a pervasive concern of those responsible for U.S. nuclear weapons, it is ignored in NPT forums. The discussion of deterrence—extended or central—is practically verboten.

Observing this omission, international relations scholar William Walker has argued that

precisely because the NPT is a disarmament treaty, the Treaty and its Conferences can neither ascribe value to nuclear deterrence nor countenance discussion of it, irrespective of the importance that leading powers and their allies attach to it, and irrespective of the role that it might play in paving the way for deep arms reductions or disarmament. To pay open homage to nuclear deterrence is to jeopardize the non-proliferation norm and regime. Nuclear deterrence is always the ghost at the table whose presence is understood but whose contribution to regional and global security cannot openly be acknowledged or weighed.⁷

If the NPT Review Conference is to be more than a purely reactive body that, once in every two or so tries, can agree to recognize half-hearted progress and identify a few relatively uncontroversial next steps, and instead proactively charts a course toward a world without nuclear weapons, it must be able to discuss nuclear deterrence. Although nuclear weapons may not play as large or important a role as some critics of the abolition agenda suggest, they are a stabilizing factor in international relations. This point was made, refreshingly, in the final report of the International Commission on Nuclear Non-Proliferation and Disarmament. Although rejecting some of the dogma of nuclear deterrence, it did recognize that “it is hard to contest the almost universally held view that the absence of great power conflict since 1945 must be at least in part attributed to the fear of nuclear war.”⁸ Without making a similar acknowledgment, the NPT Review Conference is not able to recognize the need to develop alternatives to nuclear deterrence, let alone make progress toward actually doing so.

There is a second, more political, reason why it would be useful for the NPT Review Conference to acknowledge and discuss nuclear deterrence. The

7. William Walker, “International Nuclear Order: A Rejoinder,” *International Affairs* 83 (4) (July 2007): 752.

8. *Eliminating Nuclear Threats: A Practical Agenda for Global Policymakers* (Canberra: International Commission on Nuclear Non-Proliferation and Disarmament, 2009), 61, http://www.icnnd.org/reference/reports/ent/pdf/ICNND_Report-EliminatingNuclearThreats.pdf.

NWS sometimes complain (with some truth) that the progress they have already made toward disarmament has not been recognized.⁹ If Russia and the United States were to make deeper cuts, then, according to one line of reasoning, they might find themselves under increasing pressure to finish the job and eliminate their remaining nuclear weapons regardless of whether the conditions that would make it safe to do so had been established. In this scenario, NPT politics could become more poisonous and divisive than they are today. If the Review Conference could recognize the role played by nuclear deterrence, it could acknowledge that going from low numbers to zero is a much greater challenge than reducing from current levels to low numbers. In turn, this could increase the willingness of Russia and the United States to make deep cuts.

NNWS allied to the United States have an important role to play in helping the NPT Review Conference engage in a sensible discussion about nuclear deterrence. States such as Australia, Japan, The Netherlands, Norway, and Turkey, which have good disarmament credentials and are protected by U.S. security guarantees, are well placed to acknowledge the importance they place on extended deterrence and initiate a serious discussion of how to develop a security architecture that would render it obsolete.

Discussing nuclear deterrence at an NPT Review Conference or urging the United States to de-emphasize assurance are easy suggestions to make, but they would be painful in practice. Daring to mention deterrence in an NPT forum would draw howls of protest in some quarters. Serious engagement with the United States about doctrine could cause friction. And, most important, either task would expose domestic fissures that many states want to leave buried.

Some of these fissures have been exposed in Japan with the debate about TLAM/N and the advocacy of some Japanese officials for maintaining it. Presumably in response to domestic concern that Japan was impeding progress toward disarmament, Japanese Foreign Minister Katsuya Okada took the unusual step of writing publicly to his U.S. counterpart, Hillary Clinton, to inform her that the “Japanese Government has expressed no view concerning whether or not your government should possess particular [weapons] systems such as TLAM/N and RNEP [Robust Nuclear Earth Penetrator]. If, hypothetically, such a view was expressed, it would clearly be at variance with my views, which are in favor of nuclear disarmament.”¹⁰

Given that the Strategic Posture Commission report makes clear that the Japanese officials who briefed it strongly supported retaining TLAM/N, Okada’s letter implies a deep division between the new Japanese government and the bureaucracy.

9. See, for example, Frank Miller, “Disarmament and Deterrence: A Practitioner’s View,” in *Abolishing Nuclear Weapons: A Debate*, ed. George Perkovich and James M. Acton (Washington, D.C.: Carnegie Endowment for International Peace, 2009), 150, http://www.carnegieendowment.org/files/abolishing_nuclear_weapons_debate.pdf.

10. Letter from Katsuya Okada to Hillary Clinton, December 24, 2009, unofficial translation, http://icnndngojapan.files.wordpress.com/2010/01/20091224_okada_letter_en.pdf.

Japan is hardly the only state internally divided on these issues. NATO member states are, too. The current NATO Strategic Concept contains the claim, highlighted by Sagan, that “nuclear weapons make a unique contribution in rendering the risks of aggression against the Alliance incalculable and unacceptable.” The adoption of this concept was supported by all NATO member states. Yet, at the 2005 NPT Review Conference, Norway asserted that “nuclear weapons must not be seen as an attractive option that will provide additional security.”¹¹ Similarly, a Canadian working paper from the same meeting argued that “doctrinal or policy utterances that give the impression that nuclear weapons are being accorded increased importance in respective security policies are anathema to disarmament efforts.”¹² Because the NATO Strategic Concept and its doctrinal utterances do not increase the role of nuclear weapons, the Canadian statement is not literally inconsistent with them, but the spirit of it certainly is.

It is tempting for “disarmament advocates” or “deterrence advocates” to seize, respectively, upon public endorsement of disarmament goals or private utterances about the importance of nuclear deterrence as representing the “real” Japan or Norway or Canada. The reality, however, is that both opinions are equally real, and both have strong roots. It will be difficult to downplay the importance of assurance with the United States while acknowledging the role of deterrence for the NPT Review Conference. It will require those who are charged with defense to acknowledge that they must play a role in achieving disarmament goals and those tasked with disarmament to recognize the reality of deterrence. Nevertheless, there is a potentially unifying vision: a disarmament process that recognizes the importance of, but also seeks to supplant, nuclear deterrence.

Beyond reconciling internal divisions, U.S. allies will also have to educate themselves if they are to take on either of the tasks suggested here. One of the most telling parts of Foreign Minister Okada’s letter to Secretary Clinton was his statement that “the Japanese Government is not in a position to judge whether it is necessary or desirable for your government to possess particular [weapons] systems.” Many other U.S. allies (even those within NATO with its Nuclear Planning Group) may feel the same way. This helps to explain why assurance is difficult; a state that does not understand something is less likely to trust it. Ultimately, if Foreign Minister Okada is to be convinced by the “ongoing explanations of your government’s extended deterrence policy” that he hopes to receive from the United States if TLAM/N is retired, he and his government will need to understand much more about U.S. extended deter-

11. Statement by Norway to the 2005 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, New York, May 18, 2005, <http://www.reachingcriticalwill.org/legal/npt/RevCon05/GDstatements/norway.doc>.

12. Canada, “Nuclear Disarmament,” working paper submitted to the 2005 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, May 17, 2005, NPT/CONF.2005/WP.38, <http://www.un.org/events/npt2005/working%20papers.html>.

rence strategy. If Japan is to go further and play an active role in shaping U.S. views on assurance, it will have to move from being a passive recipient of U.S. explanations to a partner in a two-way dialogue.

Perhaps the first challenge facing U.S. allies is to realize that they can play a constructive role in disarmament. They need to be more than simply observers. NATO members, in particular, discuss tactical nuclear-weapon reductions as if they had no say in the issue. At the 2005 NPT Review Conference, Belgium, for example, stated its belief that “the reduction of non-strategic nuclear arsenals, with a view to their final elimination, is an integral part of the process of global arms reductions and disarmament.”¹³ Yet Belgium hosts nuclear weapons on its soil and, as a NATO member, has a say—indeed a veto—in Strategic Concept discussions. It could clearly do more than just recognize that disarmament must ultimately involve tactical nuclear weapons. And, indeed, as this essay goes to press, it appears poised to start playing a more proactive role.¹⁴

This is a lot to expect from U.S. allies. It is convenient politically for many of them to fail to recognize the role that they could play in disarmament. The suggestions that they should engage both with the United States to de-emphasize assurance and with the NPT Review Conference to acknowledge the reality of deterrence will not be attractive, but both tasks are obligatory under Article VI. The nuclear disarmament negotiations that Article VI enjoins all states to commence should not be limited to talks on a treaty to abolish nuclear weapons at some indefinite time in the future; there are plenty of opportunities for U.S. allies to advance disarmament in the forums in which they participate today.

13. Statement by Belgium to the 2005 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, unofficial translation, New York, May 4, 2005, <http://www.un.org/en/conf/npt/2005/statements/npt04belgium-french.pdf>.

14. “Five NATO States Want U.S. Nukes Out of Europe, Report Says,” Global Security Newswire, February 19, 2010, http://gsn.nti.org/gsn/nw_20100219_2293.php.

Common Responsibilities in the NPT—Shared or Asymmetrical?

Jayantha Dhanapala¹

Can an elephant and an ant share responsibilities for their jungle habitat? If this question seems a disrespectful *reductio ad absurdum* of the well-intentioned argument in Scott D. Sagan’s essay, “Shared Responsibilities for Nuclear Disarmament” (first published in *Daedalus*, Fall 2009), let me put it another way. Can there be shared responsibilities in the mitigation of climate change between the industrialized West, whose profligate environmental pollution in the past and present is well known as a causal factor of climate change, and little Maldives in the Indian Ocean, whose innocent citizens, pursuing their traditional livelihood of fishing and new opportunities of tourism, face imminent danger of drowning in the rising Indian Ocean because of climate change?

The point of departure in Sagan’s article is the revival of interest in nuclear disarmament in the United States and the world following the publication of *Wall Street Journal* op-eds in 2007 and 2008 by George Shultz, William Perry, Henry Kissinger, and Sam Nunn and the adoption of their vision for a nuclear-weapons-free world in the 2008 U.S. presidential campaign and, after assuming office, by President Barack Obama. Sadly, the third *Wall Street Journal* op-ed written by Shultz and his coauthors in January 2010, which called for more money to maintain a reliable nuclear deterrent, muddies the waters and their reputation as disarmament proponents. Sagan’s rebuttals of the critics of the Obama administration’s policy of seeking a nuclear-weapons-free world are well argued.

Sagan reminds his readers that the commitments of the United States under Article VI of the Nuclear Non-Proliferation Treaty (NPT) to pursue nuclear disarmament are actually reinforced by U.S. law under the U.S. Constitution—hence the gravity of U.S. responsibilities and the firm closure of the escape hatch of American exceptionalism. The gravamen of Sagan’s argument is that nuclear-weapons states (NWS) and non-nuclear-weapons states

1. The views expressed in this comment are the author’s personal views.

(NNWS) must share responsibilities on nuclear issues. Applying this argument to Articles IV and VI of the NPT does not, however, help to exculpate the NWS or developed countries, given the text of the Treaty and its negotiating record. Clearly, all articles of the NPT must be viewed holistically, and compliance with all of them is a *sine qua non* for the enjoyment of NPT benefits. There is, for example, no dispute over NPT parties that the Security Council judges to be in violation of their Treaty obligations being denied Article IV benefits. The question that the NNWS raise is why the NWS are not similarly penalized for failure to honor their Article VI obligations and their Review and Extension Conference commitments, notwithstanding the 1996 Advisory Opinion of the International Court of Justice.

Under Article IV, “all parties” have the “inalienable right” to engage in peaceful uses of nuclear energy and to facilitate and participate in the “fullest possible exchange of equipment, materials and scientific and technological information.” There is clear reference to parties “in a position to do so” to making a contribution either alone or together with other states or international organizations toward the development of the peaceful uses of nuclear energy, “especially in the territories” of NNWS in the NPT, “with due consideration for the needs of the developing areas of the world.”

The above wording places the NPT squarely in the context of the North-South relationship and the global transfer of resources and technology. The development aspect of the NPT has been long forgotten. For decades, developing countries have complained that the developed countries in the International Atomic Energy Agency (IAEA) used their influence to obtain more allocations for safeguards than for technical cooperation, even when the assistance was for non-power projects involving agriculture and medicine. The special assistance program for developing NNWS within the NPT—known as Footnote A projects—was always underfunded. No incentives were offered to the NNWS. Moreover, the developing countries among the NNWS cannot be blamed for the general underfunding of the IAEA. Similar to the budget of the United Nations, contributions to the regular IAEA budget are already shared according to an agreed scale of assessment.

The NPT already requires the NNWS to accept IAEA safeguards to verify their nonproliferation obligations, and some of these states have voluntarily accepted the Additional Model Protocol—the universalization of which is a fresh and logical demand. The predicted expansion of nuclear power has led to fears of the emergence of “virtual nuclear weapon states” and to demands that the NNWS accept further constraints, beyond the terms of the NPT, on the exercise of the “inalienable right” to the peaceful uses of nuclear energy.

In Article VI, although the primary obligation of the NWS for disarmament and nonproliferation that appears in the 1961 Irish-sponsored resolution in the UN General Assembly was deliberately blurred when the NPT was drafted in the Eighteen-Nation Committee for Disarmament, the current wording places the disarmament obligation on each of the parties “to pursue negotia-

tions on nuclear disarmament” in good faith. That the NNWS have done so by, for example, creating nuclear-weapons-free zones through regional treaty arrangements, through collective measures in sponsoring and adopting resolutions in the UN General Assembly, and in working in other multilateral forums is indisputable.

More important, an objective reading of Article VI must conclude that the NWS states and their allies have more capabilities, and consequently more responsibilities, than the NNWS in implementing this Article. In addition, the International Court of Justice’s Advisory Opinion of 1996 makes it abundantly clear that the NWS have special responsibilities and that arguing for “shared responsibilities” here has little credibility. Certainly, the NNWS have their share of responsibilities in all aspects of the NPT—such as signing and ratifying the Comprehensive Test Ban Treaty and the Additional Protocol of the NPT—but to interpret shared responsibility as equal responsibility is mistaken. And yet focusing on what some developed NNWS countries are doing in developing verification technology is relevant.

A multilateral treaty must reflect a mutuality of interests if it is to serve the interests of the international community. The NWS carry responsibilities toward the implementation of the original NPT bargain and past Review Conference declarations. This bargain—legal renunciation of acquiring nuclear weapons by NNWS subject to verification in return for their agreement to use nuclear energy solely for peaceful purposes as “an inalienable right” and the vague and unverified promise of disarmament by NWS—was an unequal one. These asymmetrical obligations have been aggravated by the failure to fulfill serious commitments undertaken in successive NPT Review Conferences and the Review and Extension Conference of 1995 without which the NPT would never have been extended indefinitely. To argue that NWS responsibilities under Article VI could be affected by the acquisition of nuclear power by NNWS is one-sided, especially given that the “nuclear renaissance” is of recent origin.

The attempt to link Article VI with Article X is correct insofar as the “return to sender” concept regarding benefits accrued under the NPT—although the practical implementation of that will not be easy. To propose, however, that the sovereign right of states to enter and leave treaties freely must be curtailed beyond the terms stipulated in the NPT to encourage implementation of Article VI is illogical when the reverse can also be argued. The indefinite extension of the NPT was secured on the basis of the argument that nuclear disarmament could be assured only if the Treaty were made permanent. When the extension was achieved, no major impact was seen in the reduction of NWS arsenals.

The NNWS will remain wary of arguments that they should assume more responsibilities while the NWS remain guilty of failing their obligations. An inherently discriminatory treaty cannot be strengthened by further discrimination. That is no way to achieve nuclear nonproliferation and nuclear disarmament.

mament—two major objectives of the NPT that are inextricably linked. Just as the “the polluter pays” principle applies to climate change, the NWS have the main responsibility for achieving a nuclear-weapons-free world. If there were no weapons, there would be nothing to proliferate.

Turkey and Shared Responsibilities

Mustafa Kibaroglu

In his article, Scott Sagan outlines a new conceptual framework designed to encourage nuclear-weapons states (NWS) and non-nuclear-weapons states (NNWS) to share responsibilities for, *inter alia*, rethinking extended deterrence, with the goal of eventually eliminating nuclear weapons.¹ I fully support the framework that Sagan presents, and I believe that states must do their utmost to achieve such a noble objective by putting aside their misgivings about the effectiveness of the nuclear nonproliferation regime at the present time, even if this may require some states to make sacrifices.

Turkey is one such state. It has long been a staunch supporter of efforts to strengthen the nuclear, chemical, and biological nonproliferation regimes, having become party to virtually all of the formal and informal arrangements related to them. Turkey has not, however, shared the benefits of being loyal to the principles and norms of the nonproliferation regimes.

Turkey signed the Nuclear Non-Proliferation Treaty (NPT) in 1969 and ratified it in 1980. A safeguards agreement with the International Atomic Energy Agency (IAEA) for a 5 MW(th) research reactor constructed in Istanbul has been in place since 1981. Yet Turkey's plans for building nuclear power plants have been obstructed by its Western allies, fearful that Turkey would one day decide to weaponize its capabilities if it acquired the necessary nuclear technology and material. These fears stem from rumors regarding Turkey's close relations with Pakistan, especially in the early 1980s, when both countries were under military rule imposed by generals who had seized power in *coups d'état*.² Despite Turkey's return to democratic rule in the second half of the 1980s, fears lingered that Turkey might seek nuclear technology and materials that could be diverted to military purposes. In the 1990s, the West focused its concern on the former Soviet republics inhabited largely by Turkish-speaking peoples as the potential sources of this technology and nuclear material.

1. Scott D. Sagan, "Shared Responsibilities for Nuclear Disarmament," *Daedalus* 138 (4) (Fall 2009): 157–168.

2. Mustafa Kibaroglu, "Turkey's Quest for Peaceful Nuclear Power," *The Nonproliferation Review* 4 (3) (Spring-Summer 1997): 33–44.

Successive Turkish governments, including responsible figures in Turkey's military and diplomatic circles, have done nothing to warrant such concern. On the contrary, Turkey has sought to buttress international confidence in its peaceful nuclear intentions by demonstrating—especially vis-à-vis its Middle Eastern neighbors—how a responsible state should behave. In addition to signing and ratifying the Additional Protocol and the Comprehensive Test Ban Treaty, Turkey joined the Nuclear Suppliers Group and the Australia Group, demonstrating its commitment to the effective control of the export of sensitive and dual-use material and technologies.

Turkey continues to view with great concern the security situation in the Middle East, which the European members of the North Atlantic Treaty Organization (NATO) until recently regarded as operationally “out of area.” Despite the “solidarity clause” in Article 5 of the Washington Treaty of 1949, which established NATO, Turkey feared that its European NATO allies would come to Turkey's aid only if Turkey were attacked by a country or countries in the Warsaw Pact.³ This perception underscored worries that the solidarity clause in Article 5 would not extend to an attack from one of Turkey's Middle Eastern neighbors, such as Syria or Iraq, both Soviet allies in the 1970s and 1980s.⁴

At the same time, Turkey has allowed U.S. nuclear weapons on Turkish soil since 1960, as part of NATO's policy of extended deterrence.⁵ This decision was initially taken at NATO's Paris summit in 1957. In addition to Jupiter missiles that have a range of 3,000 kilometers and a warhead yield of 1.5 megatons, which attracted much public attention due to the role they played in the resolution of the Cuban crisis in October 1962, beginning in the early 1960s, nuclear weapons under U.S. Air Force custody that could be delivered by F-100, F-104, and F-4 aircraft were also deployed from air bases in Eskisehir, Malatya (Erhac), Ankara (Murted), and Balikesir.⁶ On April 14, 1963, the U.S. Polaris submarine USS *Sam Houston* visited the Turkish port of Izmir in a display of NATO solidarity with Turkey and to demonstrate the alliance's commitment to extended nuclear deterrence.⁷

Believing that Turkey was safe from attack by countries in the Warsaw Pact, Turkish policy-makers focused their attention on the proliferation of weapons of mass destruction (WMD) in the Middle East. Acquisition of chemical, biological, and especially nuclear weapons by Turkey's immediate neighbors poses

3. Interview with General Çevik Bir (ret.), former Deputy Chief of Turkish General Staff, January 19, 2005, Istanbul.

4. Mustafa Kibaroglu, “Turkey,” in *Europe and Nuclear Disarmament: Debates and Political Attitudes in 16 European Countries*, ed. Harald Müller (Brussels: European Interuniversity Press, 1998), 161–193.

5. Mustafa Kibaroglu, “La Turquie, les États-Unis, et l'OTAN: Une alliance dans l'Alliance,” *Questions Internationales* (12) (March–April 2005): 30–32.

6. Conversations with a retired top military commander who wished to remain anonymous, February 15, 2010, Ankara.

7. Ed Offley, *Scorpion Down, Sunk by the Soviet, Buried by the Pentagon: The Untold Story of USS Scorpion* (New York: Basic Books, 2007), 195.

a significant threat to the country's security and stability. For this reason, during the Cold War, the Turkish government opposed Soviet proposals to create a Balkans nuclear-weapons-free zone (NWFZ), which would have included Turkey. However, the Turkish government supported the creation of a nuclear-weapons-free zone in the Middle East (NWFZ/ME), provided that any agreement establishing this zone did not, by definition, include Turkey as part of the Middle East.

Turkish leaders, including President Abdullah Gul, Prime Minister Recep Tayyip Erdogan, and Chiefs of the General Staff Generals Hilmi Ozkok, Yasar Buyukanit, and Ilker Basbug, have repeatedly stated that a lasting solution to WMD proliferation in the Middle East will require the creation of a NWFZ, which should eventually be expanded into a regional WMD-free zone.⁸

Recently Turkey has been seen as part of the Middle East because of its involvement in a number of regional political issues. Not only has Turkey acted as a mediator between Syria and Israel, but it has proposed to take on a similar function concerning the nuclear issue vis-à-vis Iran, Israel, and the United States. To be consistent with its policy of supporting a NWFZ/ME, Turkey will be expected to denuclearize its territory first. The Turkish government should therefore seek the withdrawal of U.S. nuclear weapons from Turkey before other states in the region request that it do so. This decision should not be tied to, for instance, cuts in the tactical nuclear weapons in the Russian arsenal, as suggested in the *Briefing Note* published by the Center for European Reform.⁹

In general, Turkish officials attach greater political value to nuclear weapons than they do military value. They do not seriously contemplate contingencies where nuclear weapons could or even should be used. Yet some believe that U.S. nuclear weapons deployed in Turkey have a deterrent purpose.¹⁰

Uncertainty surrounding the political situation in Iraq, the Palestine-Israel conflict, and Iran's nuclear program, which is suspected of having weapons-development capabilities, make peace and stability in the Middle East and the adjacent regions appear elusive. Uncertainties regarding the full scope of Iran's nuclear capabilities and intentions further complicate Turkish threat assessments. Against this background, some Turkish officials believe that allowing U.S. nuclear weapons to remain in Turkey is sensible. Another reason centers on the nature and scope of U.S.-Turkish relations, which have suffered serious setbacks since the 2003 Iraq war. Some Turkish officials fear that withdrawal of

8. Mustafa Kibaroglu, "EURATOM & ABACC: Safeguard Models for the Middle East?" in *A Zone Free of Weapons of Mass Destruction in the Middle East*, ed. Jan Prawitz and James F. Leonard (New York and Geneva: United Nations Institute for Disarmament Research, 1996), 93-123.

9. Franklin Miller, George Robertson, and Kori Schake, "Germany Opens Pandora's Box," *Briefing Note* (London: Center for European Reform, February 2010), 1-3.

10. Many Turkish government officials and military officers expressed these and similar views in not-for-attribution interviews and private conversations over a long period of time during the author's deliberations on these matters.

nuclear weapons could weaken Turkey's long-standing strategic alliance with the United States. Others view their presence as part of the "burden sharing" principle of NATO. Still others believe that Turkey and its other allies should host a symbolic number of U.S. nuclear weapons on their territory, so that Turkey is not the only NATO country other than the United States to permit U.S. nuclear weapons on its soil.¹¹

Despite powerful arguments to the contrary, the removal of U.S. nuclear weapons from Turkey would strengthen the Turkish government's position vis-à-vis aspiring nuclear states in the region, improve the prospects of a NWFZ/ME, and be compatible with Turkey's long-standing efforts to stem proliferation. Such action from Turkey—a significant regional military power and a member of NATO—would signal to Iran, Israel, and the Arab states that nuclear weapons are no longer vital for maintaining security.¹² Moreover, according to General Ergin Celasin (ret.), a former commander of the Turkish Air Force (TUAF), nuclear weapons that reportedly remain in Turkey cannot be linked to the Turkish military. TUAF's role in NATO's nuclear contingency plans has come to an end with the withdrawal of nuclear weapons in the 1990s from the Air Force units that were deployed in several air bases in Turkey.¹³ General Celasin's words suggest that the Turkish Air Force no longer has a nuclear mission under NATO, which it had under the Cold War dual-key arrangements. This underscores that the U.S. nuclear deterrent on submarines or in the United States could just as easily continue to serve the limited extended deterrent function of protecting Turkey from the unlikely event of a Russian nuclear strike. Hence, the deployment of U.S. nuclear weapons in Turkey and NATO's "first use" policy are no longer necessary.¹⁴

As a final note, if we ask Turkey to be ready to make sacrifices in order to share responsibilities even without sharing the benefits, the "holdouts"—India, Israel, North Korea, and Pakistan—must also be ready to act along the lines of both NWS and NNWS who are seeking to strike a balance between their rights and responsibilities. Without the involvement of these holdouts, nuclear disarmament cannot succeed.

11. Mustafa Kibaroglu, "Isn't it Time to Say Farewell to US Nukes in Turkey?" *European Security* 14 (4) (December 2005): 443–457.

12. Mustafa Kibaroglu, "A Turkish Nuclear Turnaround," *Bulletin of the Atomic Scientists* 63 (6) (November-December 2007): 64.

13. Telephone interview with General Ergin Celasin (ret.), former Commander of the Turkish Air Force, February 15, 2010, Ankara.

14. For an explanation of how no-first-use would produce a more tailored and more credible form of extended deterrence, see Scott D. Sagan, "The Case for No First Use," *Survival* 51 (3) (June-July 2009): 163–182.

The Common Project of Nuclear Abolition

Harald Müller

In his article, Scott Sagan offers a robust approach to nuclear disarmament that bridges the gap between nuclear-weapons states (NWS) and non-nuclear-weapons states (NNWS). His discussion of the shared responsibility of NWS and NNWS for implementing Articles IV and VI of the Nuclear Non-Proliferation Treaty (NPT) and for dealing with enforcement and withdrawal issues as common endeavors rather than as separate responsibilities divided between these two groups of states is especially useful. Below I focus on three key issues in which I basically agree with Sagan, but with a few reservations.

The first issue concerns multinational fuel-cycle facilities. Sagan rightly notes that the expected expansion of nuclear power makes the future pursuit of sensitive national fuel-cycle facilities incompatible with the notion of a nuclear-weapons-free world. Internationally shared and managed fuel-cycle facilities offer the best solution to this problem. Sagan proposes that NWS start by voluntarily submitting some sensitive fuel-cycle facilities to international safeguards and then consider the possibility of eventually making all of their plants subject to these safeguards. In addressing this issue in 2005, however, the International Atomic Energy Agency's (IAEA) international expert group on multinational fuel arrangements reached the following conclusion:¹

A new *binding* international norm stipulating that sensitive fuel-cycle activities are to be conducted exclusively in the context of MNAs [multinational agreements] and no longer as a national undertaking would amount to a change in the scope of Article IV of the NPT. The wording and negotiation history of this article emphasize the right of each party in good standing to choose its national fuel cycle on the basis of sovereign considerations. This right is not independent of the State parties' responsibilities under Articles I and II. But if the necessary conditions are met, no legal barrier stands in the way of each State party to pursue all fuel-

1. I was the German representative in this group. Since I was heavily involved in negotiating this particular language, I feel entitled to quote it here at some length.

cycle activities on a national basis. Waiving this right would thus change the “bargain” of the NPT.

Such a fundamental change may be possible if the parties were able to agree on a broader negotiating framework. For NNWS, such a bargain could probably be realized only through the adoption of universal principles, applicable to all states, and with additional steps by NWS regarding nuclear disarmament. In addition, a verifiable FMCT [Fissile Material Cutoff Treaty] might be one of the preconditions for binding multilateral obligations. Because such a treaty would terminate the right of participating NWS and non-NPT parties to operate reprocessing and enrichment facilities for nuclear weapons purposes, it would level the playing field between NWS and NNWS. The new restrictions would apply to all states and facilities with the relevant technologies, without exception. At that time, multilateral arrangements could become a universal, binding principle.²

Persuading reluctant NNWS such as Argentina, Brazil, or South Africa to consider MNAs would require a monumental shift in how states think about national nuclear activities. The requirements go far beyond the various proposals submitted by NWS in the last few years, which can be summarized as offering guaranteed services for the civilian fuel cycles, such as enrichment, fuel fabrication, interim storage of spent fuel or spent fuel reprocessing and conditioning, while maintaining their national nuclear autonomy.³ This is untenable. Sagan’s discussion of the role of an FMCT is significant in this regard, although I would disagree with his recommendation to establish a new NWS organization of inspectors to verify facilities and fissile material in NWS rather than relying on the IAEA to perform these functions. The time for dividing the NWS and NNWS has passed. Where access by NNWS inspectors to sensitive former weapons-material production facilities is problematic, a special office within the IAEA’s safeguards department, consisting exclusively of NWS-origin inspectors, could be created.

The second issue concerns the future of extended deterrence. The current extended deterrence situation in Europe underscores the tremendous change in the attitudes of many NNWS NATO allies toward nuclear disarmament. Nowhere is this more obvious than in my country, Germany. In the coalition agreement that now governs the Federal Republic, the position of the Conservatives and the Liberals reads as follows:

We emphatically support President [Barack] Obama’s proposals for far-reaching new disarmament initiatives—including the objective of a nuclear-weapons-free world. . . . We want to use the NPT Review

2. *Multilateral Approaches to the Nuclear Fuel Cycle Expert Group Report to the Director General of the International Atomic Energy Agency* (Vienna: IAEA, 2005).

3. Cf. Harald Müller, *Multilateralisierung des Brennstoffkreislaufs: Ein Ausweg aus den Nuklearkrisen?* (Frankfurt am Main: PRIF, HSFK Report, October 2006); Yuri Yudin, *Multilateralization of the Nuclear Fuel Cycle: Assessing the Existing Proposals* (New York and Geneva: UNIDIR, 2009).

Conference in 2010 to create new momentum for treaty-based regulations. In this context, and in the context of a new strategic concept for NATO, we will strongly promote within the Alliance and vis-à-vis the American allies the withdrawal of the nuclear weapons still in Germany.⁴

Liberal and Conservative speakers confirmed this objective in a recent debate in the German Parliament.⁵ In addition, Germany is consulting with other NATO NNWS on ways to promote this goal. Given that Germany has historically been the main beneficiary of extended deterrence, the coalition's new position indicates that the perceived need for a first-use nuclear guarantee in Europe has largely disappeared.

Nevertheless, there are allies (for example, Poland, the Baltic States, and Turkey) for which the nuclear guarantee maintains a higher degree of salience than it does for the Western and Northern Europeans. This brings me to the third key issue: the crucial role of the NWS in shaping the security environment for NNWS. The security concerns of states in Eastern Europe derive largely from Russia's unfriendly policies toward its neighbors; for Turkey, this concern has been revived by Russia's harsh actions in Georgia. The establishment of a good neighbor policy by Russia would lay these security concerns to rest. The same is true for East Asia: a more pacifist China, with lower armament rates, less naval posturing, and the withdrawal of missiles from the coast facing Taiwan, would reduce concern among the Japanese and South Korean defense communities of the likelihood of a Chinese first use of nuclear weapons.

The behavior and doctrines of NWS influence the security of NNWS in yet another way, as the Turkish case again demonstrates. Turkey's interest in continued extended deterrence is, of course, also related to the potential Iranian threat. This threat has continued to grow largely because of the constraints placed on the UN Security Council by China's and Russia's extremely short-sighted and parochial policies. Consequently, NWS must abstain from issuing threats against NNWS in good standing with the NPT, while acting with determination against rule breakers. This combination of changed attitudes and threatened action would largely eliminate the need for an extended deterrence commitment that goes beyond deterrence of a nuclear attack.⁶

My final thought concerns Sagan's discussion about security assurances and the use of weapons of mass destruction (WMD). The debate about negative and positive security guarantees has suffered because NWS and NNWS have never jointly deliberated about the consequences that states should face if they are the first to use nuclear, chemical, or biological weapons. The security assurance debate has been largely ritualistic and lacking in substance.

4. WACHSTUM. BILDUNG. ZUSAMMENHALT. Koalitionsvertrag zwischen CDU, CSU und FDP 17. Legislaturperiode, Berlin, October 26, 2010.

5. Deutscher Bundestag, Stenografischer Bericht, 9. Sitzung, Berlin, December 3, 2009, 646–653.

6. See Scott D. Sagan, "The Case for No First Use," *Survival* 51 (3) (June 2009).

I would therefore propose the establishment of a standing conference of security diplomats and military experts from NWS and NNWS to discuss how the international community should respond to WMD first use.⁷ As an explicit component of the effort to abolish nuclear weapons, the conference could be installed by the UN General Assembly as a deliberative forum that would eventually become a negotiation body. An international legal instrument, adopted by the General Assembly with the prescribed two-thirds majority and endorsed by the Security Council, would be an outstanding step on the road to nuclear disarmament. Such a legal instrument would clear the field for the universal adoption of a no-first-use doctrine and enhance the security of all states that feel threatened by the biological and chemical capabilities of others.

7. For earlier ideas on this point, cf. Harald Müller, “Between Security Council Inaction and Self-Helplessness: The Case for a Positive Security Assurances Alliance,” in *Security Assurances, Implications for the NPT and Beyond*, ed. Virginia Foran (Washington, D.C.: Carnegie Endowment for International Peace, 1995), S. 25–38.

On Rethinking Extended Deterrence

Yukio Satoh

The concept of deterrence, let alone that of extended deterrence, needs to be redefined in a new light. Reducing the role of nuclear weapons in deterrence strategy should be pursued for the sake of nuclear disarmament.

However, from the perspective of an American ally in Northeast Asia, the proposed “rethinking of extended deterrence” must be addressed in a much broader security context than the “conceptual framework” Scott Sagan proposes in his stimulating article, “Shared Responsibilities for Nuclear Disarmament.” At the very least, consideration must be given to (1) the regional security conditions surrounding alliances, (2) the present level of strategic consultations within alliances, and (3) the long-term prospects of the changing strategic balance between the United States and its allies, on one side, and its strategic rivals, on the other.

This underlines the importance of a regional rather than a global approach to rethinking extended deterrence, for, on all these subjects, the tasks and priorities for U.S. alliances in Northeast Asia are different, for example, from those for NATO. In contrast to Europe, where the end of the Cold War has remarkably reduced the threat of nuclear weapons, Asia has been witnessing nuclear weapons proliferation during the past two decades.

For Japan and South Korea, deterring North Korean aggression while pursuing the goal of a nuclear-free Korean Peninsula is the top security requirement at present. U.S. extended deterrence is essential to that end. The U.S. government has long been firm in assuring its Asian allies of its commitment to deterrence, and President Barack Obama’s assurances have been unequivocal. In a speech during his first official visit to Tokyo in November 2009, President Obama stated: “So long as these [nuclear] weapons exist, the United States will maintain a strong and effective nuclear deterrent that guarantees the defense of our allies—including South Korea and Japan.”¹

1. Remarks by President Barack Obama at Suntory Hall, Tokyo, on November 14, 2009; <http://www.whitehouse.gov/the-press-office/remarks-president-barack-obama-suntory-hall>.

What is equally important for the credibility of the U.S. commitment is not now to change the U.S. declaratory deterrence strategy. No-first-use arguments are plausible in the context of nuclear disarmament. In the eyes of those depending on U.S. extended deterrence for their security, however, Washington's policy of not excluding the possibility of first use of nuclear weapons is essential for the credibility of U.S. extended deterrence. Politically, too, a unilateral change in the U.S. declaratory strategy in the face of North Korea's tenacious pursuit of nuclear weapons and missile development would only encourage Pyongyang. Moreover, it would be unwise at this time to limit the purpose of retaining nuclear weapons solely to deter nuclear threats.

It is indeed questionable whether nuclear weapons are suitable to deter the threats posed by biological or chemical weapons. Nevertheless, it is also true that no assured means are available for deterring the use of non-nuclear weapons of mass destruction (WMD) such as biological and chemical weapons. In this strategic dilemma, it is inadvisable to exclude the possibility, debatable as it might be, that countries such as North Korea suspected of possessing these WMD would refrain from their use for fear of being punished with nuclear retaliation.

Contrary to the assertion made by Sagan in his article, I have never "recommended that the United States should now threaten to retaliate with nuclear weapons if North Korea uses chemical or biological weapons in any future conflict." At the 2009 conference organized by the Carnegie Endowment for International Peace, I stressed the need for ambiguity in coping with the threats of biological and chemical weapons, underscoring the distinction between the option of openly rejecting the use of nuclear weapons in response to a biological or chemical weapons attack and that of not saying anything about the point, keeping those to be deterred in suspense. At that conference, I simply noted that "without credible means for deterring the use of biological and chemical weapons, it would be too early to limit the purpose of nuclear deterrence solely to deterring the use of nuclear weapons. This is particularly true for Northeast Asia, where North Korea is suspected to possess both biological and chemical weapons."²

It must also be pointed out that the Japanese government's pronounced policy of relying on the U.S. nuclear deterrent to protect the country "against the threat of nuclear weapons" was originally formed as part of the first Defense Program Outlines adopted in 1976, when the so-called sole purpose of nuclear weapons was not the question at issue. As I noted in my Carnegie conference presentation, Tokyo and Washington announced in 2007 that "both nuclear and non-nuclear strike forces and defense capabilities" of the United States formed the core of extended deterrence, without specifying the object of this

2. Panel transcript "Are the Requirements for Extended Deterrence Changing?" Carnegie Endowment for International Peace, April 6, 2009, http://www.carnegieendowment.org/files/npc_extended_deterrence1.pdf.

deterrence. I believe that the planned revision of the official Defense Program Outlines should reflect this line of thought.

On the other hand, Sagan arguably proposes that “those U.S. allies that remain concerned about conventional or chemical and biological threats to their security should . . . help to develop the conventional forces and defensive systems that could wean themselves away from excessive reliance on U.S. nuclear weapons for extended deterrence.”

Although Sagan’s depiction of the allies’ reliance on U.S. nuclear weapons as “excessive” is his own, Japan-U.S. defense cooperation has already been progressing in the direction he suggests. Strengthened cooperation in the deployment and development of missile defense systems against North Korean missiles is a case in point. Japan-U.S. defense cooperation will no doubt become increasingly important, particularly as the role that advanced conventional weapons systems play in the deterrence strategy is expanded. Japanese efforts to rectify long-recognized deficiencies in sharing responsibilities under the Japan-U.S. Security Treaty are required more than ever.

This leads to the second subject that must be taken into consideration in rethinking extended deterrence: the level of strategic consultations within alliances. Unlike NATO, the Japan-U.S. security arrangements lack a mechanism for consultations on nuclear strategy, as does the South Korea-U.S. alliance, so far as I understand. The Japanese case is more conspicuous, for the government has long been reluctant to be involved in U.S. nuclear strategy. The public’s strong anti-nuclear-weapons sentiment is behind this.

It has therefore been an epoch-making development that the Japanese and U.S. governments have, since 2009, begun to explore ways to commence consultations on extended deterrence. As of this writing, though, the alliance has not overcome the unprecedented jolt caused by the widely reported clumsiness of the new coalition government led by Prime Minister Yukio Hatoyama of the Democratic Party of Japan in trying to undo (without proposing any feasible alternative) the long-agreed plan to relocate the U.S. Marine Corps air station from Futenma, Okinawa—a goal central to the 1996 agreement to reduce burdens on local communities caused by the U.S. force presence on the island. It is crucial that the two governments, particularly the Japanese, make every effort to put alliance cooperation back on the right track and pursue their alleged purpose of “deepening” alliance relations through the year 2010, which marks the fiftieth anniversary of the current Security Treaty. Closer consultations on how to facilitate the functioning of U.S. extended deterrence should be an important part of deeper alliance cooperation.

In the absence of a bilateral agreement on secrecy protection as required by U.S. law, Tokyo-Washington consultations on nuclear strategy will not reach the level of NATO’s Nuclear Planning Group. Nevertheless, there are many issues that the two governments can and must discuss below that level, particularly prospective changes in the roles of nuclear and non-nuclear weapons in the U.S. deterrence strategy and, subsequently, required Japan-U.S. defense cooperation

for common deterrence purposes. The declaratory part of the U.S. deterrence strategy should also be an important agenda item for such consultations.

Another important step is to link Japan-U.S. consultations on extended deterrence with those between South Korea and the United States. Organizing a trilateral mechanism for strategic consultations would not be diplomatically advisable, for it might make China and Russia unnecessarily suspicious and further harden North Korea's stance. Given the common interest of Japan and South Korea in enhancing the credibility of U.S. extended deterrence, though, the time has come for the two countries to begin to coordinate their efforts to that end, at least through a set of three bilateral consultations: Japan-U.S., South Korea-U.S., and Japan-South Korea.

Finally, the implications of reductions in U.S. and Russian nuclear stockpiles for U.S. extended deterrence will have to be assessed carefully, as progress in this area would eventually affect the nuclear force balance among the United States, Russia, and China. Russia and China are no longer adversaries of the United States and its allies. Still, the two countries remain causes for concern, particularly for U.S. allies in Asia, because of the dictatorial nature of their regimes and the aggressiveness increasingly seen in their external postures. The continued growth of China's military power and its lack of transparency are yet other causes for concern in the Asia-Pacific region. Moreover, a bilateral nuclear force balance that Washington would regard as acceptable in relations with Moscow and Beijing might not be reassuring enough to U.S. allies in Asia in the context of the credibility of U.S. extended deterrence.

This issue would perhaps not draw attention before U.S. and Russian nuclear stockpiles each approach the one thousand level. Yet it must be seen as an important subject for consideration in rethinking extended deterrence between Tokyo and Washington as well as between Seoul and Washington, and, one hopes, among all three.

Shared, But Not Equal Responsibilities

Mohamed I. Shaker

Scott Sagan's article on "Shared Responsibilities for Nuclear Disarmament" does more than provide a strong analysis of disarmament and Article VI of the Non-Proliferation Treaty (NPT). It also establishes a set of links between this issue and other provisions of the NPT, such as peaceful uses of nuclear energy (Article IV) and the withdrawal clause (Article X).

On the issue of disarmament and deterrence, Sagan's article reminds me of a discussion I once had with a former professor, Louis Halle of the United States. Halle was a great believer in the merits of nuclear deterrence. When I mentioned the merits of nuclear disarmament, he asked, "Why nuclear disarmament? Do you want us to go back to the bow and arrow?" Halle believed that without nuclear weapons, conventional wars would erupt more frequently. Sagan notes that this belief, a kind of faith in nuclear deterrence, continues to exist in many circles in the United States. In his article, he cites multiple examples of such thinking and notes that concerns about conventional weapons imbalances will need to be seriously addressed at some point in the nuclear disarmament process.

The eradication of nuclear weapons would be similar to the eradication of smallpox. In the case of smallpox, miniscule amounts of the deadly virus are kept for research purposes at the Centers for Disease Control in the United States and at the State Research Center of Virology and Biotechnology VECTOR in Russia. Similarly, it might be prudent to maintain a small amount of nuclear weapons materials, under strict safeguards, for some unexpected, future purpose. In Rome in April 2009, former Soviet President Mikhail Gorbachev identified one such contingency: the possible need for nuclear weapons in the event of a potential collision between Earth and a meteor that could destroy the planet. Some scientists expect this scenario to occur in the third decade of this century. Aside from such contingencies, there should be no reason for maintaining nuclear weapons. In view of the fact that the NPT does not allow the transfer of nuclear weapons or other nuclear-exclusive devices to any recipient whatsoever, this would prohibit putting this force under international

or UN control. The NPT could be amended to allow such a transfer in extraordinary circumstances and especially in a world almost completely free of nuclear weapons, except for what is needed to face the threat to the planet from outer space.

Moreover, I agree with Sagan that “the current nuclear disarmament effort must be transformed from a debate among leaders in the NWS [nuclear-weapons states] to a coordinated global effort of shared responsibilities between NWS and NNWS [non-nuclear-weapons states].” Under the NPT today, however, the NWS appear to be more equal than others—that is, the NNWS. Despite Sagan’s observation that Articles IV and VI of the NPT are written to apply to the NWS and the NNWS, the lack of equality is obvious. Here I would note that the NWS definitely bear more responsibilities and obligations than the NNWS, whether with regard to the elimination of nuclear weapons and disarmament, in general, or with regard to the transfer of nuclear technology for peaceful purposes.

In the case of the transfer of nuclear technology for peaceful purposes, multinational approaches are needed, whereby sharing in the decision-making process should be among the conditions for cooperation. At the same time, not all states should necessarily have access to sensitive technologies. As I discussed in my article published in the Winter 2010 issue of *Daedalus*, participation in this process is more important than all schemes of assurances of supply that do not make room for a decision-sharing mechanism between the supplier and the user.

With regard to Article IV of the NPT and its relationship to the commitment, under Article II, not to seek or to receive any assistance in the manufacture of nuclear weapons, I would like to quote from a 1968 statement by William Foster, leader of the U.S. delegation to the UN’s Eighteen-Nation Committee on Disarmament in Geneva in his testimony before the Senate Foreign Relations Committee. On the meaning of the term “manufacture,” as prohibited by the NPT, Foster stated:

It may be useful to point out for illustrative purposes, several activities which the United States would not consider per se to be violations of the prohibitions in Article II. Neither uranium enrichment nor the stockpiling of fissionable material in connection with a peaceful program would violate Article II so long as these activities were safeguarded under Article III.

Thus, Article IV of the NPT does not prohibit NNWS from uranium enrichment activities, provided they are adequately safeguarded and judged to be in conformity with Article II of the NPT. Both the IAEA and the UN Security Council, either individually or collectively, depending on the type of violation, bear the responsibility for judging whether a state is in compliance with Article II. In the case of transferring nuclear weapons from one state to another, for instance, the UN Security Council would be responsible for judging the state’s compliance with Article II.

With regard to nuclear disarmament, the International Atomic Energy Agency (IAEA) should have responsibility for verifying states' compliance with a Fissile Material Cut-off Treaty (FMCT). I therefore disagree with Sagan's proposal of creating a new organization for this purpose. Indeed, the IAEA would be bolstered by the addition of this new task. Over the years, the IAEA has continued to accumulate experience in inspecting enrichment facilities and reprocessing plants, making it the ideal candidate for verifying FMCT compliance.

The NNWS are already involved in a variety of shared activities in the disarmament process, and their role could be expanded to include the following responsibilities:

- Exerting pressure on the NWS to make progress within the framework of the Conference on Disarmament in Geneva, where the NNWS are well represented, as well as in the UN General Assembly and its First Committee;
- Putting forward ideas and proposals on specific issues, without waiting for the NWS to take the initiative;
- Sharing financially in the application of IAEA safeguards, as mentioned by Sagan, but not at the expense of technical assistance that NNWS badly need, assistance that remains far below the required level because safeguards expenses have been higher than the funds available for technical assistance; and
- Playing a role in bilateral negotiations between the United States and Russia, such as the ongoing negotiations of the so-called START II follow-on agreement (note that the Partial Test Ban Treaty of 1963 was negotiated between the Soviet Union, the United Kingdom, and the United States; much later, in 1996, the Comprehensive Test Ban Treaty was agreed upon after a long period of multilateral negotiations).

The role of NNWS in future arms control negotiations should be enhanced. NNWS participation in disarmament, and in particular nuclear disarmament, should be expanded whenever feasible.

I applaud Sagan's mention of the 13 Practical Steps agreed upon at the 2000 NPT Review Conference. Not only are they useful examples of shared responsibilities, but they generate hope that more can be done in the future.

Finally, I would like to comment briefly on Sagan's discussion of the withdrawal clause of the NPT. A state that withdraws from the NPT for reasons acceptable to the UN Security Council should not be penalized by any "return to sender" clause. The withdrawal clause represents a safety valve that should be protected and remain unaltered. States that withdraw after violating the NPT, however, should be penalized, either by the Security Council if their

violations constitute a threat to world peace and security or by the parties to the NPT themselves, collectively or individually, and in accordance with the Vienna Convention on the Law of Treaties.

In conclusion, the NPT Review Conference, such as the one to be held in May 2010, represents an opportunity for the NWS and the NNWS to expand their shared responsibilities for nuclear disarmament and beyond.

Shared Responsibilities, Shared Rights

Achilles Zaluar¹

We may not have a nuclear power renaissance yet—significant regulatory and economic hurdles remain—but the past two years have indeed brought about a renaissance in the nuclear disarmament debate, at least in the debate conducted in the English language. After a dark age in which leading policy-makers and theorists in nuclear-weapons states (NWS) either denied the reality of their nuclear disarmament obligations or regretted them—as Scott Sagan recalls in his paper on “Shared Responsibilities for Nuclear Disarmament”—a rebirth started, perhaps, around 2007.

The first prophecies appeared in *The Wall Street Journal* in an op-ed written by the “Four Statesmen” under the title “A World Free of Nuclear Weapons.”² They were followed by British Foreign Secretary Margaret Beckett’s keynote speech at the Carnegie International Nonproliferation Conference, which added a somewhat cautious, if practical-minded interrogation point to the now famous piece.³ Then came the studies funded by the United Kingdom and Norway on the verification of nuclear warhead dismantlement. From this came George Perkovich and James Acton’s Adelphi Paper 396,⁴ which was vigorously debated, by Sagan and me, among others, in a volume published by the Carnegie Endowment.⁵

We had, of course, the groundbreaking Prague speech on April 5, 2009, by U.S. President Barack Obama, which was very well received around the world, including in non-nuclear-weapons states (NNWS) such as Brazil. We

1. The views expressed in this comment are exclusively the author’s personal views and do not necessarily reflect the positions of the Brazilian government.

2. George P. Shultz, William J. Perry, Henry A. Kissinger, and Sam Nunn, “A World Free of Nuclear Weapons,” *The Wall Street Journal*, January 4, 2007.

3. Margaret Beckett, “Keynote Address: A World Free of Nuclear Weapons?” Carnegie Endowment for International Peace International Nonproliferation Conference, June 25, 2007.

4. George Perkovich and James M. Acton, “Abolishing Nuclear Weapons,” Adelphi Paper 396 (London: International Institute for Strategic Studies, 2008).

5. *Abolishing Nuclear Weapons: A Debate*, ed. George Perkovich and James M. Acton (Washington, D.C.: Carnegie Endowment for International Peace, 2009).

saw the report by the International Commission on Nuclear Non-Proliferation and Disarmament, co-chaired by Gareth Evans and Yoriko Kawaguchi,⁶ a useful and quite detailed update to the more pithy report from 1996 of the Canberra Commission on the Elimination of Nuclear Weapons, which had been sponsored by the same Gareth Evans when he was Australia's Foreign Minister. Attentive readers paid attention to *Thinking about Nuclear Weapons: Principles, Problems, Prospects*,⁷ particularly Chapter 12—"The abolition of nuclear armouries?"—in which Michael Quinlan, the brain behind NATO's nuclear deterrence doctrine, engages in serious and constructive discussion of the eliminationist perspective. Last but not least are the two special issues of the American Academy of Arts and Sciences' journal *Daedalus* "On the Global Nuclear Future," edited by Steven E. Miller and Scott D. Sagan. (Sagan's paper on "Shared Responsibilities for Nuclear Disarmament" is published in volume 1.)⁸

What are the causes of this renaissance? There can be little doubt that it is motivated by serious concern, among scholars and politicians alike, that the global nuclear nonproliferation regime might be in jeopardy. The regime had had, shall we say, a bad decade: the 1998 nuclear tests by India and Pakistan; the 1999 rejection of the Comprehensive Test Ban Treaty (CTBT) by the U.S. Senate (a decision that impacted nonproliferation in the way the fall of Lehman Brothers in 2008 impacted the world financial system); the 1999 NATO Nuclear Doctrine, the 2001 U.S. Nuclear Posture Review, and nuclear policy statements by other NWS, which gave nuclear weapons renewed salience and seemed to debase the validity of Article VI of the Nuclear Non-Proliferation Treaty (NPT); the revelations about the A.Q. Khan network and the Iranian, North Korean, and Libyan nuclear programs; the attempts to discredit the International Atomic Energy Agency (IAEA) and the political manipulation of intelligence about nuclear issues in the run-up to the 2003 invasion of Iraq; the neglect and obstructionism that drove the 2005 NPT Review Conference off course, despite the best efforts of its president and of the New Agenda Coalition of major NNWS; the North Korean nuclear tests; the Israeli-Syrian incident of 2007; the controversy about the relationship of the regime with non-NPT nuclear-armed states; and the forced paralysis of the Geneva Conference on Disarmament.

On top of it all, while two of the three pillars of the nonproliferation regime—non-acquisition (Article II) and disarmament (Article VI)—were, as we recalled, under stress, sectors in the think-tank and academic world could think of nothing better than to attack the third pillar, peaceful uses (Article IV).

6. "Eliminating Nuclear Threats: A Practical Agenda for Global Policymakers," Report of the International Commission on Nuclear Non-Proliferation and Disarmament, December 15, 2009.

7. Michael Quinlan, *Thinking About Nuclear Weapons: Principles, Problems, Prospects* (Oxford: Oxford University Press, 2009).

8. "On the Global Nuclear Future," volumes 1 and 2, ed. Steven E. Miller and Scott D. Sagan, *Daedalus* 138 (4) (Fall 2009) and 139 (1) (Winter 2010).

Fueled by ingenuity and grants, a cottage industry of reports, articles, op-eds, and think-tank pieces appeared, in which danger to the regime was identified not in clandestine bomb-making programs, nor in failure to disarm, but in the exercise of the “inalienable right of all the Parties to the Treaty to develop research, production and use of nuclear energy for peaceful purposes without discrimination,” even if such actions are in conformity with the non-transfer and non-acquisition provisions of Articles I and II, and even if they are performed under IAEA safeguards.

Like new Mark Antonys, the proponents had come not to praise, but to bury the NPT, which they claimed was full of “loopholes.” Like the Roman demagogue, they may not have fully thought through the consequences of their ideas. If we would in haste bury the NPT, is it at all likely that, in today’s world, we could come up with something safer and better?

The danger that this approach, if tried by influential states, could bring to an already debilitated regime was quickly identified. It seemed to be on the cusp of forcing many NNWS to exercise their inalienable right earlier and more vigorously than they may have envisaged, because of the prospect of losing that right. Nations that had abandoned or mothballed their nuclear fuel-cycle programs started rushing to reactivate them. Even states that had been calmly and patiently building up their national capacities, in full compliance with non-proliferation commitments, were tempted to become more vigilant and guarded in their international intercourse.

By themselves, each of these developments may not be particularly worrisome, but overall they point to a gradual loss of trust in the viability of a rules-based international order and to a correspondingly greater recourse to self-help. Fortunately, President Obama put these concerns to rest when he pointed out in his speech in Prague that “the basic bargain is sound” and that “no approach will succeed if it is based on the denial of rights to nations that play by the rules.”

Scott Sagan’s piece belongs, of course, to a much sounder lineage than Loophole Theory. Sagan, like me, is a true believer in the NPT. He proposes to shore up the nonproliferation regime as it exists by seeking creative, realistic ways of implementing its provisions, and drawing new avenues of consensus among its parties, NWS and NNWS alike. By underlining that the commitments in Articles IV and VI are common to all, Sagan rightly rejects a selective reading of the text of the Treaty (“I like this part and that part. . . . But this other one is not convenient for me; there’s a loophole!”). This is an endeavor that merits constructive, good-faith answers. Shared responsibility is the right approach—the only one likely to succeed in maintaining nonproliferation norms, promoting gradual nuclear disarmament, and making the world safe for nuclear energy.

It also merits an honest expression of differences. There is a valid idea behind Sagan’s description of the respective roles of the IAEA Secretariat, IAEA Board of Governors, and UN Security Council in dealing with noncompliance

with safeguards agreements. But the choice of words—“this ‘inalienable’ right is in reality a conditional right”—is unfortunate and maybe misleading. The word “inalienable” is not in Article IV by chance. It means what it says. It is part of a careful balance of rights and obligations that—particularly pending further progress in disarmament—is already considered skewed toward NWS as it is. Countries that are found in noncompliance with their safeguards agreements have one obligation: to come back into full compliance and provide assurances to the international community that they did not acquire, and are not seeking to acquire, nuclear weapons. This is precisely the purpose of safeguards: “preventing diversion of nuclear energy from peaceful uses to nuclear weapons or other nuclear explosive devices” (Article III, section 1).

If Article IV on peaceful uses is “conditional,” Article III on safeguards would be as well: “The safeguards required by this article shall be implemented in a manner designed to comply with Article IV of this Treaty, and to avoid hampering the economic or technological development of the Parties or international cooperation in the field of peaceful nuclear activities” (Article III, section 3). In fact, these are not conditions, but parameters that clarify the purpose behind each commitment in the Treaty. Article IV is not to be abused in order to conceal development of nuclear explosives. Article III is not to be abused in order to stifle the development of nonexplosive nuclear applications in the NNWS. But *abusum non tollit usum*—the abuse does not take away the use. One does not restore confidence in the NPT by moving the goal posts.

It is also not clear that the “NNWS should recognize that entering into negotiations about international control of the nuclear fuel cycle is an essential part of their Article VI commitment” because the “NWS will be less likely to accept deep reductions to zero (or close to zero) if there are more and more states with latent nuclear-weapons capability because of the spread of uranium enrichment and plutonium reprocessing technologies.” There are several logical leaps here. Accepting this argument would mean that the NNWS would be legally bound to do whatever the NWS feel is proper and useful because if they don’t, the NWS will be “less likely” to fulfill their Article VI obligations. Of course, the world would be simpler for the NWS if they, and only they, had fuel-cycle capabilities. But that was not the deal we all agreed to.

The main contribution that the NNWS may give to nuclear disarmament, and the only one that is legally binding, is to refrain from acquiring nuclear weapons, while adhering to IAEA safeguards, which provide assurances that they are indeed refraining. Apart from that, there are plenty of things that everybody could do to make the world a better place and help other states feel more secure. But there is no legal obligation to commit to this or that course of action, in particular the internationalization of the nuclear fuel cycle, about which there is no agreement, either on its feasibility (the NWS themselves would not agree to relinquish national control over their fuel facilities, and any discriminatory regime would be unacceptable), or even in its desirability in principle (one has only to think of the manifold controversies that

would spring forth, relating to technological secrecy, industrial development, energy security, commercial advantage, and even proliferation).

The internationalization of the fuel cycle is an impossible solution in search of a problem. It derives from an unproven and, in my view, false assumption: that capability breeds proliferation. Instead, it is the other way around. It is the intent to proliferate that breeds capability. (There are, of course, other, more legitimate causes that may also breed capability.) This has been true in the history of nuclear weaponry, especially in the nuclear-armed states themselves. Nobody is terribly worried, for instance, about the fuel-cycle capabilities, extant or potential, of countries such as Australia, Belgium, Canada, or The Netherlands. Their capabilities are large, but they have no cogent reason to proliferate. We can therefore be confident of their intent. The same is true for Argentina, Brazil, and South Africa. But for countries that had no fuel-cycle capability, once the intent appeared, driven by political and strategic reasons, the capability was not far behind. It is therefore far better to address the cause, not the symptom.

This does not mean, and I have expressed this sentiment elsewhere, that all 192 member states of the United Nations should have nuclear fuel-cycle facilities. Autonomous control of the nuclear fuel cycle, like most valuable things in life, carries certain costs and risks, and not all states will want to accept them. For most states, buying or leasing fuel in a competitive market, under IAEA safeguards, will be the best option. The more competitive the market and the more free of political considerations, the better this option will look. Each new supplier will only help further to clog the market.

These are the two major disagreements that I have with Sagan's excellent paper. The general lines of his argument are robust and most of his advice is sound. He is also quite accurate in pointing out that even in a zero-nuclear-weapons world, nuclear deterrence would still exist, albeit in a latent, virtual, nonsalient way. The capability will still be there. If we are lucky and wise, however, we will learn not to exercise it.

Contributors

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The Global Nuclear Future Initiative of the American Academy

There is growing interest worldwide in civilian nuclear power based on the recognition of its potential for meeting increased energy demands. But the spread of nuclear technology, in the absence of rigorous safety regimes, presents unique security risks, including the potential proliferation of weapons capabilities to new states, sub-national, and terrorist groups.

The Academy's Global Nuclear Future Initiative is working to prevent this dangerous outcome by bringing together constituencies that historically have not communicated effectively—from government policy-makers to heads of nongovernmental organizations, from nuclear engineers to industry leaders, from social scientists to nonproliferation experts—to establish an interdisciplinary and international network of experts working together to devise and implement nuclear policy for the twenty-first century. Our overriding goal is to identify and promote measures that will limit the security and proliferation risks raised by the apparent growing global appetite for nuclear energy.

To help reduce the risks that could result from the global expansion of nuclear energy, the Initiative addresses a number of key policy areas, including the international dimension of the nonproliferation regime, the entirety of the fuel cycle, the physical protection of nuclear facilities and materials, and the interaction of the nuclear industry with the nonproliferation community. Each of these areas has specific challenges and opportunities, but informed and thoughtful policies for all of them are required for a comprehensive solution. We also recognize that “game changers,” developments that could have a tremendous impact but cannot be extrapolated from current trends, could influence the course of events and should be identified and included in our deliberations.

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