Life beyond Arms Control: Moving toward a Global Regime of Nuclear Restraint & Responsibility

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Today, we are on the verge of a world without nuclear restraint. In the absence of formal arms control, how do we proceed? What broad principles and norms would we want? What measures might nuclear-armed states take, even without formal agreement, that would reduce the risk of nuclear war and control the arms race? I suggest that nuclear-armed states move toward a global regime of nuclear restraint and responsibility. Restraint would primarily take the form of reciprocal commitments and unilateral measures to avoid an arms race and reduce nuclear dangers. Responsibility refers to the fact that nuclear-armed states must pursue limited forms of deterrence and are accountable to the international community. I suggest several steps that governments, with the help of civil society, could take, beginning with the most minimal, declaratory initiatives and unilateral measures, and proceeding to steps that require more action.

oday, we are on the verge of a world without nuclear restraint. If the New START (Strategic Arms Reduction Treaty) between the United States and Russia disappears after 2021, there will be no formal limitations on strategic nuclear weapons for the first time since 1972. The restraints on missiles and warheads imposed by New START, along with its critically important verification regime, would either be tacit and informal or nonexistent. Nuclear-armed governments appear to be enthusiastically embracing an arms race in an era of heightened hostility while demonstrating little interest not only in formal arms control but in nuclear restraint of any kind. Arms control treaties are being discarded and norms are eroding; new qualitative arms races are underway while quantitative arms races may be in the offing; and some governments are reviving old war-fighting strategies including damage limitation and battlefield nuclear weapons. Almost no stability talks are taking place while leaders brazenly brandish their nuclear arsenals and engage in brinkmanship. Most experts agree that the risk of nuclear war is the highest it has been since the height of the Cold War. We are, in short, in a world of what I would call "irresponsible deterrence."

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Unfortunately, little prospect exists for negotiating new treaties. Increasing polarization in the political sphere, both domestically and in the global nuclear regime, will make it exceedingly difficult to agree on any new treaties. In the United States, the Republican Senate is averse to treaties. Internationally, increasing great-power hostility, growing regional tensions, and virulent nationalism are leading to new trade wars and looming arms races while undermining prospects for cooperative agreements among the great powers. In the global nuclear realm, the approval of the Treaty on the Prohibition of Nuclear Weapons, or Nuclear Weapon Ban Treaty, in 2017 has exacerbated polarization in the international community between those states that favor the ban treaty and disarmament, and states committed to maintaining nuclear deterrence. These two groups increasingly exist in separate universes, making it ever harder to find common ground at UN meetings.

In the absence of formal arms control agreements, how do we proceed? What broad principles and norms would we want? What measures might the nucleararmed states take, even without formal agreement, that would reduce the risk of nuclear war and rein in the arms race? In this essay, I focus primarily on nucleararmed states, which have the major (though certainly not the only) responsibility here. This group includes not only the five "declared" nuclear-armed states acknowledged by the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) – the United States, Britain, France, Russia, and China-but also India, Pakistan, Israel, and North Korea, which possess nuclear weapons but are not parties to the NPT. I suggest that nuclear-armed states should move toward a global regime of nuclear restraint and responsibility. In the absence of formal arms control, restraint would primarily take the form of reciprocal commitments and unilateral measures to avoid an arms race and reduce nuclear dangers. Responsibility refers to nuclear-armed states pursuing limited forms of deterrence and being accountable to the international community. Needless to say, in the current environment of heightened great-power competition, the nuclear-armed governments are probably incapable of moving toward a regime of restraint and responsibility without significant prodding. Therefore, much of this work will fall to civil society and domestic politics, as well as to diplomacy at the United Nations and other international organizations, such as the International Atomic Energy Agency, the Conference on Disarmament, and even alliances such as NATO.

Many will argue that the current global nuclear order is illegitimate and unsustainable, and that nuclear risk can ultimately be managed only through disarmament. A concept of responsible deterrence must indeed be compatible with the pursuit of disarmament. Responsible deterrence is not simply about maintaining secure command and control or refraining from giving weapons to terrorists (though it certainly includes these measures). It must also be consistent with reducing global nuclear dangers. In a global regime of nuclear restraint and responsibility, disarmament must remain the ultimate goal. The immediate goal, however – and the focus of this essay – is preventing nuclear war. Thus, even those for whom disarmament is so far in the future as to be illusory should still be able to embrace many of the tenets of responsible deterrence laid out here.

any alternatives exist to the negotiation of formal, legally binding treaties for achieving arms control objectives. These include informal agreements that are politically but not legally binding on their parties, and unilateral initiatives that may or may not be coordinated with other parties but are expected to be reciprocated. Additional approaches include agreements in principle (agreements to agree), parallel policy statements, joint declarations, and tacit agreements.

The history of U.S.-Soviet/Russian arms control provides numerous examples of nontreaty approaches, including the 1987 Nuclear Risk Reduction Centers Agreement, the U.S.-Soviet 1988 Ballistic Missile Launch Notification Agreement, and the 1992 Cooperative Threat Reduction program under which the United States assisted Russia in reducing the number of its nuclear weapons and securing its fissile material. Prominent unilateral initiatives included the 1991 U.S. and Russian Presidential Nuclear Initiatives (PNIs) under which the United States and Russia withdrew approximately seventeen thousand tactical nuclear weapons from service. The PNIs were "reciprocal unilateral commitments": that is, they were politically, not legally, binding and were nonverifiable.

Yet treaties do have some advantages over political commitments. Whatever gets written into a treaty becomes the law of the land and, consequently, has the "force of law" behind it. Treaties create a strong sense of legal obligation that whatever measures negotiators write into a treaty – say, intrusive verification – will in fact be carried out. In contrast, a political agreement lacks the force of the law. Consequently, implementation tends to be more politicized and less certain. The force of law is one important benefit that is lost in a world without treaties.

he goals of traditional arms control are to reduce threats, provide predictability, foster stability and transparency, reduce the risk of nuclear use, and strengthen norms of restraint. Many of these goals can still be pursued in the absence of treaty-based agreements. Indeed, for the United States, the near impossibility of getting a treaty through the Senate these days means that pursuing restraint through political agreements is more likely to produce results.

Thus, the nuclear-armed states need to move toward a global regime of nuclear restraint and responsibility: a set of principles and goals that would provide a broad framework for reciprocal political agreements among nuclear powers to reduce nuclear dangers.¹ Restraint – or "keeping a situation under control or within limits" – is associated with notions of self-control, moderation, and prudence.² Without a collective effort by nuclear-armed states to renew practices of restraint, a competition in excess is likely to occur, heightening the risk of nuclear war.

Responsibility as applied to the nuclear realm has tended to be defined narrowly in terms of upholding nonproliferation norms. Nuclear-armed states like to tout themselves as "responsible nuclear powers" if they do not proliferate nuclear weapons and materials and maintain secure arsenals. Yet not all nuclear-armed states, such as India and Pakistan, are members of the NPT, and nuclear responsibility must be much broader than simply nonproliferation.³ It must also include nuclear doctrine, nuclear safety and security, and commitment to norms of nuclear restraint, including arms control and disarmament. Together, these practices are key elements of responsible deterrence. At minimum, a regime of nuclear restraint and responsibility would include the following principles and goals.

Principles

- Security cannot be achieved unilaterally. A regime of nuclear restraint and responsibility must be based on the fundamental recognition that security in the nuclear age cannot be achieved unilaterally. It requires the cooperation of others. U.S. and Soviet leaders learned this crucial lesson during the Cold War. Today's leaders must recommit themselves to this shared understanding.
- 2. *Must include all nuclear-armed states*. While the United States and Russia have by far the largest nuclear arsenals and therefore bear the greatest responsibility for containing the nuclear arms race, all nuclear-armed states contribute to nuclear dangers. States with smaller nuclear arsenals should not be allowed to hide behind the excuse that they are smaller. China and the other new nuclear states have traditionally resisted a multilateral arms control process, perceiving that it would be about preserving the dominant power position of the original nuclear states, and that unequal nuclear-conventional balances disadvantage them and complicate arms control calculations. In a regime of restraint and responsibility, however, all nuclear-armed states must take appropriate steps to reduce nuclear dangers. U.S. leaders should allay Chinese concerns that risk-reduction or arms control measures would provide useful intelligence on the location of Chinese nuclear weapons to U.S. targeteers. Rather, to reduce nuclear dangers, nuclear-armed states need to understand each other's doctrine and decision-making, not the location of weapons.
- 3. *Recognize that every person and every state in the world is a stakeholder*. We are long past the days when nuclear-armed states could pretend that they had the sovereign right to possess nuclear weapons and do with them whatever they wanted regardless of the consequences for others.⁴ A nuclear war would almost surely affect many countries. Even a regional nuclear exchange, such as between India and Pakistan, would have an effect on Earth's atmosphere and climate,

possibly wiping out large swaths of agriculture and resulting in nuclear famine.⁵ It could also produce radioactive fallout extending thousands of miles from the explosion site to produce health effects, for example, in China and Southeast Asia.⁶ States and civil society groups have a legitimate right to offer proposals and criticisms to reduce nuclear dangers. Nuclear-armed states, for their part, have an obligation to participate in such efforts and to hold themselves more accountable for the consequences of their nuclear policies, including greater transparency, reporting, and information exchanges.

All nuclear states need to be more accountable for the possible consequences of their nuclear postures and decisions about use. Since 1945, principles of accountability have become a much more prominent feature of international law and relations, and states have agreed to be increasingly accountable to each other in many realms such as trade, pollution, human rights, and justice.⁷ Accountability remains low in the realm of nuclear weapons policy, however, both domestically and among nation-states. Domestically, the American public and Congress are excluded from any decision to use nuclear weapons, raising questions about democratic oversight of a momentous decision.⁸ Internationally, non-nuclear states struggle at NPT review conferences to extract more accountability from nuclear-armed states in terms of reporting and transparency about stockpiles, doctrine, weapons developments, and the consequences of their war plans. Accountability in general is under siege everywhere in today's increasingly antidemocratic politics. Yet in the same way that efforts are under way to strengthen accountability for any use of chemical weapons, accountability for the consequences of nuclear weapons policies must be a much more central principle of responsible deterrence.9

Goals

- 1. *Focus on reducing the risk of nuclear use.* This must be the primary goal and would entail a whole range of measures to reduce crisis instability and the possibility of nuclear war through inadvertence, miscalculation, or accident. As long as nuclear weapons exist, states must depend on responsible deterrence to prevent the deliberate use of nuclear weapons (if a state is determined to start a nuclear war, no set of norms can prevent it from doing so). Yet experts widely agree that the likelihood of nuclear use by accident, miscalculation, or design is rising. The purpose of risk-reduction measures is to find ways to prevent leaders of nuclear armed states from thinking they have to act because the other side is about to escalate, or to minimize the possibility of miscalculation. Risk reduction is not a new idea, but in the current climate, it has become more urgent.¹⁰
- 2. Strengthen norms of nuclear restraint. These norms include nonuse, nonproliferation, deterrence, and disarmament. Additional norms include the norm of

no-explosive-testing, the right to peaceful uses of nuclear energy, nuclear safety and security, and a firm commitment to effective political control over nuclear policy and planning and to reserving decisions on nuclear use to heads of government. Important procedural norms include reciprocity (reciprocal commitments) and transparency. Transparency regarding nuclear stockpiles, deployments, force postures, and doctrine is an important means of stabilizing expectations and reducing worst-case analysis and miscalculation.¹¹

I propose twelve steps that governments, with the help of civil society, could take to demonstrate nuclear restraint and reduce the risk of nuclear war. Because the prospects for even confidence-building measures seem so bleak today, these proposals begin with the most minimal, declaratory initiatives and unilateral measures, and proceed to steps that require action, not just words. In reality, many of these steps will likely have to begin with initiatives by civil society. Certainly, other proposals might be possible, but I have focused here on a small set that could serve as initial steps or way stations for further progress.

For All Nuclear-Armed States

1. A joint public declaration by the leaders of all nuclear-armed states reaffirming the Reagan-Gorbachev statement: "Nuclear war cannot be won and must never be fought." This 1985 statement about the futility of nuclear war represented an important statement of nuclear restraint and a political turning point in U.S.-Soviet efforts to control the arms race. The two leaders also agreed that their countries would not seek military superiority over one another. In articulating the declaration, Ronald Reagan and Mikhail Gorbachev played key leadership roles. Today, such a declaration could be promoted by civil society and the United Nations, and leaders of all nuclear-armed states could be asked to sign on. It could be announced at Hiroshima by a group of senior statespeople. UN disarmament officials have already been using and encouraging adoption of this language.¹² Sweden presented a working paper at the 2019 NPT preparatory meeting calling for nuclear use."¹³

Despite the seemingly low-cost nature of such a declaration, however, at a side event at the NPT preparatory committee meeting in May 2019, the British ambassador to the Conference on Disarmament, Aidan Liddle, in response to a question, struggled to explain to his baffled audience why his country could not endorse the Reagan-Gorbachev statement at this time. The fact that the P5 states – the United States, the United Kingdom, China, France, and Russia – find themselves unable to reaffirm this basic statement today is astonishing and signals how far backward we have gone in terms of beliefs about nuclear use (the Trump administration may be reluctant in part because it imagines

it can win a nuclear war with North Korea). Such a declaration nevertheless remains a critical starting point for reaffirming that the shared goal must be nonuse of nuclear weapons. If it is not feasible to have a declaration endorsed by all nuclear-armed states, the United States should seek bilateral statements with Russia and China declaring that nuclear war between the United States and Russia or China cannot be won and must never be fought. India and Pakistan should also be encouraged to make such a joint statement. These bilateral statements would provide at least some benefits. Leaders should also pledge to refrain from brandishing nuclear weapons or engaging in nuclear coercion.

- 2. *Explicit reference to the seventy-four-year tradition of nonuse*. An alternative declaration would adopt the Obama-era talking points that explicitly emphasize the tradition of nonuse: "It is our fervent hope that the [74]-year tradition of nuclear non-use will continue forever." Ideally, this declaration should always be tied to actual risk-reduction efforts. Fervent hope is not enough; there must be an active effort to maintain the nonuse tradition in perpetuity. More generally, leaders should make speeches that lay out the risks of nuclear use and emphasize the importance of the tradition of nonuse.
- 3. *Risk reduction*. The United States, Russia, and other NPT-declared nuclearweapon states, as well as India and Pakistan, should engage in discussions on the full range of measures to reduce to an absolute minimum the risk of nuclear use. This would include consideration of measures such as de-alerting, as well as changes in doctrine and operational practices to strengthen crisis avoidance and management. The UN Institute for Disarmament Research has developed a comprehensive set of nuclear risk-reduction measures that focus on risks associated with doctrine, escalation, unauthorized use, and accidents.¹⁴

One possibility is that discussions of nuclear risk reduction could be part of an improved "P5 process."¹⁵ For the past decade, this process has brought together government officials from the five NPT nuclear-weapon states to coordinate their positions on issues and undertake initiatives as part of the NPT review process. Although the P5 states tout their process, the deliverables so far have been extremely modest. An improved P5 process could focus much more on risk reduction. Although there will be some reluctance to do this, the P5 have a strong mutual interest in avoiding nuclear war. The P5 states could use this existing forum to engage in dialogue about possible scenarios of nuclear escalation, whether through miscalculation or accident, as well as concepts of strategic stability. Exchanges of views could be followed by the development of cooperative steps to reduce risks.

Nevertheless, a recognized shortcoming of the P5 process – in addition to the modest results – is that it is tied to the NPT and therefore does not involve India or Pakistan. An alternative is for the Nuclear 7 (the P5 plus India and Pakistan) to discuss improvements in nuclear safety and security via an exchange of best practices.¹⁶ If this works, it would provide a foundation to build on. If such efforts to discuss safety and security fail, it is likely that talks on more ambitious steps would falter. Moving outside formal state-to-state discussions, another idea is to develop a global commission on military nuclear risks, an independent, globally representative body of diverse nongovernmental experts to offer an authoritative assessment of trends in nuclear risk.¹⁷

4. Nuclear-armed states should find a way to engage constructively with the goals of the ban treaty. Nuclear-armed states are unlikely to join the 2017 Nuclear Weapon Ban Treaty any time soon, but they should find a way to engage constructively with its goals rather than dismissing it. In addition to much greater effort on riskreduction measures, as discussed above, a positive step by nuclear-armed states would be to offer more public transparency about the extent to which their nuclear war plans meet humanitarian criteria. For example, the United States has formally declared that its nuclear war plans must meet the criteria of the laws of armed conflict (discrimination, proportionality, and necessity).¹⁸ The United States should publicize this commitment and other nuclear-armed states should consider it. Even if other nuclear powers decline to make such a commitment, however, the U.S. example is important. Further, as part of this effort, nucleararmed states should seek to minimize the consequences of even limited nuclear use, especially for noncombatant states. This is a major concern of the humanitarian consequences movement. Nuclear-armed states should declare publicly what steps they are taking to minimize collateral harm from nuclear use.

Finally, in the effort to bridge the gap between ban treaty supporters and defenders of deterrence, U.S. allies can play a key role. For example, Japan has offered a thoughtful set of ideas about how to move forward, including regular dialogues between deterrers and disarmers, and feasibility studies of minimal nuclear arsenals.¹⁹ States may be able to build on these ideas, and having a dialogue not exclusively driven by the United States may be advantageous.

5. Adoption of no-first-use policies. The other nuclear-armed states should move to-ward joining China and India in adopting no-first-use or "sole-use" policies. These could be unilateral or joint declarations. No-first-use policies are crisis stability measures and signal a willingness to limit nuclear use.²⁰ A U.S. no-first-use policy would reduce the risk of Russian or Chinese nuclear miscalculation during a crisis by alleviating concerns about a devastating U.S. nuclear first strike. To be credible, this declaratory pledge would need to be reflected in retaliatory-strike-only nuclear force postures. When fully implemented, such a policy would eliminate first-strike postures, preemptive capabilities, damage limitation, and other types of destabilizing war-fighting strategies. It would emphasize restraint in targeting, launch-on-warning, alert levels of deployed

systems, procurement, and modernization plans. Organizations such as Global Zero have proposed detailed deterrence-only postures incorporating many of these measures, including eliminating land-based missiles.²¹ It would be desirable to make the force structure changes by agreement, but the United States could also do so unilaterally.

Many practitioners believe that the "calculated ambiguity" of a U.S. firstuse threat creates uncertainty in the mind of an adversary that contributes to deterrence. A first-use threat is also necessary to reassure allies that the United States will come to their defense. Yet today, the risks and costs of an aggressive first-use posture appear to outweigh the benefits. For this reason, numerous former Pentagon officials, including former Secretary of Defense William Perry, former Vice Chairman of the Joint Chiefs of Staff General James Cartwright, and former Head of the Strategic Command General Lee Butler, among others, believe the United States should move toward a no-first-use posture. Although the political moment does not seem propitious for the adoption of nofirst-use policies, nuclear-armed states should nevertheless begin dialogues perhaps at the Track 2 (back channel) level - on moving toward such a policy. This should include discussion about the conditions, if any, under which first use of nuclear weapons would be morally acceptable. The United States should begin discussions with allies about limiting the role of nuclear weapons in extended deterrence policies to deterring, or responding to, a nuclear attack.

6. *An expanded accountability regime*. This could be organized under the United Nations to hold all nuclear-armed states accountable for the consequences of their nuclear policies. Currently, one of the big asymmetries of the NPT is that the Security Council plays a role in enforcing the nonproliferation pillar but not the disarmament pillar. A framework for a global regime of nuclear restraint and responsibility could eventually be adopted by the UN Security Council, similar to the way the Security Council adopted the "responsibility to protect" principle in 2005.

For the United States, Russia, and China

7. *Commit to "no new deployments" beyond New START limits and of land-based missiles abroad (both nuclear and conventional).* These commitments would be a type of freeze. Just as the United States and Russia continued to observe SALT II (Strategic Arms Limitation Talks) limits even though the treaty was unratified, they could continue to observe New START limits. As nuclear analyst Vince Manzo has proposed, "the two countries could pledge, in the form of parallel political commitments, to remain at or below the treaty's limits after New START expires. Each country's restraint would be contingent on the other's reciprocation."²² Likewise, in the wake of the demise of the Intermediate-Range Nuclear Forces (INF) Treaty in August 2019, a political understanding not to deploy

new land-based missiles abroad would reduce tensions. Russia has warned the United States against deploying new missiles to Europe and threatened to deploy its own in response. Since European governments are unlikely to be interested in hosting new U.S. missiles, a commitment to no new deployments would avoid creating political turmoil as well as a destabilizing strategic situation in Europe. Reintroducing U.S. land-based missiles in Asia to deter China, as some analysts have proposed, also seems unwise for similar reasons.²³

8. Commit to transparency. The United States, Russia, and China should not go backward on transparency; instead all three countries should pledge greater transparency in nuclear weapons stockpiles, force postures, deployments, and doctrines. The United States has always been more transparent about its nuclear weapons stockpile than either Russia or China, which gave it the moral high ground to demand more transparency from others. Thus, the Trump administration's decision in April 2019 to halt, without explanation, a decade-long practice of disclosing the current size of the nuclear weapons stockpile is an unfortunate - and puzzling - step backward in transparency. As analyst Hans Kristensen has noted, with this decision "the Trump administration surrenders any pressure on other nuclear-armed states to be more transparent about the size of their nuclear weapon stockpiles."²⁴ Since the Trump administration had repeatedly complained about secrecy in the Russian and Chinese arsenals, instead it now appears to endorse their secrecy. Likewise, if New START disappears, it is in the strong interest of both the United States and Russia to continue maintaining the verification provisions, which provide the only windows into the strategic posture of the two sides.

China has traditionally declined to engage in transparency measures, arguing that its small arsenal and no-first-use posture mean it has to preserve uncertainty about the exact size and structure of its arsenal. But as part of responsible deterrence, and as a matter of risk reduction, China must commit to greater exchange of nuclear information. For example, the United States and China should establish a reciprocal advance-launch notification agreement for longrange missile systems. Such an agreement would duplicate existing ballistic missile-launch notification agreements between the United States and Russia (1988) and between Russia and China (2009). As advocates note, it would serve two purposes. "First, it would establish the foundation for a broader military notification mechanism. Second, it would serve as a test case for informal arms control arrangements between the United States and China."²⁵

Unilateral Measures

9. Unilateral efforts by each of the nuclear powers to enhance awareness of the risks of entanglement of conventional and nuclear arms and strengthen crisis stability. Advances in sophisticated, long-range conventional global-strike weapons, as well as the creation of dual-use weapons, are increasingly entangling nuclear and conventional deterrence and defense, creating new kinds of escalation scenarios.²⁶ Nuclear-armed states should undertake unilateral efforts to enhance awareness of these dynamics and possible escalation pathways. Dialogue among nuclear powers could eventually follow in the form of stability talks.

10. Interpret "parity" broadly. The United States' commitment to having a nuclear arsenal "second to none" does not require duplicating every weapon of the adversary. The Trump Nuclear Posture Review unfortunately gave new life to old arguments that the United States must match Russia in every category of weapon on the escalation ladder, regardless of whether such weapons add meaningfully to U.S. deterrence. In fact, strict parity may not be necessary. As Manzo has argued, even if Russia were uninterested in maintaining New START limits, there are strong reasons for the United States to stick to them unilaterally. The United States could meet all its deterrence objectives at New START levels "even if Russia exceeds them by hundreds of deployed strategic warheads."²⁷ As long as the United States maintains a triad of strategic delivery vehicles, U.S. posture is resilient to Russian increases. Staying within the New START limits – even if Russia does not – would enable the United States to avoid a quantitative arms competition it might lose and would also help avoid a negative reaction from allies and other friendly nations if New START expires.²⁸

Likewise, a strict interpretation of parity is an ill-suited guide for the U.S.-Chinese relationship. In the interest of nuclear risk reduction, the United States and China should engage in regular nuclear weapon information exchanges. While these should be reciprocal, they will need to be asymmetric, given the very different force postures and also the two countries' different outlooks and experiences on cooperative transparency.²⁹ For their part, Chinese leaders cannot cite asymmetry in arsenals as an excuse for avoiding greater transparency and information exchange.

11. To increase arms race stability, Congress can cut the budget for nuclear modernization. By cutting funding for unnecessary new weapons that both fuel an arms race and might be destabilizing in a crisis, Congress can use its power of the purse to shape a nuclear arsenal that exhibits more restraint. Modernization of the nuclear arsenal is important for the safety and reliability of the weapons, and U.S. spending on its nuclear arsenal constitutes only about 6–8 percent of all U.S. defense spending. Still, the Trump administration's expansive modernization plans include a new low-yield warhead to match Russia's supposed "escalate to deescalate" strategy, and a new submarine-launched cruise missile that many analysts argue would be destabilizing. Because both Russia and China are increasing the number of their low-yield nuclear weapons, the Pentagon thinks it will have

a deterrence "gap" and seeks similar weapons. There are compelling arguments that the United States does not need these weapons for deterrence. U.S. interests would also not be served by matching Russia's violation of the now-defunct INF Treaty by developing a comparable U.S. ground-launched missile, as called for in the 2018 Defense Authorization Act. Congress should limit the funding for unnecessary and destabilizing new weapons.

12. Congress can adopt measures to strengthen the checks and balances on the president's ability to launch nuclear war unilaterally. A silver lining of the Trump era is that members of Congress have become acutely aware of how easy it would be for a president to launch a nuclear war unilaterally and of the tremendous risks of this unchecked power. This issue is primarily a matter of U.S. constitutional norms, not the norms of the global nuclear regime. Beginning in 2016, Representative Ted Lieu (D-CA) and Senator Edward Markey (D-MA) have regularly introduced a bill that would prohibit the president from launching a first-strike nuclear attack without congressional approval.³⁰ In January 2019, Senator Elizabeth Warren (D-MA) and Representative Adam Smith (D-WA) went even further, introducing legislation that declared: "it is the policy of the United States to not use nuclear weapons first."³¹ Congress is divided on these matters, however. More desirable may be institutional changes to require the secretary of defense and the attorney general to participate in any decision to use nuclear weapons. The secretary of defense would certify that a given order is valid (meaning that it is definitely from the commander in chief); the attorney general would certify that it is legal (that is, within the president's authority and proper legal bounds). These changes may be better done by executive decision rather than congressional legislation.³²

More feasible in the near term might be the recent proposal by political scientists Jeffrey Lewis and Scott Sagan that the United States should declare it will not use nuclear weapons "against any target that could be reliably destroyed by conventional means."³³ Congress could hold hearings on the topic, which would invite useful debate on what targets, if any, really require a nuclear weapon. While this debate over presidential authority is primarily a matter of U.S. constitutional norms, it also usefully highlights the widely shared international norm that nuclear use is (and should be) a last resort.

If taken, these proposals, individually and together, would help mitigate the larger effects from the loss of a formal arms control regime by establishing alternative approaches for dealing with destabilizing developments, minimizing the costs and risks of arms race instability, and fostering transparency and predictability. The unilateral proposals that I offer are framed primarily in terms of the United States, but there is no reason they cannot also be an exhortation to other nuclear-armed states to take similar measures.

hat is the feasibility of this agenda in an environment of toxic politics and difficult geostrategic relations? Skeptics on the right will argue that in an unstable, threatening international environment, policies such as no-first-use are unwise. Critics on the left will argue that notions such as responsible deterrence legitimize nuclear possession. In the face of resistance from nuclear-armed governments, civil society and domestic politics will likely play a key role in fostering nuclear restraint in the absence of treaties.

The nuclear freeze movement of the early 1980s provides a relevant comparison. The call to halt the nuclear arms race launched by activist Randy Forsberg in the late 1970s grew into the nuclear freeze movement in the United States, the largest peace movement in American history. It advocated a bilateral halt to the testing, production, deployment, and delivery of nuclear weapons. Through a campaign of grassroots organizing, it grew into a vast coalition of major religious denominations, academic associations, women's organizations, and physicians' groups. Numerous city councils and state legislatures passed symbolic freeze resolutions.³⁴ The freeze offered a cogent critique of the nuclear rhetoric and policy of the Reagan administration, and "even became a plank of the Democratic Party platform in 1984."³⁵ While an actual nuclear freeze was never put in place, the movement was highly successful in putting pressure on Congress and the president to rein in the arms race and engage in nuclear restraint.³⁶

Following the end of the Cold War, nuclear weapons fell off the public's radar and arms control became largely an inside-the-beltway, elite-driven process. In recent decades, the lack of a widespread grassroots antinuclear movement helps explain the lack of pressure on nuclear-armed governments to engage in disarmament and arms control. While polling shows that publics tend to support the goal of nuclear disarmament, only a small minority takes part in activism that raises awareness about the dangers of nuclear weapons, lobbies for arms control, or contributes to the goal of abolition.³⁷ This suggests the importance of, and need for, education for a public often woefully uninformed on nuclear issues.

The major exception to this picture in recent years is the Nuclear Weapon Ban Treaty. This treaty – a total prohibition on possession or use of nuclear weapons by any state – was the outcome of nearly a decade of mobilizing by a coalition of civil society organizations and non-nuclear states. The coalition sought to highlight the devastating humanitarian consequences of any use of nuclear weapons as a way to mobilize support for disarmament.³⁸ Remarkably, the treaty was achieved over the objections of nuclear-armed states, which boycotted the negotiations, while the International Campaign to Abolish Nuclear Weapons (ICAN), the civil society organization leading the campaign, was recognized for its work with the Nobel Peace Prize in December 2017.

Coming thirty-five years after the freeze, the humanitarian campaign benefitted from new antinuclear organizations such as Global Zero, the Nuclear Security Project, and Beyond the Bomb, along with a whole new world of social media that tremendously facilitated grassroots and transnational organizing. Supporting these were funders such as the Ploughshares Fund and the Stanton and MacArthur Foundations. As with the earlier freeze movement, the ban treaty is inspiring action at the regional and municipal levels that seeks to put pressure on national governments. More than thirteen hundred active members of parliaments in Europe have pledged their support for the treaty, while a growing number of city councils have joined the ICAN Cities Appeal, including Washington, D.C., Baltimore, Los Angeles, Melbourne, Toronto, Geneva, Berlin, Munich, Sydney, Oslo, Manchester, Hiroshima, and Nagasaki. The state legislatures in California, Oregon, and New Jersey have called on the United States to join the ban treaty, while the EU parliament has called on all EU member states to do so. Meanwhile, the "don't bank on the bomb" campaign urges companies not to be involved in the financing or production of nuclear weapons. These actions are mostly symbolic, of course, and cannot force nuclear powers to join the treaty or to disarm. But they are mobilizing antinuclear activism that can eventually put pressure on governments, especially those of NATO allies in Europe, to do more to reduce nuclear dangers.

Will these civil society movements actually help to reinstate norms and restrain the arms race? Skeptics argue that civil society activism has a largely one-sided effect, influencing democracies but with no evident impact on nondemocratic nuclear-armed states, which are largely immune to such pressure.³⁹ It is therefore unclear how civil society pressure will motivate the needed global responsibility and lead to universal norms.

It is true that civil society pressure has mostly been focused on democracies: the ban campaign, for example, has focused its demands for disarmament disproportionately on the United States and European allies, while seemingly letting the other nuclear powers off the hook. Yet the asymmetry is not as sharp as some may think. It is true that a large grassroots movement for the ban treaty will not be organized in Russia or China (and does not currently exist in the United States, either). Yet the Russian government has been outspoken against the ban and clearly does not see it as posing a problem only for democracies. Officials in both Washington and Moscow seek to diminish the significance of the treaty, and they would not be happy if it is eventually ratified by most of the 122 countries that have signed it and publics press some of the major governments that have resisted it to join them. This would delegitimize nuclear weapons in the eyes of a large portion of people everywhere. Russian President Vladimir Putin, for example, would not be pleased to see a weapon that he likes to wave about regarded as anathema by the rest of the world.

Moreover, were this to become the dominant view in most of the countries without nuclear weapons and even a few with such weapons, Russian authorities – including the military – would be concerned that the attitude would soon cross Russian borders. This does not mean that they would fear, let alone permit, a large

organized groundswell. But as with climate change and environmental issues, Russian leaders are sensitive to broad public sentiments, even if amorphous.⁴⁰ Nevertheless, in the immediate future, the United States and other democracies are likely to feel most acutely the pressure of pro-ban activists. I have suggested several ways they might engage the movement constructively.

Formal arms control has been an important tool of nuclear restraint and its loss will be felt. Likely someday, it will revive. In the meantime, even without treaties, nuclear-armed states can take numerous steps, both unilaterally and cooperatively, to reduce the risk of nuclear war. In the end, it is in the fundamental interest of the United States to pursue measures of nuclear restraint and responsibility, jointly with Russia and China if possible, and unilaterally if necessary. The United States could usefully begin by publicly reaffirming the importance of the seventyfour-year tradition of nonuse. U.S. leadership in demonstrating restraint and responsibility might help nudge the world toward a retreat from nuclear confrontation. Of course, it might not work, but the alternative, an unrestrained nuclear arms race, seems worse.

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ENDNOTES

- ¹ This notion explicitly invokes the concept of the responsibility to protect, adopted by the UN Security Council in 2005, which promoted a global dialogue to develop criteria for military intervention to prevent mass atrocity crimes.
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- ³ Scott D. Sagan, "Shared Responsibilities for Nuclear Disarmament," *Daedalus* 138 (4) (Fall 2009): 157–168.
- ⁴ A State Department official commented to me in 2014 regarding the humanitarian campaign, "Who are they to delegitimize OUR nuclear weapons?"
- ⁵ Michael J. Mills, Owen B. Toon, Julia Lee-Taylor, and Alan Robock, "Multidecadal Global Cooling and Unprecedented Ozone Loss Following a Regional Nuclear Conflict," *Earth's Future* 2 (4) (2014): 161–176.
- ⁶ Raymond Jeanloz, "Long-Range Effects of Nuclear Disasters," in *The Nuclear Enterprise*: *High-Consequences Accidents*: *How to Enhance Safety and Minimize Risk and Nuclear Reactors and*

Weapons, ed. George P. Shulz and Sidney D. Drell (Stanford, Calif.: Hoover Institution Press, 2012), 107–126.

- ⁷ Beth A. Simmons, *Mobilizing for Human Rights: International Law in Domestic Politics* (Cambridge : Cambridge University Press, 2009), 24–36.
- ⁸ Elaine Scarry, *Thermonuclear Monarchy: Choosing between Democracy and Doom* (New York : W. W. Norton, 2014).
- ⁹ See Rebecca K. C. Hersman and William Pittinos, *Restoring Restraint: Enforcing Accountability for Users of Chemical Weapons* (Washington, D.C.: Center for Strategic and International Studies, 2018).
- ¹⁰ Michael Krepon, ed., *Nuclear Risk Reduction in South Asia* (London: Palgrave MacMillan, 2004).
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- ¹² UN Secretary-General António Guterres has endorsed the joint statements by Reagan and Gorbachev that "a nuclear war cannot be won and must never be fought," adding that "any effort to expand the possible range of situations in which nuclear weapons are designed to be used could be destabilizing and jeopardizes the 72-year practice of non-use." United Nations Office for Disarmament Affairs, *Securing Our Common Future: An Agenda for Disarmament* (New York: United Nations Office for Disarmament Affairs, 2018), https://front.un-arm.org/documents/SG+disarmament+agenda_1.pdf.
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- ¹⁵ For this suggestion, see Lewis Dunn, "The Strategic Elimination of Nuclear Weapons : An Alternative Global Agenda for Nuclear Disarmament," *The Nonproliferation Review* 24 (5–6) (2017): 427–428.
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- ²⁹ Ibid., 110.
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