

Russia's Nuclear Weapons in a Multipolar World: Guarantors of Sovereignty, Great Power Status & More

Anya Loukianova Fink & Olga Olikier

At a time of technological and political change in the international security environment, Russia continues to view nuclear weapons as guarantors of peace and security among great powers. Nuclear weapons also assure Russia's own great-power status and mitigate uncertainty in an emerging multipolar order. In a world where the United States pursues improved missile defense capabilities and appears to reject mutual vulnerability as a stabilizing factor, Moscow views its modernized nuclear arsenal as essential to deter Washington from a possible attack on Russia or coercive threats against it. Some elites in Russia would like to preserve existing arms control arrangements or negotiate new ones to mitigate a weakening infrastructure of strategic stability. At the same time, however, they seem skeptical that the United States is willing to compromise or deal with Russia as an equal. Meanwhile, multilateral arms control appears to be too complex a proposition for the time being.

The world may be changing, but Russia's leaders see nuclear weapons much as their Soviet predecessors did: as guarantors of peace and security among great powers. A modernized nuclear arsenal is critical to Moscow's effort to maintain strategic deterrence, which relies as well on capable conventional weapons to ensure potential adversaries eschew aggression. Russia also views its nuclear arsenal as a source of continuing power and influence. As the geostrategic context evolves, Russia wants to protect and grow its global standing and its ability to respond to emerging threats. As global power balances shift and new technologies emerge, the ways that nuclear weapons fulfill these tasks may change as well. But Russians expect that, one way or another, nuclear weapons will remain important.

For the time being, Moscow sees deterrence of the United States as a primary national security challenge. The Kremlin believes that Washington is unwilling to accommodate a politically, economically, and militarily strong Russia as a fellow great power. It also views the United States as a rule-breaker that has destabilized countries around the world. Moscow fears a potential future conflict in which the

West seeks to coerce or destroy Russia, using all tools of national power, including its military.

Military threats, including from U.S. strategic conventional and nuclear capabilities, mean that nuclear weapons remain central to Russia's deterrence considerations, and that America is at the core of Russian nuclear planning. Russian concerns focus on the U.S. forces' ability to carry out a disarming or a decapitating strike. They also extend to the possibility of U.S. and/or NATO air strikes on critically important Russian targets, which could leave Russia with no option but to resort to nuclear use. Meanwhile, U.S. planners' worst-case scenarios are of a Russian preemptive limited nuclear strike undertaken for military advantage. The combination of these competing perceptions in Moscow and Washington may create dangerous escalatory dynamics in a crisis.

This danger is heightened because long-standing U.S.-Russian cooperation to manage nuclear threats has all but collapsed. If New START (Strategic Arms Reduction Treaty) is not extended before its expiration in 2021, and the United States remains dismissive of a substantive dialogue on a broad set of strategic stability issues with Russia, prospects for future bilateral agreements are dim. While the emerging multipolar system may have the potential for new cooperative structures, it also holds even greater threats to international security.

Like many of their counterparts around the world, Russian foreign policy elites believe that a unipolar system centered on the United States is evolving into a multipolar or polycentric configuration. For now, the United States remains the most powerful pole, but its relative power is declining, and that of others is growing. But if experts and laypeople around the world now talk of multipolarity, it has been a thread in Russian writing and rhetoric for at least the last twenty-five years. A decade ago, multipolarity was what Russia hoped for. Today, those hopes appear to be coming true.¹

According to Russian analysts and officials, the emerging order is unstable because it lacks new "rules of the game," while the old rules are being broken or discarded. But if Western analysts see the old rules as those of a "liberal international order," Russian analysts and officials appear to be harkening back to the rules of the post-World War II era or even the Concert of Europe. They portray the United States as a serial violator of those rules through the use of political, economic, and military power to "pressure" states and impinge on their sovereignty. In President Vladimir Putin's words, "violating rules is becoming a rule."²

The global shift away from unipolarity has created space for Russia to reassert itself on the world stage. Moscow has emerged as a selective defender of sovereignty from the Middle East to South America (albeit not when it comes to Georgia or Ukraine, or presumably other countries whose sovereignty may conflict with Russia's perceived interests). Russia's willingness to agree to disagree with

partners has ensured that it is able to enjoy good relations with Iran, Israel, and Saudi Arabia, as well as with India and Pakistan. It has sought to increase its links to Asia and strengthen and deepen cooperation with China.³ Russian public opinion surveys suggest that Russians believe that their country's use of military force in Ukraine and Syria and its assertiveness abroad have increased Russia's importance in the world.⁴

Many Western analysts would argue that Russia openly violates rules or even "raids" the international system.⁵ But even if some Russians might privately agree, much of the political-military establishment in Russia believes that because the United States is the worst offender, anything that Russia does is turn-about, and thus fair play. As Russia's Chief of the General Staff Valeriy Gerasimov has stated, U.S. policies have caused Russia to "create a threat in response to threats."⁶

This negative view of American foreign policy combined with U.S. rhetoric regarding Russia has persuaded Moscow that Washington intends to weaken or even destroy Russia's sovereignty and statehood. Relations with the United States and European Union countries have spiraled downward since Russia's 2014 annexation of Crimea and military actions in Eastern Ukraine, and the resulting U.S. and EU economic sanctions. Tensions have been further exacerbated by accusations of Russian meddling in Western elections, including the 2016 U.S. presidential election.

From a Russian perspective, all of this is treated as part and parcel of a concerted effort to undermine Moscow. Russia's Foreign Minister Sergey Lavrov has argued that U.S. political and economic pressure has pushed Russia "to the periphery of the process" in Europe, resulting in a disruption of the "European balance."⁷ NATO, in turn, is viewed as "nothing more than an instrument of U.S. military policy" and an obstacle to improving Russia's relations with Europe.⁸

The Russian public agrees. According to Levada Center's independent public opinion polling in early 2019, around 56 percent of Russian respondents had negative views of the United States. While these numbers had dropped to 40 percent by November of that year, Russians are anxious about a potential conflict with the West and express concern about their country's international isolation.⁹ In focus groups, some have reportedly argued that Russia was already in the "cold, preliminary phase" of a third world war.¹⁰

In this environment of global change and heightened threats, nuclear weapons play an important role in preserving Russian sovereignty and statehood, while deterring regional and large-scale conflict. At the strategic level, Russia's nuclear triad, which consists of nuclear-tipped road-mobile and silo-based intercontinental ballistic missiles (ICBMs) as well as missiles delivered by submarines and long-range bombers, maintains mutual deterrence with the United States. These

forces have undergone extensive modernization over the last two decades in what Russian officials argue is an effort to maintain parity with the U.S. nuclear arsenal and to shed Soviet legacy systems. Both U.S. and Russian forces are bound by numerical limits and tracked by both sides through an intrusive reciprocal verification and transparency arrangement under New START. They are also observable through national technical means, with which both sides have pledged not to interfere. This verifiable balance is the cornerstone of present-day “strategic stability” between the United States and Russia.

According to Russia’s declaratory policy, strategic nuclear forces are intended for a second strike that would inflict unacceptable damage on an aggressor. Russia would launch this retaliatory strike when its early-warning systems have detected an incoming strategic nuclear missile attack (*otvetno-vstrechnyi udar*) or an adversary’s nuclear strikes have already taken place on Russian territory (*otvetnyi udar*). As Putin articulated the Russian strategic posture in October 2018:

Only when we know for certain – and this takes a few seconds to understand – that Russia is being attacked we will deliver a counter strike. This would be a reciprocal counter strike. Why do I say “counter”? Because we will counter missiles flying towards us by sending a missile in the direction of an aggressor. Of course, this amounts to a global catastrophe but I would like to repeat that we cannot be the initiators of such a catastrophe because we have no provision for a pre-emptive strike.¹¹

Russia nurtures long-standing concerns about the vulnerability of its ability to engage in nuclear retaliation in the face of evolving U.S. capabilities and Washington’s deployment of strategic assets worldwide. Officials and experts in Moscow fear that the combination of U.S. nuclear, conventional counterforce, prompt-global-strike, and missile defense, as well as space, intelligence, surveillance, and reconnaissance capabilities that would track Russia’s mobile ICBMs, could eventually enable the United States to carry out a disarming or decapitating first strike on Russia, with Russia’s retaliatory strike prospectively absorbed by U.S. missile defenses. They read U.S. policy and planning as seeking nuclear superiority or, worse, conventional superiority that obviates the need for the United States to rely on nuclear weapons to defeat Russia. In this regard, Putin has argued that the United States is pursuing a “unilateral military advantage.”¹²

The U.S. decision to withdraw from the 1972 Anti-Ballistic Missile (ABM) Treaty in 2002, coupled with the inability of the United States, NATO, and Russia to agree on missile defense cooperation or transparency, has impacted Russian nuclear force requirements. While Western analysts have often discounted Russia’s fears about U.S. missile defense, Putin’s March 2018 speech illustrated the extent to which Russia has factored these evolutionary U.S. and allied capabilities into its nuclear modernization. Every single one of Russia’s new ICBM systems – the Yars,

the Sarmat, and the Avangard hypersonic glide vehicle currently placed on the SS-19 ICBM – are touted by officials for their ability to overcome U.S. missile defense.¹³ Other “exotic” systems like the nuclear-powered and nuclear-armed Burevestnik cruise missile also suggest pervasive Russian concerns about the ability to retaliate, as do continued rumors that the automated-control nuclear retaliatory Perimetr system, created by the Soviet Union, still exists.

Over the last decade, Russia has focused on pursuing “strategic deterrence” (*strategicheskoe sderzhivanie*): a comprehensive political-military approach to countering external threats and defending national security interests. Strategic deterrence is meant to operate in peacetime and wartime. It relies on a spectrum of capabilities including nuclear weapons, conventional forces, and nonmilitary tools, such as information.

The “non-nuclear deterrence” portion of Russian strategic deterrence, which includes, among others, general purpose forces and precision-strike systems, is a point of pride for the Russian military. The 1990s saw persistent underinvestment in conventional capabilities as Russia was dealing with economic instability, pulling back (formerly Soviet) forces stationed abroad, and engaging in extensive arms control cuts and demobilization, while also responding to post-Soviet conflicts. But as funds flowed back into military coffers, a brief period of doctrinal reliance on the nuclear arsenal to deter all threats ended in the early 2000s, falling to arguments that threats of nuclear escalation were disproportionate and thus incredible in crisis and conflict situations that Russia was more likely to encounter. And while military reform was fitful, the performance of Russian armed forces during the 2008 Russo-Georgian war served as a wake-up call. Although Russia won, it was embarrassed by how its forces fought, and finally took steps to make investments count.

Today, Russia is able to bring its potent precision-strike, air/missile defense, electronic warfare, and cyber capabilities to bear against any would-be adversary. Conventional precision-strike weapons, especially the Kalibr family of cruise missiles extensively used in Russian military operations in Syria, have provided Russian military planners with previously unavailable – but long-desired – options. They believe that these systems make it possible to use threats or inflict limited damage to an opponent’s critically important military targets and economic and other infrastructure, including for escalation management. Some analysts discuss the possibility of similar kinetic signaling in the space domain.¹⁴ Additionally, Russia’s air/missile defense, electronic warfare, and cyber systems are intended to disorganize and deny a would-be adversary superiority in the air and information domains, especially in the critical “initial period of war.” Most of these capabilities have been battle-tested, demonstrated, and thus arguably made credible as a deterrent.

Russian emphasis on advanced conventional systems, initially driven by fears of U.S. and NATO capabilities, has evolved over the last three decades. The Russian military closely watched the performance of U.S. precision-strike systems during the U.S. offensive against Iraq during the 1991 Gulf War, and saw in it the future of war. The U.S. and NATO air strikes during the conflict in the former Yugoslavia in 1999 led Russian planners and officials to conclude that a potential “aerospace war” could be conducted against them as well. Since then, airpower has played key roles in several interventions by the United States and its allies. This, combined with the fact that these interventions resulted in state collapse and/or ongoing civil wars, have led Russian political and military leaders to describe both the tactics and the results as America’s *modus operandi*, and a prospective threat to Russia. The experience of the Arab Spring has added fears of local social media manipulation to heightened internal instability and make a target country more vulnerable to attack. Meanwhile, the continued expansion of NATO infrastructure closer to Russian borders has seemingly fed into historical Russian insecurities about a lack of strategic depth.

As evident in Russian military doctrine, “regional” and “large-scale” conflict scenarios in which Russia is a victim of Western aggression form a problem set that has bedeviled Russian military planners since 1999. When planners define their scenarios for these wars, they expect that U.S. and/or NATO forces will carry out conventional cruise-missile strikes on critically important Russian targets, potentially with little advance warning. Among the critical targets Russia expects to be hit are those that form its nuclear deterrent: that is, its ability to strike back at the United States. It is not that Russia’s military analytical establishment believes that Russian strategic nuclear forces are at present truly vulnerable to a disarming U.S. conventional strike. Russia’s military modelers know that such a strike would be neither quick nor easy.¹⁵ At the same time, however, any Western strikes on Russian military targets expected as part of a conventional fight would threaten Russian strategic assets, including radar, early warning, and command and control infrastructure, and weaken Russia’s ability to carry out strategic nuclear missions.¹⁶ They could also hit Russian population centers as well as proximate hazardous facilities, with effects comparable to the use of weapons of mass destruction.

These scenarios create the context for Vladimir Putin’s comments, cited above, that Russia will launch its nuclear forces as soon as it is confident that it is under attack. Russian written declaratory nuclear policy, as outlined in the 2010 and 2014 military doctrines, states that Russia will use nuclear weapons “in response to the use of nuclear and other types of weapons of mass destruction against it and/or its allies, as well as in the event of aggression against the Russian Federation with the use of conventional weapons when the very existence of the state is in jeopardy.”¹⁷

In the context of an escalating conflict, U.S. strikes on Russia, whether with nuclear or conventional weapons, would almost certainly be perceived as threatening the very existence of the state.

Are there scenarios for Russian nuclear use short of a large-scale strategic exchange? Russia, after all, maintains a significant arsenal of non-strategic nuclear weapons. It includes a number of dual-capable systems, such as the aforementioned precision-strike cruise missiles and air/missile defense systems that could perform nonstrategic nuclear missions. In the wake of the Ukraine crisis, Western analysts have pointed out statements made by Russian officials that seem to highlight the dangers presented by Russian nuclear weapons, and noted increased Russian exercises, potentially with nonstrategic nuclear weapons.¹⁸

Russian nonstrategic nuclear weapons are a topic of extensive debate among the Western analytical community, and even the authors of this essay diverge on this issue. A number of prominent Western analysts, including Brad Roberts in this volume of *Daedalus*, argue that Russia envisions a fruitful first-and-limited-use of nuclear weapons, an approach they describe as an “escalate to de-escalate” or “escalate to win” doctrine. These analysts are especially concerned about the prospect of Russian territorial aggression against a NATO ally, followed by a limited nuclear strike to prevent the United States and its NATO allies from coming to the ally’s rescue. They argue that the United States currently does not have limited nuclear options that are sufficiently flexible, tailored, or survivable to deter Russia from engaging in this behavior.¹⁹

Offensive use of nuclear weapons seems misaligned with Russia’s formal doctrine, which paints nuclear use as primarily a deterrent or defensive. Putin has taken pains to rebut the first-use argument, including when he said in 2016: “nuclear weapons are a deterrent and a factor of ensuring peace and security worldwide. They should not be considered as a factor in any potential aggression, because it is impossible, and it would probably mean the end of our civilization.”²⁰ Some analysts have argued that open-source analysis of exercises with dual-capable systems offers only ambiguous evidence, because they could be performing in conventional or nuclear roles.²¹ There is also little evidence that Russia views NATO’s collective defense guarantees to its members as in any way incredible or that it is willing to risk the wrath of U.S./NATO conventional and nuclear capabilities to test these guarantees. If anything, Russia’s fear of NATO membership for Ukraine suggests it places real faith in the alliance and its security commitments.

The prospect of Russian nonstrategic nuclear use, or nuclear use in regional deterrence, is deliberately shrouded in ambiguity. To make sense of it, some analysts point to Russian military journals, where Russian analysts have debated the use of nonstrategic nuclear weapons during a conflict. Some of those arguments are very

similar to the “escalate to de-escalate” strategies described by Western authors, although they posit Russia as responding to aggression, not initiating it.

There is clearly a diversity of opinions across the Russian military-analytical community on this issue, and there has been for some time. Russia dropped the Soviet Union's pledge not to use nuclear weapons first in 1993, hoping to leverage nuclear deterrence against a broader range of threats. In the decade that followed, although some advocated for a greater nuclear role, other experts and officials cautioned that nuclear weapons alone could not solve all of Russia's problems and that excessive reliance upon them was dangerous.²² The discussion of nuclear use in Russia's 2000 military doctrine looked a bit more like “escalate to de-escalate”: Russia might use nuclear weapons in the event of “large-scale aggression by conventional weapons in situations deemed critical to the national security of the Russian Federation.”²³ Just before the 2010 doctrine was issued, Russia's Security Council Secretary Nikolai Patrushev promised that Russia would not rule out preemptive nuclear strikes, including in local conflict.²⁴ Because the final text of the 2010 doctrine, cited above, raised rather than lowered the bar for nuclear use, this may suggest that those arguments failed to hold sway with senior civilian leaders.²⁵ The 2014 doctrine, which added references to non-nuclear deterrence, reflected Russia's desire, long championed by some experts, to have something more credible and effective at hand than nuclear threats alone.²⁶

A 2017 doctrinal document from the Russian Navy, *Fundamentals of the State Policy of the Russian Federation in the Field of Naval Operations for the Period Until 2030*, is the only recent official publication that explicitly addresses nonstrategic nuclear weapons. It seems to fall somewhere in between notions of preemption and the hard line drawn in the military doctrine. It states that “during the escalation of military conflict, demonstration of readiness and determination to employ nonstrategic nuclear weapons capabilities is an effective deterrent” and notes that indicators of the effectiveness of state naval policy include, among others, “the capability of the Navy to damage an enemy's fleet at a level not lower than critical with the use of nonstrategic nuclear weapons; [and] the capability of the Navy to apply naval strategic nuclear forces in any situation.”²⁷ Arguably, critical damage to an entire enemy fleet could imply something far greater than de-escalation.

It is also plausible that nonstrategic nuclear weapons could play an important role in signaling in crisis. In peacetime, Russia's nonstrategic nuclear warheads, with the exception of some naval systems, are located in central storage.²⁸ If Moscow thinks conflict is imminent, it may signal determination by moving nonstrategic nuclear warheads from central storage, as well as go through other nuclear alerting sequences, including of its strategic forces (something that Russia did not do during the Ukraine conflict). Such actions should be expected as an integral part of Russian efforts to communicate the stakes and prevent a conflict from

breaking out or to curtail its progression, even as they might in themselves threaten crisis stability.

In short, the Russian military-analytical community may not be in agreement on what their nonstrategic nuclear weapons should be for. Formal doctrine, however, is not “escalate to de-escalate.” The emphasis in the naval doctrine on “demonstration of readiness and determination” may be telling, particularly in a signaling context. It seems plausible that the main purpose of Russian nonstrategic nuclear weapons is to provide the Russian political leadership with a range of flexible options and to help them maintain an environment of ambiguity that can buttress overall Russian deterrence.

The Trump administration’s 2018 Nuclear Posture Review signaled to Russia that Washington still puts a premium on nuclear weapons. Russians also read it as the United States lowering its own nuclear threshold. In Putin’s March 2018 speech, he cited a reduced U.S. nuclear threshold and explicit discussion of limited nuclear use, contrasting that to Russian military doctrine. He also noted that even a limited nuclear attack is a nuclear attack.

We are greatly concerned by certain provisions of the revised nuclear posture review, which expand the opportunities for reducing and reduce the threshold for the use of nuclear arms.... What is written is that this strategy can be put into action in response to conventional arms attacks and even to a cyber-threat. I should note that our military doctrine says Russia reserves the right to use nuclear weapons solely in response to a nuclear attack, or an attack with other weapons of mass destruction against the country or its allies, or an act of aggression against us with the use of conventional weapons that threaten the very existence of the state. This all is very clear and specific. As such, I see it is my duty to announce the following. Any use of nuclear weapons against Russia or its allies, weapons of short, medium or any range at all, will be considered as a nuclear attack on this country. Retaliation will be immediate, with all the attendant consequences. There should be no doubt about this whatsoever.²⁹

It is, therefore, plausible that Russia seeks a credible capability to threaten the use of nonstrategic nuclear weapons in an escalating regional or large-scale conflict because it sees the prospective escalation of that conflict as endangering Russia’s very existence. That is, if Russia thinks war with the United States is imminent, it might signal possible nonstrategic use – not to win, but to avoid losing a war for its survival.

However, Russia’s capacity to signal effectively is hampered by its own past efforts to use its nuclear arsenal coercively. Statements by various Russian officials reminding the world of Russia’s nuclear status have several times sounded like threats, not against the United States, but against a variety of non-nuclear countries.³⁰ Taken together, they suggest, if not an interest in preemption, then a

willingness to use the threat of preemption to coerce. If threats such as these are taken either too seriously or not seriously enough, they further heighten the risks of escalation.

Does Moscow believe that it can manage nuclear escalation? Vladimir Putin has consistently communicated that he believes escalation – horizontal or vertical – in a military conflict with the United States and NATO could not be easily limited. Russian military planners, some of the authors in Russian military journals, and perhaps those of the naval strategy might disagree.

Based on her readings of the military journals, one of the authors of this essay, Fink, thinks that the Russian military may have options to engage in limited use of nonstrategic nuclear weapons in regional and large-scale conflicts. These options would be integral to the credibility and flexibility of Russia's strategic deterrence. The other author of this essay, Olikier, agrees that this is possible but sees use of nonstrategic nuclear weapons in the scenarios described by Western analysts as divergent from overall Russian doctrine and Vladimir Putin's own repeated statements. She therefore believes that the conditions for such use would likely be very limited, for example, to cases of actual or expected attacks on Russia itself.

Back in 1994, Makhmut Gareev, former deputy chief of the general staff and the *éminence grise* of Russian military thought, argued that even if politicians see nuclear weapons as purely existing to deter, planners plan for conflict and, thus, potentially increase the prospect of use.³¹ Moreover, Russian expectations that war with the United States will soon enough be existential could be self-fulfilling. If U.S./NATO forces are expected to threaten Russia's nuclear deterrent, Russia must act while it still has one. At this point, the question becomes whether those who believe it is worth trying to manage escalation can convince the leadership that, in the event of a crisis, limited nuclear use is worth attempting, or if those who believe this will mean the end of Russia are the ones whose arguments carry more weight. In either case, if U.S./NATO forces are intent on demonstrating resolve in what they see as regional conflict, while Russians fear an existential attack and try to signal its repercussions, Putin's nightmare scenarios become increasingly likely.

The 2019 death of the Intermediate-Range Nuclear Forces (INF) Treaty may increase the danger even further. Two experienced Russian analysts, Sergey Rogov and retired general and former Chief of Staff of the Soviet Strategic Rocket Forces Viktor Esin, both of the Institute for USA and Canada Studies, have argued that the U.S. deployment of intermediate-range weapons in Europe would force Russia to shift its nuclear posture to preemption, for fear of a U.S. missile attack from European soil.³²

Indeed, the demise of the INF Treaty has served as an unfortunate backdrop for the collapse of the extensive architecture built by Moscow and Washington to

reduce nuclear dangers. In the Russian military establishment, the treaty was long unpopular: Mikhail Gorbachev agreed to it against the recommendations of his military advisers. Since then, Russian complaints have centered on the fact that other states, such as China, were not bound by the treaty, although proposals to include China in a revised treaty are recognized as unrealistic. Reportedly, Russia even proposed to the United States mutual withdrawal from the INF in 2007.³³ More recently, in the face of U.S. accusations that Russia was violating the treaty, Russian officials and scholars have spoken in favor of it.

Today, with the INF Treaty dead, Moscow is skeptical about the prospects for, if not the value of, arms control. To be sure, Russia's foreign policy establishment still sees it as a critical mechanism for attaining strategic stability and limiting U.S. strategic capabilities. In fact, Putin's speech in March 2018 could be understood as an invitation to arms control, even if it was not interpreted thus in the West. But Russians do not think the U.S. commitment to the process, in question since the U.S. withdrawal from the ABM Treaty, exists any longer. At the same time, the United States' choice to withdraw from the INF Treaty has allowed Russia to claim the high ground and point to Washington as the rule-breaker, compounding its "original sin" of ABM Treaty withdrawal. If talks were to occur, the Russians do not expect that the United States will listen to their concerns or treat them as equals.³⁴ Thus, Moscow pays lip service to Russia's implementation of existing agreements, while blaming the United States for a lack of progress.

This suits some quarters well. Russia's military establishment has been skeptical over the last decade about new agreements that would result in further cuts to Russian strategic or nonstrategic nuclear weapons. Some hold that the deeper cuts on both sides sought by the Obama administration were intended to undermine Russia's geopolitical status or to make the world safe for U.S. conventional superiority. The inability to resolve Russia's concerns about U.S. missile defense – through either U.S./NATO-Russian cooperation or a U.S.-Russian legal agreement – has only served to retrench these beliefs.

Russia thus does not support additional cuts to its nuclear forces or limits on Russian force structure. It is also not interested in deeper transparency, such as U.S.-Russian military cooperation on nuclear warhead security, for transparency's sake. According to experts, Moscow is willing to discuss limits on new and emerging technologies, including the weapons Vladimir Putin described in March 2018, of which the Sarmat and Avangard missiles would be covered by New START once deployed. There may also be room for maneuver on other issues, if Moscow is able to negotiate gains of its own. But this would require that the topics Russia has long sought to have on the table are also subject to negotiations. These include missile defense; prompt global strike; the inclusion of "third countries," such as the United Kingdom and France, especially if the

United States seeks further nuclear cuts; and the impact of these issues on strategic stability. Some creative approaches to address Russia's concerns are discussed in the essay by Linton Brooks in this volume.³⁵ As of now, the United States rejects such a model for talks.

If an opening for negotiations were to emerge, there would be no shortage of ideas for how to move forward. Experts have proposed deeper nuclear cuts, ways to integrate precision conventional weapons systems into the bilateral notions of strategic stability, further improvement in nuclear transparency among the P5 (United States, Russia, China, Great Britain, and France), and efforts to expand confidence- and security-building and accident-prevention measures to mitigate the risks of an accident between U.S./NATO and Russian forces. However, none of these ideas has been taken up in earnest by the Russian (or the U.S.) government during the last several years.

For now, Moscow's preference is to maintain existing limits on strategic nuclear weapons as well as the transparency and predictability arrangements under New START. Despite the preference to keep New START, Russian officials had long expressed reservations about doing a "clean extension." Rather, they sought formal discussion of U.S. conversion procedures for bombers and launch tubes on submarines, fearing that the Pentagon's plans allow the United States substantial latitude to reload nuclear weapons onto platforms "converted" for conventional use. While most Russian officials have been careful to say that U.S. conversion plans do not constitute a violation, some have intimated that they might be.³⁶ In December 2019, however, Putin stated that Russia was open to a "clean extension." While Moscow may believe that the treaty will continue to provide for mutual stability, Russia's ability to upload additional warheads on the Sarmat ICBM also serves as a hedge if New START, too, goes away.

Historically, the United States and Russia have been interested in limiting the proliferation of nuclear weapons as well as the missiles that could carry them. Russia has supported diplomatic efforts to reverse and prevent proliferation, particularly those that highlighted its own role. In this context, Russia has generally opposed North Korea's development of nuclear weapons and supported multilateral efforts to contain its program. Russian analysts and authorities view the DPRK's nuclear doctrine as defensive, but some worry that the country's overall weakness could also mean that its nuclear weapons, once developed, might actually be used.³⁷

Moscow has also played an important role in discussions of a WMD-free zone in the Middle East and has maintained relationships with all relevant parties in that process. Presumably, it views the prospect of a collapse of the Joint Comprehensive Plan of Action (JCPOA), to which it is also a party, and efforts by other countries in the Middle East to acquire nuclear weapons with some concern.

As with North Korea, Moscow tends to accept that proliferators seek nuclear capability in order to attain understandable strategic and tactical goals. Thus, preventing proliferation means addressing their insecurities. Russian leadership and elites have been frustrated but not surprised by the Trump administration's position toward Iran as well as its efforts to destroy the JCPOA. Indeed, these U.S. policies have lent credence to the notions that Washington cannot be trusted and that its signature on international agreements is not ironclad.

U.S.-Russian cooperation on issues that used to be above politics for both countries, such as countering nuclear terrorism, is also moribund. The U.S. attitude toward political-technical cooperation with Russia in the wake of the Ukraine crisis is one factor. But the U.S.-Russian nuclear security relationship was already in trouble, with Russia expressing consistent concerns about equality and reciprocity.³⁸ Russia's ultimate opposition to the U.S.-initiated Nuclear Security Summit process and Russian hostility toward U.S. positions in the International Atomic Energy Agency have also negatively shaped the political environment.

Other institutions of arms control and nonproliferation created by the United States and the Soviet Union decades ago are also under threat. U.S. unwillingness to ratify the Comprehensive Nuclear-Test-Ban Treaty (CTBT) has become a Russian talking point, with Lavrov and others arguing that the United States is getting ready to resume nuclear testing.³⁹ In turn, recent U.S. claims that Russia may itself be in violation of the CTBT because it has engaged in prohibited testing activities are concerning.

However, perhaps the one issue on which the United States and Russia agree is their opposition to the Treaty on the Prohibition of Nuclear Weapons, the so-called nuclear weapon ban treaty, as discussed in this volume by Harald Müller and Carmen Wunderlich.⁴⁰ Russia maintains that the agreement fails to account for all issues impacting strategic stability and could damage the Treaty on the Non-Proliferation of Nuclear Weapons.⁴¹

With arms control weakened if not dead, how great is the risk of an arms race? Mindful of Cold War history, Russian political and military officials, including Putin, Gerasimov, and Defense Minister Sergey Shoigu have emphasized to domestic audiences that Russia is not engaged in an arms race, and that it is not pursuing unaffordable military capabilities.⁴² But as Russian experts have argued, Russia's shopping list of modernized strategic nuclear weapons and dual-use systems; its long-range precision, hypersonic, and boost-glide systems; and Russia's own development of air/missile defense is expensive, especially given Russia's critical need to continue to strengthen its general purpose forces.⁴³ This issue deserves closer attention, especially as the United States considers deploying missiles in Asia that were previously banned by the INF Treaty, and as it implements elements of its new strategy of great power competition and addresses

requirements set out in its 2019 Missile Defense Review. As discussed in the essay by Christopher Chyba in this volume, these emerging technologies have the potential to threaten strategic stability.⁴⁴

As a multipolar world emerges, one can envision that unilateral or mutual commitments in specific theaters may become a primary arms control mechanism, rather than treaties that limit numbers. And Russia may come to favor new bans or limits on new and emerging capabilities in time. But bilateral approaches to such questions will not be sufficient, and multilateral arrangements, such as ones proposed in the essay by James Timbie in this volume, are notoriously harder to negotiate than bilateral ones.⁴⁵ However, it's not likely that Russia would be ready for a norms-based "restraint and responsibility" regime, as proposed by Nina Tannenwald in this volume.⁴⁶

Russian security experts have talked about the importance of initiating dialogue with China, or perhaps dialogue that involves both the United States and China. This could cover strategic stability issues generally or hypersonic systems and their impact on strategic stability. Lavrov has recently stated that "the crisis around the INF Treaty clearly shows that progress in nuclear arms reductions can no longer be sustained in the bilateral Russia-U.S. format. It is time that we seriously reflect on how to launch a multilateral process on nuclear arms control based on the principle of common and indivisible security."⁴⁷ Of course, this statement echoes past Russian comments on multilateralizing an INF Treaty follow on. And all of the problems inherent in such an effort remain.

While the Russian government and its more prominent experts continue to reassess the country's role in the changing global order, Russian perspectives on nuclear weapons remain largely in line with those of the past. Russia continues to view its nuclear weapons as primarily intended to deter the United States. While the relationship between the United States and Russia remains openly antagonistic, there is no question that Russian officials and experts will continue to publicly discuss nuclear weapons from that perspective, and this will be reflected in Russian strategy.

As the international system evolves and new alignments take shape, Russian priorities may as well. To be sure, Russia's status and its ability to defend its sovereignty will almost certainly continue to be based in its position as a nuclear-weapon state. However, other capabilities in its statecraft toolkit – from economic to "soft" and political – are bound to grow in importance. Meanwhile, nuclear threats from new sources may shift whom Russia seeks to deter, and how. Important factors could include the evolution of more independent European nuclear policies as the United States steps back from the region. Russia's relationship with China, whose arsenal it currently insists is not a threat, could also shift.

Ultimately, Russian foreign policy experts note that, given the history of controlling weapons after World War I, arms control in a multipolar world is a complicated proposition.⁴⁸ Russia, like all those great powers, is in a position to seek and build constructive pathways and solutions that help regulate the global nuclear (dis)order. Or it can choose to do the opposite.

ABOUT THE AUTHORS

Anya Loukianova Fink is a Research Analyst at CNA and a Research Associate at the Center for International and Security Studies at Maryland (CISSM). She holds a Ph.D. in international security and economic policy from the University of Maryland, College Park. The views expressed here are her own.

Olga Oliker is Director of the Europe and Central Asia Program at the International Crisis Group and an adjunct professor at the Johns Hopkins University School of Advanced International Studies (SAIS). She holds a Ph.D. in political science from the Massachusetts Institute of Technology. The views expressed here are her own.

ENDNOTES

- ¹ For a discussion of the evolution of Russian writings and official documents, see Andrey Kortunov, "Between Polycentrism and Bipolarity," *Russia in Global Affairs*, March 26, 2019, <https://eng.globalaffairs.ru/number/Between-Polycentrism-and-Bipolarity-19988>.
- ² Vladimir Putin, speech at the St. Petersburg International Economic Forum plenary session, St. Petersburg, Russia, May 25, 2018, <http://en.kremlin.ru/events/president/news/57556>.
- ³ Alexander Gabuev, "Why Russia and China Are Strengthening Security Ties," *Foreign Affairs* 97(5) (2018), <https://carnegie.ru/2018/09/24/why-russia-and-china-are-strengthening-security-ties-pub-77333>.
- ⁴ Dina Smeltz, Lily Wojtowicz, and Stepan Goncharov, "Despite Last Year's Expectations, Publics Sense Strains in U.S.-Russia Relations," Chicago Council on Global Affairs, February 7, 2018, <https://www.thechicagocouncil.org/publication/despite-last-years-expectations-publics-sense-strains-us-russia-relations>.
- ⁵ For an argument about raiding, see Michael Kofman, "Raiding and International Brigandry: Russia's Strategy for Great Power Competition," War on the Rocks, June 14, 2018, <https://warontherocks.com/2018/06/raiding-and-international-brigandry-russias-strategy-for-great-power-competition/>.
- ⁶ Valeriy Gerasimov, "Vektory Razvitiia Voennoi Strategii [Vectors of the Development of Military Strategy]," speech to the Academy of Military Sciences, March 4, 2019, <http://redstar.ru/vektory-razvitiya-voennoj-strategii/>.

- ⁷ Sergey Lavrov, "Speech by Sergey Lavrov, Minister of Foreign Affairs of the Russian Federation," in *Primakov Readings 2018: Hedging Risks of Unstable World Order*, Collection of Materials for International Forum 29–30.05.2018 (Moscow: Institute of World Economy and International Relations, 2018), https://www.imemo.ru/files/File/ru/publ/2018/2018_30.pdf.
- ⁸ Ruslan Pukhov, "NATO Is the Obstacle to Improving Russian-Western Relations," *Defense News*, March 28, 2019, <https://www.defensenews.com/opinion/commentary/2019/03/28/nato-is-the-obstacle-to-improving-russian-western-relations/>.
- ⁹ "Otnosheniie k Stranam [Attitudes toward Countries]," Levada Center, <https://www.levada.ru/indikatory/otnoshenie-k-stranam/>.
- ¹⁰ See "Bolee Poloviny Rossiian Sochli Real'noi Ugrozu Voiny s Drugimi Stranami [More than Half of Russians Assess Real Threat of War with Other Countries]," Levada Center, January 30, 2019, <https://www.levada.ru/2019/01/30/bolee-poloviny-rossiian-sochli-realnoj-ugrozu-voiny-s-drugimi-stranami/>; and "Rossiane Chuvstvuiut, Chto Vkhodiat v Tret'iu Mirovuiu [Russians Feel Third World War Is Beginning]," Levada Center, April 16, 2018, <https://www.levada.ru/2018/04/16/rossiyane-chuvstvuyut-chto-vhodyat-v-tretyu-mirovuyu/>.
- ¹¹ Transcript of the meeting of the Valdai International Discussion Club, Sochi, Russia, October 18, 2018, <http://en.kremlin.ru/events/president/news/58848>.
- ¹² Vladimir Putin's Address to the Federal Assembly, Moscow, Russia, March 1, 2018, <http://en.kremlin.ru/events/president/news/56957>.
- ¹³ Vladimir L. Leontiev, "Message Received. Attempt at Distance Communication with the U.S. State Department," *Independent Military Review*, April 12, 2019, translation available at Ministry of Foreign Affairs of the Russian Federation, http://www.mid.ru/web/guest/foreign_policy/international_safety/regprla/-/asset_publisher/YCxLFJnKuD1W/content/id/3613093; and V. F. Lata, "Present and Future of the Strategic Missile Forces as the Guarantor of the Defense and Security in Russia," *Vestnik Akademii Voennykh Nauk*, February 2018, <https://dlib.eastview.com/browse/doc/51523032>.
- ¹⁴ A. A. Kokoshin, "Strategic Nuclear and Nonnuclear Deterrence: Modern Priorities," *Herald of the Russian Academy of Sciences* 84 (2) (2014).
- ¹⁵ See Dmitriy Akhmerov, Evgeniy Akhmerov, and Marat Valeev, "Po Bystromy Ne Poluchit'sia [Quickly Won't Work]," *Voenna-Promyshlennyy Kur'er*, October 19, 2015, <https://vpk-news.ru/articles/27617>.
- ¹⁶ Alexey Arbatov, Vladimir Dvorkin, and Petr Topychkanov, "Entanglement as New Security Threat: A Russian Perspective," in *Entanglement as a New Security Threat: A Russian Perspective*, ed. James Acton (Washington, D.C.: Carnegie Endowment for International Peace, 2017), <https://carnegie.ru/2017/11/08/entanglement-as-new-security-threat-russian-perspective-pub-73163>.
- ¹⁷ "Voennaia Doktrina Rossiiskoi Federatsii [Military Doctrine of the Russian Federation]," February 5, 2010, <http://www.kremlin.ru/supplement/461>; and "Voennaia Doktrina Rossiiskoi Federatsii [Military Doctrine of the Russian Federation]," *Rossiyskaya Gazeta*, December 25, 2014, <https://rg.ru/2014/12/30/doktrina-dok.html>. See translation of the text of the 2010 doctrine at https://carnegieendowment.org/files/2010russia_military_doctrine.pdf; and translation of the text of the 2014 doctrine at <https://rusemb.org.uk/press/2029>.

- ¹⁸ See Gudrun Persson, ed., *Russian Military Capability in a Ten-Year Perspective – 2016* (Stockholm: Swedish Defense Research Agency, 2016), <https://www.foi.se/rest-api/report/FOI-R--4326--SE>.
- ¹⁹ Brad Roberts, “On Adapting Nuclear Deterrence to Reduce Nuclear Risk,” *Dædalus* 149 (2) (2020).
- ²⁰ Transcript of the meeting of the Valdai International Discussion Club, October 27, 2016, <http://en.kremlin.ru/events/president/news/53151>.
- ²¹ Bruno Tétrais, “Russia’s Nuclear Policy: Worrying for the Wrong Reasons,” *Survival* 60 (2) (2018).
- ²² See translation of the text of the 1993 military doctrine at <https://fas.org/nuke/guide/russia/doctrine/russia-mil-doc.html>. On the debate, see Jacob W. Kipp, “Forecasting Future War: Andrei Kokoshin and the Military-Political Debate in Contemporary Russia. Andrei Kokoshin: Scholar and Bureaucrat” (Fort Leavenworth, Kans.: Foreign Military Studies Office, 1999), <http://www.fas.org/nuke/guide/russia/agency/990100-kokoshin.htm>; “Novyi Sekretar’ Soveta Bezopasnosti Andrei Kokoshin i Ego Proekt Voennoi Reformy [New Security Council Secretary Andrei Kokoshin and His Military Reform Plan],” *Voprosy Bezopasnosti* 5 (1998); Andrei Kokoshin, “Military-Political and Economic Aspects of Reform of the Russian Armed Forces,” *Military Thought*, September 1996; “Interesy Rossii. Makhmut Gareev: Iadernoe Oruzhie v Sovremennom Mire [Russia’s Interests. Makhmut Gareev: Nuclear Weapons in the Modern World],” *Krasnaia Zvezda*, June 29, 1994; Makhmut A. Gareev, “Voina i Voennoe Iskusstvo v Meniaushchemsia Mire [War and Military Art in a Changing World],” *Mezhdunarodnaia Zhizn’* 3 (1994); Makhmut Gareev, “Kontury Vooruzhennoi Bor’by Budushchego [Contours of Future Armed Conflict],” *Mezhdunarodnaia Zhizn’* 4 (1994); Makhmut Gareev, *Esl’i Zavtra Voina* [If War Comes Tomorrow?] (Moscow: Vladar, 1995); and “Novaia Kontseptsiiia Natsional’noi Bezopasnosti Rossii: Vopros Iadernogo Oruzhiia [New Russian National Security Concept: The Question of Nuclear Weapons],” *Voprosy Bezopasnosti* 22 (2) (1998).
- ²³ See translation of the text of the 2000 doctrine at Arms Control Association, “Russia’s Military Doctrine,” https://www.armscontrol.org/act/2000_05/dc3ma00.
- ²⁴ See “Russia Reserves Pre-Emptive Nuclear Strike Right,” Reuters, October 13, 2009, <https://www.reuters.com/article/idUSLD72025>.
- ²⁵ Kokoshin also notes that the threshold war raised in 2010. Kokoshin, “Strategic Nuclear and Nonnuclear Deterrence.”
- ²⁶ See “Voennaia Doktrina Rossiiskoi Federatsii [Military Doctrine of the Russian Federation],” 2014; or a translation of the text of the 2014 doctrine at <https://rusemb.org.uk/press/2029>. For discussion of non-nuclear deterrence, see Kokoshin, “Strategic Nuclear and Nonnuclear Deterrence.”
- ²⁷ *Fundamentals of the State Policy of the Russian Federation in the Field of Naval Operations for the Period Until 2030*, trans. Anna Davis (Newport, R.I.: Russia Maritime Studies Institute, U.S. Naval War College, 2017), [https://dnnlgwick.blob.core.windows.net/portals/0/NWCDepartments/Russia%20Maritime%20Studies%20Institute/RMSI_RusNavyFundamentalsENG_FINAL%20\(1\).pdf?sr=b&si=DNNFileManagerPolicy&sig=fjFDEGWhpd1ING%2FnmGQXqaH5%2FDEujDU76EnksAB%2B1Ao%3D](https://dnnlgwick.blob.core.windows.net/portals/0/NWCDepartments/Russia%20Maritime%20Studies%20Institute/RMSI_RusNavyFundamentalsENG_FINAL%20(1).pdf?sr=b&si=DNNFileManagerPolicy&sig=fjFDEGWhpd1ING%2FnmGQXqaH5%2FDEujDU76EnksAB%2B1Ao%3D).
- ²⁸ Igor Sutyagin, *Atomic Accounting: A New Estimate of Russia’s Non-Strategic Nuclear Forces* (London: Royal United Services Institute, 2012); Pavel Podvig and Javier Serrat, *Lock*

Them Up: Zero-Deployed Non-Strategic Nuclear Weapons in Europe (Geneva: United Nations Institute for Disarmament Research, 2017).

- ²⁹ Vladimir Putin's Address to the Federal Assembly, 2018.
- ³⁰ See Persson, *Russian Military Capability in a Ten-Year Perspective* – 2016.
- ³¹ Gareev, "Voina i Voennoe Iskusstvo v Meniaiushchemsia Mire," 91–98; and Makhmut Gareev, "Kontury Vooruzhennoi Bor'by Budushchego [Countours of Future Armed Conflict]," *Mezhdunarodnaia Zhizn'* 4 (1994): 75–84.
- ³² Oleg Odnokolenko, "General-Polkovnik Vektor Esin: 'Esli Amerikantsy Vse-Taki Nachnut Razvorachivat' Svoi Rakety v Evrope, Nam Nichego Ne Ostanetsia, Kak Ot-kazat'sia Ot Doktriny Otvetno-Vstrechnogo Udara i Pereiti k Doktrine Uprezhdai-ushchego Udara [General-Colonel Viktor Esin: If the Americans Begin Deploying Their Missiles in Europe after All, We Will Have No Choice but to Reject a Launch-Under-Attack Doctrine and Shift to a First-Strike Doctrine]," *Zvezda*, November 8, 2018, <https://zvezdaweb.ru/news/t/2018117102-0iaAI.html>; and "Russian Expert Rogov on the Suspension of the INF Treaty: We Can Inflict an Intolerable Blow on the Americans," The Middle East Media Research Institute Special Dispatch No. 7873, February 4, 2019, <https://www.memri.org/reports/russian-expert-rogov-suspension-inf-treaty-we-can-inflict-intolerable-blow-americans>.
- ³³ Amy Woolf, *Russian Compliance with the Intermediate Range Nuclear Forces (INF) Treaty: Background and Issues for Congress* (Washington, D.C.: Congressional Research Service, updated 2019), <https://fas.org/sgp/crs/nuke/R43832.pdf>.
- ³⁴ As Putin stated in his Federal Assembly speech, the West "got the impression" that "there is no point in reckoning with Russia's opinion, [and] it is necessary [for the West] to further pursue ultimate unilateral military advantage in order to dictate the terms in every sphere in the future." Vladimir Putin's Address to the Federal Assembly, 2018.
- ³⁵ Linton F. Brooks, "The End of Arms Control?" *Dædalus* 149 (2) (2020).
- ³⁶ "Riabkov: V Mosckve Schitaiut, Chto SSHA Narushili Dogovor o SNV, Vyvedia iz Zacheta Chast' Nositelei [Ryabkov: In Moscow, They See the U.S. as Having Violated the START Agreement by Removing Some Delivery Vehicles from Their Count]," *bfm.ru*, December 24, 2018, <https://www.bfm.ru/news/402965>; and Andrey Baklitskiy, "Arms Control Is Dead. Long Live Arms Control," Carnegie Moscow Center, March 21, 2019, <https://carnegie.ru/commentary/78651>.
- ³⁷ For varying opinions on North Korea, see Anastasia Barannikova, "O Iadernoi Doktrine KNDR [On North Korea's Nuclear Doctrine]," Russian Council on International Affairs, February 28, 2018, <http://russiancouncil.ru/blogs/dvfu/anastasiya-barannikova-o-yadernoy-doktrine-kndr/>; and Sergey Karaganov and Artyom Kobzev, "Poka Nuzhno Kak Mozhno Zhestche Slerzhivat' SSHA [For Now, We Must Deter the U.S. as Forcefully as Possible]," *Russia in Global Affairs*, May 25, 2016, <http://www.globalaffairs.ru/pubcol/poka-nuzhno-kak-mozhno-zhestche-sderzhivat-SSHA-18184>.
- ³⁸ For positive proposals of an agenda that did not come to pass, see Anton Khlopkov, "Russia's Nuclear Security Policy: Priorities and Potential Areas of Cooperation," Policy Analysis Brief (Muscatine, Iowa: The Stanley Foundation, 2015), <https://www.stanleyfoundation.org/publications/pab/KhlopkovPAB515.pdf>.
- ³⁹ "Statement by H. E. Mr. Sergey Lavrov, Minister of Foreign Affairs of the Russian Federation at the Plenary Session of the Conference on Disarmament, Geneva, March 20,

- 2019,” Permanent Mission of the Russian Federation to the United Nations Office in Geneva, https://geneva.mid.ru/web/geneva_en/international-security-and-disarmament/-/asset_publisher/Gx3Med4zxBAF/content/statement-by-h-e-mr-sergey-lavrov-minister-of-foreign-affairs-of-the-russian-federation-at-the-plenary-session-of-the-conference-on-disarmament-geneva.
- ⁴⁰ Harald Müller and Carmen Wunderlich, “Nuclear Disarmament without the Nuclear-Weapon States: The Nuclear Weapon Ban Treaty,” *Dædalus* 149 (2) (2020).
- ⁴¹ “Rossiia Ne Namerena Prisoedinizt’sia k Dogovoru o Zapreshchenii Iadernogo Oruzhiia [Russia Is Not Planning to Join the Treaty on the Prohibition of Nuclear Weapons],” Russian News Agency TASS, October 2017, <https://tass.ru/politika/4663129>.
- ⁴² As Putin described Russia’s new nuclear capabilities in March 2018, “highly effective but modestly priced.” Vladimir Putin’s Address to the Federal Assembly.
- ⁴³ Alexey Arbatov, “Rossiya i Gonka Vooruzhenii [Russia and the Arms Race],” *Nezavisimoe Voennoe Obozrenie*, April 24, 2016, http://www.ng.ru/stsenarii/2016-04-26/13_race.html.
- ⁴⁴ Christopher F. Chyba, “New Technologies & Strategic Stability,” *Dædalus* 149 (2) (2020).
- ⁴⁵ James Timbie, “A Way Forward,” *Dædalus* 149 (2) (2020).
- ⁴⁶ Nina Tannenwald, “Life beyond Arms Control: Moving toward a Global Regime of Nuclear Restraint & Responsibility,” *Dædalus* 149 (2) (2020).
- ⁴⁷ “Statement by H. E. Mr. Sergey Lavrov.”
- ⁴⁸ Sergey Rogov, remarks in “The ‘New Bipolarity’: A Myth or Reality,” in *Primakov Readings* 2018.