

Status and Strategy in Russian Nuclear Decision-Making

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Abstract: Prestige and strategic goals play a role in Russian nuclear policy. This paper seeks to understand when prestige or strategy is more important. I argue that Russia prioritizes strategic concerns when the strategic environment is more dangerous and prestige when it is safer. A leader's personality also plays an important role, with the influence of prestige increasing when leaders place a significant emphasis on status competition. Finally, I argue that strategic concerns play a greater role than prestige in nuclear policy when conditions favor each, but that prestige concerns can play a role in selecting competing policy options when multiple could address Russian security concerns. While this paper focuses on the nuclear politics of Russia and the Soviet Union, it can provide lessons that apply to a broader range of cases.

Keywords: Arms Control, Nonproliferation, Nuclear Politics, Russia, Status

Concerns regarding prestige and strategic goals play an important role in Russian nuclear policy. Russian perception of strategic stability incorporates both ensuring the ability to launch a retaliatory second strike against a nuclear-armed adversary and maintaining rough parity with the United States.² Moscow's engagement with Washington regarding arms control in the second half of the 20th century and the first two decades of the 21st were driven by strategic imperatives and a desire to maintain interaction with the United States in the one area Russia was still treated as an equal.³ Similarly, both a desire to maintain a nuclear triad as a symbol of Russian status

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² Andrei Kokoshin, "Ensuring strategic stability in the past and present: Theoretical and applied questions," Harvard Belfer Center for Science and International Affairs, June 2011, <https://www.belfercenter.org/sites/default/files/legacy/files/Ensuring%20Strategic%20Stability%20by%20A.%20Kokoshin.pdf>.

³ Angela E. Stent, *The limits of partnership: U.S.-Russia relations in the twenty-first century* (Princeton, NJ: Princeton University Press, 2014).

and a strategic imperative to maintain a retaliatory strike capability vis-a-vis the United States have influenced weapons procurement and force structure decisions.⁴

This paper seeks to understand when nuclear policy is more prestige-driven and when it is more strategy-driven. I argue that Russia prioritizes strategic concerns when strategic competition with its peer nuclear competitor—the United States—is intense, while prestige plays a more central role during periods of amicable U.S.-Russia relations. A leader's preferences also play an important role, with the influence of prestige increasing when leaders that place a significant emphasis on status competition come to power and is reduced when leaders seek to achieve status ambitions through cooperation with the United States. Finally, I argue that strategic concerns play a greater role than prestige in nuclear policy when conditions that favor each—such as intense competition with the United States over security-related issues and the presence of a status leader in the Kremlin—but that prestige concerns can play a role in selecting competing policy options when multiple could address Russian security concerns.

I use multiple case studies of nuclear policy choices across Soviet and Russian history to generate and test this theory. The first set of cases contributes to theory construction, exploring the potential pathways for status and security competition to drive or shape nuclear decision-making. These cases cover a variety of nuclear decisions, including proliferation, modernization, and arms control decisions. I then test my theory across Soviet ICBM development in the late 1950s and the first wave of ICBM modernization in the 1960s.

⁴ Olga Oliker, *Between rhetoric and reality: Explaining the Russian Federation's nuclear force posture* (Ph.D. Diss: Massachusetts Institute of Technology, 2016); Spenser A. Warren, *Security, power, and prestige: Understanding the determinants of Russian Nuclear Modernization under Vladimir Putin* (Ph.D. Diss: Indiana University Bloomington, 2023).

While this paper focuses on the nuclear politics of Russia and the Soviet Union, it can provide lessons that are applicable to a broader range of cases. Scholars have noted strategic interests and status ambitions as important drivers of nuclear policy in other contexts, including the United States, China, India, Pakistan, the United Kingdom, and France. Both factors may also drive proliferation decisions. While certain features of Russian nuclear policy are unique to Russia—or narrowly applicable to Russia and a smaller subset of nuclear-armed states—many strategic and domestic political phenomena are experienced by all or most members of the nuclear club. All nuclear-armed states face variations in the level and nature of threats from rivals. All nuclear-armed states have domestic factions advocating for advancing the greatness of the state. All nuclear-armed states have seen leadership turnover, with new leaders bringing new priorities, operational codes, and varying levels of interest in nuclear policy. By exploring how these elements influenced Russian nuclear policy, this paper generates broadly applicable knowledge that advances our understanding of foreign policy selection and nuclear politics in political science and that can be applied to understand nuclear policy dynamics in other cases better.

The paper's first section reviews the literature on the role of status in Russian foreign policy and nuclear politics, arguing that there is a significant gap in the exploration of status as a driver of nuclear politics after proliferation. The second section outlines the case study methods I employ, describing the diverse case selection method I use for theory generation and testing. The third section uses these diverse cases for theory generation, exploring the role of status and security competition in the Soviet Union's decision to proliferate, Moscow's participation in the Strategic Arms Limitations Talks (SALT) in the 1970s, and Russia's pursuit of novel nuclear weapons after 2002. The fourth section takes the lessons of these cases and uses them to build a

theory for when and how status and security drive nuclear decision-making. The fifth section engages in cross-case studies of modernization.

Status in Nuclear Politics and Russian Foreign Policy

Status is a relative good in international politics.⁵ Other states must also perceive status, with beliefs about power and shared values influencing these perceptions.⁶ States also maintain perceptions of their own status, which may differ from how leaders believe other states perceive them.⁷ Differences between how a state perceives its rightful status and how others perceive its actual status may create status deficits, with status-seeking states willing to engage in risky and costly actions to erase.⁸ Material capabilities play an important role in determining international status, serving as a symbol of advanced status.⁹

States compete for status in international politics, using social mobility, creativity, and competition strategies to enhance others' perceptions of their relative status.¹⁰ Mobility strategies involve emulating high-status groups by adopting their values, norms, practices, or status

⁵ John Harsanyi, *Essays of ethics, social behavior, and scientific explanation* (Dordrecht: Reidel, 1976); Deborah Welch Larson, T.V. Paul, and William C. Wohlforth, "Status and world order," in T.V. Paul, Deborah Welch Larson, and William C. Wohlforth (eds.), *Status in world politics* (New York: Cambridge University Press, 2014); Martin Shubik, "Games of status," *Behavioral Science* 16 (1971); Wohlforth, "Unipolarity, status competition, and great power war," *World Politics* 61.1 (2009): 28-57.

⁶ Marina G. Duque, "Recognizing international status: A relational approach," *International Studies Quarterly* 62.3 (2018): 577-592; William C. Wohlforth, Benjamin de Carvalho, Halvard Leira, and Iver B. Neuman, "Moral authority and status in international relations: Good states and the social dimension of status seeking," *Review of International Studies* 44.3 (2018): 526-546.

⁷ Ted Hopf, *Social construction of international politics: Identities & foreign policies, Moscow 1955 and 1999* (Ithaca, NY: Cornell University Press).

⁸ Jonathan Renshon, "Status deficits and war," *International Organization* 70.3 (2016): 513-550.

⁹ Robert Gilpin, *War and change in world politics* (New York: Cambridge University Press, 1981); Michelle Murray, "Identity, insecurity, and great power politics: The tragedy of German naval ambition before the First World War," *Security Studies* 19.4 (2010): 656-688.

¹⁰ Deborah Welch Larson and Alexei Shevchenko, *Quest for status: Chinese and Russian foreign Policy* (New Haven, CT: Yale University Press, 2019).

symbols.¹¹ Lower-status groups engage in social mobility strategies when they perceive the existing hierarchy as simultaneously permeable and legitimate.¹² States pursue social creativity strategies by attempting to change the characteristics, symbols, or behaviors associated with advanced status.¹³ States engaging in social competition attempt to become equal or superior to a higher-status group by improving their position along the dimensions determining the existing status hierarchy, such as military and economic power in international politics.¹⁴

Status is an important mechanism in many constructivist theories focusing on the role of state identities and national self-images as driving factors in international politics.¹⁵ This is especially true for aspirational constructivism, as attaining and maintaining a certain status may be necessary for accomplishing an identity to which a state aspires.¹⁶ However, constructivism is not the only theoretical perspective that pays significant attention to status. Status is also important in classical realist theories of international relations, which expect states to pursue power and prestige in the international system.¹⁷ National self-perceptions, which may include

¹¹ Larson and Shevchenko, *Quest for status*; Diana Ono, Joanne R. Smith, and Thomas Kessler, "Intergroup emulation: An improvement strategy for lower status groups," *Group Processes and Intergroup Relations* 18.2 (2015): 210-224.

¹² Onu, Smith, and Kessler, "Intergroup emulation."

¹³ Maarten Johannes van Bezouw, Jojanneke van der Toorn, and Julia Christina Becker, "Social creativity: Reviving a social identity approach to social stability," *European Journal of Social Psychology* 51.2 (2021): 409-422.

¹⁴ Larson and Shevchenko, *Quest for status*; Henri Tajfel and John Turner, "An integrative theory of intergroup conflict," in William G. Austin and Stephen Worchel (eds.), *The social psychology of intergroup relations* (Monterrey, CA: Brooks Cole Publishing).

¹⁵ Hopf, *Social construction of international politics*; Alexander Wendt, *Social theory of international politics* (Cambridge, UK: Cambridge University Press, 1999); Wendt, "Collective identity formation and the international state," *American Political Science Review* 88.2 (1994): 384-396.

¹⁶ Anne L. Clunan, "Historical aspirations and the domestic politics of Russia's pursuit of international status," *Communist and Post-Communist Studies* 47.3-4 (2014): 281-290.

¹⁷ Steven Forde, "International realism and the science of politics: Thucydides, Machiavelli, and neorealism," *International Studies Quarterly* 39.2 (1995): 141-160; Gilpin, *War and change in international politics*; Thucydides, Richard Crawley (trans.), *The history of the Peloponnesian War* (New York: Barnes and Noble Classics, 2006).

status ambitions, are also among the domestic variables important in neoclassical realist theories of international relations and foreign policy.¹⁸

Much of the work on nuclear weapons and status focuses on the role of prestige in nuclear proliferation decisions. Nuclear weapons can serve as symbols of advanced industrial or technological status. A successful nuclear program requires a degree of technological sophistication and state capacity.¹⁹ As such, states may develop nuclear weapons to attain status goals, showing their advanced technological standing and entering a club of nuclear-armed states that consists of only a few members.²⁰ Scholars have linked status concerns to proliferation in specific states.²¹ For example, several scholars tie Indian proliferation to status concerns.²² Additionally, status may have played a significant role in French proliferation.²³ The impact of status transcends regime type, as scholars have argued that both democracies such as France and India and autocracies such as Russia have engaged in status-seeking through nuclear policy.²⁴

¹⁸ Norrin M. Ripsman, Jeffrey W. Taliaferro, and Steven E. Lobell, *Neoclassical realist theory of international politics* (London: Oxford University Press, 2016); Gideon Rose, "Review: Neoclassical realism and theories of foreign policy," *World Politics* 51.1 (1998): 144-172.

¹⁹ Malfrid Braut-Heghammer, *Unclear physics: Why Iraq and Libya failed to build nuclear weapons* (Ithaca, NY: Cornell University Press, 2016).

²⁰ Michelle Murray, *The struggle for recognition in international relations: Status, revisionism, and rising powers* (London: Oxford University Press, 2018); Barry O'Neill, "Nuclear weapons and national prestige," Cowles Foundation Discussion Paper No. 1560, February 28 2006, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=887333; Scott D. Sagan, "The causes of nuclear weapons proliferation," *Annual Review of Political Science* 14 (2011): 225-244; Sagan, "Why do states build nuclear weapons? Three models in search of a bomb," *International Security* 21.3 (1996): 54-86.

²¹ Some scholars disagree with the arguments that France and India developed nuclear weapons for status purposes, arguing that security concerns or domestic politics played a greater role. For strategic arguments, see Sumit Ganguly, "India's pathway to Pokhran II: The prospects and sources of New Delhi's nuclear weapons program," *International Security* 23.4 (1999): 148-177; Alexandre Debs and Nuno P. Monteiro, *Nuclear politics: The strategic causes of proliferation* (New York: Cambridge University Press, 2017), 418-436. For domestic political arguments, see Sagan, "Why do states build nuclear weapons?"; Lawrence Scheinman, *Atomic energy policy in France under the Fourth Republic* (Princeton, NJ: Princeton University Press, 1965).

²² Sagan, "Why do states build nuclear weapons?"

²³ Edward A. Kolodziej, *French international policy under De Gaulle and Pompidou: The politics of grandeur* (Ithaca, NY: Cornell University Press).

²⁴ See Kolodziej, *The politics of grandeur*; Warren, *Understanding the determinants of Russian strategic nuclear modernization*.

Constructivist theories of nuclear politics argue that state identities play an important role in nuclear decision-making.²⁵ Two distinct elements of state identity—sovereign authority and collective identity—may influence nuclear policy decisions such as proliferation or participation in arms control, occasionally producing conflicting pressures on the state.²⁶ States with leadership that view the world in oppositional terms and states that aspire to high relative status are the most likely to construct identities that are open to nuclear weapons.²⁷ Status-seeking states may see nuclear weapons as useful for signaling power, perceiving them as symbols of omnipotence.²⁸ The perception of nuclear weapons as status symbols may create a positive set of norms that can overcome normative aversions to their possession.²⁹ States with more cooperative identities are more likely to avoid such behaviors.³⁰

Historically, status plays an important role in Russian foreign policy. Russian leaders across the Tsarist, Soviet, and post-Soviet periods have expected Russia to play a special role in international politics.³¹ In the post-Soviet period, Russia has pursued social mobility, creativity, and competition strategies, transitioning to social competition during the 2000s and early 2010s.³²

²⁵ Jacques E.C. Hymans, *The psychology of nuclear proliferation: Identity, emotions, foreign policy* (New York: Cambridge University Press, 2006).

²⁶ Jane Darby Menton, *Who speaks for the state? Narration, representation, and the JCPOA* (Ph.D. Diss: St. John's College, Cambridge University, 2022).

²⁷ Karsten Frey, "Nuclear weapons as symbols: The role of norms in nuclear policy making," Institut Barcelona d'Estudis Internacionals (2006); Hymans, *The psychology of nuclear proliferation*.

²⁸ Karsten Frey, "The psychology of nuclear choice," *Journal of Genocide Research* 9.3 (2007): 369-387; O'Neill, "Nuclear weapons and national prestige."

²⁹ Frey, "Nuclear weapons as symbols."

³⁰ Hymans, *The psychology of nuclear proliferation*; Etel Solingen, "The political economy of nuclear restraint," *International Security* 19.2 (1994): 126-169.

³¹ Larson and Shevchenko, *Quest for status*; Angela Stent, *Putin's world: Russia against the West and with the rest* (New York: Twelve Books, 2019); Kathryn E. Stoner, *Russia resurrected: Its power and purpose in a new global order* (New York: Oxford University Press, 2020).

³² Larson and Shevchenko, *Quest for status*.

Several areas of Russian foreign policy have significant policy implications. Russian leaders wish to gain access to the club of states considered great powers and often believe that assertive foreign policy assists American acceptance of Russia in this club.³³ Efforts to attain and maintain honor, status, and prestige have been a significant factor in Russian relations with the United States and Europe.³⁴ Regaining lost international status and restoring Russian prestige is a central goal of Vladimir Putin's foreign policy.³⁵ Status concerns, including Russian investment in artificial intelligence and autonomous weapons technologies, largely drive Russia's pursuit of emerging military technologies and investment in technological innovation.³⁶

Scholars have tied status ambitions, in combination with domestic politics and strategic imperatives, to Russian nuclear behavior.³⁷ Gotz argues that status aspirations are the impetus for Russian exercises and maneuvers, with an assertive posture promoting the image of Russia as a great military power.³⁸ Status plays a role in Russian modernization, with the Putin regime promoting novel systems and weapons with claimed superlative abilities like the fastest bomber or largest ICBM.³⁹ Status concerns also played some role in Soviet nuclear modernization

³³ Pal Roren, "The belligerent bear: Russia, status orders, and war," *International Security* 47.4 (2023): 7-49.

³⁴ Larson and Shevchenko, *Quest for status*; Larson and Shevchenko, "Status seekers: Chinese and Russia responses to U.S. primacy," *International Security* 34.4 (2010): 63-95; Andrei P. Tsgankov, *Russia and the West from Alexander to Putin: Honor in international relations* (New York: Cambridge University Press, 2012).

³⁵ Brian D. Taylor, *The code of Putinism* (New York: Oxford University Press, 2018).

³⁶ Anna Nadibaidze, "Great power identity in Russia's position on autonomous weapons systems," *Contemporary Security Policy* 43.3 (2022): 407-435; Nadibaidze, "Russian perceptions of military AI, automation, and autonomy," Foreign Policy Research Institute, January 27 2022, <https://www.fpri.org/article/2022/01/russian-perceptions-of-military-ai-automation-and-autonomy/>; Katarzyna Zysk, "Defense innovation and the 4th industrial revolution in Russia," *Journal of Strategic Studies* 44.4 (2021): 543-571.

³⁷ Anya Loukianova Fink and Olga Oliker, "Russia's nuclear weapons in a multipolar world: Guarantors of sovereignty, great power status & more," *Daedalus* 149.2 (37-55); Elias Gotz, "Strategic imperatives, status aspirations, or domestic interests? Explaining Russia's nuclear weapons policy," in Elias Gotz and Neil MacFarlane (eds.), *Russia's role in world politics: Power, ideas, and domestic influences* (London: Palgrave Macmillan, 2022); Hanna Notte et al., "Russia's novel weapons systems: Military innovation in the post-Soviet period," *The Nonproliferation Review* 28.1-3 (2021): 61-93; Warren, Security, power, and prestige.

³⁸ Gotz, "Strategic imperatives, status aspirations, or domestic interests?"

³⁹ Notte et al., "Russia's novel weapons systems;" Warren, "Understanding the determinants of Russian strategic nuclear modernization."

efforts, such as the development of ICBMs and SSBNs.⁴⁰ Maintaining rough parity, regardless of a strategic imperative to do so, is also an important aspect of Russia's concept of strategic stability.⁴¹ Russian ambitions for prestige are one of the factors driving Russia's maintenance of a large nuclear arsenal.⁴² Russian engagement with the United States was partially driven by status concerns, as well, with Russian leaders perceiving the bilateral arms control regime as the final fora where Russia and the United States were equals.⁴³

Methods

This manuscript uses case study research methods to generate and test a theory that explains the power of prestige relative to strategic imperatives in the formation of nuclear policy. I employ a diverse case selection strategy for both, as it is useful for hypothesis generation and testing.⁴⁴ I select cases from a variety of nuclear phenomena. Specifically, I explore cases of nuclear proliferation, arms control, and modernization for theory-generating purposes and arms control and modernization for theory-testing purposes. All three behaviors could accomplish strategic goals or enhance status. Proliferation is included among the theory generation cases as doing so allows the theory to explain a broader set of nuclear behaviors. However, there is only one case of nuclear proliferation in the Soviet or Russian case—the decision to develop nuclear weapons in the late 1940s—preventing the use of a second case for theory testing purposes.

⁴⁰ Steven J. Zaloga, *The Kremlin's nuclear sword: The rise and fall of Russia's strategic nuclear forces 1945-2000* (Washington: Smithsonian, 2002).

⁴¹ Kokoshin, "Ensuring strategic stability in the past and present."

⁴² Olikier, Explaining the Russian Federation's nuclear force posture.

⁴³ Stent, *The limits of partnership*; Lydia Wachs, "Security versus status: Explaining Russia's interest in the Presidential Nuclear Initiatives and the Strategic Offensive Reductions Treaty," *The Nonproliferation Review* (Forthcoming).

⁴⁴ John Gerring, *Case study research: Principles and practices* (New York: Cambridge University Press, 2007).

For theory generation, I selected the Soviet proliferation decision in the late 1940s, the Strategic Arms Limitations Talks of the 1970s, and the development of novel nuclear weapons in the 21st century. These cases are typical examples of each behavior examined: proliferation, arms control, and modernization. Each also has an important temporal element, with the long time covered in each case allowing fluctuations in both the strategic environment and leader interest in prestige.

I assess two cases of modernization for theory testing. This allows for the strategic environments and status implications of each to be assessed against the other. I use Soviet ICBM development in the 1950s and ICBM modernization efforts in the 1960s. These cases cover varied and changing security environments, as well as the leadership of two rulers with differing views on nuclear weapons, foreign policy, and prestige: Nikita Khrushchev and Leonid Brezhnev.

Within cases, I use historical process tracing methods to explore causal pathways, tease out relationships between multiple variables, and assess the possibility of multicausality.⁴⁵ Exploring the relationships between status, strategic interests, and nuclear decision making also allow us understand the reasoning behind status-seeking behaviors, as states may pursue status for its own end or as a means for achieving other strategic outcomes, helping us to delineate the impacts of status from strategic interest. Using qualitative process tracing methods also allows me to consider alternative causal relationships, an important feature when doing theory generation. I use a mix of secondary and primary sources depending on availability of qualitative

⁴⁵ James Mahoney, "Process tracing and historical explanation," *Security Studies* 24.2 (2015): 200-218.

data. Primary sources include official documents, military theoretical debates, and declassified materials on Russian and Soviet nuclear policy.⁴⁶

Exploratory Cases of Russian Nuclear Decision-Making

This section will cover the three exploratory cases of Russian and Soviet nuclear decision-making. I will use these cases to generate a theory to explain the relative importance of strategic concerns and status ambitions in nuclear policymaking in the next section before conducting four case studies to test the theory. The three theory-generating case studies explore the Soviet decision to develop a nuclear weapon, Soviet participation in the Strategic Arms Limitations Talks, and Russia's development of novel nuclear weapons. Depending on the availability of different qualitative data, these case studies rely on a combination of declassified historical documents, media reports, military theoretical writings, and scholarly secondary sources.

Nuclear Proliferation: The Soviet Nuclear Program, 1945-1949

The Soviet nuclear program began during World War II. Initially, it focused on developing nuclear energy capabilities, seeing nuclear technology as an enabling technology for developing the industrial, agricultural, and military capacity necessary to defeat the capitalist Anglo-American alliance in a global war that Stalin saw as inevitable.⁴⁷ The emphasis on nuclear energy shifted to nuclear weapons during the war, with Stalin ordering the creation of a crash

⁴⁶ Collection of primary source data remains ongoing.

⁴⁷ David Holloway, *Stalin and the bomb: The Soviet Union and atomic energy, 1939-1956* (New Haven, CT: Yale University Press).

program to develop both nuclear explosives and reliable delivery systems. Influenced by ideology and the aftermath of the Great Purges, several leading Soviet scientists believed that nuclear science was a false bourgeois science due to its prevalence in Nazi German and Anglo-American physics research, limiting its promise for the Soviet Union.⁴⁸ Nuclear research overcame these hurdles by finding two powerful allies within the highest echelons of Soviet politics who believed a nuclear program was essential for surviving the post-war world: NKVD Director Lavrenty Beria and Josef Stalin himself.⁴⁹

The Soviet program pivoted to a weapons program in August 1945, with a special weapons committee that reported directly to the Politburo created on August 20. This pivot was a response to the success of the Manhattan Project and the subsequent use of nuclear weapons against Hiroshima and Nagasaki.⁵⁰ The success of the Manhattan Project definitively proved the feasibility of a nuclear weapon, which some members of the Soviet scientific community continued to debate.⁵¹ Josef Stalin interpreted the secretive development of nuclear weapons and Harry S. Truman's behavior at the Potsdam Conference as a signal that Truman was willing to challenge the Soviet Union's post-war ambitions with force.⁵² Furthermore, the use of nuclear weapons against Japan showed the weapon's destructive power and signaled the willingness of the United States to use the bomb against even a defeated enemy.⁵³

Igor Kurchatov, the director of the Soviet nuclear program during the late 1940s, recounted Stalin's keen interest in developing nuclear weapons in his personal notes. During a

⁴⁸ Ethan Pollock, *Stalin and the Soviet science wars* (Princeton, NJ: Princeton University Press, 2006).

⁴⁹ Pollock, *Stalin and the Soviet science wars*; Zaloga, *The Kremlin's nuclear sword*.

⁵⁰ Holloway, *Stalin and the bomb*; Pavel Podvig, *Russian strategic nuclear forces* (Cambridge, MA: MIT Press, 2004); Martin J. Sherwin, *Gambling with Armageddon: Nuclear roulette from Hiroshima to the Cuban Missile Crisis* (New York: Penguin Random House, 2020), 55-63; Zaloga, *The Kremlin's nuclear sword*.

⁵¹ Holloway, *Stalin and the bomb*; Pollock, *Stalin and the Soviet science wars*.

⁵² Sherwin, *Gambling with Armageddon*, 55-57.

⁵³ Podvig 2004, *Russian strategic nuclear forces*, 2; Sherwin, *Gambling with Armageddon* 57-58.

January 1946 meeting with Vyacheslav Molotov, Beria, and Kurchatov, Stalin claimed that the Soviet Union needed “to move decisively, with the investment of a decisive quantity of resources,” to advance work on the Soviet nuclear program “on a Russian scale,” and promising to provide Kurchatov with “the broadest, utmost assistance,” highlighting the need “to use Germany to the utmost,” including its people, equipment, experience, and industry, in the pursuit of nuclear weapons.⁵⁴ The Soviet Council of Ministers issued a decree a few months later creating a special committee to oversee scientific work for the Soviet nuclear and missile programs, outlining the goods necessary to take from occupied German territory, and providing for the attempted purchase of sensitive equipment from the United States under the guise of scientific research.⁵⁵

The Soviet nuclear program eventually created a nuclear device, RDS-1, and a delivery system, the Tupolev Tu-4 strategic bomber. The Soviet Union completed testing for the Tu-4 by 1948 and tested RDS-1 in 1949. The Soviets based RDS-1 on the implosion-type plutonium bomb developed at Los Alamos, using detailed reports and scientific calculations provided by Soviet spy Klaus Fuchs.⁵⁶

Arms Control: The Strategic Arms Limitations Talks

⁵⁴ Igor V. Kurchatov, "Notes on the discussion between I.V. Kurchatov, lead scientist for the Soviet nuclear effort, and Stalin," Wilson Center Digital Archive, January 25, 1946, <https://digitalarchive.wilsoncenter.org/document/notes-discussion-between-iv-kurchatov-lead-scientist-soviet-nuclear-effort-and-stalin>.

⁵⁵ USSR Council of Ministers, "Decree of the USSR Council of Ministers, 'Questions of reactive weaponry,'" Wilson Center Digital Archive, May 13, 1946, <https://digitalarchive.wilsoncenter.org/document/decreed-ussr-council-ministers-questions-reactive-weaponry>.

⁵⁶ Holloway, *Stalin and the Bomb*.

Moscow and Washington engaged in multiple efforts to reduce high Soviet-American tensions during the 1960s, including cooperation on nuclear arms control and nonproliferation. These efforts were largely a response to the Cuban Missile Crisis, with the American and Soviet leadership trying to reduce the likelihood and risk of future conflicts. Arms control cooperation resulted in a series of treaties, including the Partial Test-Ban Treaty and Nonproliferation Treaty, as well as talks on a range of issues related to strategic stability and confidence building.

These efforts also included wide-ranging talks on limiting nuclear arms and missile defenses. The Strategic Arms Limitations Talks grew out of secret communications between Lyndon B. Johnson and Soviet Premier Aleksei Kosygin in the late 1960s. Johnson and Kosygin were initially concerned with the growth of Soviet missile defenses and pressures on the Johnson Administration to increase the American strategic nuclear arsenal in response.⁵⁷ A series of letters between Johnson and Kosygin laid the groundwork for future talks, eventually taking place between the Soviet leadership and the Nixon Administration.⁵⁸

Richard Nixon attempted to build upon the progress of the Johnson Administration following his election in 1968. Leonid Brezhnev, who was horrified by the experience of the Cuban Missile Crisis, also supported improved relations but remained suspicious of Nixon until

⁵⁷ Bernard Gwertzman, "Five-year effort for an arms curb began with secret Johnson letter to Kosygin," New York Times, May 27, 1972, <https://www.nytimes.com/1972/05/27/archives/fiveyear-effort-for-an-arms-curb-began-with-secret-johnson-letter.html>.

⁵⁸ Lyndon B. Johnson, "Letter from President Johnson to Chairman Kosygin," in Evans Gerakas, David S. Patterson, and Carolyn B. Yee (eds.), *Foreign Relations of the United States, 1964-1968, Volume XI, Arms control and disarmament* (Washington: United States Government Printing Office, 1997), Document 263, <https://history.state.gov/historicaldocuments/frus1964-68v11/d263>; Alexei Kosygin, "Letter from Chairman Kosygin to President Johnson," in Gerakas, Patterson, and Yee, (eds.), *FRUS, 1964-1968, Vol. XI*, Document 261, <https://history.state.gov/historicaldocuments/frus1964-68v11/d261>; Kosygin, "Text of letter from Chairman of the USSR Council of Ministers A.N. Kosygin to the President of the USA, L. Johnson," Wilson Center Digital Archive, August 18 1968, <https://digitalarchive.wilsoncenter.org/document/text-letter-chairman-ussr-council-minister-kosygin-president-usa-l-johnson>.

an interpersonal breakthrough in August 1971 and a summit between the two in 1972.⁵⁹ The breakthrough allowed for the eventual success of the SALT negotiations, ongoing since 1969.

For both the Americans and Soviets, the primary goal of SALT was to reduce the threat of nuclear war, the cost of arms races, and systems that threatened strategic stability. American and Soviet SALT negotiators focused heavily on limiting missile defenses, seeing them as potential causes of arms races and instability.⁶⁰ Defending proposals for a ban on missile defenses, Soviet Deputy Foreign Affairs Minister and Chief of the Soviet SALT delegation Vladimir Semyonov claimed that the deployment of a robust missile defense “could heighten the aggressive intentions” of the deploying country and “lead to an increase in the threat of nuclear war.”⁶¹ The Soviets and Americans also considered limits to offensive strategic weapons, an inclusion the Americans wanted in exchange for a missile defense ban.⁶² The Soviets also indicated an interest in offensive limitations earlier, especially limits to MIRVed warheads.⁶³

⁵⁹ Vladislav M. Zubok, *A failed empire: The Soviet Union in the Cold War from Stalin to Gorbachev* (Chapel Hill, NC: University of North Carolina Press, 2007), 216.

⁶⁰ Gwertzman, "Five-year effort for an arms curb;" National Security Council, "Evaluation of possible strategic arms control agreements between the United States and the Soviet Union," in William Burr (ed.), National Security Archive Electronic Briefing Book 36: Missile defense thirty years ago: Déjà vu all over again? Document, March 21, 1970, <https://nsarchive2.gwu.edu/NSAEBB/NSAEBB36/docs/doc03.pdf>; K. Wayne Smith and Hal Sonnenfeldt, "Memorandum for Dr. Kissinger: SALT—Vienna phase IV," in William Burr, (ed.), National Security Archive Electronic Briefing Book 60: The secret history of the ABM treaty, 1969-1972, Document 6, January 12, 1971, <https://nsarchive2.gwu.edu/NSAEBB/NSAEBB60/abm032.pdf>; U.S. Embassy Helsinki, "Sixth SALT meeting: Semenov statement," in Burr (ed.), National Security Archive EBB 36, Document 5, November 28, 1969, <https://nsarchive2.gwu.edu/NSAEBB/NSAEBB36/docs/doc16.pdf>; U.S. SALT Delegation, "Memorandum to U.S. Secretary of State: Semenov statement on July 23, 1971," in Burr (ed.), National Security Archive EBB 36, Document 13, July 23 1971, <https://nsarchive2.gwu.edu/NSAEBB/NSAEBB36/docs/doc10.pdf>.

⁶¹ National Security Archive EBB 36, Document 10, page 2.

⁶² Henry Kissinger, "Memorandum of conversation between Henry A. Kissinger and Anatoliy F. Dobrynin," in Burr, (ed.), National Security Archive EBB 60, Document 7, January 28, 1971, <https://nsarchive2.gwu.edu/NSAEBB/NSAEBB60/abm05.pdf>.

⁶³ Arms Control and Disarmament Agency, "Strategic arms limitations 1968," in William Burr, (ed.), National Security Archive Electronic Briefing Book 782: Strategic stability and instability during the middle years of the Cold War, Document 20, December 1968, <https://nsarchive.gwu.edu/document/27216-document-20-arms-control-and-disarmament-agency-strategic-arms-limitations-1968-nd>.

The talks ultimately resulted in two arms control agreements: the SALT I Agreement and the Anti-Ballistic Missile (ABM) Treaty. While SALT I failed to include limits on MIRVs, it did freeze ICBMs at their existing levels and limited the deployments of new SLBMs. The ABM treaty restricted the deployment of ballistic missile defense sites, allowing for both countries to deploy one site to protect the national capital and one to protect ICBM silos. Together, the agreements bolstered strategic stability and limited arms racing and served as a temporary confidence-boosting measure.

Modernization: Russia's Novel Nuclear Weapons

Vladimir Putin announced a series of new weapons types during his 2018 annual address to Russia's Federal Assembly.⁶⁴ These weapons included a hypersonic glide vehicle, hypersonic cruise missile, hypersonic aeroballistic missile, nuclear-powered cruise missile, and nuclear-powered uncrewed underwater vehicle.⁶⁵ Each system, in theory, is dual-capable and can deliver a nuclear or conventional warhead, although at least the uncrewed underwater vehicle is likely to deliver a nuclear payload.

While Putin unveiled these weapons in 2018, their development goes back to at least 2002, with some based on research the Soviets conducted in the 1980s. They are also part of a broader modernization trend that includes upgrades to all three legs of Russia's nuclear triad.⁶⁶

⁶⁴ Vladimir Putin, "Address of the President to the Federal Assembly," Office of the President of the Russian Federation, March 1, 2018, <http://en.kremlin.ru/events/president/news/56957>.

⁶⁵ Amy F. Woolf, "Russia's nuclear weapons: Doctrine, forces, and modernization," Congressional Research Service, April 21, 2022, <https://sgp.fas.org/crs/nuke/R45861.pdf>.

⁶⁶ Warren, Security, power, and prestige.

Multiple factors, including status aspirations and strategic concerns, may have influenced their development.⁶⁷

These weapons are a hedge against future American missile defense and counterforce capabilities. Russia began developing these systems following the American withdrawal from the ABM Treaty, although some were considered earlier. Several are theoretically capable of penetrating advanced missile defense systems.⁶⁸ Others enhance Russia's mobile nuclear capabilities, making the more survivable part of Russia's arsenal more effective. Russian military theorists argue that developing novel weapons is necessary to counter a future robust national missile defense system and advanced American counterforce capabilities enhanced by American investment in high-precision long-range conventional weapons.⁶⁹ Vladimir Putin has also linked these systems to the need to counter advances in American missile defense and counterforce capabilities.⁷⁰

⁶⁷ Notte, "Russia's novel weapons systems;" Leah Walker, "Nuclear-powered cruise missiles: Burevestnik and its implications," *Journal of Science Policy & Governance* 16.1 (2020); Warren, Security, power, and prestige.

⁶⁸ Sergei Ketonov, "'Burevestnik' na zaklaniye: Nyet smysla prodlevat' SNV-3 tsenoyi otkaza ot samogo perspektivnogo oruzhiya ['Burevestnik' to the slaughter: It doesn't make sense to extend START-3 at the expense of abandoning the most promising weapon]," *Military-Industrial Courier*, December 7, 2020, <https://vpknews.ru/articles/59856>; Spenser A. Warren, "Avangard and Transatlantic security," Center for Strategic and International Studies, September 23, 2020, <https://www.csis.org/blogs/post-soviet-post/avangard-and-transatlantic-security>.

⁶⁹ Aleksandr Aleksandrov, Yuri Avdeev, and Konstantin Lobkov, "Novyishyeye giperzvukovoye voruzheniye sposobno obespechit' Rossii strategicheskoye sderzhivaniye [The latest hypersonic weapons are able to provide Russia with strategic deterrence]," *Red Star*, February 4, 2018; S.V. Karakayev, "The strategic missile forces in Russia Today," *Military Thought* 29.1 (2020): 144-151; Ketonov, "'Burevestnik' to the slaughter;" V.A. Kiselyov, "What kind of warfare should the Russian armed forces be prepared for?" *Military Thought* 26.2 (2017): 1-12; V.V. Selivanov and Yu.D. Ilyin, "Choosing priorities in developing kinetic energy weapons for military conflicts," *Military Thought* 26.4 (2017): 69-82; Selivanov and Ilyin, "Methodological basis for launching asymmetric responses in a military-technological battle with a high-technology adversary," *Military Thought* 28.1 (2019): 20-29; A.Ye. Sterlin, A.A. Protasov, and S.V. Kreidin, "Current transformations in the concepts and power instrument of strategic deterrence," *Military Thought* 28.3 (2019): 40-51.

⁷⁰ Vladimir Putin, "Poslanie Prezidenta Federal'nomu Sobraniyu [Address of the President to the Federal Assembly]," Office of the President of Russian Federation, April 21 2021, <http://kremlin.ru/events/president/news/65418>; Putin, "Ezhegodnaia press-konferentsiia Vladimira Putina [Annual Press Conference of Vladimir Putin]," Office of the President of the Russian Federation, December 17 2020, <http://kremlin.ru/events/president/news/64671>; Putin, "Beseda s Gerbertom Efremovym [Conversation with Herbert

However, strategic imperatives are insufficient to explain why Russia pursued these weapons. Other systems could also accomplish these goals, including advanced ICBMs, modernized road-mobile missiles, and enhanced SSBNs.⁷¹ These weapons, however, provided an additional benefit: they could be used as status symbols.

Vladimir Putin's personal interests and beliefs play a critical role in the development of novel nuclear weapons. Putin holds status ambitions and perceives novel nuclear weapons as recognizable status symbols. Putin frequently highlights the superiority and originality of these systems. For example, during an address to the Committee “Victory,” he remarked that Russia had the world’s most modern nuclear arsenal.⁷² In his speech commemorating the 325th Day of the Navy, Putin tied the development of hypersonic weapons with Russia’s status as a naval power, stating that “In the shortest possible time, Russia took its rightful place among the leading maritime powers, passed a colossal path of development from a modest Petrovsky boat to powerful ships of the ocean zone and nuclear missile submarines, gained effective long-range and short-range naval aviation, reliable coastal defense systems, the latest hypersonic high-precision weapons systems that still have no analogues in the world, which we are constantly and successfully improving.”⁷³ During a ceremony for newly appointed senior officers, Putin

Yefremov],” Office of the President of the Russian Federation, September 19, 2020, <http://kremlin.ru/events/president/news/64058>; Putin, “2018 Address to the Federal Assembly.”

⁷¹ Warren, Security, power, and prestige.

⁷² Vladimir Putin, “Zasedanie Rossiiskogo organizatsionnogo komiteta ‘Pobeda’ [Meeting of the Russian Organizing Committee ‘Victory’],” Office of the President of the Russian Federation, 2021, <http://kremlin.ru/events/president/news/65618/>.

⁷³ Vladimir Putin, “Glavnyi voenno-morskoï parad [Main naval parade],” Office of the President of the Russian Federation, July 25, 2021, <http://kremlin.ru/events/president/news/66254>.

remarked that advanced novel weapons such as Avangard and Tsirkon determine the image of the Russian military.⁷⁴

The security environment when Russia decided to develop these weapons was significantly different than the one faced by the Soviets during the previous two case studies. While Russia and the United States maintained a rivalry, they were not diametrically opposed adversaries like they were during the late 1940s. They also did not experience a period of warming relations like during the SALT years. Instead, Russia and the United States were engaged in a fairly cooperative period, with a series of events—the Iraq War, Color Revolutions, the Russian invasion of Georgia, the 2011 Russian Election, and NATO intervention in Libya—gradually eroding that cooperation. As such, the immediate security concerns of Russia were not as pronounced when Russia made the decision to develop these weapons in the early 2000s, allowing them to focus on a hedging response with status implications rather than an immediate crash program similar to the development of the Tu-4 and RDS-1 in the late 1940s.

Building a Theory of Status and Strategy in Nuclear Politics

The three cases from the previous section provide insights from which I will construct a theory to explain the importance of strategic drives of nuclear behavior relative to status drivers. Table 1 below summarizes the role of strategic and status factors during the three case studies.

⁷⁴ Vladimir Putin, “Tseremoniia predstavleniia ofitserov, naznachennykh na vysshie komandnye dolzhnosti [Ceremony for the presentation of officers, appointed to senior command positions],” Office of the President of the Russian Federation, April 11, 2019, <http://kremlin.ru/events/president/news/60264>.

<i>Table 1</i>	Strategic Factors	Status Factors	Strategic Environment	Status Ambitions
Soviet Proliferation	*		Dangerous: Perception of imminent great power war	High: But concerns largely absent from proliferation discussions
SALT I	*		Dangerous: Recent history of nuclear brinkmanship, concerns about emerging technologies and impact on deterrence	High: But largely absent from proliferation discussions
Novel Nuclear Weapons	*	*	Safe: No imminent nuclear threat, although potential for future threats	High: Attempts to regain prestige lost following collapse of the Soviet Union

Strategic drivers played some role in all three decisions. The Soviets pursued a nuclear capability in the late 1940s because they believed it would be necessary in the imminent capitalist-socialist world war. The Soviets engaged in SALT to reduce the threat of nuclear war, establishing an early arms control regime to bolster strategic stability and curtail arms racing. The Russians invested in novel nuclear weapons to overcome future American missile defense and counterforce capabilities.

Status was also a more significant factor in the third case than the previous two. The strategic environment Russia faced during this period was notably different than the one the Soviets faced during the late 1940s and early 1970s. While Vladimir Putin was suspicious of Washington and viewed the United States as a threat, he did not view a Russia-United States war as imminent, as Stalin perceived a coming Anglo-American war against the Soviets. Nor was

Russia engaged in nuclear brinkmanship with the United States, as the Soviets were in the early 1960s, nearly ending the world during the Cuban Missile Crisis. Instead, the threat was a future one that did not need an immediate response. The United States and Russia's contemporary relationship was flawed but generally cooperative. In addition, Russian leaders perceived radical Islamic terrorism as the primary threat facing Russia and viewed the United States as a natural and essential partner to combat this mutual adversary.

Two conditions make the influence of prestige more acute: a permissible strategic environment and leaders with status ambitions. Leaders are the individuals ultimately responsible for nuclear decision-making. They may include a sole decision-maker or a group of important policymakers. In Russia today, Vladimir Putin is the primary decision-maker responsible for nuclear decision-making, although leaders in the political and military sphere may also influence certain nuclear policies, such as nuclear modernization. Stalin and Beria were important during the early days of the Soviet nuclear program, while the Soviet Politburo—led by Kosygin and Brezhnev—was crucial during the SALT era.

While leaders may hold significant status ambitions, a harsh strategic environment forces states to prioritize strategic needs. For most nuclear states, nuclear weapons are the backbone of their defensive forces, with nuclear deterrence protecting their sovereignty and territorial integrity.⁷⁵ Adversaries frequently try to undermine this deterrence, seeking to overcome nuclear stalemate by developing weapons to counter an enemy's deterrent.⁷⁶ Under such security

⁷⁵ Debs and Monteiro, *Nuclear politics*; Robert Jervis, *The meaning of the nuclear revolution: Statecraft and the prospect of Armageddon* (Ithaca, NY: Cornell University Press, 1990).

⁷⁶ Keir A. Lieber and Daryl G. Press, *The myth of the nuclear revolution: Power politics in the atomic age* (Ithaca, NY: Cornell University Press, 2020)

environments, strategic concerns will drive behaviors seeking to limit these threats, maintain this deterrence, or build nuclear weapons for these purposes.

<i>Table 2</i>		Strategic Environment	
		More Dangerous	More Safe
Leader Status Ambition	High	❖ Primarily strategic behavior ❖ Status behaviors when multiple actions could accomplish strategic goals equally well	❖ Status-seeking behavior
	Low	❖ Strategic behavior	❖ Other factors drive behavior

Table 2 shows the interplay between strategic and status concerns. When ambitions are high and the strategic environment more dangerous, behavior is primarily strategic. However, there may be cases where multiple actions could accomplish strategic goals equally well. For example, developing greater ICBM countermeasures and better SSBN capabilities would allow an arsenal to hedge against an adversary's missile defense advances, just as developing hypersonic glide vehicles would. In such cases, leaders with status ambitions are likely to select the expected status-enhancing behavior so long as it does not conflict with strategic goals. States will engage in status-seeking behavior when ambitions are high and the environment safe. When ambitions are low and the environment more dangerous, states engage in strategic behavior. Finally, when ambitions are low and the environment is safer, any changes to nuclear policy are likely driven by other factors, such as domestic politics.

The following section will test this theory using two case studies of Soviet nuclear modernization. The case studies cover the Soviet Union's development of ICBMs and the modernization of ICBM capabilities in the 1950s and 1960s, respectively.

Theory Testing through Historical Case Studies

Developing ICBMs

Strategic and status concerns both played a role in the development of the Soviet Union's initial ICBM capability. These developments occurred in a particularly severe strategic environment for the Soviets. The mid to late 1950s saw multiple crises in Europe and Asia and changes to American doctrine and force structure under Dwight Eisenhower. While some events, such as Moscow and Washington's attempt to thaw relations after Khrushchev consolidated power, served to minimize tensions, this period remained one of the most dangerous of the Cold War. As a result, security factors played the predominant role in the Soviet Union's pursuit of ICBMs, even if it was not the only factor.

The development of strategic weapons that could hold American population centers, economic hubs, and military targets at risk was a significant goal of the Soviet military. The Marxist-Leninist doctrine espoused by the Soviet political elite expected capitalist powers like the United States to be expansionary and violent and predicted an inevitable war of aggression against communist countries led by the Soviet Union. The ability to retaliate by delivering a nuclear strike against targets within the United States would provide the Soviets with a significant deterrent capability, potentially delaying such a war. This deterrent would reduce the threat of American aggression and allow the Soviets to embark on their own aggressive policies with reduced fear of American intervention. The United States would be less likely to intervene

on behalf of a European ally under Soviet attack⁷⁷ or directly support a member of the Soviet bloc attempting to emerge from Moscow's control.

Strategic weapons that could reach industrial centers, transportation hubs, agricultural regions, and energy facilities could significantly degrade the war-making capabilities of the United States. Delivering a nuclear payload, rather than a nonnuclear one, reduced the accuracy needed for a strategic strike to be successful while also increasing the number of casualties—depleting potential reserve forces and increasing the likelihood strategic strikes would break the will of the Americans to fight.

Unlike the Americans, who could strike Soviet population and industrial centers with nuclear or conventional forces based in Europe, the Soviets needed systems with an intercontinental range to deliver a strategic strike. The earliest intercontinental options available to the Soviets were long-range bombers. However, strategic bombers were highly vulnerable to American air defenses and fighters, reducing their efficacy as strategic weapons. Additionally, the Soviets struggled to design, test, and field a bomber with sufficient range to strike targets in the United States and return to the Soviet Union.

ICBMs were a solution to this problem. By the mid-1950s, Soviet defense industry leaders largely expected the Soviet Union to move towards a rocket force, although Khrushchev was not fully convinced until after the success of Sputnik. The ICBM, once developed, allowed the Soviet Union to strike targets in the United States or Western Europe without being intercepted by American or Allied air forces or air defense, achieving a particular Soviet

⁷⁷ This would require the United States to adopt a series of strategies to assure allies, deter the Soviets, and prevent allied proliferation throughout the Cold War, with a mixed record of success as several allies, most notably the French, often questioned American resolve despite the efforts.

strategic goal. Soviet policymakers studied the potential impacts of ICBMs on doctrine before their implementation. Soviet rocket design research accelerated following World War II's conclusion, with many captured Nazi scientists contributing their knowledge of wartime German rocket programs.

The combination of changing strategic needs, domestic lobbying, and status ambitions drove the development of early Soviet ICBMs. Zaloga (2002) claims that two factors motivated Khrushchev's support for missiles: the status afforded to the Soviet Union—which Khrushchev perceived as useful for both dealing with the United States and for legitimizing the Soviet government domestically—and the ability of missiles to be a cost-effective tool for addressing multiple security threats. Podvig (2004) also highlights international status and domestic propaganda benefits of technical superiority as reasons for Khrushchev's emphasis on missile development, a field where the Soviets were outcompeting the United States during the late 1950s.

ICBM Modernization in the 1960s

The security environment in the 1960s remained harsh for the Soviet Union. Tense relations with the United States continued to deteriorate in the early 1960s following the construction of the Berlin Wall in 1961, the failed American attempt to overthrow the Soviet-allied Cuban regime during the Bay of Pigs invasion, and the placing of Soviet nuclear missiles on Cuba in 1962. However, tensions with the United States became less severe over the course of the decade. After the Soviet decision to place nuclear weapons on Cuba nearly led to a global nuclear war, Moscow and Washington began exploring ways to reduce tensions and created the

early pieces of the global nonproliferation and bilateral arms control regimes. During this period, the Soviets began exploring second generation ICBMs. Status and security once again played important roles. However, status—especially the symbolic importance of maintaining qualitative parity—played a larger role than during the 1950s.

Soviet leadership authorized the development of second-generation ICBMs in 1962 in an effort to reach qualitative parity with the U.S. ICBM force. The Soviet military also explored technologies that could improve the survivability of the Soviet nuclear arsenal, but improving the survivability of the arsenal was not a major aim of Soviet nuclear modernization during the 1960s.⁷⁸ The primary goal of Soviet ICBM modernization was the development of a solid fuel-powered light ICBM analogous to the American Minuteman ICBM.⁷⁹ In addition to having symbolic value as a close counterpart to the most advanced American ICBM at the time, a solid-fueled "Red Minuteman" would have two critical benefits relative to the R-16: the Red Minuteman could be armed and ready for launch within 3 minutes—as opposed to 20 hours for the R-16—and the solid fuel was far safer than the two components of liquid-fueled missiles, one that corroded human flesh and another that had a toxicity similar to nerve gas when inhaled.⁸⁰

Early tests of light ICBMs produced disappointing results, leading to the authorization of two parallel programs assigned to competing design bureaus in the hope that if one program failed, the other would make enough progress to continue the development of a light ICBM.⁸¹ The RT-2 program, assigned to the Korolev design bureau, sought to develop a highly sophisticated weapon system that included advanced guidance and hardened missile silos in

⁷⁸ Podvig 2004a, 123-124.

⁷⁹ Zaloga 2002, 103.

⁸⁰ Zaloga 2002, 103-104.

⁸¹ Zaloga 2002, 106.

order to develop a weapon on equal technological footing as the United States.⁸² The UR-100 program, assigned to the Chelomey design bureau, sought to develop a more simplistic weapon that was not as technologically sophisticated as American missiles but could be developed and deployed quickly while giving the Soviet Union similar strategic capabilities.⁸³

The simpler UR-100 proceeded more quickly and more successfully than the RT-2. The first UR-100 tests produced promising results in 1965 and were completed by October 1966, while RT-2 testing began in early 1966 with a failure and did not have its first partially successful test—the launch was a success, but the warhead disintegrated during reentry—until November 1966.⁸⁴ The UR-100 gained additional support from defense leaders, who were attracted to its low cost and ease of production relative to the RT-2, but it was not a solid fuel weapon, prompting some concern from defense leaders.⁸⁵ Due to the perceived need to develop solid-fuel missiles, the RT-2 program was allowed to continue, and RT-2 testing was completed in October 1968, more than a year after Soviet leaders chose the UR-100 as the primary light ICBM in the Soviet arsenal.⁸⁶ The Soviet Union would field 1,000 UR-100s and 6 RT-2s.

Soviet nuclear modernization in the 1960s also involved the development of a second-generation heavy ICBM analogous to the American Titan ICBM. Ultimately, the Soviets chose RS-36 to serve as a "Red Titan".⁸⁷ The RS-36 provided the Soviet military with multiple warhead options, as it could carry various payloads, including a MIRVed warhead or, theoretically, a fractional orbital bombardment system (FOBS), leading to its prioritization over proposed

⁸² Zaloga 2002, 106-107.

⁸³ Zaloga 2002, 106-107.

⁸⁴ Zaloga 2002, 107.

⁸⁵ Zaloga 2002, 107.

⁸⁶ Zaloga 2002, 108.

⁸⁷ Zaloga 2002, 111.

medium ICBMs, which could only boost traditional nuclear warheads.⁸⁸ The development of FOBS, which required a heavy ICBM to be boosted into orbit, was intended to overcome future American BMD capabilities. In theory, FOBS would approach American BMD systems from the south—thus evading early-warning systems facing to the north—allowing the Soviets to strike BMD systems ahead of a nuclear strike, but the weapon was not practical due to its inaccuracy and the ability of American early defense systems to detect an ICBM launch.⁸⁹

Conclusion

Soviet modernization decisions show that strategic concerns dominate nuclear policymaking during periods of intense competition between nuclear-armed rivals. In both the creation of the ICBM and the modernization of ICBM capabilities in the 1950s and 1960s, respectfully, strategic concerns played the primary role in driving Soviet modernization decisions. While status ambitions were present and may have aided the push for ICBMs and their later modernization, they were of secondary importance. Additionally, the role that status did play was greater during the modernization of Soviet ICBM capabilities, an era that saw improving relations with the United States, even if competition did remain significant. This era saw a greater focus on matching American capabilities even if it was not required by strategic needs, although concerns about American counterforce and missile defense capabilities served a more important role.

These findings suggest that both a more relaxed security environment and state status aspirations increase the role of status in nuclear policymaking. This framework should be transportable to other contexts. For example, status should play a greater role in South Asian

⁸⁸ Zaloga 2002, 112.

⁸⁹ Zaloga 2002, 113-114.

nuclear politics if leaders in Islamabad or New Delhi have significant status aspirations and when Pakistan-India and India-China relations are less tense. Conversely, periods of significant China-India and India-Pakistan tensions, such as the strategic environment during and following the Pulwama-Balakot crisis and Sino-Indian border clashes in Doklam and Ladakh in the late 2010s and early 2020s, should increase the role of strategic concerns in South Asian nuclear policymaking. Future research could test nuclear policymaking in Pakistan and India, as well as other nuclear contexts such as the United States, China, Britain, France, or South Africa, to test the generalizability of these findings.⁹⁰

Other future avenues of research should address the shortcomings of this framework. Specifically, the focus on security and status omits other variables that are important in nuclear policymaking, including economic development, bureaucratic politics, interservice rivalries, leader ideologies and beliefs, strategic culture, electoral politics, and path dependencies, among others. Several of these factors played some role in some of the cases above, especially bureaucratic politics and interservice rivalries. Infighting between and within the Soviet military and defense industry played important roles in the development of second-generation ICBMs. This infighting, combined with debates among self-interested Politburo members and party officials, influenced which specific weapons programs the Soviets developed. However, strategic and status concerns remained more important in the decision to pursue capabilities, driving the Soviet quest for certain weapons types, even if the specific tool used to achieve a specific strategic or status outcome was chosen based on other factors. Future research could explore how these other factors interact with status and security on a case-by-case basis.

⁹⁰ Applying the framework to North Korea or Israel may also generate important insights if sufficient data is available.