The Domestic Politics of Nuclear Choices: A Review Essay¹

Forthcoming, International Security

Elizabeth N. Saunders Georgetown University elizabeth.saunders@georgetown.edu

Abstract:

When and how does domestic politics matter for explaining a state's nuclear choices? Recent scholarship on nuclear security develops many domestic-political explanations for different nuclear decisions, especially as scholars have expanded the nuclear "timeline," examining state behavior before and after nuclear proliferation, and moved beyond blunt distinctions between democracies and autocracies to more fine-grained understandings of domestic constraints. Without linkages among these new explanations, however, they risk being dismissed as a laundry list, rather than moving the debate over the role of domestic politics forward. Contrary to most previous domestic arguments, many of the newer domestic-political mechanisms posited in the literature are in some way top-down, that is, they originate from the level of elite decisionmakers. Two dimensions govern the extent and nature of domestic-political influence on nuclear choices: the degree of threat uncertainty, and the costs and benefits to leaders of expanding the circle of domestic actors involved in a nuclear decision. These dimensions, and the resulting framework developed in this review essay, help make sense of several cases explored in the recent nuclear security literature, and have implications for understanding when and how domestic-political arguments might diverge from what security-focused theories might predict.

¹ For helpful comments and advice, the author thanks Mark Bell, Andrew Bennett, Taylor Fravel, Francis Gavin, Charles Glaser, James Goldgeier, Brendan Green, Jooeun Kim, Sarah Kreps, James Lebovic, Keir Lieber, James Lindsay, Julia MacDonald, Nicholas Miller, Vipin Narang, Amy Nelson, Todd Sechser, Caitlin Talmadge, and Jane Vaynman, as well as seminar participants at the Georgetown Security Studies Workshop and the authors' workshop for the Carnegie Project on U.S. Nuclear Policy toward China, held at the Institute for Security and Conflict Studies at George Washington University. She is especially thankful to Sean Lynn-Jones for editorial guidance. The author is also grateful for research support from the Carnegie Corporation, the Georgetown Center for Security Studies, and the Institute for Security and Conflict Studies at George Washington University, as well as for the opportunity to conduct part of this research as a Stanton Nuclear Security Fellow at the Council on Foreign Relations. The author thanks Caroline Andridge, Gregory Durso, Kathryn Long, Patrick O'Malley, and Brian Radzinsky for excellent research assistance. This article is dedicated to the memory of Janne E. Nolan, who provided invaluable advice and encouragement on this project, as on so many others.

Domestic politics seem to lurk behind many contemporary nuclear problems. The United States faces nuclear challenges from authoritarian regimes, including China, Iran, North Korea, and Russia. The cycles of threats and diplomacy between North Korean leader Kim Jong Un and President Donald Trump have put concerns about leaders front and center.¹ Both Iran and the United States faced domestic hawkish constraints when negotiating the Joint Comprehensive Plan of Action (JCPOA), commonly known as the Iran nuclear deal.² The inability of President Barack Obama to pursue the agreement as a treaty in a politically polarized Senate left the deal more vulnerable to a new president with different preferences, and the lack of opposition support diminished the signal that the United States would uphold the commitment.³ As regional nuclear powers acquire more capable forces, regimes such as Pakistan and North Korea face trade-offs in how much control to give their militaries over nuclear strategy, raising questions about the stability of deterrence.⁴ Domestic factors may also help explain U.S.-China nuclear competition, given that Chinese leaders' beliefs and desire to keep nuclear policy centralized influenced China's acquisition of the bomb and continue to affect Chinese nuclear strategy.⁵

^{1.} For a discussion highlighting both the role of Kim and Trump as well as longer-term factors, see Van Jackson, *On the Brink: Trump, Kim, and the Threat of Nuclear War* (New York: Cambridge University Press, 2019), pp. 132–166.

^{2.} Farideh Farhi, "Distrust and Verify: Why Iranian President Hassan Rouhani's Obstacles to a Nuclear Deal are Surprisingly Similar to President Obama's," *Slate*, November 13, 2014,

http://www.slate.com/articles/news_and_politics/foreigners/2014/11/iran_s_domestic_obstacles_to_nuclear_deal_pr esident_hassan_rouhani_and_foreign.single.html; and David Sanger, "Americans and Iranians See Constraints at Home in Nuclear Negotiations," *New York Times*, July 13, 2014,

https://www.nytimes.com/2014/07/14/world/middleeast/iran-nuclear-talks.html.

^{3.} On how polarization increases the likelihood that presidents will maneuver around the treaty process, reduces the signal of support for U.S. commitments, and undermines perceptions of U.S. policy consistency, see Kenneth A. Schultz, "Perils of Polarization for U.S. Foreign Policy," *Washington Quarterly*, Vol. 40, No. 4 (Winter 2018), pp. 15, 19–21, doi.org/10.1080/0163660X.2017.1406705.

^{4.} On Pakistan, see Vipin Narang, "Posturing for Peace? Pakistan's Nuclear Postures and South Asian Stability," *International Security*, Vol. 34, No. 3 (Winter 2009/10), pp. 60–70, doi.org/10.1162/isec.2010.34.3.38. On North Korea, see Vipin Narang and Ankit Panda, "Command and Control in North Korea: What a Nuclear Launch Might Look Like," *War on the Rocks*, September 15, 2017, https://warontherocks.com/2017/09/command-and-control-in-north-korea-what-a-nuclear-launch-might-look-like/.

^{5.} Jacques E.C. Hymans, *Achieving Nuclear Ambitions: Scientists, Politicians, and Proliferation* (New York: Cambridge University Press, 2012), pp. 124–156; M. Taylor Fravel and Evan S. Medeiros, "China's Search for Assured Retaliation: The Evolution of Chinese Nuclear Strategy and Force Structure," *International Security*, Vol.

Yet, security concerns and military-technical factors remain powerful drivers of states' nuclear decisions. North Korea's pursuit of nuclear weapons is "hardly a puzzle," as "the country finds itself in one of the most dangerous security environments in the world."⁶ The JCPOA did not immediately collapse after President Trump withdrew the United States, partly because Iran saw security benefits from continuing to adhere to the deal, at least in the short term.⁷ Technological advances that make it harder for states to hide nuclear weapons or secure command and control threaten to erode the survivability of nuclear forces, a key ingredient of deterrence.⁸

Understanding the sources of states' nuclear behavior is important not only for scholars to better explain nuclear decisions, but also for policymakers to formulate policies to address nuclear challenges. If domestic politics strongly influence other states' nuclear decisions, then policies aimed at domestic variables—such as sanctions that target regime elites, concessions designed to reassure domestic actors, or policies calibrated to particular leaders—are more likely to be effective. But if security factors drive nuclear choices, such policies may be misguided.

Yet, despite a torrent of new research on the domestic politics of nuclear security over the last decade—an important part of a "renaissance" in nuclear studies after waning interest in the

Henry Rome, "Why Iran Waits: Staying in the Nuclear Deal Is Its Worst Option, Except for All the Others," *Foreign Affairs*, January 10, 2019, https://www.foreignaffairs.com/articles/iran/2019-01-10/why-iran-waits.
 Keir A. Lieber and Daryl G. Press, "The New Era of Counterforce: Technological Change and the Future of Nuclear Deterrence," *International Security*, Vol. 41, No. 4 (Spring 2017), pp. 9–49,

^{35,} No. 2 (Fall 2010), pp. 48–87, doi.org/10.1162/ISEC_a_00016; Fiona S. Cunningham and M. Taylor Fravel, "Assuring Assured Retaliation: China's Nuclear Posture and U.S.-China Strategic Stability," *International Security*, Vol. 40, No. 2 (Fall 2015), pp. 7–50, doi.org/10.1162/ISEC_a_00215; Vipin Narang, *Nuclear Strategy in the Modern Era: Regional Powers and International Conflict* (Princeton, N.J.: Princeton University Press, 2014), pp. 121–152; and M. Taylor Fravel, *Active Defense: The Evolution of China's Military Strategy since 1949* (Princeton, N.J.: Princeton University Press, 2019), pp. 236–269.

^{6.} Nicholas L. Miller and Vipin Narang, "North Korea Defied the Theoretical Odds: What Can We Learn from Its Successful Nuclearization?" *Texas National Security Review*, Vol. 1, No. 2 (February 2018), p. 67, doi.org/10.15781/T2M32NT02.

doi.org/10.1162/ISEC_a_00273; and Caitlin Talmadge, "Would China Go Nuclear? Assessing the Risk of Chinese Nuclear Escalation in a Conventional War with the United States," *International Security*, Vol. 41, No. 4 (Spring 2017), pp. 59–62, doi.org/10.1162/ISEC_a_00274.

immediate aftermath of the Cold War's end—scholars still lack an accounting of when and how domestic politics matters.⁹ Indeed, the latest wave of nuclear security research has reaffirmed the primacy of security concerns in nuclear decisions,¹⁰ and even scholars whose analyses include domestic politics "prioritize and privilege a state's security environment."¹¹ When do the mechanisms identified by new theories of the domestic politics of nuclear choices apply? What is the payoff from opening up the "black box" of the state, and where within the box should scholars look? Under what conditions would one expect to get a different answer from a security-based analysis versus one that included domestic politics in some form?

This review essay assesses recent research on domestic politics and nuclear security, and develops a framework that illuminates when and how domestic-political mechanisms are likely to affect nuclear choices. Two welcome developments have changed the nature of the long-standing debate between domestic and security explanations for nuclear behavior, but ironically, risk exacerbating rather than resolving it. First, recent research has developed a more fine-grained picture of the nuclear timeline, before and after nuclear acquisition.¹² Second, scholars have much more nuanced understandings of domestic constraints on international behavior, both within and across regime type, and especially in autocracies.

As a result, nuclear security scholarship has generated many more domestic-political explanations for many more nuclear phenomena. But without some linkages between them, new domestic-political findings could be dismissed as a laundry list of factors that might operate in

^{9.} Sagan counts "two renaissances," one in political science, and one in history, thanks to the opening of archives. Scott D. Sagan, "Two Renaissances in Nuclear Security Studies," *H-Diplo/ISSF*, Forum No. 2, June 15, 2014, p. 2, https://issforum.org/ISSF/PDF/ISSF-Forum-2.pdf.

^{10.} For a defense of the primacy of security concerns, see Alexandre Debs and Nuno P. Monteiro, *Nuclear Politics: The Strategic Causes of Proliferation* (Cambridge: Cambridge University Press, 2017).

^{11.} Narang, Nuclear Strategy in the Modern Era, p. 31.

^{12.} On the literature's previous focus on nuclear acquisition, see ibid., pp. 6–7.

certain cases, but do not explain significant variation.¹³ Among recent (and still-debated) arguments are the following: that personalist dictatorships are more likely to seek the bomb¹⁴; that the international or inward-facing nature of a state's political economy affects whether the state will seek nuclear weapons¹⁵; that the success of a developing state's nuclear ambitions (regardless of regime type) depends on giving its scientists professional autonomy¹⁶; that the nuclear strategy of regional powers depends on civil-military relations¹⁷; that partisan politics shaped arms control during and after the Cold War¹⁸; that the U.S. public may not be as averse to using nuclear weapons as previous work on the "nuclear taboo" suggests¹⁹; and that individual leaders' beliefs influence nuclear decisions in both democracies and autocracies, including the

^{13.} One previous proliferation-focused effort at synthesis, which also notes the problem of multiplying domestic arguments, is Jacques E.C. Hymans, "Veto Players, Nuclear Energy, and Nonproliferation: Domestic Institutional Barriers to a Japanese Bomb," *International Security*, Vol. 36, No. 2 (Fall 2011), pp. 154–189, especially pp. 154–155, doi.org/10.1162/ISEC_a_00059.

^{14.} Christopher Way and Jessica L.P. Weeks, "Making It Personal: Regime Type and Nuclear Proliferation," *American Journal of Political Science*, Vol. 58, No. 3 (July 2014), pp. 705–719, doi.org/10.1111/ajps.12080. On variation in capacity, even among personalist dictatorships, see Malfrid Braut-Hegghammer, *Unclear Physics: Why Iraq and Libya Failed to Build Nuclear Weapons* (Ithaca, N.Y.: Cornell University Press, 2016).

^{15.} Etel Solingen, *Nuclear Logics: Contrasting Paths in East Asia and the Middle East* (Princeton, N.J.: Princeton University Press, 2007).

^{16.} Hymans, Achieving Nuclear Ambitions, pp. 25–29; see also p. 77 on regime type.

^{17.} Narang, Nuclear Strategy in the Modern Era, pp. 36–39.

^{18.} James Cameron, *The Double Game: The Demise of America's First Missile Defense System and the Rise of Strategic Arms Limitation* (Oxford: Oxford University Press, 2017); Sarah E. Kreps, Elizabeth N. Saunders, and Kenneth A. Schultz, "The Ratification Premium: Hawks, Doves, and Arms Control," *World Politics*, Vol. 70, No. 4 (October 2018), pp. 479–514, doi.org/10.1017/S0043887118000102; and Carrie A. Lee, "Electoral Politics, Party Polarization, and Arms Control: New START in Historical Perspective," forthcoming, *Orbis*.

^{19.} On public opinion on nuclear use, see Daryl G. Press, Scott D. Sagan, and Benjamin A. Valentino, "Atomic Aversion: Experimental Evidence on Taboos, Traditions, and the Non-Use of Nuclear Weapons," *American Political Science Review*, Vol. 107, No. 1 (February 2013), pp. 188–206, doi.org/10.1017/S0003055412000597; and Scott D. Sagan and Benjamin A. Valentino, "Revisiting Hiroshima in Iran: What Americans Really Think about Using Nuclear Weapons and Killing Noncombatants," *International Security*, Vol. 42, No. 1 (Summer 2017), pp. 41–79, doi.org/10.1162/ISEC_a_00284. On the taboo itself, see Nina Tannenwald, *The Nuclear Taboo: The United States and the Non-Use of Nuclear Weapons since 1945* (New York: Cambridge University Press, 2007). For evidence from U.S. wargames showing nuclear aversion among elites, see Reid B.C. Pauly, "Would U.S. Leaders Push the Button? Wargames and the Sources of Nuclear Restraint," *International Security*, Vol. 43, No. 2 (Fall 2018), pp. 151–192, doi.org/10.1162/isec a 00333.

choice to pursue the bomb, whether to attack other proliferators, and aspects of nuclear strategy.²⁰

Whereas prior research either assumes that leaders have security incentives to keep nuclear choices as tightly controlled as possible (often an implicit assumption of realist approaches), or instead identifies domestic actors who influence nuclear decisions from the bottom up, many of the newer domestic-political mechanisms posited in the literature are in some way top-down; that is, they show leaders deliberating maintaining or loosening control over nuclear choices. I argue that two dimensions of nuclear choices affect when and how domestic politics matters: the degree of threat uncertainty, which creates space for domestic disagreement about how, if at all, to adjust nuclear policy in response to the threat; and the payoffs for expanding the domestic circle for nuclear policy—that is, the cost-benefit trade-off for leaders to devolve some power over a nuclear decision to other domestic actors, which affects the ultimate size of the circle. These two dimensions define how much room there is for domestic politics: when threat uncertainty is high, there is more room for disagreement. When leaders would pay large costs relative to benefits for expanding the circle of nuclear politics, they have greater incentives to centralize policy.

In assessing the literature, I make two additional arguments. First, I argue that it is useful to bring what are undeniably very different nuclear dependent variables (including proliferation,

^{20.} On leaders and proliferation, see Jacques E.C. Hymans, *The Psychology of Nuclear Proliferation: Identity, Emotions, and Foreign Policy* (Cambridge: Cambridge University Press, 2006); Matthew Fuhrmann and Michael C. Horowitz, "When Leaders Matter: Rebel Experience and Nuclear Proliferation," *Journal of Politics*, Vol. 77, No. 1 (January 2015), pp. 72–87, doi.org/10.1086/678308; and Jonas Schneider, "The Study of Leaders in Nuclear Proliferation and How to Reinvigorate It," *International Studies Review*, published ahead of print, January 24, 2019, doi.org/10.1093/isr/viz001. On leadership turnover and nuclear reversal, see Rupal N. Mehta, *Delaying Doomsday: The Politics of Nuclear Reversal* (New York: Oxford University Press, forthcoming), chap. 2. On leaders and counterproliferation, see Rachel Elizabeth Whitlark, "Nuclear Beliefs: A Leader-Focused Theory of Counter-Proliferation," *Security Studies*, Vol. 26, No. 4 (2017), pp. 545–574, doi.org/10.1080/09636412.2017.1331628. On leaders and nuclear cooperation, see Molly Berkemeier, "Relationships Matter: Leaders, Shared Identity, and Nuclear Cooperation," paper presented at the annual meeting of the International Studies Association, Toronto, March 2019. On Chinese leaders and nuclear security, see note 5.

strategy, and arms control) under the umbrella of "nuclear choices." Domestic-political arguments have developed mainly with respect to a single dependent variable, such as proliferation. Looking across dependent variables, however, suggests that some similar forces affect disparate nuclear decisions. Second, many recent domestic-political arguments share a focus on how leaders try to control the domestic-political circle involved in nuclear choices. Maintaining such control, however, may require leaders to expend hidden or difficult-to-measure domestic-political effort. The influence of other domestic variables, such as public opinion or bureaucratic politics, is not a given, but depends on leaders widening the circle of nuclear policymaking, perhaps because they need other actors to obtain the nuclear outcome they want.

When there is significant uncertainty about the nature and intensity of threat and when leaders have incentives to centralize a nuclear decision, there is the widest variance in possible outcomes, especially compared to what one would expect from a security-driven analysis. And if states depart from security-based expectations, the source of such divergence is most likely to be leaders themselves—for example, if leaders' beliefs strongly influence threat assessments. Divergence is likely to be especially wide when threats are clear but leaders continue to prioritize domestic-political imperatives, such as internal threats. Ironically, when leaders centralize policy, domestic politics may play a large but hidden role that is difficult to observe—and one cannot conclude from observing a tight circle of decisionmaking that domestic politics do not matter. One contribution of the new literature is to illuminate opaque domestic debates and factors such as individual leaders' beliefs across different regime types.

This article proceeds in five steps. First, I review and assess recent developments in scholarship on domestic politics and nuclear security. Second, I examine two dimensions of nuclear choices: threat uncertainty and leaders' payoffs for expanding the circle of domestic

5

actors involved in nuclear policy. Third, I use these two dimensions to develop a framework that illuminates when domestic-political mechanisms identified in the recent literature are likely to operate. Fourth, I illustrate how this framework applies to several cases discussed in recent scholarship. Fifth, I explore what this framework suggests for understanding when and how domestic-political arguments might diverge from the predictions of security-based analyses, before concluding with implications for future research.

The Evolution of Scholarship on Domestic Politics and Nuclear Security

The debate between domestic and security explanations for states' nuclear behavior is not new. For example, scholars continue to debate whether intense nuclear competition during the Cold War, particularly after the United States and the Soviet Union achieved mutually assured destruction, was warranted by security or technological factors or was instead unnecessary and driven by domestic interests such as the military's preference for a counterforce doctrine.²¹ Debate also persists over the role of domestic politics in nuclear proliferation, which became the focus of much nuclear scholarship after the Cold War. As Jacques Hymans noted in 2011, "The overwhelming majority" of nuclear proliferation research highlights domestic politics in some form, but "one limitation…is that different theoretical models have tended to assert, or to assume, the primacy of one or another type of domestic actor."²² Alexandre Debs and Nuno Monteiro argue that "non-security-based explanations," including those relying on domestic politics, are "now themselves the source of myriad different predictions," as a result of what they

^{21.} See, for example, the discussion in Charles L. Glaser, *Analyzing Strategic Nuclear Policy* (Princeton, N.J.: Princeton University Press, 1990), pp. 207–256. More recently, see Austin Long and Brendan Rittenhouse Green, "Stalking the Secure Second Strike: Intelligence, Counterforce, and Nuclear Strategy," *Journal of Strategic Studies*, Vol. 38, Nos. 1–2 (February 2015), pp. 38–73, doi.org/10.1080/01402390.2014.958150; and Lieber and Press, "The New Era of Counterforce."

^{22.} Hymans, "Veto Players, Nuclear Energy, and Nonproliferation," pp. 154–155.

deem a "premature turn away from what is intuitively the most important determinant of nuclear acquisition: a state's security environment."²³

A striking feature of previous scholarship on domestic politics and nuclear choices is the bottom-up nature of domestic-political constraints; that is, domestic-political actors outside the highest levels of decisionmaking try to use their power to influence nuclear choices. In his analysis of three "models" for why states pursue the bomb, Scott Sagan noted that the domestic-political model, which took a "bottom-up view," was "strongly influenced by the literature on bureaucratic politics and the social construction of technology." In this literature, "bureaucratic actors are not seen as passive recipients of top-down political decisions; instead, they create the conditions that favor weapons acquisition by encouraging extreme perceptions of foreign threats, promoting supportive politicians, and actively lobbying for increased defense spending."²⁴ Sagan found the most support for the security model but some support for the domestic politics model, particularly in the case of India.²⁵ He noted three types of domestic actors that form coalitions for or against proliferation: members of the nuclear energy establishment, parts of the professional military, and "politicians in states in which individual parties or the mass public strongly favor nuclear weapons acquisition."²⁶ He argued, however, that "there is no well-

24. Scott D. Sagan, "Why Do States Build Nuclear Weapons? Three Models in Search of a Bomb," *International Security*, Vol. 21, No. 3 (Winter 1996/97), p. 64, doi.org/10.1162/isec.21.3.54. On bureaucratic politics, see Graham T. Allison and Morton H. Halperin, "Bureaucratic Politics: A Paradigm and Some Policy Implications," *World Politics*, Vol. 24 (Spring 1972), pp. 40–79, doi.org/10.2307/2010559.

25. Sagan, "Why Do States Build Nuclear Weapons?" p. 66. See also Itty Abraham, *The Making of the Indian Atomic Bomb: Science, Secrecy, and the Postcolonial State* (London: Zed, 1998); and George Perkovich, *India's Nuclear Bomb: The Impact on Global Proliferation* (Berkeley: University of California Press, 1999).
26. Sagan, "Why Do States Build Nuclear Weapons?" pp. 63–64. See also Matthew Evangelista, *Innovation and the Arms Race: How the United States and the Soviet Union Develop New Military Technologies* (Ithaca, N.Y.: Cornell University Press, 1988), p. x; Dan Caldwell, *The Dynamics of Domestic Politics and Arms Control: The SALT II Treaty Ratification Debate* (Columbia: University of South Carolina Press, 1991); and Jeffrey W. Knopf, *Domestic Society and International Cooperation: The Impact of Protest on US Arms Control Policy* (Cambridge: Cambridge University Press, 1998).

^{23.} Debs and Monteiro, Nuclear Politics, p. 20.

developed domestic political theory of nuclear weapons proliferation that identifies the conditions under which such coalitions are formed."²⁷

Of course, top-down processes were also present in previous research. Robert Jervis emphasized the psychology of top decisionmakers in his analysis of the nuclear revolution.²⁸ Both Janne Nolan and Peter Feaver have stressed that nuclear policy and operational doctrine are so complex and opaque that even top civilian leaders leave it to the nuclear "guardians" in peacetime, focusing on the details only sporadically or in crises.²⁹ Nina Tannenwald's argument about the nuclear taboo emphasizes not only grassroots and civil-society actors, who generated bottom-up pressure, but also elite-level decisionmakers who accepted and institutionalized the taboo in national policy.³⁰ But among those making an affirmative effort to foreground domestic-political factors influencing nuclear policy, as Sagan notes, the main direction of domestic-political arguments tended to be from the bottom up, in the tradition of liberal theories that start from domestic actors' preferences.³¹

Recent research has deepened scholars' knowledge of domestic-political imperatives and constraints on nuclear security decisions. As Sagan has noted, one rare point of consensus in recent research (both qualitative and quantitative) is that "regime type has only a minimal effect

^{27.} Sagan, "Why Do States Build Nuclear Weapons?" p. 64. More recently, see Vipin Narang, "Strategies of Nuclear Proliferation: How States Pursue the Bomb," *International Security*, Vol. 41, No. 3 (Winter 2016/17), p. 129, doi.org/10.1162/ISEC_a_00268.

^{28.} Robert Jervis, *The Meaning of the Nuclear Revolution: Statecraft and the Prospect of Armageddon* (Ithaca, N.Y.: Cornell University Press, 1989), pp. 136–173.

^{29.} Janne E. Nolan, *Guardians of the Arsenal: The Politics of Nuclear Strategy* (New York: Basic Books, 1989); Peter D. Feaver, *Guarding the Guardians: Civilian Control of Nuclear Weapons in the United States* (Ithaca, N.Y.: Cornell University Press, 1992). In the case of India, see also Vipin Narang and Paul Staniland, "Democratic Accountability and Foreign Security Policy: Theory and Evidence from India," *Security Studies*, Vol. 27, No. 3 (2018), p. 440, doi.org/10.1080/09636412.2017.1416818.

^{30.} Tannenwald, The Nuclear Taboo, pp. 64-65.

^{31.} Sagan, "Why Do States Build Nuclear Weapons?" p. 64. On liberal theory, see Andrew Moravcsik, "Taking Preferences Seriously: A Liberal Theory of International Politics," *International Organization*, Vol. 51, No. 4 (Autumn 1997), pp. 513–553, https://doi.org/10.1162/002081897550447. For a useful discussion, see Kevin Narizny, "On Systemic Paradigms and Domestic Politics: A Critique of the Newest Realism," *International Security*, Vol. 42, No. 2 (Fall 2017), pp. 160–161, doi.org/10.1162/ISEC_a_00296.

on proliferation.³² Two developments, however, have considerably expanded the domesticpolitical lenses through which scholars view nuclear choices: first, the extension of the nuclear timeline beyond the simple, black-and-white question of whether states acquire the bomb; and second, change in the study of regime type, which has filtered into the nuclear security literature. These developments have identified more opportunities for domestic politics to matter for nuclear security in more precisely specified ways. Although still largely operating in isolation, these arguments tend to take a more top-down view of domestic politics, with governments and even leaders of both democracies and autocracies controlling access to the politics of nuclear security.

THE NEW NUCLEAR TIMELINE

Recent nuclear scholarship has expanded the nuclear timeline, both before and after proliferation. Scholars have given more attention to a state's nuclear activities before the moment of proliferation, as in research on nuclear latency, or "a measure of how quickly a state could develop a nuclear weapon from its current state of technological development if it chose to do so."³³ Another line of research explores how states translate a desire for the bomb into an

Scott D. Sagan, "The Causes of Nuclear Weapons Proliferation," *Annual Review of Political Science*, Vol. 14 (2011), p. 236, doi.org/10.1146/annurev-polisci-052209-131042. Indeed, quantitative tests have routinely found little relationship between regime type and proliferation, as well as post-proliferation behavior. See, for example, Sonali Singh and Christopher R. Way, "The Correlates of Nuclear Proliferation: A Quantitative Test," *Journal of Conflict Resolution*, Vol. 48, No. 6 (December 2004), pp. 859–885, doi.org/10.1177/0022002704269655; Dong-Joon Jo and Erik Gartzke, "Determinants of Nuclear Weapons Proliferation," *Journal of Conflict Resolution*, Vol. 51, No. 1 (February 2007), pp. 167–194, doi.org/10.1177/0022002706296158; and Todd S. Sechser and Matthew Fuhrmann, *Nuclear Weapons and Coercive Diplomacy* (New York: Cambridge University Press, 2017). For an exception, see Matthew Kroenig, "Importing the Bomb: Sensitive Nuclear Assistance and Nuclear Proliferation," *Journal of Conflict Resolution*, Vol. 53, No. 2 (April 2009), pp. 171–172, doi.org/10.1177/0022002708330287.
 Sagan, "The Causes of Nuclear: Introducing the Nuclear Latency Dataset," *Conflict Management and Peace Science*, Vol. 32, No. 4 (September 2015), pp. 443–461, doi.org/10.1177/0738894214559672; Tristan A. Volpe, "Atomic Leverage: Compellence with Nuclear Latency," *Security Studies*, Vol. 26, No. 3 (2017), pp. 517–544, doi.org/10.1080/09636412.2017.1306398; and Rupal N. Mehta and Rachel Elizabeth Whitlark, "Benefits and

operational nuclear capacity in the face of international and domestic challenges. New research on this question homes in on domestic-political variables. Hymans, for example, argues that a state's ability to realize a weapons program depends on the professionalism of the nuclear establishment, which in turn depends on whether leaders leave the professionals alone. "Neopatrimonial," personalist regimes are more likely to meddle in their own nuclear programs, harming their efficiency, whereas "Weberian legal-rational states," characterized by "impersonal structures," allow nuclear professionals to work efficiently.³⁴ Malfrid Braut-Hegghammer argues that in personalist dictatorships like Iraq and Libya, state capacity limitations and fears of coups can inhibit nuclear ambitions.³⁵ Vipin Narang argues that civil-military relations and leaders' beliefs condition the nature and pace of a nuclear program. Given the ambivalence of several Indian prime ministers and their resistance to allowing the military to play a significant role, Narang finds, in contrast to bottom-up accounts, that India's program was deliberately centralized and that India's "security pressures were strongly refracted through a domesticpolitical prism."³⁶

Recent scholarship also sheds new light on states' nuclear trajectories after acquiring the bomb, including the analysis of regional powers' nuclear strategies, new assessments of nuclear force structure and Cold War-era nuclear strategies of the United States and the Soviet Union, the determinants of states' counterproliferation choices, and the role of partisanship in arms control.³⁷ These dependent variables are very different, but some domestic-political variables

Burdens of Nuclear Latency," *International Studies Quarterly*, Vol. 61, No. 3 (September 2017), pp. 517–528, doi.org/10.1093/isq/sqx028. See also Mehta, *Delaying Doomsday*.

^{34.} Hymans, Achieving Nuclear Ambitions, p. 26.

^{35.} Braut-Hegghammer, Unclear Physics.

^{36.} Narang, "Strategies of Nuclear Proliferation," p. 146. Notably, Sagan's "three models" article also highlights Indira Gandhi's efforts to centralize the decision to seek the bomb, with key foreign and defense officials shut out of the decisionmaking. Sagan, "Why Do States Build Nuclear Weapons?" p. 67.

^{37.} On regional power nuclear strategy, see Narang, *Nuclear Strategy in the Modern Era*. On force structure, see Erik Gartzke, Jeffrey M. Kaplow, and Rupal N. Mehta, "The Determinants of Nuclear Force Structure," *Journal of*

are posited to explain more than one of them (to take one example, civil-military arrangements designed to limit the military's power may influence both the path to proliferation and nuclear strategy). Examining nuclear dependent variables as a group reveals that many of the domestic-political arguments developed to explain them share a top-down approach. These arguments, in turn, draw on a second development: new views of domestic politics and international security.

THE NEW DOMESTIC POLITICS

Since the end of the Cold War, many scholars have been preoccupied with whether democracies have advantages in their international relations (a research agenda that includes assessing why democracies rarely fight each other, whether they are better at selecting and fighting wars, and whether their coercive threats are more effective than those of other regime types).³⁸ More recently, however, scholars have moved beyond the blunt categories of "autocracies" and "democracies," a trend that has been reflected in the nuclear security literature.³⁹ Three strands of research are relevant. First, scholars have developed more fine-grained predictions for how states within each regime type pursue security, especially within the previously neglected and

38. On the democratic peace, see Bruce Russett and John Oneal, Triangulating Peace: Democracy,

Interdependence, and International Organizations (New York: W.W. Norton, 2001). On democracies and war, see Dan Reiter and Allan C. Stam, *Democracies at War* (Princeton, N.J.: Princeton University Press, 2002); but see Michael C. Desch, *Power and Military Effectiveness: The Fallacy of Democratic Triumphalism* (Baltimore, Md.: Johns Hopkins University Press, 2008). On coercive diplomacy, see Kenneth A. Schultz, *Democracy and Coercive Diplomacy* (Cambridge: Cambridge University Press, 2001); but see Alexander B. Downes and Todd S. Sechser, "The Illusion of Democratic Credibility," *International Organization*, Vol. 66, No. 3 (2012), pp. 457–489. 39. For a review of the general trend within international relations, see Susan D. Hyde and Elizabeth N. Saunders, "Recapturing Regime Type in International Relations: Leaders, Institutions, and Agency Space," conditionally

Conflict Resolution, Vol. 58, No. 3 (April 2014), pp. 481–508, doi.org/10.1177/0022002713509054. On Cold War strategy, see Brendan R. Green and Austin Long, "The MAD Who Wasn't There: Soviet Reactions to the Late Cold War Nuclear Balance," *Security Studies*, Vol. 26, No. 4 (2017), pp. 606–641,

doi.org/10.1080/09636412.2017.1331639; and Cameron, *The Double Game*. On counterproliferation, see Whitlark, "Nuclear Beliefs"; Matthew Fuhrmann and Sarah E. Kreps, "Targeting Nuclear Programs in War and Peace: A Quantitative Empirical Analysis, 1941–2000," *Journal of Conflict Resolution*, Vol. 54, No. 6 (2010), pp. 831–859, doi.org/10.1177/0022002710371671; see especially pp. 839–840 on targeting autocratic proliferators. On arms control, see Kreps, Saunders, and Schultz, "The Ratification Premium."

accepted, *International Organization* (as of June 2019).

overly general category of autocracies.⁴⁰ For example, Christopher Way and Jessica Weeks argue that personalist dictatorships should be distinguished from other, more constrained autocracies in terms of their motivation to pursue the bomb, because they have strong motives to protect their regime survival and face few, if any, veto players.⁴¹ Hymans and Braut-Hegghammer offer explanations for why some authoritarian, developing countries are able to bring their nuclear ambitions to fruition whereas others are not.⁴²

Second, scholars have identified mechanisms that cut across regime type, such as features of the domestic-political economy or new understandings of long-recognized concepts such as civil-military relations, especially the degree to which civilians restrict the military's power or in the extreme, engage in coup-proofing practices that can harm military effectiveness.⁴³ In the nuclear security literature, Etel Solingen argues that regimes with an internationally oriented political economy are more likely to resist nuclear weapons because the negative international response would threaten domestic stability, whereas inward-oriented regimes with fewer connections to the global economy are more likely to pursue the bomb.⁴⁴ Narang's theory of regional nuclear strategies relies in part on variation in civil-military relations, which can affect both democracies and autocracies. Narang shows that both India and China, for example, have "assertive" civil-military relations that centralize civilian control over nuclear strategy and thus

^{40.} On variation within autocracies, see, for example, Jessica L.P. Weeks, *Dictators at War and Peace* (Ithaca, N.Y.: Cornell University Press, 2014). On democracies, see, for example, Matthew A. Baum and Philip B.K. Potter, *War and Democratic Constraint: How the Public Influences Foreign Policy* (Princeton, N.J.: Princeton University Press, 2015).

^{41.} Way and Weeks, "Making It Personal."

^{42.} Hymans, *Achieving Nuclear Ambitions*; and Braut-Hegghammer, *Unclear Physics*. See also Hymans's and Braut-Hegghammer's contributions to the *H-Diplo* review of *Unclear Physics*. Vipin Narang and Diane Labrosse, eds., *H-Diplo/ISSF*, Roundtable, Vol. 9, No. 22, August 4, 2017, pp. 8–19, 30–37, https://issforum.org/ISSF/PDF/ISSF-Roundtable-9-22.pdf.

^{43.} See Caitlin Talmadge, *The Dictator's Army: Battlefield Effectivenss in Authoritarian Regimes* (Ithaca, N.Y.: Cornell University Press, 2015); and Vipin Narang and Caitlin Talmadge, "Civil-Military Pathologies and Defeat in War: Tests Using New Data," *Journal of Conflict Resolution*, Vol. 62, No. 7 (August 2017), pp. 1379–1405, doi.org/10.1177/0022002716684627.

^{44.} Solingen, Nuclear Logics, pp. 40-47.

an "assured retaliation" posture that does not predelegate authority to the military; in contrast, both France and Pakistan have exhibited "delegative" civil-military relations, which enable "asymmetric escalation" postures that give the military significant autonomy to use nuclear weapons.⁴⁵

Third, a growing set of findings shows how leaders systematically influence security choices.⁴⁶ Some scholars focus on individual leaders' beliefs and backgrounds,⁴⁷ whereas others explore how different domestic institutions give varying scope for individual leaders to shape security decisions.⁴⁸ Research on how leaders influence nuclear choices is growing. Several scholars have made arguments about how leaders' beliefs and backgrounds affect motivations to pursue the bomb. One of the first in this vein was Hymans's argument that leaders with an "oppositional nationalist" orientation are more likely to seek nuclear weapons, and such leaders' rise to power and "top-down direction" were necessary to get states like France and India (notably, both democracies) to pursue the bomb.⁴⁹ Matthew Fuhrmann and Michael Horowitz argue that leaders who have rebel experience are more likely to seek the bomb than those who do not, in part because they are more risk-acceptant and skeptical of outside security guarantees.⁵⁰ Leaders' beliefs also inform counterproliferation decisions, as in Rachel Whitlark's argument

46. Daniel L. Byman and Kenneth M. Pollack, "Let Us Now Praise Great Men: Bringing the Statesman Back In," *International Security*, Vol. 25, No. 4 (Spring 2001), pp. 107–146, doi.org/10.1162/01622880151091916.
47. Elizabeth N. Saunders, *Leaders at War: How Presidents Shape Military Interventions* (Ithaca, N.Y.: Cornell University Press, 2011); and Michael C. Horowitz, Allan C. Stam, and Cali M. Ellis, *Why Leaders Fight* (Cambridge: Cambridge University Press, 2015).

48. Michael C. Horowitz and Matthew Fuhrmann, "Studying Leaders and Military Conflict: Conceptual Framework and Research Agenda," *Journal of Conflict Resolution*, Vol. 62, No. 10 (November 2018), pp. 2076–2078, doi.org/10.1177/0022002718785679; Giacomo Chiozza and H.E. Goemans, *Leaders and International Conflict* (New York: Cambridge University Press, 2011); and Jeff D. Colgan, "Domestic Revolutionary Leaders and International Conflict," *World Politics* Vol. 65, No. 4 (October 2013), pp. 656–690, doi.org/10.1017/S004388711300021X.

^{45.} Narang, Nuclear Strategy in the Modern Era.

^{49.} Hymans, *The Psychology of Nuclear Proliferation*, pp. 11–14. See also Schneider, "The Study of Leaders in Nuclear Proliferation and How to Reinvigorate It."

^{50.} Fuhrmann and Horowitz, "When Leaders Matter," pp. 74-76.

about different U.S. presidents' views of the threat from China's nascent nuclear program—and thus whether it was worth attacking.⁵¹

THE NEW DOMESTIC POLITICS OF NUCLEAR SECURITY—MORE THAN THE SUM OF ITS PARTS?

As domestic explanations for nuclear choices accumulate, however, there remain few links between them, apart from ongoing debates about a single dependent variable such as proliferation. Do these arguments have features in common that advance the literature? And when, if at all, is a particular domestic-political mechanism identified in the literature likely to matter? After all, few would deny that security threats can overwhelm domestic concerns: for example, in Narang's theory of nuclear strategy, when regional nuclear powers face a clear threat and lack superpower protection, domestic factors such as civil-military relations fade in importance.⁵² At the same time, external security factors often make indeterminate predictions, and as neoclassical realists argue, security threats can be filtered through domestic elites' perceptions.⁵³ Leaders may also face domestic threats that they must balance with external security concerns as they both utilize and shape their security institutions.⁵⁴

Across several different dependent variables, one common feature of many recent arguments in the nuclear security literature is that leaders exert control over whether other

Politics."

^{51.} Whitlark, "Nuclear Beliefs."

^{52.} Narang, Nuclear Strategy in the Modern Era, pp. 31-36.

^{53.} Ibid., pp. 28–29; Schneider, "The Study of Leaders in Nuclear Proliferation and How to Reinvigorate It," pp. 20–21; and Mark S. Bell, "Examining Explanations for Nuclear Proliferation," *International Studies Quarterly*, Vol. 60, No. 3 (September 2016), p. 525, doi.org/10.1093/isq/sqv007. On neoclassical realism, see Gideon Rose, "Neoclassical Realism and Theories of Foreign Policy," *World Politics*, Vol. 51, No. 1 (October 1998), pp. 144–172, doi.org/10.1017/S0043887100007814; but, for a critique, see Narizny, "On Systemic Paradigms and Domestic

^{54.} See Talmadge, *The Dictator's Army*; Todd S. Sechser and Elizabeth N. Saunders, "The Army You Have: The Determinants of Military Mechanization, 1979–2001," *International Studies Quarterly*, Vol. 54, No. 2 (June 2010), pp. 481–511, doi.org/10.1111/j.1468-2478.2010.00596.x; and Sheena Chestnut Greitens, *Dictators and Their Secret Police: Coercive Institutions and State Violence* (New York: Cambridge University Press, 2016).

domestic actors can participate in or influence a nuclear choice. To be sure, some recent arguments continue the tradition of specifying the preferences of domestic-political actors or groups that may be involved in nuclear choices (for example, new research on public opinion and nuclear security falls in this category). Most recent arguments, however, do not take the power of other domestic-political actors, such as scientists (in Hymans's or Braut-Hegghammer's accounts) or even institutions such as the military (in Narang's) as given, but rather describe how that power may depend on the central government or even leaders themselves. Leaders are often seen as intervening in, overriding, or circumventing institutional or bureaucratic constraints, or even preventing such constraints from forming in the first place. For example, Taylor Fravel demonstrates that the civilian party leadership has maintained centralized control over nuclear strategy across China's nuclear history, in contrast to other aspects of military strategy, which have varied with external threats and party unity.⁵⁵ This centralization required active intervention to keep nuclear strategy out of the hands of the Second Artillery Force (now the People's Liberation Army Rocket Force), which serves as the custodian for China's nuclear weapons. Narang argues that in some countries, including India and China (states with very different regime types), civilians are loath to cede control over nuclear weapons to the military, and nuclear strategy is a product of this "assertive" control.⁵⁶ Realists would expect unitary policymaking, because they see leaders as channeling security concerns. Centralized policymaking is not automatic, however-leaders may have to exert domestic-political effort to

^{55.} Fravel, Active Defense, pp. 236-269.

^{56.} Narang, *Nuclear Strategy in the Modern Era*; see pp. 112–120 on India and pp. 128–152 on China. India and China have different reasons for maintaining assertive control; as Narang argues, India has "intentionally defanged" its military since independence, with persistent fears of the military becoming too powerful (pp. 111–115). In China, as Fravel demonstrates, Chinese leaders delegate authority to the People's Liberation Army in non-nuclear areas, but "nuclear strategy was viewed as a matter of supreme national policy that only the party's top leaders could determine." Fravel, *Active Defense*, p. 236.

gain and maintain their hold on decisionmaking in ways that may alter nuclear policy. Thus, the effect of domestic politics may not be immediately visible, but may still shape nuclear choices.

To help make sense of domestic-political arguments, analysts and policymakers would like to know not only when it is necessary to open up the "black box" of the state, but also into which compartment they should look. Assessments of domestic arguments, therefore, should address when and how particular domestic-political actors are likely to have influence over nuclear choices. For domestic politics to influence nuclear policy, there must be some differences or debate among the domestic-political actors who could influence nuclear choices. Domestic debate is more likely when there is uncertainty about security threats (and thus nuclear policies that may or may not be required to meet them). Leaders may also face trade-offs from including other actors in a nuclear choice. They may gain benefits from doing so, such as succeeding in their pursuit of the bomb, enhancing the credibility of their nuclear strategy, or gaining broader support for their policy so as to increase its longevity. Yet, they may also face costs to empowering those with different nuclear preferences or who pose a domestic threat. The next section explores these dimensions.

When Do Domestic Politics Matter?

I argue that two variables help make sense of when and how domestic politics matter for nuclear choices: the degree of threat uncertainty, which affects the scope for domestic debate and disagreement; and the costs and benefits of expanding the domestic circle for nuclear choices (i.e., domestic-political trade-offs to including other actors in nuclear decisions). I discuss these two dimensions in this section, before combining them in the following section into a framework for understanding the politics of nuclear choices.

16

THREAT UNCERTAINTY

One might expect to see a wider range of nuclear policy preferences (and thus greater scope for domestic politics to matter) when is there is uncertainty over the nature and extent of security threats.⁵⁷ Security threats include not only nuclear threats, but also the conventional military threats that can motivate decisions to seek or expand nuclear capabilities. Uncertainty about threat can come from several sources. First, for any given state, permanent features of the security environment such as geography set an important baseline for how much scope there is for different views of threats. As Narang argues in the case of India, natural barriers give it some protection from China, and thus India has some "latitude" in its security environment—driving the locus of its nuclear strategy choice down to the domestic level (in this case, civil-military relations).⁵⁸ Other states, such as North Korea, face forbidding geography that, when combined with adversary capability, leaves less room for doubt about the nature and scope of threats.⁵⁹

Second, there may be uncertainty because states have incomplete information about the nature, severity, likelihood, and source of a threat. Such information might concern the capabilities or intentions of adversaries, as well as factors that might mitigate threats, such as the support of allies.⁶⁰ For example, states may have imprecise or incomplete intelligence estimates of the progress of another state's nuclear program, what types of nuclear capabilities an adversary seeks (or how much of a capability), or how an adversary bases or targets its existing capabilities (factors that affect the survivability of nuclear weapons, and thus deterrence). External security guarantees are another source of potential threat uncertainty. Even when a

^{57.} Hymans provides a useful discussion of this point. See Hymans, *The Psychology of Nuclear Proliferation*, pp. 17–18.

^{58.} Narang, Nuclear Strategy in the Modern Era, p. 112.

^{59.} See Miller and Narang, "North Korea Defied the Theoretical Odds," p. 67.

^{60.} Domestic politics can itself be a source of uncertainty. See Jane E. Vaynman, "Enemies in Agreement: Domestic Politics, Uncertainty, and Cooperation between Adversaries," Ph.D. dissertation, Harvard University, 2014. See also Amy J. Nelson, "Improving the Efficiency of Arms Control: From Risk Reduction to Uncertainty Management," Ph.D. dissertation, University of California-Berkeley, 2013.

third-party patron promises to protect an ally under its "nuclear umbrella," uncertainty remains over the credibility of that guarantee or the strength of the alliance relationship.⁶¹ The proliferation literature highlights threat uncertainty as states debate whether threats are so acute that it is worth paying the costs to acquire the bomb.⁶² Furthermore, debates over the warfighting utility of nuclear weapons partly reflect uncertainty over the security benefits of particular nuclear doctrines or improvements (which, after all, have never been tested), as well as the effect of such capabilities if acquired by adversaries.⁶³

Third, domestic actors may hold different beliefs about the nature and severity of the threat, which generates uncertain assessments if different actors view the same information through different beliefs or motivated reasoning.⁶⁴ This kind of uncertainty is obviously different from uncertainty that stems from incomplete information, but it can be characterized as uncertainty about the meaning of a threat. Divergence in beliefs may come from different domestic sources and affect different types of nuclear choices. As mentioned, the nuclear security literature increasingly recognizes that individual leaders, across regime type, vary in their threat assessments. For example, in the proliferation literature, Fuhrmann and Horowitz argue that leaders with prior rebel experience are more sensitive to threats to their country's independence and less trusting of external security guarantees, and thus more likely to seek a

^{61.} For a useful discussion, see Gene Gerzhoy, "Alliance Coercion and Nuclear Restraint: How the United States Thwarted West Germany's Nuclear Ambitions," *International Security*, Vol. 39, No. 4 (Spring 2015), p. 102, doi.org/10.1162/ISEC_a_00198.

^{62.} On this point, see Bell, "Examining Explanations for Nuclear Proliferation," p. 525.

^{63.} Nolan, *Guardians of the Arsenal*; Francis J. Gavin, *Nuclear Statecraft: History and Strategy in America's Atomic Age* (Ithaca, N.Y.: Cornell University Press, 2012), pp. 120–133; James H. Lebovic, *Flawed Logics: Strategic Nuclear Arms Control from Truman to Obama* (Baltimore, Md.: Johns Hopkins University Press, 2013); Green and Long, "The MAD Who Wasn't There"; and Matthew Kroenig, *The Logic of American Nuclear Strategy: Why Strategic Superiority Matters* (New York: Oxford University Press, 2018).

^{64.} Robert Jervis, *Perception and Misperception in International Politics* (Princeton, N.J.: Princeton University Press, 1976); Saunders, *Leaders at War*; and Keren Yarhi-Milo, *Knowing the Adversary: Leaders, Intelligence, and Assessment of Intentions in International Relations* (Princeton, N.J.: Princeton University Press, 2014).

nuclear weapon.⁶⁵ The leaders whom Hymans categorizes as "oppositional nationalists" leaders tend toward higher levels of fear and thus to "higher threat assessment" (in response to the same information).⁶⁶ When assessing the nuclear capabilities of adversaries, Whitlark shows that U.S. presidents disagreed about the threat posed by China getting a nuclear capability.⁶⁷

Divergent beliefs and threat assessments can also arise between policymakers within the same state. Nuclear analysts have long recognized, for example, that the military tends to prefer offensive weapons and doctrines.⁶⁸ Bureaucracies may have organizational preferences for particular nuclear policies.⁶⁹ Disagreement can also result from political ideology or a hawk-dove divide: for example, as James Lebovic details, during Cold War arms control debates in the United States, U.S. policymakers' "sense of security derived not from objective readings of the *numbers*; instead it drew on underlying *beliefs* about U.S. benefits and costs under the proposed or accepted terms of an agreement."⁷⁰

Threat uncertainty or consensus is not the same as the severity of the threat. Threats can be high and uncertain: for example, during the high threat levels of the Cold War, there was significant uncertainty about adversary capabilities and intentions, as well as a wide range of beliefs about how to assess available information. There can also be relative clarity that threats are low. Hymans notes that in the late 1940s, for example, French policymakers generally agreed that the nuclear threat was relatively low (dampening consideration of a nuclear

^{65.} Furhmann and Horowitz, "When Leaders Matter," pp. 74-75.

^{66.} Hymans, The Psychology of Nuclear Proliferation, pp. 30-31.

^{67.} Whitlark, "Nuclear Beliefs."

^{68.} Glaser, Analyzing Strategic Nuclear Policy, pp. 365-368.

^{69.} Organization theory suggests that militaries may favor offensive doctrines. See Barry Posen, *The Sources of Military Doctrine: France, Britain, and Germany between the World Wars* (Ithaca, N.Y.: Cornell University Press, 1984), pp. 47–51. Other bureaucracies may favor restraint, as in the Arms Control and Disarmament Agency during the Cold War. See Nicholas L. Miller, *Stopping the Bomb: The Sources and Effectiveness of U.S. Nonproliferation Policy* (Ithaca, N.Y.: Cornell University Press, 2018), p. 27.

^{70.} Lebovic, Flawed Logics, p. 1 (emphasis in original). See also Feaver, Guarding the Guardians, pp. 73-74.

capability).⁷¹ Still, as discussed below, the severity of threat can affect the salience of nuclear issues in domestic politics, and thus can affect the second dimension to which I now turn: the costs and benefits of expanding the circle for nuclear choices.

COSTS AND BENEFITS OF EXPANDING THE DOMESTIC CIRCLE

Even when there is little uncertainty or debate about threats, other domestic disagreements or internal threats can affect nuclear decisionmaking. The costs and benefits of expanding the domestic circle capture the payoffs leaders would reap if they loosened control over nuclear choices (for example, by expanding the circle of decisionmakers or delegating some aspects of nuclear policy). By "domestic circle," I mean those who can participate in or observe a leader's nuclear decision and potentially impose costs on or provide benefits to the leader for that decision. Three successive levels of domestic actors are relevant. At the center are state leaders and their immediate inner circle, who are the ultimate decisionmakers. The next level consists of elite actors whose participation in nuclear policy is often necessary to make or implement a policy change, and whose preferences may influence nuclear choices, but who do not have direct decisionmaking authority (unless explicitly granted by leaders). This group includes bureaucratic, military, and legislative elites, as well as scientists and technicians involved in nuclear projects. Finally, there is the mass public, which usually serves as an observer or "audience" rather than a participant in nuclear policy, but whose preferences can serve as a constraint on leaders or be activated by elite cues.⁷² This dimension draws on broader trends in

^{71.} Hymans, The Psychology of Nuclear Proliferation, pp. 88-89.

^{72.} In international relations scholarship, the term "domestic audience" is often used in the context of "audience costs," or political punishment for backing down from a threat. See James D. Fearon, "Domestic Political Audiences and the Escalation of International Disputes," *American Political Science Review*, Vol. 88, No. 3 (September 1994), pp. 577–594, doi.org/10.2307/2944796. More generally, it can mean a group that can hold leaders accountable. For an example, see Weeks, *Dictators at War and Peace*, pp. 14–15.

international relations scholarship showing that there is variation in the nature and extent of domestic constraints within and across regime type. This variation can stem from domestic institutional constraints in both democracies and autocracies, which are relatively fixed and slow to change.⁷³ Alternatively, in the shorter term, leaders can try to alter or maneuver around domestic-political constraints—for example, by attempting to control the flow of information to other elite actors or the public, which is typically not well informed about security issues.⁷⁴

The costs and benefits that leaders might incur or obtain when they expand the domestic circle for nuclear choices will vary depending on the exact policy under consideration. It is beyond the scope of this article to fully describe such variation, although it is a fruitful avenue for future research. Of interest here are the common features of the trade-offs leaders face across nuclear choices. There are two sources of leaders' wariness to include other domestic-political actors' participation in or influence on a nuclear decision. First, there may be a distribution of policy preferences within the state on a given nuclear issue. Second, independent of nuclear policy, other domestic actors may have their own personal, political, or organizational interests that pose a domestic threat to leaders.

On the cost side, when leaders contemplate a change in nuclear policy—whether it is starting a nuclear weapons program, crossing the proliferation threshold, changing nuclear posture, or pursuing an arms control agreement—they may pay a domestic price if they involve

74. In autocracies, see Jessica Chen Weiss, *Powerful Patriots: Nationalist Protest in China's Foreign Relations* (Oxford: Oxford University Press, 2014). In democracies, see Elizabeth N. Saunders, "War and the Inner Circle: Democratic Elites and the Politics of Using Force," *Security Studies*, Vol. 24, No. 3 (September 2015), pp. 466–501, doi.org/10.1080/09636412.2015.1070618; John M. Schuessler, *Deceit on the Road to War: Presidents, Politics, and American Democracy* (Ithaca, N.Y.: Cornell University Press, 2015); and Sarah E. Kreps, *Taxing Wars: The American Way of War Finance and the Decline of Democracy* (New York: Oxford University Press, 2018). For a framework that integrates both institutional and strategic sources of constraint, see Hyde and Saunders, "Recapturing Regime Type in International Relations."

^{73.} This structural variation in audiences is explored on the autocratic side by Weeks, *Dictators at War and Peace*; and on the democratic side by Baum and Potter, *War and Democratic Constraint*.

more actors.⁷⁵ First, if leaders allow other actors or constituencies into the policymaking process, they may face political costs, including loss of political capital or popularity, or even ouster. For example, leaders fearing a military coup may take significant steps to limit military access to information and authority. In extreme cases, such fears can seriously undermine a state's ability to meet a clear external threat: for example, Caitlin Talmadge shows that even in the face of acute external threats, authoritarian regimes prioritize internal threats and take active coup-prevention steps to centralize control over military practices and information that dramatically undermine military effectiveness, until the moment when threats arrive at the "palace gates."⁷⁶ Democratic leaders may also fear coups, of course. Additionally, both democratic and authoritarian leaders might have reason to be concerned about political or bureaucratic opponents who have incentives to deny them a policy victory or who seek to oust them from office.⁷⁷ These domestic threats and disagreements can contribute to or exacerbate a distribution of views and incentives when a state faces a nuclear choice, and in turn, make leaders think hard about loosening their grip on nuclear security decisions.

Another form of cost that leaders may pay is the loss of control or influence over nuclear policy—for example, if they give a stakeholder with different preferences (such as the military, a bureaucratic actor, or a group of legislators) access to policymaking. Leaders may be willing to pay costs to keep the circle of policymaking narrow, excluding or maneuvering around some domestic actors to achieve what they see as the most appropriate policy. It may be politically cheaper for leaders to obtain their preferred policy by obtaining the support of some political actors at the expense of others, or of pivotal actors (e.g., powerful legislators) who can bring

^{75.} Leaders may also risk paying international costs, such as accidents, conflicts, unintended escalation, or sanctions. Given this article's focus, I concentrate on domestic costs.

^{76.} Talmadge, The Dictator's Army, pp. 15–17, 24.

^{77.} This concern rises with political polarization, as discussed in Kreps, Saunders, and Schultz, "The Ratification Premium," pp. 493–494.

others on board. In that case, paying costs in the form of a side payment (for example, policy concessions or an increased share of the budget) may be a useful way to obtain a crucial stakeholder's blessing and avoid the need to further widen the circle. Ratification debates over arms control agreements frequently involve such bargaining.⁷⁸

In the face of such costs to widening the circle (and benefits to keeping it narrow), why would leaders ever loosen their grip on nuclear policy? First, leaders may need to empower other domestic actors simply to make their preferred policy a reality: for example, bureaucratic or scientific actors need capacity and independence to make a state's nuclear ambitions operational, as Hymans and Braut-Hegghammer demonstrate.⁷⁹ If leaders wish to enhance the credibility of nuclear threats, they may consider predelegating launch authority, but that would require giving the military some independent control over nuclear policy. Second, expanding the circle of nuclear policy can help leaders make their nuclear policy "stick"—for example, by institutionalizing it in a new (or newly empowered) bureaucratic organization or obtaining a broader base of support by submitting it for legislative approval (and even when such approval is required, seeking the widest possible margin). Third, a wider base of support may bring international benefits, such as more credibly signaling commitment to a policy.⁸⁰ Fourth, an expanded circle may facilitate innovation, for example from a well-established scientific or technical infrastructure.⁸¹

The recent nuclear security literature offers many examples of leaders—across the regime type spectrum and over a range of nuclear dependent variables—facing these trade-offs in the

78. Ibid.

^{79.} Hymans, Achieving Nuclear Ambitions; and Braut-Hegghammer, Unclear Physics.

^{80.} One need not believe that "audience costs," defined as the costs leaders pay for making a threat and backing down, are significant in order to include this potential benefit here; leaders may believe that audience scrutiny is valuable, and thus I include this possibility as a potential benefit. Relevant here is Schultz's argument that opposition support can enhance the credibility of coercive diplomacy. See Schultz, *Democracy and Coercive Diplomacy*. See also Schultz, "Perils of Polarization for U.S. Foreign Policy," pp. 19–21. 81. Evangelista, *Innovation and the Arms Race*, p. 32.

costs and benefits of expanding the domestic circle for nuclear choices. Leaders have taken steps to cut other actors out of nuclear policymaking for fear of coups, ouster, or domestic-political costs. Leaders who decide they want a nuclear capability may still be unwilling to devolve sufficient power to the professional scientists and technicians who can deliver a bomb, lest they become a "pole of power around which political opposition could cluster."⁸² Democratic leaders often work to keep nuclear decisions secret. Hymans notes that in France, political leaders feared that if the public learned of preparations for a bomb program, the government might fall.⁸³ Political costs also loom over nuclear crises: as Jonathan Brown and Anthony Marcum argue, in the United States during and after the Cuban missile crisis, President John F. Kennedy kept the concessions he made to the Soviets secret.⁸⁴ This secrecy limited domestic actors' access to information, allowing him to avoid paying domestic costs for stating prior to the crisis that the United States would act if the Soviets made a military move in Cuba.⁸⁵ In contrast, Soviet leader Nikita Khrushchev could not keep his concessions secret from the Presidium, and thus the crisis contributed to his political weakening.⁸⁶

Leaders have also sought to restrict the domestic circle for nuclear choices to exclude those who have different nuclear policy preferences, so as not to relinquish control and to keep their own policy options open. Narang details the steps that successive Indian prime ministers took to "centrally manage the program in order to prevent India's scientists and military from entrepreneurially advancing the program beyond the point that India's prime ministers had so

^{82.} Hymans, Achieving Nuclear Ambitions, p. 66.

^{83.} Hymans, The Psychology of Nuclear Proliferation, p. 103.

^{84.} Jonathan N. Brown and Anthony S. Marcum, "Avoiding Audience Costs: Domestic Political Accountability and Concessions in Crisis Diplomacy," *Security Studies*, Vol. 20, No. 2 (2011), pp. 163–168, doi.org/10.1080/09636412.2011.572671.

^{85.} Ibid., p. 159.

^{86.} Ibid., p. 167–168. See also Joseph Torigian, "A State of Fever': The Civil-Military Relations of the Nuclear (and Rocket) Revolution in the USSR," paper presented at the annual meeting of the International Studies Association, Toronto, March 2019.

carefully calibrated.^{**87} Both leadership beliefs and a desire to keep the military out of decisionmaking played a role in the drive for centralization.⁸⁸ Leaders may also pay domestic costs that can be imposed by other elites, whose participation in policymaking could limit their flexibility in negotiations or decisionmaking or even cost them politically. For example, during Cold War arms control negotiations, U.S. presidents from both parties accommodated the preferences of the military.⁸⁹ Additionally, bureaucratic actors who favored arms control could push negotiations in unwanted directions, leading more hawkish presidents such as Richard Nixon to maneuver around their own negotiators, as illustrated by his administration's frequent circumventing of Gerard Smith, the director of the Arms Control and Disarmament Agency and nominally the administration's lead negotiator for the SALT I accords.⁹⁰

Even in Japan, a democracy with a salient and unique nuclear history, and, as Hymans notes, many domestic veto players who would have to reach consensus to change Japan's policy against nuclear weapons,⁹¹ leaders may have some ability to circumvent constraints. Llewelyn Hughes has argued that "institutional hedging by decisionmakers has ensured that the formal barriers to nuclearization are surmountable."⁹² Furthermore, Richard Samuels and James Schoff note that despite anti-nuclear sentiment in Japan and apparent institutional barriers, "Japan's robust democratic politics and its determined leadership have repeatedly demonstrated that

91. Hymans, "Veto Players, Nuclear Energy, and Nonproliferation."

^{87.} Narang, "Strategies of Nuclear Proliferation," p. 142.

^{88.} Perkovich, India's Nuclear Bomb, p. 275.

^{89.} Steven E. Miller, "Politics over Promise: Domestic Impediments to Arms Control," *International Security*, Vol. 8, No. 4 (Spring 1984), p. 81, doi.org/10.2307/2538563.

^{90.} Gerard Smith, *Doubletalk: The Story of SALT I* (Lanham, Md.: University Press of America, 1985); and John Newhouse, *Cold Dawn: The Story of SALT* (Washington, D.C.: Pergamon-Brassey's, 1989).

^{92.} Llewelyn Hughes, "Why Japan Will Not Go Nuclear (Yet): International and Domestic Constraints on the Nuclearization of Japan," *International Security*, Vol. 31, No. 4 (Spring 2007), p. 91, doi.org/10.1162/isec.2007.31.4.67.

opposition and veto power are not the same."⁹³ Indeed, there have been recent efforts to centralize Japanese national security policymaking.⁹⁴

Leaders can also obtain benefits from expanding the domestic circle for nuclear choices, or at least, sometimes see those benefits as worth the costs. For example, Sagan suggests that leaders may opt for strong "latent" nuclear capabilities, in part because "a high degree of latency could make it easier for a pro-nuclear weapons party or individual leaders to implement a decision to acquire nuclear weapons if they are in power for only a brief period of time."⁹⁵ Tristan Volpe similarly argues that nuclear technology brings "increasing returns to various players within the state," and thus higher levels of latency increase the domestic costs of reversing nuclear programs (and thus a cost of "stickiness" is reduced flexibility to strike nonproliferation bargains internationally).⁹⁶

The two dimensions—threat uncertainty and the costs and benefits of expanding the domestic circle—are not completely independent. Uncertain threats can increase the likelihood that actors with different preferences will try to influence a nuclear choice unless leaders take steps to exclude them. A change in threat uncertainty, in either direction, can also affect the salience of nuclear decisions. For example, the apparent softening of an alliance commitment may increase threat uncertainty and salience, as in the case of allies' concerns over the reliability of the U.S. nuclear umbrella.⁹⁷ Sudden clarity about a threat—as when an adversary acquires nuclear weapons—may also increase salience, which can affect the costs or benefits of expanding the domestic circle if the leader holds a threat perception that differs from the

^{93.} Richard J. Samuels and James L. Schoff, "Japan's Nuclear Hedge: Beyond 'Allergy' and Breakout," *Political Science Quarterly*, Vol. 130, No. 3 (Fall 2015), p. 492, doi.org/10.1002/polq.12362.

^{94.} Mayumi Fukushima and Richard J. Samuels, "Japan's National Security Council: Filling the Whole of Government?" *International Affairs*, Vol. 94, No. 4 (July 2018), pp. 773–790, doi.org/10.1093/ia/iiy032. 95. Sagan, "The Causes of Nuclear Weapons Proliferation," p. 240.

^{96.} Volpe, "Atomic Leverage," pp. 526–527.

^{97.} See, for example, Samuels and Schoff, "Japan's Nuclear Hedge," pp. 482-489.

prevailing view. Leaders may have to work harder to keep their views and preferences in control of nuclear policy. The arrow can also run the opposite direction: high costs for expanding the domestic circle may lead to the exclusion of domestic voices that affect threat assessments, and thus affect uncertainty. Nonetheless, the two dimensions are sufficiently independent that it is useful to analyze their interaction.

The Domestic Politics of Nuclear Choices: A Framework

In this section, I combine the two dimensions—threat uncertainty and the costs and benefits of expanding the domestic circle—into a framework that helps map the recent literature. After describing the framework and some illustrative cases, I then turn to its implications for understanding how states make nuclear choices.

	Threat Uncertainty	Threat Clarity
Payoffs from expanding domestic circle low	centralizers	gamblers
Payoffs from expanding domestic circle high	mobilizers	delegators

Table 1. Domestic and International Dimensions of Nuclear Security

Putting these two dimensions together yields four possible combinations, as shown in table 1. The rows combine the costs and benefits from expanding the domestic circle into "payoffs," which can be low (e.g., low benefits relative to high costs) or high (e.g., low costs, or

large benefits relative to costs). In the upper-left "centralizer" box, there is both significant uncertainty about the nature, severity, or meaning of the threat, and domestic incentives for excluding some actors from the circle of nuclear decisionmaking, giving leaders strong incentives to keep close control over nuclear policy. Centralization is not costless to leaders, however, and may require expending significant domestic-political capital. There are also costs or trade-offs in terms of outcome. Centralization may introduce delays in proliferation, even if such delays are a welcome way for leaders to keep control over the pace of a program, as in the case of nuclear "hedging."⁹⁸ In the case of nuclear strategy, centralization in the form of assertive civil-military relations constrains options and introduces delays for nuclear use (although there are other benefits, such as preventing accidental launch).⁹⁹ Making nuclear policy with a narrow base of support may make it easier for opponents to undo the policy at lower political cost. If leaders centralize, they may have calculated that the costs of centralization are lower than the costs of expanding the circle for nuclear choices or that the benefits of expansion do not outweigh the costs. The costs of centralization may be difficult for scholars to observe, however, whether because of regime opacity, deliberate secrecy, or actions that simply do not occur because centralization deters or prevents them.

Where threats remain uncertain but the payoffs from expanding the domestic circle are higher, as in the lower-left box, "mobilizers" may see significant benefits to expanding the domestic circle for nuclear policy and securing the buy-in of other domestic actors, even if they face costs in doing so. Many familiar domestic-political mechanisms fall into this "mobilizer" box, but the key point is that leaders often make an active choice to empower these actors. For

^{98.} For example, in the Indian case, Narang, "Strategies of Nuclear Proliferation," pp. 141-142.

^{99.} For a discussion, see Peter D. Feaver, "Command and Control in Emerging Nuclear Nations," *International Security*, Vol. 17, No. 3 (Winter 1992/93), pp. 160–187, doi.org/10.2307/2539133. See also Narang and Panda, "Command and Control in North Korea."

example, at the early stages of many nuclear programs, the creation of professionalized nuclear bureaucracies is often the result of a "mobilizing" process. The work of Hymans and Braut-Hegghammer underscores that scholars should not take the role of such bureaucracies for granted, even if they later accrue power through institutionalization or increasing returns—as Volpe argues can occur in more advanced stages of nuclear "latency."¹⁰⁰ Leaders who make nuclear agreements may also seek to mobilize by obtaining broad legislative support, using the tools of coalition politics such as side payments to legislative or bureaucratic actors in the case of arms control or force planning (which are often intertwined).¹⁰¹ In terms of nuclear coercion or nuclear use, "mobilizers" may try to invoke public opinion or make public threats. Although some recent research has explored public opinion on nuclear policy, other scholarship shows that it remains an elite-driven phenomenon to which the public, quite rationally, pays only sporadic attention, and elites are an important route through which public opinion is itself activated.¹⁰²

To be sure, bureaucratic and legislative actors are not merely passive recipients of a mobilizing leader's decision to grant political access. As recent scholarship on the U.S. approach to nuclear testing and nonproliferation has shown, bureaucrats and members of Congress have seized openings to press their views—for example, when there is disagreement about threats among the various actors but leaders lack expertise on the issue or when salience

^{100.} Volpe, "Atomic Leverage," p. 526.

^{101.} Even when ratification is required, leaders may seek the broadest support possible, as when Nixon sought a lopsided vote for the SALT I agreements and submitted the Interim Agreement to the House of Representatives. See Kreps, Saunders, and Schultz, "The Ratification Premium," p. 497; and Alan Platt, "The Anti-Ballistic Missile Treaty," in Michael Krepon and Dan Caldwell, eds., *The Politics of Arms Control Treaty Ratification* (New York: St. Martin's, 1991), pp. 247–249.

^{102.} On this point, see Abigail S. Post and Todd S. Sechser, "Norms, Public Opinion and the Use of Nuclear Weapons," working paper, Anderson University and University of Virginia, 2019. In the context of India, see also Narang and Staniland, "Democratic Accountability and Foreign Security Policy," p. 428.

increases (e.g., after a nuclear test).¹⁰³ As Nicholas Miller shows, Congress has "a long history as Washington's nonproliferation watchdog," along with certain bureaucratic actors with nonproliferation expertise; once such roles become entrenched, they effectively widen the default size of the domestic circle for future nuclear choices.¹⁰⁴ Leaders' ability to strategically manage the power of other domestic actors remains an important factor, however.

On the right side of table 1 are cases in which threats are clearer (whether they are clearly high, or low). Here, leaders may have little choice but to expand the circle of domestic actors to achieve what they consider a beneficial change in nuclear policy—giving power to the scientific or technical community, for example, or greater authority to the military for nuclear use. There are likely significant limits on the extent of this expansion, and policy may remain relatively centralized. After all, when threats are certain and acute, centralization can be useful for mobilizing resources or indicating priority.¹⁰⁵

Yet even when there is little uncertainty surrounding security threats, different domestic incentives may lead to different outcomes. In the upper-right box, where costs for expanding the domestic circle are high relative to benefits, leaders may loosen control over nuclear policy only when threats become so acute that leaders have no other choice. Such leaders can be dubbed "gamblers," because they are essentially betting that domestic threats outweigh international threats, and thus they are likely to decentralize policy only reluctantly and hastily at the last possible moment. "Gamblers" are betting not only that such a change in nuclear policy is unlikely to be necessary, but also that they could execute a change relatively quickly if needed—

^{103.} See, for example, Julia M. Macdonald, "Eisenhower's Scientists: Policy Entrepreneurs and the Test-Ban Debate, 1954–1958," *Foreign Policy Analysis*, Vol. 11, No. 1 (January 2015), pp. 1–21, doi.org/10.1111/fpa.12018; and Miller, *Stopping the Bomb*, pp. 26–28.

^{104.} Miller, Stopping the Bomb, p. 28.

^{105.} Evangelista, Innovation and the Arms Race, p. 30.

a high-risk strategy.¹⁰⁶ Talmadge's argument about coup-proofing and conventional military effectiveness provides a useful parallel: she argues that for dictators who have prioritized coup-proofing against internal threats and accepted the risk of inferior military performance, "truly unambiguous signals" from the security environment, such as "regime-rocking battlefield defeats," may not allow a leader time to loosen coup-proofing restrictions and improve battlefield practices.¹⁰⁷

One can analogize this gamble to the nuclear realm: leaders who previously starved or coup-proofed a bomb program, for example, will face greater obstacles should they pursue an accelerated pursuit of a nuclear weapon, as illustrated by Saddam Hussein's "crash" program after the Iraqi invasion of Kuwait in August 1990.¹⁰⁸ Command and control arrangements will also be problematic for "gamblers" who try to suddenly expand previously centralized procedures. As Peter Feaver notes, such a switch could occur in a country where leaders maintain assertive command and control arrangements in peacetime because of "volatile" civil-military relations, but that tried to delegate, "perhaps catastrophically," when crises clarified the threat in wartime.¹⁰⁹ Even when such shifts come in response to a clear signal from the security environment, leaders must live with the legacy of their previously tight circle of decisionmaking.

Where costs of expanding the domestic circle are low or benefits high, as in the lowerright box, "delegators" can more smoothly devolve power to those who will implement their choices. Institutions or infrastructure may already be in place to facilitate such delegation. The

^{106.} This logic is analogous to Talmadge's argument that personalist dictators maintain their coup-proofing practices that inhibit military effectiveness until the threat reaches the proverbial palace gates. See Talmadge, *The Dictator's Army*, p. 24.

^{107.} Talmadge, The Dictator's Army, p. 24.

^{108.} Braut-Hegghammer, *Unclear Physics*, pp. 103–123. See also Hymans, *Achieving Nuclear Ambitions*, pp. 111–114. There is debate between these authors over how far Iraq actually got with this program, but little disagreement that it was done suddenly and faced significant obstacles stemming from leadership.

^{109.} Feaver, "Command and Control in Emerging Nuclear Nations," p. 181. See also Narang and Panda, "Command and Control in North Korea."

relatively straightforward delegation and subsequent bureaucratic professionalism of some of the first nuclear weapons programs, including that of the United States, is illustrative, as Hymans argues.¹¹⁰ A state's civil-military relations may allow the military to have custody over or authority to use nuclear weapons. As Feaver notes, even the United States' command and control system shifts from assertive to more delegative in wartime, but this shift is likely to be less dangerous given U.S. procedures and experience with periods of delegative systems even in peacetime.¹¹¹ For other countries, the costs of expanding the domestic circle may be already "baked in," as in the case of Pakistan, where, as Narang describes, "nuclear command-and-control architecture and decision making occurs within a clearly praetorian [military] structure."¹¹² Although there are costs to delegation—for example, increased risk of accidents or unauthorized launch¹¹³—there is less active domestic-political effort required to maintain delegation on an ongoing basis.

This framework is inevitably oversimplified, and it identifies only ideal types. In the real world, each dimension is a continuum. The line between "gambler" and "delegator" can be especially blurry, for example. Some "sprinting" proliferation strategies may straddle this line, with the nuclear bureaucracy allowed to operate somewhat professionally in the face of clear threats but with intrusive monitoring by leaders or their agents.¹¹⁴ As David Holloway notes in the context of the Soviet nuclear program, Lavrentii Beria, Stalin's trusted associate and secret

^{110.} Hymans, Achieving Nuclear Ambitions, pp. 31-33.

^{111.} Feaver, *Guarding the Guardians*, p. 74; and Feaver, "Command and Control in Emerging Nuclear Nations," p. 186.

^{112.} Narang, Nuclear Strategy in the Modern Era, p. 84.

^{113.} See Scott D. Sagan, *The Limits of Safety: Organizations, Accidents, and Nuclear Weapons* (Princeton, N.J.: Princeton University Press, 1993).

^{114.} On sprinting, see Narang, "Strategies of Nuclear Proliferation," pp. 120–121.

police chief, used threats to spur the program, but was "intelligent enough to realize that he had to balance the repressive powers at his disposal against the need for competent management."¹¹⁵

Mechanisms and Illustrative Cases

Table 2 places several domestic-political mechanisms discussed in recent research within the framework outlined above. This list is by no means exhaustive, but shows how the framework illuminates when different domestic-political mechanisms might matter across various nuclear dependent variables. In the "centralizer" box, leaders' beliefs and perceptions are likely to be of greatest importance (as discussed further below). To achieve centralization, leaders might use mechanisms such as keeping certain elites out of the loop on nuclear policy; coup-proofing; or designing or shaping institutions that insulate nuclear policy from particular domestic actors, as in cases where nuclear forces are handled separately from the conventional military (as in the Chinese case) or the early U.S. attempt to put custody of nuclear material in the hands of a civilian agency.¹¹⁶ "Mobilizers" may try to build support for their policies using the tools of coalition politics, such as side payments or opening up legislative or even public debate; they may also seek to build or alter nuclear bureaucracy. "Gamblers" are likely to use many of the same tools as centralizers, but to an extreme degree, even in the face of certainty about threats. When they finally decentralize, they will do so in limited, abrupt, or reluctant ways.

"Delegators" are more likely to give the bureaucracy and military independence and resources, whether to build a nuclear capability, or in command and control. Over time, mobilization or delegation can allow bureaucracies to build up the independent voice that leads to the more

^{115.} David Holloway, *Stalin and the Bomb: The Soviet Union and Atomic Energy, 1939–1956* (New Haven, Conn.: Yale University Press, 1994), p. 173; see also pp. 134–135. See also Evangelista, *Innovation and the Arms Race*, p. 30.

^{116.} On China, see Fravel, *Active Defense*, pp. 236–269. On the U.S. case, see Feaver, *Guarding the Guardians*, pp. 87–127.

traditional view of bureaucratic politics as a drag on a leader's ability to implement a policy

change (although delegation may lead to earlier and more complete bureaucratic

independence).¹¹⁷

	Threat Uncertainty	Threat Clarity
Payoffs from expanding domestic circle low	Centralizers leader beliefs coup-proofing intra-elite secrecy bureaucratic insulation assertive control/monitoring Examples: Indian and Chinese nuclear strategy; initial Swedish nuclear program	 Gamblers coup-proofing assertive control/monitoring abrupt decentralization (e.g., "crash" nuclear program) crisis or wartime delegation of command and control Examples: North Korean command and control? Chinese command and control in wartime?
Payoffs from expanding domestic circle high	 Mobilizers bureaucratic politics, military inclusion in nuclear programs coalition politics (e.g., in proliferation, arms control) activating public opinion Examples: Sweden's turn away from nuclear program; French nuclear program; Iran deal 	 Delegators scientific/bureaucratic independence delegative custody/control over weapons program delegative or praetorian command and control arrangements Examples: initial U.S. and Soviet nuclear programs; Pakistan's nuclear strategy; North Korean nuclearization?

Several examples from cases of historical and contemporary policy interest illustrate each of these ideal types. In the real world, lines between the categories blur, and states also

^{117.} Allison and Halperin, "Bureaucratic Politics."

experience change over time. These examples come from different points in the nuclear timeline and different regime types.

FROM CENTRALIZER TO MOBILIZER: SWEDEN'S NUCLEAR PROGRAM

Sweden's brief foray into the nuclear arena illustrates the importance of centralization in the period before states make a full commitment to the bomb. Previous scholarship depicts Sweden either as strongly influenced by anti-nuclear norms,¹¹⁸ or as a cold-eyed taker of cues from the international environment.¹¹⁹ New evidence about the politics of Sweden's rejection of a bomb, however, tells a more nuanced story.¹²⁰ As recent research by Thomas Jonter shows, Swedish Prime Minister Tage Erlander played an important role in keeping debate over the program behind closed doors, given serious division within his own party as well as pressure from the military to pursue the bomb, yielding high political costs for a wider debate. The prime minister "had to use all his political talents to manoeuver between the 'yes' and the 'no' camps."¹²¹ Erlander was certainly attentive to security concerns, but managed the scope of debate so that he could buy time.

Debs and Monteiro argue that security imperatives initially drove Sweden's interest in a bomb, given its position in the flight path of superpower bombers and its neutrality, which kept Sweden outside either superpower's nuclear umbrella. They also argue that the easing of security concerns led Sweden to abandon the bomb, given "changes in the international environment from the early 1960s onward," coupled with secretive cooperation with NATO that meant it

^{118.} Maria Rost Rublee, *Nonproliferation Norms: Why States Choose Nuclear Restraint* (Athens: University of Georgia Press, 2009), pp. 169–184.

^{119.} Debs and Monteiro, Nuclear Politics, pp. 177-196.

^{120.} See Robert Dalsjö, "The Hidden Rationality of Sweden's Policy of Neutrality during the Cold War," *Cold War History*, Vol. 14, No. 2 (2014), pp. 175–194, doi.org/10.1080/14682745.2013.765865; and Thomas Jonter, *The Key to Nuclear Restraint: The Swedish Plans to Acquire Nuclear Weapons During the Cold War* (London: Palgrave Macmillan, 2016).

^{121.} Jonter, The Key to Nuclear Restraint, p. 81.

could "effectively rely on the United States in an eventual conflict with the Soviet Union."¹²² Narang brings in domestic politics to explain the "hard hedging" strategy that led Sweden to pursue a latent capability, arguing that Sweden faced an acute security threat without a security guarantee, but that the lack of domestic consensus for a bomb led it to "assemble the pieces of a hard hedging strategy."¹²³ Although the threat was acute, there was also uncertainty about whether a nuclear weapon would make Sweden a target for a preventive strike, while strong internal divisions increased the costs of decentralizing its nuclear policy.¹²⁴

Erlander played a crucial role in allowing a consensus to form. The prime minister used centralizing tools such as restricting debate in parliament on the issue until consensus could be reached—an approach that muted the countervailing effects of military outspokenness in favor of nuclear weapons and growing public opposition to a bomb.¹²⁵ As Debs and Monteiro detail, mutually assured destruction between the superpowers, and later détente, diminished Swedish fears of nuclear war, while throwing into sharper relief concerns that any Swedish nuclear capability would be a preventive war target. Additionally, secret and extensive Swedish planning for cooperation with the West in the event of war, despite Swedish neutrality, "obviate[ed] the need for an independent nuclear deterrent."¹²⁶ There remained uncertainty and a range of views, and most domestic actors did not know about the secret preparations. But for Erlander, who hoped to both avoid a security mistake and the political costs of a party or elite split, the costs of losing control over Sweden's nuclear policy to those with anti-nuclear preferences diminished.

^{122.} Debs and Monteiro, Nuclear Politics, pp. 179-180.

^{123.} Narang, "Strategies of Nuclear Proliferation," p. 129; see also p. 118.

^{124.} On this murky threat assessment, see Jonter, The Key to Nuclear Restraint, p. 82.

^{125.} Ibid., especially pp. 35-92 and pp. 125-193.

^{126.} Debs and Monteiro, pp. 188–189; see also pp. 184–186. On cooperation planning, see also Dalsjö, "The Hidden Rationality of Sweden's Policy of Neutrality during the Cold War."

Having steered the politics of the nuclear issue through internal divisions and bought time, Erlander then shifted to the politics of mobilization, to reach a consensus around the renunciation of nuclear weapons.¹²⁷ As the strategic shift took place, so too did Erlander shift to allow a more open political debate, which brought anti-nuclear voices more squarely and centrally into the political arena. To be sure, both grassroots and international opposition to nuclear weapons had significant voices; but Erlander, who "prioritized the achievement of broad political consensus on the nuclear weapons issue," largely set the terms of when and how opponents would play a role.¹²⁸ Erlander ultimately struck a deal with the opposition party on postponement of the nuclear decision, and thus "the debate had been set free."¹²⁹ Domestic and international anti-nuclear voices became increasingly important. Ultimately, Sweden achieved not only an institutionalized anti-nuclear domestic consensus, but also its status as an international disarmament leader.¹³⁰ Thus, the nature and timing of domestic-political mechanisms in the Swedish case were closely tied to its leader's ability to manage debate.

MOBILIZERS: FRANCE'S NUCLEAR PROGRAM; THE IRAN DEAL

Hymans's discussion of nuclear debates in France in the early 1950s, in the face of the "shock" and uncertainty surrounding German rearmament, is illustrative of "mobilizer" politics.¹³¹ Hymans argues that Prime Minister Pierre Mendès France's "oppositional nationalism" toward Germany led him to decide in favor of nuclear weapons and that he took steps to ensure his politically fraught decision to pursue a bomb would outlive his tenure. These steps included a 1954 decree that gave a "crucial green light for formal contacts between the military" and the

^{127.} Jonter, The Key to Nuclear Restraint, p. 257.

^{128.} Ibid., p. 161.

^{129.} Ibid., p. 171.

^{130.} Rublee, Nonproliferation Norms, p. 180.

^{131.} Hymans, The Psychology of Nuclear Proliferation, p. 89; see also pp. 89–109 in ibid. on this period generally.

civilian atomic energy commission (CEA).¹³² The latter had been created by Charles de Gaulle in 1945, as part of "de Gaulle's desire to maintain political control over nuclear affairs – and, in particular, to keep the atom out of the hands of the French military."¹³³ Mendès France's move in 1954 to open up links with the military thus represented a departure and created "substantial, and as it turned out, unstoppable momentum toward a French nuclear arsenal on at least three levels: intra-bureaucratic (within the CEA), inter-bureaucratic (notably between the CEA and the military), and political."¹³⁴ This momentum meant that the bomb decision survived the 1956 ascension of Prime Minister Guy Mollet, who took a public and popular stance against a national bomb program.¹³⁵

Beyond proliferation, the politics of the Iran nuclear deal also illustrate that leaders of both democracies and autocracies can have incentives to at least try to "mobilize" when pursuing international nuclear diplomacy. During the negotiations, several commentators noted that despite their very different domestic contexts, advocates of the deal in both the United States and Iran faced hawkish domestic constraints.¹³⁶ On the Iranian side, Iran's relatively moderate president, Hassan Rouhani, supported a negotiated deal. Rouhani, however, owed his election to Iran's Supreme Leader, Ayatollah Ali Khamenei, who surprised many when he did not try to engineer a conservative victory in the 2013 elections, as he had in 2009. Faced with popular protests in the wake of the disputed 2009 election, as well as the rise of the military's power, Khamenei saw Rouhani as a candidate who might help restore clerical legitimacy.¹³⁷ Rouhani

^{132.} Ibid., p. 102.

^{133.} Ibid., p. 87.

^{134.} Ibid., p. 109.

^{135.} Ibid., pp. 111-113.

^{136.} Farhi, "Distrust and Verify"; and Sanger, "Americans and Iranians See Constraints at Home in Nuclear Negotiations."

^{137.} See Clifton W. Sherrill, "Why Hassan Rouhani Won Iran's 2013 Presidential Election," *Middle East Policy*, Vol. 21, No. 2 (Summer 2014), pp. 64–75, doi.org/10.1111/mepo.12071; and Elliot Hen-Tov and Nathan Gonzalez, "The Militarization of Post-Khomeini Iran: Praetorianism 2.0," *Washington Quarterly*, Vol. 34, No. 1 (Winter

was able to pursue the nuclear deal within a fragile elite consensus—but partly because Khamenei loosened control over Iranian nuclear policy.

On the U.S. side, President Obama presumably would have preferred to "mobilize" and get the JCPOA ratified as a treaty, signaling a bipartisan commitment to the deal and increasing the political costs to future presidents of backing out.¹³⁸ In the face of a polarized, Republicancontrolled Senate disinclined to give him a victory, however, Obama maneuvered around Congress. The Senate agreed to vote on whether to "disapprove" the deal using a sixty-vote threshold, and Obama sought enough votes to kill the disapproval resolution so he would not have to veto it. The lack of formal Congressional approval, however, weakened the signal of commitment to the agreement and left it "vulnerable to swings in party control."¹³⁹ These dynamics suggest that partisan polarization in democracies can increase the costs of expanding the domestic circle for democratic leaders. Indeed, Sarah Kreps, Elizabeth Saunders, and Kenneth Schultz find that "partisan bias," or the political benefit that the opposition gains from rejecting an agreement, can increase the side payments required to close a ratification deal.¹⁴⁰

GAMBLERS, DELEGATORS, AND CONTEMPORARY NUCLEAR CHALLENGES

On the post-proliferation end of the nuclear timeline, the contrast in predictions for how "gamblers" and "delegators" handle command and control during crises or wartime may be relevant to a future U.S.-China nuclear conflict. As mentioned, China's peacetime nuclear strategy is partly driven by highly centralized, "assertive" civil-military relations; Narang argues

^{2011),} pp. 45–59, doi.org/ 10.1080/0163660X.2011.534962. See also Ariane Tabatabai, "Reading the Nuclear Politics in Tehran," *Arms Control Today*, Vol. 45, No. 7 (September 2015), pp. 16-21.

^{138.} On the "stickiness" of the agreement, see Michael C. Dorf, "The Senators' Letter to Iran and Domestic Incorporation of International Law," *Political Science Quarterly*, Vol. 131, No. 1 (Spring 2016), pp. 51, 67, doi.org/10.1002/polq.12433.

^{139.} Schultz, "Perils of Polarization for U.S. Foreign Policy," p. 15; see also p. 21.

^{140.} Kreps, Saunders, and Schultz, "The Ratification Premium," pp. 493–494. See also Lee, "Electoral Politics, Party Polarization, and Arms Control."

that the sticky institutional structures surrounding Beijing's centralized control mean that "there would be clear indicators if China were to move to a more delegative command-and-control structure."¹⁴¹ Talmadge's recent research, however, suggests another possibility for how China might respond in wartime conditions. If Chinese leaders perceived that a conventional war threatened the survivability of China's arsenal, then a wartime shift to strike first might look more like a "gambler" scenario, in which China shifted its command and control rapidly under duress. Such a scenario echoes Talmadge's argument that autocrats fighting conventional wars loosen their coup-proofing restrictions only when the opposing armies reach the dictator's doorstep.¹⁴² Talmadge makes a convincing case that China may well perceive such a clear threat to its nuclear arsenal in a conventional war, "in a world where [its] nuclear weapons already have failed to deter the onset and escalation of a massive conventional war on one's home territory, and many of the state's nuclear weapons have been disabled or destroyed."¹⁴³ To be clear, this discussion is hypothetical, and this argument by no means suggests that China plans to "gamble." Any shift in command and control might be the product of the fog of war; the point, however, is that even when such changes come from security pressures or events, "gamblers" must live with their prior, and often sticky, arrangements. Thus this argument highlights a difference between "gamblers" and "delegators" in terms of doctrine and command and control. In the U.S. context, the ebb and flow in assertive versus delegative policy that Feaver highlights suggests that the United States would be more practiced and experienced in delegation, and thus less prone to end up in the "gambler" box.¹⁴⁴

^{141.} Narang, Nuclear Strategy in the Modern Era, p. 152.

^{142.} Talmadge, The Dictators' Army, p. 24.

^{143.} Talmadge, "Would China Go Nuclear?" p. 88.

^{144.} Feaver, Guarding the Guardians, pp. 149-218.

Finally, how might this framework discussed in this article apply to North Korea? Analyzing North Korea is challenging—indeed, as Miller and Narang detail, most academic theories failed to predict North Korea's rapid nuclearization and successful missile program.¹⁴⁵ North Korea in the post-Cold War era faced a clear threat mitigated only by the increasingly fraught patronage of China.¹⁴⁶ Although North Korea is a highly personalist regime with an unusually small ruling coalition heavily dependent on the military,¹⁴⁷ after consolidating power, Kim Jong Un gave high priority to the nuclear program and protected—and heavily monitored scientists.¹⁴⁸ On taking power, Kim engaged in some centralizing, or at least active maintenance of an already-centralized system, purging much of the personnel in the coalitional base of the regime.¹⁴⁹ Having done that, Kim may have decided that the domestic costs of some delegation were well worth the international benefits of "invasion insurance" provided by a successful nuclear program.¹⁵⁰ Furthermore, the line between a gambler and a delegator may depend to some degree on resource constraints. North Korea overcame the resource constraints that, as Braut-Hegghammer shows, plagued other would-be proliferators such as Iraq and Libya. As Horowitz has argued, basic nuclear technology is old and yet remains relevant, so "North Korea, in essence, put its nickels in a jar every year for 40 years and eventually gained an extremely

146. On China and North Korea, see, for example, Oriana Skylar Mastro, "Why China Won't Rescue North Korea: What to Expect If Things Fall Apart," *Foreign Affairs*, Vol. 97 (January/February 2018), pp. 58–66, https://www.foreignaffairs.com/articles/asia/2017-12-12/why-china-wont-rescue-north-korea.

147. Stephan Haggard and Marcus Noland, *Hard Target: Sanctions, Inducements, and the Case of North Korea* (Stanford, Calif.: Stanford University Press, 2017), p. 40. See also Anna Fifield, *The Great Successor: The Divinely Perfect Destiny of Brilliant Comrade Kim Jong Un* (New York: PublicAffairs, 2019), pp. 129–141; and Victor Cha, *The Impossible State: North Korea, Past and Future* (New York: Ecco, 2013), pp. 64–109.

^{145.} Miller and Narang, "North Korea Defied the Theoretical Odds," pp. 58–75.

^{148.} Malfrid Braut-Hegghammer, "Why North Korea Succeeded at Getting Nuclear Weapons—When Iraq and Libya Failed," *Washington Post*, January 2, 2018; and Choe Sang-Hun et al., "Rocket Men: The Team Building North Korea's Missile," *New York Times*, December 15, 2017,

https://www.nytimes.com/interactive/2017/12/15/world/asia/north-korea-scientists-weapons.html.

^{149.} Haggard and Noland, Hard Target, p. 40.

^{150.} Miller and Narang, "North Korea Defied the Theoretical Odds," p. 67.

useful capability."¹⁵¹ Thus, after paying significant up-front domestic costs to install a new network loyal to him, Kim achieved a North Korean version of delegation. The question now is what its future nuclear strategy will look like. As Vipin Narang and Ankit Panda have detailed, North Korea has incentives to keep the world guessing with an opaque doctrine, but may seek to balance between centralizing control of a nuclear launch in Kim's hands and the kind of delegative, "fail deadly" command and control practices that would ensure that its weapons would still be usable if Kim were killed.¹⁵²

Implications: When Does Opening the "Black Box" Matter?

The framework described above suggests conjectures about when analysts would expect theories that include domestic politics to diverge from security-based arguments and the type of domestic-political mechanism that would lead to such divergence. At the same time, domestic politics may not be immediately visible or result in obvious divergence from security predictions, but may still strongly influence nuclear choices.

First, consider the conditions that lead to centralization, that is, when threats are uncertain and there are low payoffs for expanding the circle for nuclear decisions—conditions that are likely to obtain frequently, even when threat levels are high. Centralizing policy means the state's security—and thus the range of outcomes—depends heavily on its leader. If leaders centralize, they may do so because they have better information or different preferences than other actors. Better information might allow them to better align policy with security needs (e.g.,

^{151.} Michael C. Horowitz, "How Surprising is North Korea's Nuclear Success? Picking Up Where Proliferation Theories Leave Off," *War on the Rocks*, September 6, 2017, https://warontherocks.com/2017/09/how-surprising-is-north-koreas-nuclear-success-picking-up-where-proliferation-theories-leave-off/. See also Michael C. Horowitz, *The Diffusion of Military Power: Causes and Consequences for International Politics* (Princeton, N.J.: Princeton University Press, 2010), pp. 98–133.

^{152.} Narang and Panda, "Command and Control in North Korea."

seek a nuclear weapon that the security environment suggests is necessary or, alternatively, forgo a nuclear capability that may be superfluous or risky), and thus centralization may result in alignment with what a security analysis would predict, to the extent such an analysis points to an optimal outcome. Leaders may also recognize and manage uncertainty, as Erlander did in the Swedish case. If, however, the leader's beliefs lead to different interpretations of security threats—for example, through motivated reasoning or background characteristics such as rebel experience that affect nuclear preferences—then divergence from security predictions becomes more likely, especially because centralization may exclude other views that could compete with or check a leader's views. States with highly centralized nuclear policy are thus likely to see high variance in possible outcomes—even though it may be difficult to observe the operation of domestic politics in such cases because leaders hide so much nuclear policy behind the proverbial curtain.

For "gamblers," the scope for divergence from security imperatives is more extreme. Gamblers face less uncertainty about threats—which can be clearly high or clearly low—but there are strong, perhaps overriding incentives not to widen the circle for nuclear choices even when threats are acute. One particularly pertinent example is a security environment where a nuclear weapon or a change in nuclear doctrine (say, to a more delegated posture) would be desirable, but the leader fears domestic costs and denies domestic actors the power or resources to deliver such capabilities. When leaders finally face an overwhelming external threat, they do so under risky conditions—they may lack capabilities that might have been useful or may try to change capabilities or strategy under crisis conditions.

Ironically, for "mobilizers" and "delegators"—for whom the payoffs from expanding the audience are relatively high—the variance of outcomes is likely to be narrower and divergence

43

from security imperatives perhaps less likely, even though the operation of domestic politics may be more readily apparent to scholars and observers.¹⁵³ When leaders calculate that they can or should include more actors in a nuclear choice, they do so either because they are "mobilizers" who, amid uncertainty, believe they can make their own view "stick" by including other actors, or they are "delegators" who face a clear threat and reasonable costs to widening the circle. Leaders may still have views that diverge from other actors or from the security environment, but their views will engage with those of other actors, increasing the chance that extreme views will be checked. Even when threats are clear and leaders delegate, however, bureaucratic politics, as traditionally understood in the literature, can introduce delay or friction in implementing policy change.¹⁵⁴ Mobilizing and delegating also carry risks from organizational-level failures or military assertiveness, which might lead to accidents or accidental launch.¹⁵⁵ Many of these mechanisms are not new, but recent literature, and this framework, put them in a fresh light by showing that bureaucracies derive some of their power from leaders.

Conclusion

This article concludes that recent research has significantly advanced the ongoing debate over when and how domestic politics matters in states' nuclear choices, and suggests several avenues for future research. First, scholars should continue the trend of moving beyond the question of whether regime type "matters" to how leaders manage their domestic circle both within and across regime type. Second, it is useful to recognize that many domestic-political mechanisms identified in the literature—including public opinion, bureaucratic politics, and civil-military

^{153.} Some "delegator" mechanisms may be so long-standing that they are easy to take for granted. On this point, see Narang's discussion of long-term factors that can produce civil-military arrangements. Narang, *Nuclear Strategy in the Modern Era*, pp. 36–39.

^{154.} Allison and Halperin, "Bureaucratic Politics."

^{155.} Sagan, Limits of Safety; and Narang, Nuclear Strategy in the Modern Era, p. 311.

relations—may operate at the mercy of leaders' decisions to expand the circle of nuclear politics. Much nuclear decisionmaking is characterized by centralization, since it occurs under conditions of threat uncertainty and internal division or debate. Leaders may work hard to keep control of nuclear policy for domestic-political reasons, which may keep some familiar mechanisms from operating—but scholars cannot observe their absence and conclude that domestic politics did not matter. To be sure, bottom-up processes driven by civil society, bureaucratic, or legislative actors, can play important roles, by affecting the payoffs for expanding the circle as well as perceptions of threat.¹⁵⁶ But recent research focuses attention on processes of centralization and assertive choices made by leaders. Third, although it is beyond the scope of this article, a fruitful avenue for future research is exploring which domestic-political mechanisms are more likely to affect different nuclear dependent variables. For example, one could imagine—as Hymans argues in his work on leaders and proliferation—that leaders' beliefs matter most for the choice to pursue the bomb, which is, whatever the security imperatives, a "leap in the dark."¹⁵⁷

Finally, although methodological debates are beyond the scope of this article, it is useful to note the continuing essential role of qualitative evidence in this literature. Although the new wave of nuclear security research has benefited from both careful quantitative and qualitative studies, many recent arguments require scholars to delve into leaders' beliefs and restricted domestic-political debates that are difficult to penetrate except through careful process tracing, often through primary documents or interviews.¹⁵⁸ Nuclear security scholars have demonstrated that it is well worth the effort not only to peer inside the black box of the state, but also to map its inner sanctum.

^{156.} Tannenwald, The Nuclear Taboo; and Miller, Stopping the Bomb.

^{157.} Hymans, "The Psychology of Nuclear Proliferation," p. 11.

^{158.} On the importance of archival research, see Hal Brands, "Archives and the Study of Nuclear Politics," *H-Diplo/ISSF*, Forum No. 2, June 15, 2014, pp. 66–76, https://issforum.org/ISSF/PDF/ISSF-Forum-2.pdf.