

H-Diplo | ISSF

Forum, No. 8 (2015)



A production of H-Diplo with the journals *Security Studies*, *International Security*, *Journal of Strategic Studies*, and the International Studies Association's Security Studies Section (ISSS).

<http://issforum.org>

H-Diplo/ISSF Forum Editors: **Thomas Maddux and Diane Labrosse**

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Introduction by Francis J. Gavin

H-Diplo/ISSF Forum on Andreas Wenger, Roland Popp (eds.). “Special Issue: The Origins of the Nuclear Nonproliferation Regime.” *The International History Review* 36:2 (2014): 195-394. DOI: 10.1080/07075332.2014.899263. <http://dx.doi.org/10.1080/07075332.2014.899263>

Published by H-Diplo/ISSF on **18 May 2015**

Permalink: <http://issforum.org/forums/origins-nuclear-nonproliferation-regime>

Shortlink: <http://tiny.cc/ISSF-Forum-8>

PDF URL: <http://issforum.org/ISSF/PDF/ISSF-Forum-8.pdf>

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Introduction by Francis J. Gavin, Massachusetts Institute of Technology

Last year, Scott Sagan declared – on H-Diplo – that we are in the midst of a renaissance in nuclear studies, driven by first-rate work by younger scholars.¹ Two qualities in particular mark this scholarship. First, many of these young scholars combine both methodological innovation and rigor while engaging new archival sources. Second, these scholars are unafraid to challenge long-held conventional wisdoms about the nuclear age. The three commentators to this forum – a roundtable on Andreas Wenger and Roland Popp (eds.), “Special Issue: The Origins of the Nuclear Nonproliferation Regime,” in *The International History Review* -- are exemplars of these trends. Eliza Gheorghe has mined new sources to explore the previously unknown and fascinating history of Romania’s nuclear program, in the process generating important insights into nuclear dynamics between superpowers and smaller states.² Nicholas Miller has identified the key moments in United States nuclear nonproliferation policy, helping us understand the motivations and tools driving these efforts.³ Jane Vayman has built upon recent historical research to model the causal dynamics behind the surprising superpower collusion to stem the spread of nuclear weapons.⁴ As their previous work and their reviews here reveal, all three are equally conversant in the most recent historical scholarship and the newest trends in international relations theory involving nuclear dynamics.

These three also possess the ideal perspective to gauge how the new historical work presented in *The International History Review* challenges what we know about our nuclear past. As they highlight, the articles in this special volume challenge the conventional wisdom surrounding the origins of what we might think of as the Nuclear Proliferation Treaty (NPT) regime, which includes but goes well beyond the 1968 NPT Treaty (such as the London Suppliers Group). This challenge is both surprising and important -- discuss this regime and its history with policy, arms control or think tank types, or participate in the obscure, cult-like ‘prepcon’ or ‘revcon’ or Carneige ‘nukfest’ process associated with the NPT, and you will hear a simple but powerful story about bargains. In short, you will be told that the non-nuclear weapons states agreed to the noble goal of eschewing nuclear

¹ Scott Sagan, “Two Renaissances in Nuclear Security Studies,” in *H-Diplo/ISSF Forum* on “What We Talk About When We Talk About Nuclear Weapons” June 15, 2014, found at <http://issforum.org/ISSF/PDF/ISSF-Forum-2.pdf>

² Eliza Gheorghe, “Atomic Maverick: Romania’s negotiations for nuclear technology, 1964–1970,” *Cold War History*, [Volume 13, Issue 3](#), 2013: 373-392; Eliza Gheorghe, “Building *détente* in Europe? East-West trade and the beginnings of Romania’s nuclear programme, 1964–70,” *European Review of History: Revue européenne d’histoire*, [Volume 21, Issue 2](#), 2014: 235-253.

³ Nicholas Miller, “Hegemony and Nuclear Proliferation,” Dissertation, MIT Department of Political Science, 2014; Nicholas Miller, “The Secret Success of Nonproliferation Sanctions,” *International Organization*, Fall 2014.

⁴ Andrew Coe and Jane Vaynman, “Super Power Collusion and the Nuclear Nonproliferation Regime,” working paper, found at http://media.wix.com/ugd/e9fef9_705adaa3184a4fa799f04f2438576486.pdf

weapons in return for two things from the nuclear-weapons states: a promise to move credibly towards nuclear disarmament while providing any and all civilian nuclear technology needed by the non-nuclear weapons states. In this narrative, the NPT system – to their minds, singularly responsible for keeping the number of nuclear weapons states in the single digits – is constantly under threat, undermined largely by the failure of the nuclear-weapons states, especially the United States, to keep their end of the deal and disarm.

As the articles reviewed here and other new scholarship reveal, the story was not so simple. The United States and the Soviet Union colluded to prevent proliferation not out of any noble goal, but because it was in their shared national interest to prevent other states – friend and foe alike – from getting the bomb. It is not clear that either super-power took its Article IV and VI obligations all that seriously. Furthermore, they used other tools, ranging from the threat of sanctions to extending their nuclear umbrellas (which required the patron to have more, not less, nuclear forces) to ensure nonproliferation. The smaller powers had their own complex and often hidden motives. Domestic politics, regional rivalries, technological and economic capabilities, and the attitudes of patron states all interacted to generate outcomes. The line between civilian nuclear capabilities and weaponization was often blurry. Whether a state was ‘nuclear’ or not was not simply a binary, yes/no calculation, as states routinely engaged in nuclear hedging and latency. Not surprisingly, these articles reveal one of the frustrating virtues of good international historical work, by showing how complicated nuclear dynamics were and remain.

All three reviewers praise this volume’s historical work while suggesting further areas of inquiry. How important was the NPT in inhibiting proliferation, as opposed to other vehicles, from the carrots of civilian nuclear assistance and security guarantees to the stick of sanctions? What motivated the states in question to pursue the nuclear policies they did – the superpowers, the non-nuclear weapons states, and the non-great power nuclear states in between – and what influenced the timing of their policies? Were the most interesting nuclear dynamics between friends and allies as opposed to adversaries and neutrals?⁵ As Gheorghe rightly points out, these findings shed new light not simply on nuclear dynamics, but on our understanding of postwar history and international relations theory. Furthermore, they tell us much about the deeply contested nuclear dynamics we find in the world today. Given the enormous consequences of nuclear policy, we should be grateful to see this interdisciplinary renaissance in nuclear studies flourishing.

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⁵ In addition to the work of each of the reviewers, see Alexander Lanoszka, “Protection States Trust: Major Power Patronage, Nuclear Behavior, and Alliance Dynamics,” (Doctoral Dissertation, Princeton University, 2014); Gene Gerzhoy, “Coercive Nonproliferation: Security, Leverage, and Nuclear Reversals” (Doctoral Dissertation, University of Chicago, 2014)

Carolina Press, 2005) and *Nuclear Statecraft: History and Strategy in America's Atomic Age* (Cornell University Press, 2012).

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Jane Vaynman is the Associate Director of the Institute for Security and Conflict Studies and Research Instructor at the Elliott School of International Affairs, George Washington University. Her research focuses on security cooperation between adversarial states, the design of arms control agreements, and the nuclear nonproliferation regime. She received her Ph.D. in Government from Harvard University in 2014. Jane is the co-founder of the Nuclear Studies Research Initiative, a project that promotes intellectual exchange and cross-fertilization for emerging research in history and political science.

The NPT: Before, After, and Beyond

In September 1975, Ji Dengkui, the Vice-Premier of the People's Republic of China and one of Mao Zedong's protégées, shared Beijing's impressions of the first Review Conference of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) with his Romanian counterpart, Ilie Verdet.¹ At the first Review Conference held in Geneva earlier that year, the non-nuclear weapon states (NNWS) harshly criticized the lack of progress on disarmament made by nuclear-weapon states (NWS), embedded in Article VI of the Treaty. All eyes were on the U.S. and the USSR, the main proponents of the treaty and the possessors of the biggest nuclear arsenals.² There was hardly any reason for optimism that the two superpowers would deliver on their promise to cut down and eventually eliminate nuclear weapons, Ji Dengkui implied. Citing U.S. Secretary of State Henry Kissinger, the Chinese official summarized Washington's position on proliferation: treaties are mere pieces of paper that could be torn up at any time. Verdet concurred: "history proves that many treaties remained just blank pieces of paper."³ This pessimistic view contrasts sharply with the view that the NPT is the most successful arms control treaty in human history.⁴

For the authors included in this special issue of *The International History Review*, edited by Roland Popp and Andreas Wenger, the NPT is neither an empty promise nor the triumph of security regimes over anarchy.⁵ Popp argues that the NPT made a difference, but its initial effect was limited.⁶ The introduction and the seven articles address a series of questions

¹ Arhivele Naționale Istorice Centrale [National Central Historical Archives - ANIC], Comitetul Central al Partidului Comunist Român [Central Committee of the Romanian Communist Party - CC PCR], Relații Externe [Foreign Relations], 274/1975, Minutes of conversation between Ilie Verdet and Ji Dengkui, September 6, 1975, 2-39.

² Arhivele Ministerului Afacerilor Externe [Archives of the Romanian Ministry of Foreign Affairs - AMAE], 5929/1975, Resolution drafts regarding disarmament, Telegram 053145 from New York to the Romanian Ministry of Foreign Affairs, November 4, 1975, 1.

³ ANIC, CC PCR, Relații Externe, 274/1975, Minutes of conversation between Ilie Verdet and Ji Dengkui, September 6, 1975, 10.

⁴ James Walsh, "Learning from Past Success: The NPT and the Future of Non-Proliferation," Paper No. 41, The Weapons of Mass Destruction Commission, Stockholm, 2005, 3, available at: <http://www.un.org/disarmament/education/wmdcommission/files/no41.pdf>.

⁵ Andreas Wenger, Roland Popp (eds.), "Special Issue: The Origins of the Nuclear Nonproliferation Regime", in *The International History Review*, Vol. 36, No. 2 (2014), 195-394.

⁶ Roland Popp, "Introduction: Global Order, Cooperation between the Superpowers, and Alliance Politics in the Making of the Nuclear Non-Proliferation Regime," in *The International History Review*, Vol. 36, No. 2 (2014), 202.

that have long been blackboxed: why, how, when, and for whom did the NPT matter? By answering these questions, this special issue makes a major contribution to three strands of literature: nuclear studies, Cold War International History, and International Relations theory.

With respect to nuclear studies, this special issue enriches the debate about the inevitability of nuclear proliferation.⁷ It suggests that the spread of nuclear weapons was neither inescapable nor fully preventable. Its main strength resides in the careful and multi-faceted examination of two key strategies - "non-proliferation by persuasion" and "non-proliferation by denial" (203). From this point of view, the articles included in this issue deal with four broad frameworks within which these two strategies could operate: multilateral negotiations, supranational arrangements, bilateral deals, and unilateral policies. With respect to the latter, Dane Swango looks at the approach of the United States towards including the issue of civil nuclear assistance into the Non-Proliferation Treaty.⁸ John Krige, Fabian Hilfrich, and Tatiana Coutto present bilateralism as a source of both resentment and mutual reassurance.⁹ Krige's analysis treats the bilateral levers Washington relied on to prevent the British from challenging the technological superiority of the United States in the realm of gas centrifuges. Hilfrich offers an account of how Bonn resisted the pressure applied by the Carter Administration to cancel the nuclear deal the Federal Republic of Germany signed with Brazil in 1975. Coutto's article explains nuclear restraint in the case of Brazil and Argentina, two regional rivals outside the purview of the NPT, as the result of trust building measures fostered by the bilateral framework they designed in the field of atomic energy. With respect to multilateral settings, William Burr documents Henry Kissinger's efforts to co-opt France, a country outside the NPT framework, into the Nuclear Suppliers' Group (NSG), which allowed for reaching a lowest common denominator among nuclear exporters.¹⁰ As for supranational arrangements, Stuart Butler's article analyzes the bureaucratic infighting within the British government

⁷ This proposition can be found in Scott D. Sagan and Kenneth Waltz, *The Spread of Nuclear Weapons: A Debate Renewed* (New York and London: W. W. Norton and Company, 2002), 3.

⁸ Dane Swango, "The United States and the Role of Nuclear Co-operation and Assistance in the Design of the Non-Proliferation Treaty," in *The International History Review*, Vol. 36, No. 2 (2014), 210-229.

⁹ John Krige, "US Technological Superiority and the Special Nuclear Relationship: Contrasting British and US Policies for Controlling the Proliferation of Gas-Centrifuge Enrichment," in *The International History Review*, Vol. 36, No. 2 (2014), 230-251; Fabian Hilfrich, "Roots of Animosity: Bonn's Reaction to US Pressures in Nuclear Proliferation," in *The International History Review*, Vol. 36, No. 2 (2014), 277-301; Tatiana Coutto, "An International History of the Brazilian-Argentine Rapprochement," in *The International History Review*, Vol. 36, No. 2 (2014), 302-323.

¹⁰ William Burr, "A Scheme of 'Control': The United States and the Origins of the Nuclear Suppliers' Group, 1974-1976," in *The International History Review*, Vol. 36, No. 2 (2014), 252-276.

over the trade-off implied by Euratom: relinquishing control over certain aspects of the national nuclear program in exchange for a revamped role in international affairs.¹¹

This issue also includes a perceptive analysis of how domestic pressures can trump the non-proliferation regime and shape the outcome of state-to-state negotiations. James Cameron shows how the turn in public opinion against the military-industrial complex affected President Richard Nixon's ability to take steps towards implementing Article VI of the NPT (dealing with disarmament). Therefore, by taking into account both internal and external factors, this special issue provides the reader with a fuller picture of the emerging global nuclear order.¹²

The special issue shows how the abstract terms of the NPT translated into reality. Crucially, these articles cast doubt on the very idea that the NPT was a grand bargain, whereby NNWS renounced nuclear weapons in exchange for nuclear disarmament and civil nuclear assistance on the part of the NWS.¹³ Swango, for example, compellingly argues that by agreeing to include Article IV (dealing with nuclear technology transfers) in the Treaty, the U.S. did not make much of a concession. The U.S. merely continued its pre-NPT nuclear assistance policy, making decisions about nuclear cooperation in accordance with "broader U.S. interests," not because of a particular concern with living up to its end of the bargain (222). An analysis of how Moscow's thinking about Article IV evolved over time would have been useful in this respect. In its absence, the reader is left wondering about the extent of superpower collusion and coordination.

Many of the non-proliferation mechanisms and institutional arrangements analyzed in this special issue preceded the signature of the NPT or operated outside its purview. As mentioned above, among these frameworks, this special issue discusses Euratom, a specialist market for nuclear power within the EEC established more than ten years before the NPT opened for signature. Euratom fostered a certain degree of transparency, allowing member-states to keep an eye on each other. Britain, the third country to develop nuclear weapons after the U.S. and the USSR and one of the key players on the global nuclear market, remained outside the Communities until 1973. London regarded Euratom as detrimental to the British national nuclear program, because supranationalism threatened Britain's technological lead.¹⁴ Yet, in 1960, faced with a decline in British influence on the

¹¹ Stuart A. Butler, "The Struggle for Power: Britain and Euratom, 1955-1963," in *The International History Review*, Vol. 36, No. 2 (2014), 324-341.

¹² James Cameron, "From the Grass Roots to the Summit: The Impact of US Suburban Protest on US Missile-Defence Policy, 1968-1972," in *The International History Review*, Vol. 36, No. 2 (2014), 342-362.

¹³ The idea of a grand bargain has been questioned by other scholars as well. See Liviu Horovitz, "Beyond Pessimism: Why the Treaty on the Non-Proliferation of Nuclear Weapons Will Not Collapse," in *Journal of Strategic Studies*, (2014), 5, DOI: 10.1080/01402390.2014.917971.

¹⁴ For a detailed discussion of Britain's competitive advantage in the field of nuclear technology, see Krige's article in this special issue.

international stage, Prime Minister Harold Macmillan reconsidered the European option and applied for membership in the EEC.¹⁵ Confronted with the choice between “prestige through independence” and “prestige through integration,” London chose the latter (326). What seems to be missing from Butler’s article is an analysis of the connection between Britain’s EEC accession and non-proliferation post-1973. William Burr’s mention of the British contribution to the creation of the NSG may shed some light on this question. The main driver behind Britain’s support for the NSG may have been the U.S.-UK special relationship, but the positive effect of the burgeoning cooperation among West Europeans fostered by the European Communities should not be discounted as a factor. Despite this omission, by bringing to the fore questions about integration in multilateral and supranational organizations operating outside the direct jurisdiction of the NPT, this special issue sheds light on the origins, complexity, and endurance of the non-proliferation regime.

Regarding this issue’s contribution to Cold War History, this collection of articles shows how central the atom is to our understanding of the post-1945 era. Nuclear proliferation is an integral but often understudied part of international history. As Odd Arne Westad pointed out in his 2000 Bernath Lecture, the atom, the epitome of modernization, represented a useful recruitment tool in the battle for hearts and minds, thus having a significant impact on the course of the superpower competition.¹⁶ Yet, the specific jargon associated with nuclear studies has created a divide between the literature on proliferation and that on the global Cold War. In reality, nuclear history is part and parcel of Cold War international history. This is not only because nuclear weapons have shaped much of the post-war picture, but also because the quest for nuclear technology is linked to some of the key developments in the global Cold War. For example, Hilfrich convincingly argues that if the U.S.-German animosity regarding Bonn’s nuclear deal with Brazil is left out, we would have an incomplete picture of the twists and turns in transatlantic relations in the 1980s and beyond. Hilfrich’s skillful use of American and German primary sources allows him to explain the thinking in both Washington and Bonn, and to show the concatenation of actions and reactions. Several articles in this issue pay attention to the rationale, strategy, and tactics adopted by actors other than the two superpowers. They not only offer an excellent example of how the three paradigms for Cold War International History identified by Westad can be merged, but also demonstrate how to study the post-1945 era through a pericentric framework.¹⁷

¹⁵ Anne Deighton, “The Past in the Present: British Imperial Memories and the European Question,” in Jan-Werner Müller, *Memory and Power in Post-War Europe: Studies in the Presence of the Past* (Cambridge: Cambridge University Press, 2002), 114.

¹⁶ Odd Arne Westad, “Bernath Lecture. The New International History of the Cold War: Three (Possible) Paradigms,” in *Diplomatic History*, Vol. 24, No. 4 (Fall 2000), 557.

¹⁷ Westad, “Bernath Lecture,” 551-565; Tony Smith, “New Bottles for New Wine: A Pericentric Framework for the Study of the Cold War,” in *Diplomatic History*, Vol. 24, No. 4 (Fall 2000), 567-591.

The shift to a more inclusive perspective, one that takes into account the role of smaller actors, points to the contribution this issue makes to larger questions of International Relations theory. The spread of nuclear weapons explains when and how power shifted away from Washington and Moscow in the 1960s and 1970s, and how the international system evolved into a militarily bipolar and politically multipolar arena in the era of détente. The atom helped to globalize the Cold War, because it provided middle and small powers with the means to develop the ‘ultimate weapon’ and a greater role on the international stage. But these more autonomous actors quickly realized they had to operate in a more complex and precarious environment than in the early days of the Cold War. Superpower condominium changed alliance dynamics: mutual trust between ‘center’ and ‘periphery’ eroded; unilateralism superseded consultations and policy coordination; the superpowers resorted to coercion, intimidation, or isolation against allies and enemies. Middle and small powers also proved too weak to balance against the superpowers, which left them insecure and oversensitive. Tensions within alliances flared up time after time. While this rancor did not erupt into an all-out war, its presence calls into question the idea of the Cold War ushering in a stable order, and reveals the post-1945 era as a far more dangerous period than previously assumed.

In conclusion, the research presented in this special issue contributes to the resurgence in the study of nuclear weapons discussed by Scott Sagan in a recent H-Diplo/ISSF Forum.¹⁸ The introduction and the seven articles offer not only fascinating insights from a wide array of archives, but also conceptual tools that help refine established theories of proliferation and nuclear behavior. For these reasons, this special issue of *International History Review* will likely become a point of reference for scholars of nuclear proliferation, historians, and International Relations theorists for many years to come.

¹⁸ Scott Sagan, Two Renaissances in Nuclear Security Studies, 2-10, H-Diplo/ISSF Forum on “What We Talk About When We Talk About Nuclear Weapons.” Some of the drivers behind this renewed interest in the role of nuclear weapons in international affairs include the Nuclear Proliferation International History Project (NPIHP) at the Woodrow Wilson International Center for Scholars, the Nuclear Studies Research Initiative (NSRI) at MIT, and the Public Policy and Nuclear Threats Training Program at the University of California, the National Security Archive at the George Washington University, and the generous grants offered by the Stanton, MacArthur, and Carnegie Foundations.

The historical origins and working of the nuclear nonproliferation regime is a topic that is simultaneously understudied and of immense policy importance. The articles in this special issue of the *International History Review* make important strides toward redressing this gap. Happily, they represent only a small portion of a growing renaissance of scholarly research on nuclear issues, both in the fields of history and political science.¹ As a political scientist who dabbles in historical research on nuclear nonproliferation, I will focus my review on two important conceptual issues that appear in many of the articles and hold implications for political science theory: (1) the role of technological superiority, or an impending loss thereof, in motivating policy positions on nonproliferation, and (2) the controversial problem of sensitive nuclear assistance to foreign countries, which at times caused deep fissures within the Western alliance. I will argue that our existing stock of theories in political science are ill-suited to explaining the dynamics of technological superiority and sensitive nuclear assistance that are described in the articles, and suggest some avenues where progress can be made in future research.

It is straightforward to argue that states with technological superiority, particularly in an area as sensitive as nuclear technology, will seek to maintain their dominance and will be sensitive to any indications that other states are catching up. Indeed, many prominent theories of international relations are premised on the notion that great powers seek technological, economic, or military superiority and then fight to preserve these advantages, whether by fighting preventive wars against rising powers,² or by locking these advantages in through institutional arrangements built when relative power is at its apex.³

The collection of articles in this special issue makes clear that threats to technological superiority can serve as powerful motives for nonproliferation policy initiatives. John Krige documents how the development of gas centrifuge technology, which could potentially allow technologically weak nuclear aspirants to acquire highly enriched uranium covertly “in a garage or cellar,” alarmed Britain to the extent that it entertained the idea that the emerging

¹ Scott D. Sagan, “Two Renaissances in Nuclear Security Studies,” in *H-Diplo/ISSF Forum* No. 2 (2014): 2-10.

² See, for example, Robert Gilpin, *War and Change in World Politics* (Cambridge: Cambridge University Press, 1981); Jack Levy, “Declining Power and the Preventive Motivation for War,” *World Politics* 40, No. 1 (1987): 82-107; and Alexandre Debs and Nuno Monteiro, “Known Unknowns: Power Shifts, Uncertainty, and War,” *International Organization* 68, No. 1 (2014): 1-31.

³ See Robert Keohane, *After Hegemony: Cooperation and Discord in the World Political Economy* (Princeton: Princeton University Press, 1984); and G. John Ikenberry, *After Victory: Institutions, Strategic Restraint, and the Rebuilding of Order after Major Wars* (Princeton: Princeton University Press, 2001).

Non-Proliferation Treaty (NPT) would have to be revised to account for the new risks (233),⁴ while the U.S. preferred a strategy that relied on secrecy and classification. In his article on the role of civil technological assistance in the NPT, Dane Swango demonstrates that the United States pushed to finalize the treaty after China's test caused officials to worry that proliferation would spin out of control and erode the dominant American geopolitical position (212-215).⁵ The United States also sought to utilize its superiority as a reactor and nuclear-fuel supplier to induce adherence to the NPT, although, as Swango argues, it is not clear how credible an inducement this represented. Soon thereafter, the American worry that the Soviets were catching up in the vertical proliferation race helped trigger the Strategic Arms Limitation Talks (SALT) and Anti-Ballistic Missile Treaty (ABM) negotiations (343), which James Cameron shows were hamstrung by domestic political protest in the United States.⁶ With the weaknesses in the NPT laid bare with India's 1974 nuclear test, William Burr explains how the United States pushed to establish the Nuclear Suppliers Group, which was viewed as urgent, partially because European suppliers like West Germany and France were starting to challenge U.S. and Soviet superiority in the nuclear marketplace, using sensitive technologies and looser safeguards as "sweeteners" in their export deals with developing countries (252-253).⁷ In a related policy realm, Butler shows how Britain was reluctant to join Euratom partially out of fear that such an association would infringe on its dwindling superiority in nuclear weapons and energy technology relative to other European states (326-327; 333-334).⁸

What is striking about the historical narratives in these articles is how reactive nuclear policy developments appear and how little they resemble the stylized narratives of states acting rationally and proactively to preserve their technological or military superiority. First, it is notable that despite the dramatic relative power shift brought on by nuclear acquisition, preventive war to prevent states from acquiring nuclear weapons has historically been

⁴ John Krige, "US Technological Superiority and the Special Nuclear Relationship: Contrasting British and US Policies for Controlling the Proliferation of Gas-Centrifuge Enrichment," *The International History Review* 36, No. 2 (2014): 230-251.

⁵ Dane Swango, "The United States and the Role of Nuclear Co-operation and Assistance in the Design of the Non-Proliferation Treaty," *The International History Review* 36, No. 2 (2014): 210-229.

⁶ James Cameron, "From the Grass Roots to the Summit: The Impact of US Suburban Protest on US Missile-Defence Policy, 1968-72," *The International History Review* 36, No. 2 (2014): 342-362.

⁷ William Burr, "A Scheme of 'Control': The United States and the Origins of the Nuclear Suppliers' Group, 1974-1976," *The International History Review* 36, No. 2 (2014): 252-276.

⁸ Stuart A. Butler, "The Struggle for Power: Britain and Euratom 1955-63," *The International History Review* 36, No. 2 (2014): 324-341.

exceedingly rare. As Roland Popp notes in his introduction, “coercive non-proliferation was not a preferred option for the superpowers during the cold war” (202).⁹

Second, in terms of softer nonproliferation measures, it is puzzling that instead of establishing a robust nonproliferation regime when their nuclear superiority was at its apex in the 1950s, the United States and Soviet Union initially muddled along: spreading nuclear technology to client states and looking the other way and even aiding allies in their development of nuclear weapons. It was only in the mid-1960s, following the dramatic shock of the Chinese nuclear test, that the Soviets and Americans were able to make the compromises necessary to finalize the NPT, despite the fact that their relative superiority in nuclear technology had been slowly diminishing for more than a decade. Likewise, it took the shock of the Indian nuclear test to wake the United States to the risk of “civilian” nuclear exports facilitating nuclear weapons acquisition. Other than relying on classification, the Krige piece shows how the United States failed to react to the development of gas centrifuge technology. Indeed, as with the NPT and NSG, it took a crisis—in this case, the revelation of the A.Q. Khan illicit nuclear trade network—to spur the United States to action in terms of limiting access to dual use technology relevant for centrifuge programs.¹⁰ This is not a history of highly strategic, forward-thinking actors working to lock in their superiority in nuclear technology when relative power was at its apex; rather, it reads like a history of great powers that were ‘learning on the job,’ only making important nonproliferation policy advances in response to dramatic, salient events that occurred when technological superiority was already rapidly declining.

A second important theoretical issue that emerges from the articles in this special issue relates to the provision of foreign technological assistance. Particularly with respect to sensitive assistance such as enrichment or reprocessing technology, there is the puzzle of what could motivate a state to undercut its own relative superiority and provide technology that could be used to produce nuclear weapons. While an earlier body of research highlights the economic motives that often lay behind the export of sensitive nuclear technology,¹¹ recent influential work in political science dismisses economic motives and offers a strategic theory of why states provide such assistance, which on its face may seem self-defeating.¹² According to this strategic theory, states are more likely to provide sensitive nuclear

⁹ Roland Popp, “Introduction: Global Order, Cooperation between the Superpowers, and Alliance Politics in the Making of the Nuclear Non-Proliferation Regime,” *The International History Review* 36, No. 2 (2014): 195-209.

¹⁰ David Albright and Corey Hinderstein, “Unraveling the A.Q. Khan and Future Proliferation Networks,” *Washington Quarterly* 28, No. 2 (2005): 121.

¹¹ For example, Lewis Dunn, “Nuclear ‘Gray Marketeering,’” *International Security* 1, No. 3 (1977): 107-118; and Paul Joskow, “The International Nuclear Industry Today: The End of the American Monopoly,” *Foreign Affairs* 54, No. 4 (July 1976): 788-803.

¹² Matthew Kroenig, *Exporting the Bomb: Technology Transfer and the Spread of Nuclear Weapons* (Ithaca, NY: Cornell University Press, 2010).

assistance when (1) they lack the ability to project conventional military power over the recipient state, meaning that proliferation has less impact on the supplier's relative power, (2) when they share a common enemy with the recipient, and (3) when they lack a superpower patron, which tends to oppose such assistance.

In contrast to this strategic theory, the evidence in the William Burr, Krige, and Fabian Hilfrich articles makes clear that economic motives are often central to understanding why states support or oppose sensitive nuclear exports, and that relative power projection capability and superpower patronage do a poor job of explaining variation in attitudes toward nonproliferation and sensitive assistance.

With respect to the potential diffusion of the gas centrifuge, Krige observes that "it was, ironically, the weaker technological power [Britain]" that was more concerned about the spread of the sensitive technology (232-3), a finding which is directly contrary to the proposition that relatively powerful states will be more opposed to proliferation. Nevertheless, in spite of its concerns about the proliferation of centrifuge technology, Britain ultimately *did* share the technology with other countries—namely the Netherlands and West Germany through the establishment of the Urenco enrichment company. As Krige notes, Britain felt that cooperating with West Germany on centrifuges would reduce the latter's ability to divert highly enriched uranium to a weapons program (241); moreover, nuclear cooperation would be economically beneficial and would support Britain's political agenda in Europe (239). Contrary to the notion that superpowers would seek to prevent their clients from spreading sensitive technology, the United States actually supported the Anglo-Dutch-German collaboration on centrifuges, believing that it would increase the odds of West Germany signing the NPT (241).

Burr's article on the formation of the Nuclear Suppliers Group also paints a more complex picture about attitudes toward sensitive nuclear exports. Again, we see relatively weaker powers—in this case Britain and Canada—seeking more strict controls on sensitive nuclear exports than the relatively more powerful United States (267-269). Again, we see economic rather than strategic motives behind sensitive nuclear exports, in this case on the part of West Germany and France (253). Moreover, these countries were not deterred from offering and providing sensitive nuclear assistance even though they were clients of the United States. This hints at another weakness of the strategic theory of sensitive assistance: the U.S. commitment to limiting sensitive exports has not been constant over time. Indeed, Burr's article is precisely the story of how the United States developed a stronger policy at a precise historical moment. In line with the strategic theory, the United States ultimately did succeed in convincing France to give up sensitive exports going forward (269); however, an understanding of how U.S. policy changed over time is necessary to explain why France and Germany were major exporters of sensitive technology prior to the late 1970s and largely compliant with U.S. nonproliferation policy thereafter.

Hilfrich's piece on U.S.-German discord over the Brazilian nuclear deal, signed in 1975, offers a similarly complex picture. West Germany was transparently motivated by economic rather than strategic motives in its decision to offer Brazil sensitive technology (279-280). A relatively weaker state (the Netherlands) proved more concerned about the proliferation

risks of sensitive nuclear exports than its more powerful West German partner (291). While France ultimately reversed its permissive export policy in response to U.S. pressure and came to oppose the German-Brazilian deal, it did so largely out of commercial rather than strategic motives (292). In sum, there is clearly a wide gulf between extant strategic theories of sensitive assistance and the emerging historical record.

What are we to make of the disjuncture between elegant political science theories and the complex histories that these articles so effectively convey? And what is the way forward for researchers on either side of the history-political science divide? First, in terms of the specific substantive issues raised in this review, future research could profitably examine why U.S. nonproliferation policy has been so reactive, and why it takes salient, crisis-like events to spur important policy advances. Do such events change the causal beliefs or priorities of U.S. policymakers, or do they simply provide a bureaucratic opening for actors within the government or society that already were pushing more stringent nonproliferation policies? Historians have done an excellent job of documenting and describing these changes in policy, but much more could be done to provide systematic explanations for *why* these changes occurred. Future work could also address the puzzle of why preventive war against nuclear weapons programs has been so rare, and how economic and strategic motives interact in decisions on nuclear export policies.

Second, in terms of what political scientists can learn from historians, the lesson is clear: elegant theories are no substitute for historical knowledge of the phenomena under study. Even without stepping foot in an archive, political scientists can sharpen their theories by accessing the vast quantity of documents available online, whether in the Foreign Relations of the United States volumes, the National Security Archive, or the Cold War International History Project. Meanwhile, historians could sharpen their work by being more systematic in addressing alternative explanations (including from political science theories) and more upfront about their underlying theoretical assumptions and arguments. Both of these steps are necessary if we are to derive maximum benefit from the ongoing renaissance in nuclear security studies.

The special issue of *International History Review* reflects a growing interest in reexamining nuclear weapons dynamics that has recently emerged among both historians and political scientists.¹ This resurgence has included work on why states sought nuclear weapons, why they did not, why they shared technology and how that affected weapons pursuits, and how nuclear capabilities have affected deterrence and compellence. However, there is also new effort, exemplified both by this journal as well as several other projects and conferences, to examine what else states did in response to the existence of nuclear weapons -- namely, how they built a regime to restrain them, operated within that regime to secure their preferred policies, and took steps to circumvent the rules and restrictions imposed by the most powerful actors. The Nuclear Nonproliferation Treaty (NPT) forms the center of the regime, but the creation and persistence of this treaty, as well as issues surrounding the pursuit of nonproliferation policy by the U.S., have largely been neglected until very recently.²

This special issue highlights both what has been positive about the resurgence in research, and what is still lacking. On one hand, the issue makes great strides in filling the gap in available information and analysis of nonproliferation dynamics during the 1960s and 1970s. Most importantly, the authors use new sources to present several challenges to how we think about the relationship between the U.S. and USSR, as well as between the U.S. and its allies. The mainstream understanding of the NPT focuses on several intuitive 'bargains' – bargain between the nuclear haves and the have-nots, as well as a bargain between the U.S. and its allies on patronage and protection. This new research, however, suggests that these bargains are not what they seem. They have involved different actors and have been more coercive and discriminatory than the conventional wisdom suggests.

On the other hand, the historical accounts lack a theoretical frame to explain the patterns of state behavior they so carefully document. As theory is usually the purview of political scientists rather than historians, this special issue actually inspires a number of ways in which these two disciplines can contribute to one another's goals. Some of the more counterintuitive accounts in this issue – including those on superpower collusion and regarding the extensive friction between allies on nonproliferation issues – would seem less surprising if they were grounded on a better theory about how the regime balances the conflicting proliferation interests of patrons and allies or technology suppliers and recipients. This review, written from my perspective as a political scientist, focuses on how the articles in this issue suggest the need to reconsider our understandings of several

¹ Andreas Wenger, Roland Popp (eds.), "Special Issue: The Origins of the Nuclear Nonproliferation Regime," in *The International History Review*, 36: 2 (2014): 195-394.

² Some recent examples on work on U.S. nonproliferation policy include: Nicholas L. Miller, "The Secret Success of Nonproliferation Sanctions," *International Organization*, Volume 68 Issue 4 (Fall 2014): 913-944. Gene Gerzhoy, "Go Your Own Way? Alliance Coercion, Military Dependence, and West German Nuclear Ambitions." Paper presented at the APSA Annual Meeting, 2014.

nuclear bargains. Rather than directly evaluating historical contributions, I focus on how these articles, especially in conjunction with one another, implicitly propose new explanations for lingering puzzles about the NPT and in doing so raise several questions for additional research.

In his introductory article, Roland Popp highlights several important shifts in thinking about the role of nuclear weapons in the international system that emerged in the 1960's. First, nuclear pessimism gained traction in the views and, subsequently, the policies of leaders in both the U.S. and the Soviet Union. Both states began to see the detriment of nuclear proliferation, including proliferation to their own allies. The confluence of this shift in perception created a move towards cooperation between the two adversaries on the NPT. Popp identifies an important gap in the reassessment of the nonproliferation regime and the "unholy co-operation" that developed between the superpowers, a gap that the articles in the issue also do not address (200). Though the articles each have different goals, we also do not overall see much of an explanation for why the regime arose when it did, or the patterns of counter proliferation efforts that enforced it. The key puzzle of the NPT, which Popp suggests in highlighting the pillars of the NPT, remains a puzzle after reading the special issue: disarmament and the technological promises of the treaty remained inadequate inducements for non-nuclear weapons states, while managing the "hypocrisy" of the discriminatory arrangement was difficult for nuclear states (201). Given this fundamental problem, how did the regime not only survive but also prosper, rising to near universal membership?

From the political science perspective, there has likewise been a dearth of explanations. My own recent work seeks to develop a better theory to explain the nonproliferation regime, incorporating the implications of nuclear weapons for both intra-alliance politics and the competition between alliance blocks. My coauthor and I characterize superpower collusion on the NPT as a key element of how the regime was both established and maintained during the Cold War.³ Interestingly, Popp presents his discussion of U.S.-Soviet cooperation as part of a growing consensus in what he calls "New International Nuclear History" (199). This observation alone deserves stronger attention. Most political scientists have not observed the shifts in thinking surrounding nuclear weapons, proliferation, or the possibilities for cooperation that occurred during this 1960's-1970's period, and so have not sought to explain them. While I cannot judge whether a rethinking of the NPT will challenge the dominant historiography of nonproliferation in the Cold War, as Popp suggests it may, I can see how this historical material will be highly valuable to political scientists in seeing the need to better theorize nonproliferation dynamics.

³ Andrew Coe and Jane Vaynman, "Superpower Collusion and the Nuclear Nonproliferation Regime," Working Paper, September 2014.

Out of the articles in the special issue, Dane Swango's contribution most directly connects to the themes of Popp's introduction.⁴ The article focuses on one key piece of the NPT bargain – the provision of civilian nuclear technology to non-nuclear states. Although there are some ambiguities in the language, the article seems to conclude that the promise to provide assistance was indeed a concession by the U.S. that was important in making the NPT bargain viable, but at the same time it was a hollow promise that few expected to be upheld and the logic of which actually did not incentivize treaty participation. Although the U.S. and USSR were primarily responsible for drafting the NPT treaty text, they did feel pressure by non-nuclear weapons states NNWS to include greater inducements (215).

Swango makes two important critiques of the 'grand bargain' that have not been made in previous research, and that also relate to evidence provided in several other articles in the special issue. First, the incentive of getting access to nuclear technology was primarily a carrot for the states that the U.S. was *not* worried about –the ones that did not have the technology already. The real states of concern were those that did have nuclear technology, the ones that could develop nuclear weapons on their own in the future. For technologically advanced or nuclear-capable states, the agreement with obligations on nuclear technology sharing could be either a benefit or a burden. On one hand, nuclear suppliers wanted to maintain their ability to competitively sell civilian energy products to other countries.⁵ On the other hand, even mild obligations to contribute to technology could be interpreted as a way to erode the suppliers' competitive advantages. In the same issue, John Krige highlights how important some of those civilian nuclear technology issues were for supplier states.⁶ The UK's desire to remain competitive on gas centrifuge technology while worrying about its dual-use potential suggests exactly the kind of concern that nuclear states would have had in joining a bargain that called for sharing. In other words, the nuclear-capable states preferred to maintain their policies of selling nuclear technologies, but the NPT did not offer much in the way of an extra benefit beyond validating their current policies, while possibly even raising new questions about obligations.

Second, Swango convincingly argues that the benefits of nuclear assistance to NNWS were not a real inducement in to join the actual treaty either. The promise of these benefits for the most part characterized the status quo policy by the U.S., and the condition of nuclear assistance did not actually exclude the possibility of similar policies towards states that did

⁴ Dane Swango, "The United States and the Role of Nuclear Co-operation and Assistance in the Design of the Non-Proliferation Treaty," *The International History Review*, 36: 2 (2014): 210-229.

⁵ Looking at an earlier time period, Stuart A. Butler shows that the UK was quite hesitant to join an international institution which might compromise its own advantage in nuclear technology. While the issue in this case was over maintaining perceived independence and prestige, the example is suggestive of other drawbacks that nuclear weapons states might have seen in a call to increase their participation in technology assistance, even though more commercial sales would also be advantageous.

⁶ John Krige, "US Technological Superiority and the Special Nuclear Relationship: Contrasting British and US Policies for Controlling the Proliferation of Gas-Centrifuge Enrichment," *The International History Review*, 36: 2 (2014): 230- 251.

not join the NPT (217). The lack of a conditional connection between nuclear assistance and NPT membership calls into question both the efficacy and the logic of this pillar of the grand bargain. This point is an important one, as it challenges the logic of cartel theories of the NPT, where the cartel of the nuclear weapons states uses energy assistance as a bribe to induce states to join the treaty.⁷ It also calls into question the popular images of the treaty used in most of the mainstream commentary on NPT bargain, which elevates access to nuclear energy as one of the three ‘pillars’ of the NPT, and see it as one of the key trades between nuclear haves and have-nots, the other being eventual disarmament.

Several articles in the special issue pick up on the implications of civilian assistance, suggesting that the real bargains that helped enforce nonproliferation were not the ones contained in the pillars of the treaty, but rather those which were essentially forced by the U.S. on its allies. Fabian Hilfrich looks at the supplier side of the story, focusing on how Germany faced U.S. pressure over a deal with Brazil on nuclear cooperation.⁸ As Swango also notes, Brazil had not signed the NPT, while Germany argued that its deal to sell nuclear plants, reprocessing, and enrichment facilities was within the terms of the NPT. However, as Tatiana Coutto notes, the U.S. had suspicions that Brazil would pursue a weapons option, and sought to deny access to the full fuel cycle. What resulted was a subtle back-and-forth bargaining process, where Bonn tried to resist U.S. pressures, and the U.S. at the same time tried to meet its nonproliferation goals without appearing to coerce an ally.⁹

Hilfrich documents this negotiation process, but one of the most interesting elements of the article is its identification of the similarities in concerns of European countries and their interests in possibly joining together to oppose U.S. pressures (290). That these states were unable to collectively resist U.S. pressure is an under-explored element of U.S. nonproliferation policy. The extent to which isolating allies and fostering their disagreements was an explicit U.S. strategy is not clear, but the finding in this article that ‘side bargains’ were particularly difficult to form deserves further exploration. Instead, a mixed status quo emerged – while Germany did not cancel the agreement, the deal was slowed and eventually not implemented. Hilfrich writes that Washington was “unable to stop the German-Brazilian agreement and realize its nonproliferation objectives” and at the same time alienated an ally (294). There might however be another interpretation here than the one Hilfrich presents. The U.S. traded-off between pressure to enforce its

⁷ Daniel Verdier, “Multilateralism, Bilateralism, and Exclusion in the Nuclear Proliferation Regime,” *International Organization*, Volume 62, Issue 03 (July 2008) 439 – 476.

⁸ Fabian Hilfrich, “Roots of Animosity: Bonn’s Reaction to US Pressures in Nuclear Proliferation,” *The International History Review*, 36: 2 (2014): 227-301.

⁹ The U.S. preference to not appear to be a forceful enforcer of the NPT is also noted in William Burr’s article with respect to both German – Brazil and France – South Korea nuclear deals. 263. Coutto observes the same goals in looking at the Brazil case, and notes that while the U.S. did not want to be seen as applying pressure on the German-Brazil deal, it was offering extra inducements for Brazil to give up the agreement. Tatiana Coutto, “An International History of the Brazilian-Argentine Rapprochement,” *The International History Review*, 36: 2 (2014): 311.

nonproliferation objectives and maintaining alliance relations, selecting a path that compromised both strategies but also gave up neither.¹⁰

Looking at the same period from the perspective of nuclear technology recipients, Tatiana Coutto traces shifts of competition and cooperation between Brazil and Argentina. The study identifies mutual restraint that emerged outside of the nonproliferation regime. In a sense, Argentina and Brazil were able to accomplish what the European states could not, and formed a separate bargain between themselves that rejected U.S. influence, reassured international observers about the prospect of rivalry and arms racing, and sought to allow both states to remain nuclear recipients and suppliers. Coutto provides detailed evidence on how this ‘separate bargain’ came about, though her analysis is perhaps slightly flawed by including too many drivers of bilateralism without drawing distinctions of conclusions about their relative importance. This article, however, and its pairing with Hilfrich’s on Germany, suggests a question for future research: how do we explain the difference in how regional powers (in South American versus Europe) were able to coordinate to diminish U.S. influence? Is it a story primarily about security dependence on the superpower patron, or are there other regional or domestic political factors to consider?

Finally, this special issue also addresses bargains made to address gaps in the NPT regime. The bargain forged in the Nuclear Suppliers Group was more of a compromise between allies than one between the U.S. and USSR, as may be expected given Cold War competition. William Burr’s article offers a new perspective on the NSG negotiations by highlighting the role of France as the key holdout.¹¹ Burr’s treatment of the France question leaves unanswered many questions about French strategy with respect to the regime. He notes that “no one was sure why the French appeared to be ‘foot-dragging’” on participating in a conference with nuclear suppliers, and speculates that France ultimately joined because it “probably” did not want to be isolated (263). Then, despite previous hesitation, the French supported the final agreement and began to consult more closely with Washington on sensitive technologies. Burr notes this change, but does not really explain why it came about. Again, it seems like another ambiguity about the French position, and perhaps an important change in strategy.

One important puzzle about the NPT is why the treaty contains essentially a built-in ‘gap’ with respect to dual-use technologies. Countries can legally attain fuel cycle technologies, shortening their time towards breakout nuclear capabilities while still being in good standing with the regime, and then quickly develop weapons capabilities. Evidence from two of the articles suggests a possible answer to this puzzle. John Krige argues that the UK

¹⁰ Coutto notes that Brazil and Germany experienced strong pressure from the U.S., and by 1976 it was clear that Brazil was not going to get access to the most sensitive technologies. Coutto, 310.

¹¹ The USSR on the other hand, is an early supporter (260), evidence that also further supports Popp’s opening picture of the regime as establishing cooperation between the superpowers. Burr quotes Kissinger saying that in getting the NSG agreement, it was the “Western European allies who have been most troublesome,” and not the USSR (270). William Burr, “A Scheme of ‘Control’: The United States and the Origins of the Nuclear Suppliers Group, 1974-1976. *The International History Review*, 36: 2 (2014): 252-276.

largely saw the 'dual-use' problem that was posed by centrifuge enrichment technology, but shows that there was actually disagreement between the U.S. and the UK about the extent of the threat. The U.S. recognized British concerns, but overestimated both the technological difficulty of centrifuge enrichment and the degree of its own technological superiority in this area. The U.S. therefore estimated the 'gap' to be relatively small, and given the need to make some concessions to NNWS on nuclear sharing, saw additional restraints as too costly at the time. But this perception was not static. Burr argues that the extent of the dual-use problem became more fully apparent to U.S. policymakers after India's 1974 test.¹² As a result, this is the point at which we observe U.S. leadership in trying to patch up the weakness in the regime by establishing a separate deal, the NSG. Here again, the 'bargain' that helped maintain the nonproliferation regime is not with the non-nuclear states as we might expect, but rather with the group of nuclear-supplier allies.

Two articles are also rather disconnected from the themes of the special issue, which distracts somewhat from the issue's otherwise strong focus. John Cameron's article seeks to establish the influence of domestic opposition on U.S. missile defense policy, and specifically negotiating positions on the 1972 ABM Treaty.¹³ The claim is creative and interesting, particularly because there are few studies of how domestic political factors affected U.S. policy on nonproliferation or arms control. The argument is, however, not well supported and the causal connection that directly links suburban protests to broader electoral concerns, and finally to compromises on the ABM, remains underdeveloped. This is primarily because Cameron does not consider other potentially stronger drivers of missile defense policy. Stuart A. Butler's article on Britain and Euratom documents the intricacies of UK decision-making in 1955-63, but it is unclear how these earlier considerations fit into nonproliferation debates.¹⁴ The article would benefit from a broader assessment of how the largely economic concerns on Euratom were connected to or influenced the UK's policies on nuclear technology sharing and the later interactions with the International Atomic Energy Agency (IAEA) or the Nuclear Suppliers Group.

¹² By highlighting this shift in U.S. perceptions of the problems associated with civilian nuclear technology, Burr's account adds a new dimension to prior historical work, which claimed that Nixon and Kissinger did not really support nonproliferation goals, and did little to support the NPT. See chapter 5 in Francis J. Gavin, *Nuclear Statecraft: History and Strategy in America's Atomic Age*. Cornell University Press (New York: 2012). Burr suggests that Kissinger was at first skeptical and perhaps even just focused on other matters (256). But, the India test got his attention, and resulted in a realization that technology sharing posed more problems than previously expected, which in turn led to a much more active U.S. policy on managing nuclear supply (258). The effects of the test on U.S. understandings of nuclear energy technology parallel pre-NPT responses to the French and Chinese nuclear tests. The earlier tests motivated U.S. policy makers to see new problems with sharing nuclear weapons capabilities.

¹³ James Cameron, "From Grass Roots to the Summit: The Impact of US Suburban Protest on US Missile-Defense Policy, 1968-1972," *The International History Review*, 36: 2 (2014): 342-362.

¹⁴ Stuart A. Butler, "The Struggle for Power: Britain and Euratom 1955-63," *The International History Review*, 36: 2 (2014): 324-341.

To conclude, I want to note some drawbacks that I found in what are otherwise very well researched, documented, and argued articles. There are occasional omissions across the articles, which leave the reader with unanswered questions. For example, the authors often document shifts in policies without explaining why they came about, such as the case with Burr's treatment of French positions, and Swango's of U.S. compromises on Mexico's proposals on NPT drafts. Krige details the contrast between the U.S. and UK position on centrifuges, but does not indicate whether the U.S. position changed after the time period that he is looking at, which in a sense leaves a gap between his account and where Burr picks up on the U.S. role in the Nuclear Suppliers Group.

The most curious omission, however, is in how little we hear about the USSR in any of the articles, especially given the emphasis that Popp places on superpower collusion in the introduction. What did the U.S. think about Russian nuclear technology when it chose to not worry about British concerns over dual-uses for centrifuge enrichment? Did Argentina and Brazil consider going to the USSR as a nuclear supplier? Was the USSR active in negotiating with France and Germany regarding the NSG? Of course, Soviet records are likely not nearly as accessible as the archives that the authors used for these articles, so my questions may all have to wait. But if there were other ways to shed more light on the Soviet role, our debate on how to reassess the various nonproliferation bargains would be greatly enhanced.

Overall, this special issue shows that the emerging historiography on the nuclear regime has increasingly acknowledged and documented collusion between the superpowers, friction between allies on the application of nonproliferation policy, and moves towards nuclear bargains outside the regime. However, in characterizing this evidence as counter-intuitive and in contrast to existing histories of the Cold War, the new scholarship has not yet developed theories that might explain these observations. The issue was perhaps not intended in itself to do this kind of theory development, but it provides an excellent launching point for these and other scholars to develop broader explanations for the formation and evolution for the nonproliferation regime.