

H-Diplo | Robert Jervis International Security Studies Forum

Roundtable Review 15-24

Elisabeth Roehrlich. *Inspectors for Peace: A History of the International Atomic Energy Agency*. Baltimore: Johns Hopkins University Press, 2022. DOI: <https://doi.org/10.1353/book.100164>

22 January 2024 | PDF: <https://issforum.org/to/jrt15-24> | Website: rjissf.org | Twitter: [@HDiplo](https://twitter.com/HDiplo)

Editor: Diane Labrosse
Commissioning Editor: Thomas Maddux

Production Editor: Christopher Ball
Pre-Production Copy Editor: Bethany Keenan

Contents

Introduction by Maria Rentetzi, Friedrich-Alexander-Universität Erlangen-Nürnberg.....	2
Review by Melina Antonia Buns, University of Stavanger, Norway	5
Review by Toshihiro Higuchi, Georgetown University	9
Review by Akira Kurosaki, Fukushima University	13
Response by Elisabeth Roehrlich, University of Vienna	18

 Introduction by Maria Rentetzi, Friedrich-Alexander-Universität Erlangen-Nürnberg

In January 2023 I had the honor of interviewing Margaret Doane, the IAEA's Deputy Director General of the Department of Management of the International Atomic Energy Agency (IAEA). In the midst of the Russian war in Ukraine and the renewal of nuclear threats, I asked her the obvious question: how have the recent geopolitical upheavals changed the IAEA? "We never had inspectors long-term in the field at nuclear power plants" Doane noted. "Now there were individual inspectors going in to the Zaporizhzhia plant, and then providing information so when the IAEA was communicating, you knew that the information that was coming in was very reliable."¹ A concern—the safety and security of a nuclear power plant—that had been considered primarily as a national issue had become an international headache of military significance.

But there is also something else that the war in Ukraine changed forever. This is the myth that the IAEA's dual mandate presupposes: a clear-cut distinction between military and civilian uses of nuclear energy. The day Russia invaded Ukraine, Russian troops took control of the Chernobyl nuclear power plant (NPP). Only a few days later the IAEA was informed that Russian tanks and infantry were approaching also the Zaporizhzhya NPP, which was finally taken over by Russian forces on 4 March 2022.² As Kate Brow and Susan Solomon wrote in their *Washington Post* op-ed days after the invasion, war was "one thing nuclear power plants weren't built to survive."³

I read *Inspectors of Peace* around the start of the war as I was asked to provide a pre-publication endorsement. While I was reading through the captivating chapters of the book, I wondered whether Elisabeth Roehrlich's main argument could be still valid: that IAEA's promotional agenda of nuclear energy and technologies worked in favor of the agency's success because in times of crisis it allowed scientists from conflicting states to work together and facilitated diplomats to explore solutions in an international setting (5). It was at that time also that, together with Angela Creager, I argued that during its early years, the IAEA deliberately positioned itself as the dominant supplier of radiative materials, standards, and guidelines to create a world nuclear law that could underwrite the development of the nuclear industry.⁴ To us, the IAEA's dual mandate was not paradoxical at all, but an obvious move towards global nuclear governance. At that moment, I regarded *Inspectors for Peace* as a gift by an international historian to those of us—historians of science and technology—who have long argued about the close entanglement of science and politics and, more recently, of diplomacy.⁵

In her response to the three wonderful reviews of *Inspectors for Peace*, written by experts in nuclear and international history Akira Kurosaki, Toshihiro Higuchi, and Melina Antonia Buns, Roehrlich summarizes her book as an effort "to understand how the agency negotiated and implemented its dual mandate of nuclear

¹ Interview, Margaret Doane to Maria Rentetzi, 18 January 2023, IAEA Headquarters, HRP-IAEA ERC project, <https://hrp-iaea.org>

² IAEA, "Update 9 – IAEA Director General Statement on the Situation in Ukraine," 3 March 2022, <https://www.iaea.org/newscenter/pressreleases/update-9-iaea-director-general-statement-on-the-situation-in-ukraine>; IAEA, "Update 11 – IAEA Director General Statement on Situation in Ukraine," 4 March 2022, <https://www.iaea.org/newscenter/pressreleases/update-11-iaea-director-general-statement-on-situation-in-ukraine>

³ Kate Brown and Susan Solomon, "One Thing Nuclear Power Plants Weren't Built to Survive: War" *The Washington Post*, 18 March 2022, <https://www.washingtonpost.com/outlook/2022/03/18/chernobyl-zaporizhzhia-nuclear-plant-ukraine/>

⁴ Angela Creager and Maria Rentetzi, "Sharing the Safe Atom: The International Atomic Energy Agency and Nuclear Regulation through Standardization," in Bernadette Bensaude-Vincent, Soraya Boudia, and Kyoko Sato, *Living in a Nuclear World: Order, Knowledge, and Normalization* (New York: Routledge, 2021): 111–131.

⁵ Kenji Ito and Maria Rentetzi, eds. "The Co-Production of Nuclear Science and Diplomacy: Towards a Transnational Understanding of Nuclear Things," *History and Technology* 37:1 (2021): 4–20.

promotion and control.” Yet, Kurosaki, a specialist on the history of Japan’s nuclear policy, questions one of the argument’s core premises: “How seriously was the agency’s leadership concerned about its endurance?” In other words, did the IAEA’s leadership deliberately try to survive as a critical diplomatic forum taking advantage of the limits, and the paradox, of the dual mandate? Obviously, there is the underlining and problematic assumption that the IAEA’s leadership has been a stable parameter in the agency’s history. Roehrlich succinctly responds that “writing the history of an international organization such as the IAEA is like following a moving target.”

In his review, Toshihiro Higuchi, a historian of the nuclear age with a focus on its scientific, technological, and environmental aspects, points to three shortcomings of the book. He argues that *Inspectors for Peace* does not address “the web of international organizations that nest in the field of atomic energy,” does not explore the ways that the IAEA has interacted throughout its history with members of civil society, and does not explain the agency’s contrasting role in nuclear safety and security, favoring the later. Roehrlich’s concern, as she explains, is neither the IAEA’s history of dealing with nuclear safety and security, nor the role of civil society. Her approach has been selective by deciding to focus on some actors rather than others.

Melina Antonia Buns’s review seconds Higuchi’s concerns about the lack of “stronger analytical argumentation and justification” for the choices made concerning national case studies and periodization. She argues that what is missing is a stronger reference to the global nuclear politics and the role of other international organizations, issues that could both strengthen Roehrlich’s initial argument. Buns, an environmental historian who focuses on international organizations, also underlines the absence of the nuclear industry from Roehrlich’s narrative. The point of convergence for both Buns and Higuchi is that *Inspectors for Peace* missed a chance to present IAEA’s struggle with its dual mandate in the wider nuclear institutional context of the Cold War. But as Roehrlich explains, “the exemplary approach was a deliberately stylistic choice” aimed at an accessible narrative.

Beyond constructive and warranted criticism, the three reviewers agree on one major point. *Inspectors for Peace* is a long-anticipated and fascinating study of the IAEA’s history that brings front and center the role of the UN’s dominant nuclear organization. Those of us who work in the field of nuclear history have appreciated Roehrlich’s massive use of the IAEA archive, a depository that gradually opened its doors because of her work, among others.⁶ As Higuchi suggests in his insightful review, *Inspectors for Peace* is “no ordinary institutional history.” In my view, this is a well-documented, wonderfully written attempt to explore one aspect of the IAEA’s multifaceted history, leaving ample space for a new generation of historians of international organizations with an interest in the nuclear world order. What this community is still missing, however, is a dialogue with historians of science and technology.

Contributors:

⁶ Anna Weichselbraun, “Increasing Transparency at the IAEA Archives,” Issue Brief 4, Nuclear Proliferation International History Project (3 March 2015); <https://www.wilsoncenter.org/sites/default/files/media/documents/publication/IB%234--Increasing%20Transparency%20at%20the%20IAEA%20Archives.pdf>; Toby McIntosh and William Burr, “The IAEA’s Lack of Transparency,” National Security Archive, 24 April 2015, <https://nsarchive2.gwu.edu/nukevault/ebb512/#:~:text=But%20the%20most%20significant%20transparency,for%20declassifying%20very%20old%20records>

Elisabeth Roehrlich is an Associate Professor in History at the University of Vienna, Austria, where she is also Vice Dean of the Faculty of Historical and Cultural Studies. Before taking up her tenure-track professorship, Roehrlich was an Elise Richter Senior Fellow at the Department of Contemporary History at the University of Vienna. Roehrlich received her doctorate in 2009 from the University of Tübingen, Germany, and since then has held fellowships at the Woodrow Wilson International Center for Scholars, the German Historical Institute (both in Washington, DC), the Norwegian Institute for Defense Studies in Oslo, and Monash University South Africa in Johannesburg. Her first monograph on Austrian foreign policy was awarded the Bruno Kreisky Recognition Prize for the Political Book in 2010. Her work on the history of the International Atomic Energy Agency has appeared in journals such as *Diplomacy and Statecraft*, the *Journal of Cold War Studies*, *Cold War History*, and the *IAEA Bulletin*, and her monograph, *Inspectors for Peace: A History of the International Atomic Energy Agency*, was published with Johns Hopkins University Press in 2022.

Maria Rentetzi is Professor and Chair for Science, Technology and Gender Studies at Friedrich-Alexander-Universität Erlangen-Nürnberg. She currently serves as FAU's internationalization officer being responsible for increasing the international visibility of FAU. Rentetzi has been trained as a physicist at the Aristotelian University of Thessaloniki, Greece. She received her MA in History of Science and Technology from NTUA, an MA in Philosophy and a PhD in Science and Technology Studies from Virginia Tech. She was a Postdoctoral Fellow and guest scholar at Max Planck Institute for History of Science and a Lise Meitner Fellow of the Austrian Science Fund (FWF). She has received multiple international awards for her scholarship, including the Gutenberg-e Prize of the American Historical Society and one of the most prestigious grants in Europe, the ERC Consolidator grant. Her ERC project focuses on the history of radiation protection and the role of the International Atomic Energy Agency in setting radiation standards after World War II. Through her ERC project, she currently leads the development of a new strand of research, Diplomatic Studies of Science, and edits a series on science diplomacy at Brepols.

Melina Antonia Buns is Associate Professor of History at the University of Stavanger, Norway, where she is affiliated with *The Greenhouse—Center for Environmental Humanities*. Her research interests are located at the intersection of environmental, energy, and international history, with a focus on politics, international organizations, and the Nordic region. She is currently working on a project exploring the international dimension of radioactive waste and its technology-society-environment entanglement. Her work has appeared in *Scandinavian Journal of History* and *Diplomatica*.

Toshihiro Higuchi is Associate Professor of History at Georgetown University. He studies the international history of the nuclear age with a focus on its scientific, technological, and environmental aspects. His publications include *Political Fallout: Nuclear Weapons Testing and the Making of a Global Environmental Crisis* (Stanford UP, 2020).

Akira Kurosaki is a Professor at Fukushima University. He has a Doctor of Law from Tohoku University, Japan. He specializes in International Relations and International History. He has written extensively on the history of Japan's nuclear policy, Japan-US relations, and arms control and disarmament. His articles have appeared in *Nonproliferation Review*, *Journal of Cold War Studies*, *International History Review*, and other journals and edited volumes. He is also the author of an award-winning book, *Kakubeiki to Nichi-Bei kankei: Amerika no kaku fukakusan gaiko to Nihon no sentaku 1960–1976* [*Nuclear Weapons and Japan-US Relations: US Nuclear Non-proliferation Diplomacy and Japan's Choice 1960–1976*] (Tokyo: Yushisha, 2006).

 Review by Melina Antonia Buns, University of Stavanger, Norway

When the International Atomic Energy Agency's (IAEA) Support & Assistance Mission to Zaporizhzhia left for Ukraine in late August 2022, the agency's Director-General, Rafael Grossi, documented this event in the life of the world's "nuclear watchdog"—as the agency is widely known today despite the fact that this perception only emerging around the millennium (204)—with a tweet. He included an accompanying picture showing the fourteen-member crew with clenched hands. In the eyes of its director-general, the IAEA was on a mission "to protect the safety and security" of the largest nuclear power plant in Ukraine and Europe; ultimately portraying themselves as inspectors in a mission for peace.¹ The photo and the additional official news update reveal two things: first, as it was more than sixty years ago, the IAEA's mandate remains without authority and instruments; and second, that the IAEA's on-site inspections depend on the goodwill of governments—or, in this case, occupying Russian armed forces. Yet, as Elisabeth Roehrlich shows in her work *Inspectors for Peace*, the IAEA's new self-image as "an institution with its own 'mission'" (237) emerged only in the mid-2010s; for most of its existence, the agency was "an executer with an assigned 'mandate'" (237).

Sixty-five years after the creation of the International Atomic Energy Agency in 1957, Elisabeth Roehrlich's book *Inspectors for Peace* offers a long-anticipated, novel, and rich historical analysis of this international organization and its dual mandate of "technological promotion and inhibition" (3). Central to Roehrlich's analysis is her quest "to unravel the IAEA's seeming paradox of sharing nuclear material, technology, and knowledge, while aiming to deter nuclear weapon programs" (3). As Roehrlich argues, the strict separation between the beneficial civilian atom and the malicious military atom was as central to upholding the organization's mandate as was maintaining the myth of its "purely technical character" (237). It is *Inspectors for Peace's* aim to not only understand how this paradox evolved historically (4), but also why it was, and still is, crucial for the IAEA to distinguish between the political and the technical (234).

Enquiring into this paradox, Roehrlich's analysis reveals that because of the "entanglement of political and technical issues" connected to nuclear promotion and nuclear safeguards, the IAEA's "legitimacy rested on its self-portrayal as an international bureaucracy" executing a technical mandate (236). Whereas this image of the agency seems to have changed since 2016, during the Cold War, whose "very notion... stem[med] from the entanglement of superpower dynamics and nuclear development," the image was crucial since it allowed for international cooperation across ideological and military alliances (28). While the agency facilitated international exchange with the promotion of civilian nuclear cooperation, the collaboration across Cold War divides was itself instrumental to the agency's nuclear non-proliferation activities.

In *Inspectors for Peace*, Roehrlich convincingly argues that nuclear promotion and inhibition were mutually dependent. On the one hand, the promotion of technical assistance was the "IAEA's selling point" (89) and was also the main reason for states to become interested and involved in this agency which promised access to a perceived "key technology of the future" (234). The resulting "broad and geographically diverse membership" (129), on the other hand, allowed the IAEA to have an equally large sphere of dissemination and influence for its nuclear safeguards regime. Roehrlich argues, however, that the agency's role as a "key arena for nuclear nonproliferation" only evolved when it became the verification institution of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) in 1968 (108).

The analysis illustrates that the dual nature not only pervades the agency's mandate and politics, but also to its structure, finances, alliances, and safeguards regimes. Constructed along a "dualistic architecture" (78) with a

¹ "Ukraine: UN atomic energy experts head to stricken nuclear power station," UN News: Global Perspective, Human Stories, 29 August 2022, <https://news.un.org/en/story/2022/08/1125612>.

secretariat and two diplomatic bodies, the IAEA operates within a two-budget-system, in which mandatory contributions are covered safeguards, whereas the key focus of the organization—its technical assistance activities—are covered by voluntary financial contributions. Instead of Cold War duality, dividing lines existed between “nuclear haves” and “nuclear have-nots,” between NPT-states and non-NPT-states, with each having their own their safeguards regime, one following the comprehensive safeguards agreements connected to the NPT, and another following the facility-based safeguards agreements for non-signatory states to the NPT.

Drawing on novel archival insights into the IAEA as well as oral history interviews with several key actors of the organization throughout its decades, including its former director generals Hans Blix (from 1981–1997) and Mohamed ElBaradei (from 1997–2009), *Inspectors for Peace* bases its analysis on “institutional memory” (11) combined with empirical material from beyond the agency. This foundation aligns with the work’s methodological approach to the IAEA as an arena for international cooperation, and an actor in international affairs at the same time. As such, the book positions itself within the wider set of historical literature on the role of international organizations in the development and dissemination of policies, knowledge and ideas during the twentieth century.² Yet with its focus on nuclear safeguards, *Inspectors for Peace* is not only a much-needed key contribution to the history of international organizations, but also to the history of nuclear non-proliferation, and the field of political nuclear history and global politics more broadly.

By approaching the IAEA as an arena and an actor, *Inspectors for Peace* offers new insights into the internal dynamics of the agency, its position within the global (nuclear) order during the Cold War and beyond, and its own agenda, as well as its instrumentalization by other actors. It shows how different alliances were mobilized within the agency for various domestic and political reasons, but also how the agency itself used its relations—for instance with the Soviet Union following the Chernobyl accident in 1986—in order to present “itself as a neutral place where East and West came together in the name of science and technology” (196). Equally, locating the IAEA in Cold War Vienna, at that time “an outpost of the ‘free world’ in the shadow of the Iron Curtain” (62), was the result of balancing superpower tensions as well as of Austrian diplomatic lobbyism. The emphasis on this debate in the book’s narrative draws a much-appreciated attention to the symbolic, and eventually essentially political, meaning of the locations and geographies of international organizations, as well as to the prestige and influence gained by those countries hosting the same.

The book’s nine empirical chapters scrutinize the fascinating and tension-filled history of the IAEA, from its intellectual beginnings following the advent of the nuclear age, until the beginning of the 2010s, at which point Roehlich highlights the refocusing on the agency’s technical assistance mandate made visible in its modified motto of “Atoms for Peace and Development” (15). Initially, it was this promise of development by means of technical assistance which made US President Dwight Eisenhower’s idea of “Atoms for Peace,” and by extension the agency, attractive to states, rather than the safeguards for which the IAEA is primarily known today (86). Starting with the advent of nuclear weapons, Roehlich shows how a “new form of nuclear diplomacy” (17f.) that emerged in the post-war and early Cold War period formed the intellectual foundations of what later developed into the rationale of the IAEA and its dual mandate. Although developed in the momentum of post-war reconstruction and post-nuclear bombing, only Eisenhower’s “Atoms for Peace” speech in 1953 decisively shifted “the public’s attention from military uses of the atom to civilian purposes” (33) and promoted an international agency that would have the peaceful uses of the atom, and the technical

² See, for example, Karen Gram-Skjoldager, Haakon A. Ikonou and Thorsten Kahlert, eds., *Organizing the 20th-Century World: International Organizations and the Emergence of International Public Administration, 1920–1960s* (London: Bloomsbury Academic, 2020); Wolfram Kaiser and Jan-Henrik Meyer, eds., *International Organizations and Environmental Protection: Conservation and Globalization in the Twentieth Century* (New York: Berghahn, 2017), Daniel Maul, Human Rights, Development and Decolonization: The International Labour Organization, 1940-70 (Basingstoke: Palgrave, 2012).

nuclear assistance to medicine, agriculture, science, and power generation, as its “primary objective” (57). Subjected to its own dynamics of international negotiations, the initial arms control aspect lost ground to the promises of the peaceful applications of nuclear energy and nuclear safeguards, eventually resulting in the statutes that created the IAEA in 1957.

Although the work emphasizes the “IAEA’s most defining developments, conflicts, and breakthroughs of each decade” (12), one might have wished for a stronger analytical argumentation and justification for the different case studies and periodizations used, as well as for the decades covered. What emerges from this narrative is a history of an international organization that, after some initial slow years, experienced success during the 1970s, only to become challenged by both internal and external developments from the 1980s onwards. In particular the period between 1964, when the IAEA was “widely regarded as the key scientific organization in the nuclear field” (104), and the early 1980s, when the IAEA lost its “rather comfortable position as a technical bureaucracy” (151), is central, given that during that time the agency emerged as a key actor within international nuclear non-proliferation and the development of its safeguards regime. While in her nuanced analysis, Roehrlich demonstrates how safeguards, initially not the main focus of “Atom for Peace,” developed into the key objective of the IAEA, the reviewer is left wondering whether additional insights into the developments and dynamics of global nuclear politics and between different international organizations could have strengthened and enriched the book’s narrative and argument by including further reflections about such agency-specific periodizations.

Initially, during the late 1950s and early 1960s, the agency’s activities focused on technical assistance in line with the time’s international development rationale, whereas safeguards were “rudimentary” (89). Safeguards were neither attractive to developing states, who criticized safeguards and inspections as discriminatory and considered them as a form of “great power imperialism,” (56), nor to industrialized countries, whose criticism stemmed from fears for industrial espionage (89). The turn to a focus on safeguards came only with the establishment of the IAEA’s responsibility for the verification of the NPT, a reorientation that did not remain uncriticized by the Global South.

As *Inspectors for Peace* shows, nuclear safeguards, drawn up in the “climate of confidence” (125), were developed along the “concept of deterrence by detection” (124). Yet, the discovery of hidden nuclear weapons programs in—among others—Iraq revealed the “gaps in the system” (131) and its inefficiency, leading to the authority of the agency over safeguards becoming challenged in particular from the 1980s and 1990s onwards. Equally difficult for the IAEA was the intensifying conflict between the “nuclear haves” and the “nuclear have-nots” as exemplified by the increasingly political and international security-related debates during the 1980s with South Africa and Israel as centers of these debates (chapter 7). Additionally, the Chernobyl accident in 1986 “called into question the agency’s dual mandate” and “challenged the credibility of the IAEA’s promotional mission,” as civilian nuclear industries had been found to harm humanity, too (183).

Such problems led to a loss in trust and credibility of the agency as well as a questioning of civil nuclear energy, itself vital for the existence of the IAEA. Thus, what further emerges from *Inspectors for Peace*’s groundbreaking analysis is that the agency not only needed to continuously reform its structure in order to adapt to new global structures and changing nuclear orders, but also needed to constantly rebrand its own image—a strategy that could have been explored in more detail. During the 1980s, the IAEA’s nuclear safeguards, which had been much criticized as patronizing and controlling, were reframed into a “service [provided] to states to demonstrate their good intentions” (181). Equally, reconsideration was necessary for the image of peaceful applications of nuclear technologies and their contribution to the global community: after Chernobyl, the promise of development and modernity of the 1950s and 1960s was replaced by the promise of an ecological and climate-friendly source of energy (190). Given these developments, a discussion of the role of the nuclear industry within the agency would have been informative.

With *Inspectors for Peace*, Elisabeth Roehlich has enriched the scholarly literature with a beautifully written, thoroughly researched, and well-argued history of an organization that not only against all odds was born and survived the Cold War, but whose mandate remains equally important, and yet paradoxical, in contemporary nuclear affairs.

Review by Toshihiro Higuchi, Georgetown University

Today, the International Atomic Energy Agency (IAEA) is the public face of nuclear safety and security around the world. The news media routinely report the activities of its officials and experts at the scene of a crisis, whether it is Iran's undisclosed nuclear activities, the nuclear power plant accident in Fukushima, Japan, or reactor safety in the war in Ukraine. At the time of its foundation in 1956, however, few foresaw such a prominent role for the agency, which began with a tiny budget, a skeleton bureaucracy, and a broad yet vague mandate. Elisabeth Roehrlich's *Inspectors for Peace: A History of the International Atomic Energy Agency* is a path-breaking study of this famous yet enigmatic international organization. As Roehrlich points out, historical accounts of the IAEA and many other international organizations tend to be written by themselves as a "narrative of progress." The book thus offers a much-needed independent perspective that allows us to "scrutinize the founding myths and narratives presented by such official histories" (11).

Inspectors for Peace, however, is no ordinary institutional history. Using the IAEA and its evolution as a theoretically capacious, empirically rich case study, Roehrlich successfully brings together the histories of atomic energy, the Cold War, decolonization, development, and global governance in whole new ways. Equally notable is the book's methodological breakthrough. As Amy L. Staples noted in her pioneering work on the role of international organizations in development, some of the archives of international organizations are closed to outside researchers or notoriously difficult to use.¹ Far from being discouraged, Roehrlich has worked closely with IAEA archivists and scholars around the world to make the agency's records more accessible to the public. At the same time, she looked beyond the institutional archive, methodically collecting many documents from the United Nations as well as primarily in Austria, the United Kingdom, and the United States. This impressive array of textual records is complemented by the many oral history interviews that Roehrlich conducted with former diplomats and retired IAEA staff members, including former Directors-General Hans Blix and Mohamed ElBaradei. In both conception and methodology, *Inspectors for Peace* is a trailblazer in what one may call a "new institutional history" of international organizations.

Central to the book is the dual mandate inscribed in the IAEA Statute, that is, promoting the peaceful uses of atomic energy while curbing the further spread of nuclear weapons. While many criticize the IAEA's mission as contradictory and detrimental to the goal of nuclear nonproliferation, Roehrlich argues that the dual mandate has proven essential to the agency's success. Indeed, the IAEA began not as a nuclear watchdog, as it is typically known today, but rather as a "development agency" (45), whose primary function in its formative years was to promote international cooperation in civilian nuclear applications. The IAEA safeguards were originally designed as a mere accessory to the agency's promotional work, namely to prevent the diversion of civilian nuclear assistance by a recipient country for military purposes. Even after the 1968 Non-Proliferation Treaty (NPT) strengthened the agency's verification functions, the IAEA has to this date remained largely reliant on voluntary declarations made by states about their nuclear activities, and almost all non-nuclear weapons states have chosen to stay in the IAEA in order to participate in civilian nuclear cooperation. By offering its member states access to nuclear technologies while softening the coercive edges of safeguards, Roehrlich argues, the IAEA has made the goal of nonproliferation "more than the interest of a superpower 'cartel'" (129), successfully facilitating the voluntary compliance of a vast majority of the countries with the global nuclear nonproliferation regime.

In demonstrating the close and complementary relationship between the IAEA's technical assistance and safeguards, *Inspectors for Peace* successfully demystifies another binary that typically characterizes the agency. Throughout its history, the IAEA and its critics have both insisted that the agency's work is technical and

¹ Amy L. S. Staples, *The Birth of Development: How the World Bank, Food and Agriculture Organization, and World Health Organization Changed the World, 1945-1965* (Kent, OH: Kent University Press, 2006).

ought to be free from politics. As Roehrlich points out, however, the IAEA's mission has always been political from the very beginning. If so, then, "the crucial question for historians is why it was, and continues to be, important for the IAEA to distinguish between the political and the technical" (234). Roehrlich's methodical analysis of the IAEA's institution-building reveals the centrality of the normative distinction between politics and science for the agency's ability to successfully execute its mandate, as discussed primarily in chapter 4 concerning the creation of the Scientific Advisory Committee (SAC) in 1958 and the election of Swedish physicist Sigvard Eklund as director-general in 1961. Roehrlich adds that the disavowal of politics at the IAEA was politics by other means, noting, "The members of SAC and the board [of Governors] used the words 'political,' 'technical,' and 'scientific' ... to thwart oppositional views" (85). The cynical disavowal of politics, however, by no means negated its utility for the IAEA and its member states. In an argument reminiscent of Stephen Krasner's famous concept of organized hypocrisy, Roehrlich calls the allegedly technical character of the agency "a myth that everybody knew was a myth, but one that needed to be sustained to enable the IAEA to carry out its mandate" (237).² Indeed, by the time the NPT was concluded, the positive cycle between the IAEA's technical identity and its effectiveness as an international organization had become firmly established so that the agency was entrusted by the treaty's chief sponsors, including the United States and the Soviet Union, to the task of verifying its compliance by all signatories (chapter 5).

Some of the most original and fascinating insights offered by *Inspectors for Peace*, however, concern developing countries. In highlighting their prominent and consequential role in the IAEA, the book joins the growing literature that foregrounds the Global South as a major site and actor in the formation of global nuclear order.³ Part of its influence was inflected through the Cold War, as the agency's development agenda turned the United States and the Soviet Union into "competitors and partners" (59), waging the propaganda war to win the hearts and minds of people in the Third World while cooperating in technical assistance to advance their interests in the new Cold War battleground. Developing countries, however, were far from being passive subjects in global nuclear order. Beginning in the 1970s, with the priority of the nuclear superpowers shifting from development to nonproliferation, many IAEA member states from the Third World formed a powerful bloc within the agency's policy-making bodies to repeatedly resist the strengthening of the agency's safeguards while demanding greater access to nuclear technologies.

Even more importantly, Third World activism went beyond matters directly relating to the agency's mission. One of the most fascinating discussions in the book concerns a global campaign seeking to reject the credentials of South Africa's apartheid regime. While the controversial role of South Africa in the IAEA has been extensively studied in recent historiography,⁴ Roehrlich reveals its historical significance as one of the key issues that signaled a major shift in the agency's identity from a "technical" to a "political" organization. For instance, South Africa and its Western allies successfully preempted a call for expelling the apartheid

² Stephen D. Krasner, *Sovereignty: Organized Hypocrisy* (Princeton, NJ: Princeton University Press, 1999).

³ Austin R. Cooper, "The Tunisian Request: Saharan Fallout, US Assistance and the Making of the International Atomic Energy Agency," *Cold War History* 22:4 (2022): 407-436; Gabrielle Hecht, *Being Nuclear: Africans and the Global Uranium Trade* (Cambridge, MA: MIT Press, 2012); Nicola Horsburgh, *China and Global Nuclear Order: From Estrangement to Active Engagement* (Oxford: Oxford University Press, 2015); Jonathan Hunt, "Mexican Nuclear Diplomacy, the Latin American Nuclear-Weapon-Free Zone, and the NPT Bargain, 1962-1968," in *Negotiating the Nuclear Non-Proliferation Treaty: The Making of a Nuclear Order*, eds. Roland Popp, Liviu Horowitz, and Andreas Wenger (Abingdon: Routledge, 2016), 179-202; Carlo Patti, *Brazil in the Global Nuclear Order, 1945-2018* (Baltimore, MD: Johns Hopkins University Press, 2021); Abena Dove Osseo-Asare, *Atomic Junction: Nuclear Power in Africa After Independence* (Cambridge: Cambridge University Press, 2019); Jayita Sarkar, *Ploughshares and Swords: India's Nuclear Program in the Global Cold War* (Ithaca, NY: Cornell University Press, 2022).

⁴ Gabrielle Hecht, "Negotiating Global Nuclearities: Apartheid, Decolonization, and the Cold War in the Making of the IAEA," *Osiris* 21:1 (2006): 25-48; Hecht, *Being Nuclear*; Jo-Ansie van Wyk, "Atoms, Apartheid, and the Agency: South Africa's Relations with the IAEA, 1957-1995," *Cold War History* 15:3 (2015): 395-416.

regime during the 1963 session of the General Conference by insisting that the agency was a purely scientific body. At the time, even R.P. Baffour, the Ghanaian governor who presided over the session, agreed that the agency's work "lay outside politics" (96). With the representation of the developing states growing within the IAEA over the next decade, however, Pretoria was eventually outnumbered and voted out of the Board of Governors in 1977. Together with the Israeli air raid on an Iraqi nuclear reactor in 1981, the rising North-South tensions shook the IAEA's reputation as a politically neutral, highly competent body. The replacement of Eklund with Swedish diplomat Hans Blix as IAEA director-general in 1981 thus solidified "the IAEA's new profile as a political organization" (177).

Compared with its thorough analysis of the IAEA's dual mandate in nuclear energy promotion and safeguards, *Inspectors for Peace* offers relatively little regarding the agency's other dual mandate, namely promotion and safety.⁵ This is certainly understandable, given the minor role that the IAEA has played in health and safety. Although the agency was initially intent on carrying out its safety mandate, setting binding rules proved difficult because "health and safety were seen as the domain of the individual member states" (91). Roehrlich returns to the question of safety in chapter 8, where she discusses the IAEA's response to the Chernobyl accident of 1986. The stakes were indeed high for the IAEA, as the promise of civilian nuclear power served as a linchpin in the agency's safeguards mandate as well as the "grand bargain" in the NPT between nuclear weapon states and non-nuclear weapon states (187-188). As Roehrlich points out, however, the IAEA's attempts to reassure the world about reactor safety and radiation health in the wake of the Chernobyl accident backfired, as critics loudly accused the agency of having a pro-nuclear bias at expense of health and safety. These negative public reactions eventually forced the IAEA to "[lower] the public profile of its promotional activities for nuclear power" (202). Subsequent efforts to strengthen the IAEA's role in reactor safety also met with little success, as few member states were willing to submit their nuclear power programs to the agency's review. The world's worst nuclear accident, then, hardly changed the IAEA's role in nuclear safety.

As is the case for any groundbreaking work, *Inspectors for Peace* raises more questions than it answers. Of them, three important issues stand out. The first concerns the agency's contrasting role in nuclear security and safety. While a series of proliferation crises and nuclear accidents beginning in the 1980s made the IAEA prominent and controversial on the international stage, Roehrlich seems to argue that the agency has reacted to them quite differently, embracing a more active role in security while remaining passive in safety. If so, what can explain this historical divergence? Given the growing importance of health and safety for nuclear-power promotion, what implications does the conspicuous lack of the IAEA's leadership in this area have for the agency's future?

The second issue involves the role of civil society in global governance. *Inspectors for Peace* does not delve into this topic except for its brief, albeit insightful, analysis of the influence of the global anti-apartheid movement. Although the agency indeed tends to interact with sovereign states and their collectives only, its object of concern—nuclear technologies—is among the most prominent issues that historically have galvanized social

⁵ For more extensive discussion of the IAEA's health and safety activities, see Bernadette Bensaude-Vincent, Soraya Boudia, and Kyoto Sato, eds., *Living in a Nuclear World: From Fukushima to Hiroshima* (London; New York: Routledge, 2022); Toshihiro Higuchi and Jacques E. C. Hymans, "Materialized Internationalism: How the IAEA Made the Vinča Dosimetry Experiment, and How the Experiment Made the IAEA," *Centaurus* 63:2 (2021): 244-261; Maria Rentetzi, "Determining Nuclear Fingerprints: Glove Boxes, Radiation Protection, and the International Atomic Energy Agency," *Endeavour* 41:2 (2017): 39-50; Rentetzi, "The Global Experiment: How the International Atomic Energy Agency Proved Dosimetry to Be a Techno-Diplomatic Issue," *NTM* 30:2 (2022): 167-195.

movements around the world.⁶ IAEA safeguards can serve as both a trigger of and a peaceful solution to a proliferation crisis, whereas the agency's steadfast commitment to nuclear power promotion puts the IAEA increasingly at odds with antinuclear activists. The influence of civil society can also come from within the agency. As an autonomous body within the United Nations system, the IAEA grants consultative status to nongovernmental organizations (NGOs) for their expertise and/or stakes in the work of the agency. How has the IAEA interacted with members of civil society both within and outside the institution? And what do these interactions (or lack thereof) tell us about the IAEA's standing in global governance?

The third and final issue is related to the ecosystem of international organizations which the IAEA inhabits. *Inspectors for Peace* reveals the complex relationships that the agency has developed with a few bodies. For instance, the self-inspections of the European Atomic Energy Community (EURATOM) complicated the IAEA safeguards, whereas a series of nonproliferation initiatives taken by nuclear suppliers outside the IAEA framework kept the agency clear of the delicate and divisive issue of export controls. The book also briefly touches on the controversial memorandum of understanding between the IAEA and the World Health Organization regarding health-related work and public relations. The web of international organizations that nest in the field of atomic energy, however, is much wider and deeper than the book suggests. For instance, the Nuclear Energy Agency of the Organization for Economic Co-Operation and Development (NEA-OECD), which was founded in 1958, has emerged as a leading intergovernmental agency for nuclear power promotion in the increasingly anti-nuclear Western world. The World Association of Nuclear Operators (WANO), a group of owners and operators of nuclear power plants that was established in 1989, aims to facilitate consultation and coordination in nuclear power safety outside government regulation. In the field of radiation health, the International Commission on Radiological Protection (ICRP), which was formed in 1928, has issued and updated the basic recommendations that provide a fundamental basis for the IAEA's health and safety manuals. These and many other organizations are linked and overlapped with the IAEA through a variety of formal and informal channels such as affiliations, personnel, grants, and meetings. The extent to which the IAEA competes and cooperates with these and many other organizations thus behooves us to look beyond a single institution and explore the dynamic network of elusive and unaccountable technocracy at the heart of global nuclear order.

The standard disclaimer about these caveats hardly does justice to the true originality and importance of Roehrlich's book. *Inspectors for Peace* is a major landmark in nuclear historiography, advancing the latest trends in research that decenter the superpowers while opening up many new and exciting lines of inquiries for future work. Equally important, the book demonstrates the enormous potential of critical institutional history to study global governance. Undoubtedly, *Inspectors for Peace* will set a new standard for scholarship for many years to come.

⁶ For instance, see Andrew Tompkins, *Better Active than Radioactive! Anti-Nuclear Protest in 1970s France and West Germany* (Oxford: Oxford University Press, 2016); Lawrence S. Wittner, *Confronting the Bomb: A Short History of the World Nuclear Disarmament Movement* (Stanford, CA: Stanford University Press, 2009).

The growth of intergovernmental organizations in number and role is a notable development in international relations after the Second World War. Within a society of sovereign states, an intergovernmental organization has to act as the agent of its principals, namely member states, and lacks the means to enforce the mandate assigned to it by them. Some scholars have thus directed deep-seated skepticism at the intergovernmental organization's role in international relations.¹ Nevertheless, states collaborated to create and sustain universal and regional intergovernmental organizations even during the Cold War, when the East–West confrontation offered a severe obstacle to international cooperation. Later, more states joined intergovernmental organizations amidst the rapid progress of decolonization, which resulted in an explosion of independent states. These developments heightened the significance of intergovernmental organizations as diplomatic arenas. Furthermore, intergovernmental organizations expanded their activities and enhanced their authority in various issue areas and regions. Today, one cannot ignore the role of intergovernmental organization in international public policymaking and policy implementation, despite its inherent limitations as a non-state actor.

Elizabeth Roehrlich's *Inspectors for Peace* explores the history of one of those intergovernmental organizations, the International Atomic Energy Agency (IAEA), which was established as a United Nations specialized agency in 1957. The agency's history has been the subject of previous research and publication.² Among the existing literature, David Fischer's *History of the International Atomic Energy Agency*, which was published on the fortieth anniversary of the agency, offers the most comprehensive historical account of the agency's activities and institutions.³ Unlike Fischer's work, which was commissioned by the agency, *Inspectors for Peace* is the product of an independent scholarly investigation, based on archival and other sources gathered across national borders. These include the IAEA's archival materials, which have become gradually open for research in recent years, supplemented by Roehrlich's interviews with IAEA diplomats, staff members, and high-ranking officials, such as former Director-Generals Hans Blix and Mohamed ElBaradei. *Inspectors for Peace* is a significant step forward for historical research on the IAEA, filling critical gaps in the existing literature.

Roehrlich looks into the IAEA's history from a distinct perspective. First, *Inspectors for Peace* does not aim to sketch the IAEA's history comprehensively. Instead, it focuses on the agency's dual mandate, set by its founders: to share the benefit of nuclear science and technology, while also controlling the risk and dangers of nuclear power. Roehrlich traces the historical development of the agency's contradictory mandate, critically assessing its limits and consequences. Second, she sheds light on the IAEA's strained relationship with politics. Since its foundation, the agency has been aware that it needed to be seen as the impartial agent of member states in order to maintain its legitimacy and gain broader acceptance. Therefore, the IAEA sought to present itself as a technical organization detached from politics. However, as Roehrlich's work shows, in

¹ John J. Mearsheimer, "The False Premise of International Institutions," *International Security* 19:3 (1994/1995): 5-49.

² Major publications include: Lawrence Scheinman, *The International Atomic Energy Agency and World Nuclear Order* (Washington, D.C.: Resources for Future, 1987); Astrid Forland, "Negotiating Supranational Rules: The Genesis of the International Atomic Energy Agency Safeguards System," PhD diss. (University of Bergen, 1997); Robert L. Brown, *Nuclear Authority: The IAEA and the Absolute Weapons* (Washington, D.C.: Georgetown University Press, 2015). Scheinman's policy study examines the historical development of the IAEA's activities and institutions up to the late 1980s to consider the agency's relevance to U.S. foreign policy. Forland's historical study examines the evolution of the IAEA safeguards system. Fischer's book offers an official history of the agency from its inception to the late 1990s. A political scientist, Brown looks into the agency's history to investigate its power to affect the nuclear policy choices of states.

³ David Fischer, *History of the International Atomic Energy Agency: The First Forty Years* (Vienna: The International Atomic Energy Agency, 1997).

reality politics has been an integral part of the IAEA's policymaking and policy implementation throughout its history. Roehrllich examines how politics influenced the IAEA's activities and institutions. Last, the book places the IAEA's history in broader historical contexts, such as the Cold War, the rise of the Global South, and the development of global nuclear governance. From this unique perspective, *Inspectors for Peace* illuminates the IAEA's struggle to effectively carry out its dual mandate in a society of sovereign states.

According to Roehrllich's study, the founders' dual mandate of nuclear sharing and control did not destine the IAEA to grow into its contemporary role as a "nuclear watchdog." Since its creation, the agency has served as a global hub for exchanging scientific knowledge and technology and facilitating international assistance for civilian nuclear programs. Meanwhile, the IAEA initially could not carry out the mandate of nuclear safeguards intended to control the diversion of nuclear energy for weapons purposes. A lack of political consensus among member states on the need for nuclear safeguards served as a critical stumbling block (87-90). In the early 1960s, the IAEA embarked on nuclear safeguards work limited to verifying the use of nuclear material and technology provided via the agency. International concern about nuclear proliferation increased as more states possessed nuclear material and technology in the name of peaceful uses, leading to a major breakthrough in the growth of the agency's nuclear safeguards functions (100-103, 197-129). Against this backdrop, the Nuclear Non-Proliferation Treaty (NPT) was established in 1968 to prevent more states from possessing nuclear weapons.⁴ As a result, the agency assumed the responsibility of implementing the comprehensive safeguards agreements mandated by the treaty so as to deter its non-nuclear-weapons party states from seeking nuclear weapons.

As Roehrllich shows, after the NPT went into effect in 1970, the IAEA encountered many challenges, which exposed the limits and risks of pursuing the dual mandate. India, an original member state of the IAEA, refused to join the NPT and conducted a nuclear explosive test in 1974. The Indian test dramatically demonstrated the risk of nuclear proliferation from nuclear assistance, because it used a nuclear reactor purchased from Canada and heavy water that had been supplied by the United States for India's civilian nuclear program, in order to build the nuclear explosive device (135-138). The growth of the nuclear power generation industry worldwide in the 1970s and 1980s increased the burden of safeguards work on the IAEA, which had to expand its staff and budget to fulfill its safeguards mission (153). Despite its efforts for nuclear control, the IAEA could not prevent member states, such as Iraq, South Africa, and North Korea, from pursuing clandestine military nuclear programs. Against this backdrop, in the 1990s, the IAEA reinforced its safeguards functions, aiming to detect and forestall secret nuclear weapon programs (218-222). Nevertheless, in the 2000s, North Korea declared withdrawal from the NPT, carrying on nuclear weapon development while refusing the IAEA's inspection. Concurrently, Iran's uranium enrichment activities emerged as another severe proliferation concern for the agency, which still lingers to the present (212-215, 226-232).

The IAEA also faced difficulties in promoting the peaceful use of nuclear energy. With the public's general acceptance, nuclear power generation expanded in industrialized countries between the late 1960s and the 1980s. Nevertheless, following the Three Mile Island accident in 1979, and then the Chernobyl nuclear disaster in 1986, the public became more skeptical of nuclear power generation. It developed into a politically contentious issue, especially in countries in North America and Western Europe (149-151, 184-190). In the 2000s, growing concerns about energy security and climate change reinvigorated interest in nuclear power

⁴ For the history of the NPT's creation, see the following studies: Shane J. Maddock, *Nuclear Apartheid: The Quest for American Atomic Supremacy from World War II to the Present* (Chapel Hill: University of North Carolina Press, 2010); Roland Popp, Liviu Horovitz, and Andreas Wenger, eds., *Negotiating the Nuclear Non-Proliferation Treaty: Origins of the Nuclear Order* (London: Routledge, 2018); John Baylis and Yoko Iwama, eds., *Joining the Non-Proliferation Treaty: Deterrence, Non-Proliferation and the American Alliance* (London: Routledge, 2018); Johnathan R. Hunt, *The Nuclear Club: How America and the World Policed the Atom from Hiroshima to Vietnam* (Stanford: Stanford University Press, 2022).

generation in various countries globally, but this nuclear optimism did not last long. The Fukushima nuclear disaster in 2011 demonstrated the considerable risk and danger involved in nuclear power generation (239-240). Then, an attack on nuclear facilities and the theft and use of nuclear material by terrorist organizations became grave concerns for the international community after the 9/11 terrorist attack in 2001 (222-223, 240). In this changing political climate,, the agency has toned down its advocacy of peaceful nuclear energy, while additionally seeking to enhance its regulatory roles in nuclear safety and security, for which states were previously primarily responsible.

Based on these observations, Roehrlich poses a critical query concerning the IAEA's dual mandate: "Why did the IAEA, an international organization with almost global membership, defend its counterintuitive and risky mandate of sharing nuclear knowledge and technology while hoping to deter nuclear weapon programs?" (5). In reply to this question, Roehrlich argues that "In order to keep states participating in the safeguards regime, the agency needs to offer them tangible benefits. This is why, despite nonproliferation concerns, technical cooperation remains vital for the IAEA's legitimacy and broad acceptance" (5). This argument brings to mind a conventional historical narrative that the NPT was a grand bargain between nuclear weapon states and non-nuclear weapon states.⁵ The deal includes the former's assurance to allow the latter to pursue peaceful nuclear energy and enjoy the benefits of international nuclear cooperation, in return for the latter's nonproliferation commitment. In light of this conventional view, it is arguable that the IAEA took the pivotal role in implementing the grand bargain, which in turn legitimized the IAEA's dual mandate.

Roehrlich additionally proposes a thought-provoking argument, noting that "what appears to be the IAEA's greatest weakness has actually contributed to its success." "While the promotional agenda of the IAEA bore risks," she contends, "it also allowed the agency to facilitate diplomats and national experts coming together at the same table in pursuit of shared missions"(5). While critically assessing the limits and risks of pursuing the dual mandate, Roehrlich does not evaluate the IAEA's success in terms of its contribution to global efforts for nuclear nonproliferation. Instead, she emphasizes how successfully it maintained its legitimacy and broad acceptance. What is notable is that the choice evinces a motif of her research: writing about the IAEA's quest for endurance as an international body responsible for a dual mandate in a society of sovereign states. Considering the high hurdle of empirically measuring the performance of international organizations, her choice is also academically wise and reasonable for a historical study.

Moving beyond the role of safeguards in the IAEA's dual mandate, Roehrlich also explores the agency's entangled relationship with politics. The agency was established on the "working hypothesis" that "nuclear weapons constituted a political topic and civilian nuclear applications a purely technical one" (8). Therefore, she claims, "[A]fter the agency's inception 'politicization' became a 'dirty' word within the agency, a charge leveled by member states against perceived as bringing politics into an impartial technical organization" (7). Even so, "the agency's dual mandate was highly political" from the outset (234). As Roehrlich emphasizes, "the agency and its member states have had different attitudes about the proliferation risks inherent in the agency's dual mandate"(235). The agency thus increasingly got involved in the politically charged issue of nuclear proliferation as it assumed greater responsibility for undertaking international nuclear safeguards. "Throughout the IAEA's history," Roehrlich argues, "the relationship between, and often the opposing nature of, the facilitating and inhibiting aspects of its work have been at the center of political debate among member states"(4).

Additionally, member states could bring politically controversial issues, aiming to exploit the IAEA's policy-making bodies in order to pursue their own diplomatic goals and interests. Following Israel's surprise air attack on the Osirak nuclear reactor in Iraq in 1981, for example, Iraq proposed to expel Israel from the

⁵ Leonard Weiss, "Nuclear-Weapon States and the Grand Bargain," *Arms Control Today* 33:10 (2003): 21-25.

agency. After intense discussions at the agency's Board of Governors and General Conference in 1982, the latter rejected the credentials of the Israeli delegation (169, 178-179). The Arab, Eastern European, and non-aligned states from Asia and Africa supported the move against Israel. Discontent with the decision, the United States, the agency's top financial donor, temporarily boycotted IAEA in support of Israel. According to Roehrich, Israel's critics sought to limit its influence in the IAEA by the diplomatic sanction (178), and "the developing countries' desire for more input in IAEA decision-making" constituted the backdrop for the crisis that developed around Iraqi nuclear program (158).

Roehrich suggests that the root cause of the IAEA's entanglement with politics lies in its institutional structure. Since its foundation, the agency has been composed of its bureaucratic body, the Secretariat, and its policymaking bodies, the Board of Governors and the General Conference (10). The latter has been the arena of politics and diplomacy for member states, whose attitudes toward the peaceful and military uses of nuclear energy were not always identical. As more states joined the agency, the heterogeneity of member states increased. As a non-state actor, the IAEA— or, to be more specific, its bureaucratic organ—has held its goals and interests separable from those of member states. Thus, politics have been essential to the agency's policy-making and policy implementation.

Finally, Roehrich illuminates the political dynamics of the IAEA in broad historical contexts. Specifically, she links the agency's history with significant international developments in the latter half of the twentieth century. Roehrich thus incorporates the conflict and cooperation between the East and the West, the North and the South, and the agency's bureaucratic body and member states, into her historical account. For example, the East-West confrontation continued to cast a shadow on the IAEA throughout the Cold War. Still, it did not preclude US-Soviet cooperation in setting up the agency. Then, by the mid-1960s, the Cold War rivals found a common interest in preventing more countries from possessing nuclear weapons, jointly leading the multilateral negotiations that established the NPT. The US and USSR thus agreed to assign the agency the crucial role of verifying nuclear safeguards mandated by the treaty, a legal foundation of global nuclear governance (108-118).

Other international developments such as the rise of the Global South and the evolution of global nuclear governance also influenced the politics of the IAEA. After its foundation, more states joined the agency as decolonization progressed in the 1950s and 1960s. This membership expansion had a significant political consequence: the growing influence of the Global South in the IAEA. "In the 1970s," Roehrich claims, "the influence of developing states began to be felt more strongly in the IAEA General Conference, the forum of all the member states" (12-13). In this political climate, the rift between developing and industrialized member states became substantial. In the meantime, the Cold War ended, and nuclear proliferation remained a severe international concern. Under the circumstances, in the 1990s the NPT was extended indefinitely, and, as mentioned above, the IAEA enhanced its verification functions under the treaty. Thus the agency grew into what we call today the nuclear watchdog crucial for global nuclear governance. Given its improved capability and authority, the IAEA leadership under Mohamed ElBaradei stood up for the then sole superpower, the United States, heading toward war against Iraq in 2003 (203-204).

Another crucial puzzle Roehrich seeks to consider relates to politicization in the IAEA. "Rather than focusing on how and why nuclear power went from being a technical issue to a political debate," she insists, "the crucial question for historians is why it was, and continues to be, important for the IAEA to distinguish between the political and the technical" (234). Here again, Roehrich stresses the agency's need for legitimacy. "Its legitimacy," she argues, "rested on its self-portrayal as an international bureaucracy in charge of executing the mandate it had received from member states rather than an institution with its own political agenda" (236). According to Roehrich, "the purely technical character of the IAEA became a myth that everybody knew was a myth, but one that needed to be sustained to enable the IAEA to carry out its mandate" (237). As mentioned above, Roehrich also contends that the need for its legitimacy drove the

agency to remain committed to promoting international cooperation for peaceful nuclear energy, despite the inherent proliferation risks (236). In essence, what emerges from the historical account of *Inspectors for Peace* is the IAEA's struggle to maintain its legitimacy and gain broad acceptance for its continuation as an international body effectively carrying out its dual mandate.

Roehrlich's study leaves crucial questions for future research in regard to the agency's dual mandate. "Common sense would suggest," she claims, "that an international organization with contradictory missions and domination by two opposing power is doomed to fail. In reality, however, the IAEA thrived in such an environment and then survived a major rupture in the international order: the end of the Cold War followed by the dissolution of the Soviet Union in 1991" (5-6). According to Roehrlich, the agency survived as a critical diplomatic forum for states to discuss nuclear proliferation issues due to, rather than despite, the limits of the dual mandate. Roehrlich regards this as a success for the IAEA. Indeed, it must have been a desired consequence for the IAEA leadership. In this sense, her evaluation of the agency's success appears valid. It is unclear from Roehrlich's historical account if the agency's endurance resulted from the IAEA's deliberate efforts, and how critical such efforts were for such a consequence. By referring to what she calls "common sense," Roehrlich explains that the agency's leadership recognized the possibility that it would have ceased to exist or fallen into dormancy as an international body responsible for the dual mandate. However, the book contains no explicit discussion of how seriously the agency's leadership was concerned about its endurance in the first place.

Roehrlich's study does not explicitly answer the questions of how the IAEA's leadership perceived the risk of undermining its legitimacy and endangering its existence by limiting or denying the access of non-nuclear weapon states to nuclear knowledge and technology through the agency, how it assessed the proliferation risk of the agency's fulfilment of the nuclear sharing mandate, how important the agency's commitment to providing technical assistance for non-nuclear weapons states to join and remain in the international safeguards regime under the NPT was, and whether the IAEA would have ceased to be a vital diplomatic arena if it had limited or denied the access of non-nuclear weapon states to nuclear knowledge and technology for the cause of nuclear nonproliferation. Considering these questions is crucial to the argument that the agency's deliberate efforts served its persistence as an international body effectively carrying out the dual mandate. Roehrlich's core argument would have been more articulate and convincing had it answered those questions, although this would admittedly be no easy task for any researcher.

Overall, *Inspectors for Peace* opens a new horizon for historical research on the IAEA. It is a must-read book for those who study the agency's history. Because of its particular analytical perspective, it does not offer a detailed historical account of specific aspects of the agency's activities and institutions. Even so, Roehrlich touches on multiple topics, offering intriguing analysis and interpretation of the agency's historical development. *Inspectors for Peace* will be a source of inspiration and information for new research on IAEA history. For instance, those who are interested in researching a state's diplomatic relations with the IAEA will benefit from Roehrlich's work. Its contribution goes beyond the IAEA history study. It is a valuable study in the research fields of Cold War history, nuclear history, and global governance. *Inspectors for Peace* also helps deepen our understanding of the development of the intergovernmental organization's role in international relations after the Second World War. Sowing the seeds of future research, Roehrlich's work will have a lasting impact on historical studies on the IAEA and beyond.

 Response by Elisabeth Roehrlich, University of Vienna

I would like to thank Tom Maddux and Diane Labrosse for bringing together this H-Diplo roundtable on my book *Inspectors for Peace: A History of the International Atomic Energy Agency*. I would particularly like to thank the reviewers, Melina Buns, Toshihiro Higuchi, and Akira Kurosaki. I am immensely grateful that these scholars, whose work I find truly inspiring, have taken the time to engage with my book and to provide such detailed and thought-provoking comments. While the three reviewers raise important questions and identify critical fields for further research, they all take the book for what it is and do not question my overall approach toward the history of the International Atomic Energy Agency (IAEA). I am very grateful for this. I feel honored that they regard *Inspectors for Peace* as “a major landmark in nuclear historiography” (Higuchi) and “a long-anticipated, novel, and rich historical analysis” (Buns) that is “filling critical gaps” (Kurosaki). I would also like to thank Maria Rentetzi for contributing the introduction to this roundtable.

When I began studying the history of the IAEA over a decade ago, nuclear history was an exciting field to enter. Christian Ostermann (Woodrow Wilson International Center for Scholars) and Leopoldo Nuti (Roma Tre University) had just established the “Nuclear Proliferation International History Project” (NPIHP), generously funded by the Carnegie Corporation of New York, and they set out to build a global network of nuclear historians.¹ Their initiative focused especially on supporting a younger generation of historians who were interested in all things nuclear, and I was lucky to meet them at the very beginnings of my research into the IAEA. At the same time, I felt inspired by new dynamics in the history of international organizations, which had turned into a lively and innovative field of research since the early 2000s. This new work on international organizations proved the cliché wrong that institutional history has to be a rather dry exercise.² It is thus a great honor that Higuchi sees in *Inspectors for Peace* a “trailblazer in what one may call a ‘new institutional history’ of international organizations.”

Since these early stages of my research on the IAEA, nuclear history has grown immensely, both as a research field as well as a community of scholars. The history of the IAEA has developed into its own branch of research in this regard, with Maria Rentetzi’s major research project at the University of Erlangen-Nuremberg and Jacob Darwin Hamblin’s latest monograph *The Wretched Atom* as only two, albeit key, examples.³

Writing the history of an international organization such as the IAEA is like following a moving target. Given the IAEA’s key role in the global nuclear order, it constantly faces new challenges and grows into new responsibilities. When I was finishing the book’s manuscript, I expected my future readers to be primarily interested in the agency’s nonproliferation role in Iran. But shortly after the book was published, the IAEA took over new responsibilities in Ukraine, as Melina Buns reminds us in her review. Since the beginning of Russia’s war against Ukraine, the IAEA has been trying to ensure the safety and security of the country’s nuclear facilities. The IAEA’s history shows its ability to take over new international mandates and even, as Buns puts it in her review, to repeatedly “rebrand its own image” as an institution.

¹ Nuclear Proliferation International History Project (NPIHP), <https://www.wilsoncenter.org/program/nuclear-proliferation-international-history-project>.

² Sunil Amrith and Glenda Sluga, “New Histories of the United Nations,” *Journal of World History* 19:3 (2008): 251-274.

³ “Living with Radiation: The Role of the International Atomic Energy Agency in the History of Radiation Protection,” directed by Maria Rentetzi and funded by the European Research Council, <https://cordis.europa.eu/project/id/770548>; Jacob Darwin Hamblin, *The Wretched Atom: America’s Global Gamble with Peaceful Nuclear Technology* (Oxford: Oxford University Press, 2021).

Often, it needed crisis to enable reform. In *Inspectors for Peace*, I argue that it was not the IAEA's lack of awareness that prevented the strengthening of its safeguards regime before the late 1990s, but the lack of political will of member states. This aspect might also help answer one of the questions that Higuchi raises in his review: why were there divergences in the developments of the IAEA's security and safety branches? Major accidents and conflicts drove change, both in security and safety, and the IAEA was only as strong as the member states were willing to make it. The 1986 Chernobyl nuclear accident motivated member states to give the IAEA a new role in nuclear safety, an area in which those states had traditionally preferred (and still prefer) to take lead responsibility. The IAEA's role in nuclear security grew after the end of the Cold War. In 1994, the international Convention on Nuclear Safety was adopted. The dissolution of the Soviet Union raised fears that nuclear materials and equipment from Soviet facilities might end up on the black market, which led to a new focus on nuclear security. But only the 9/11 terrorist attacks on the United States in 2001 and the revelation in 2003 of the illegal nuclear trading network of A.Q. Khan—the so-called “father” of Pakistan's nuclear weapons program—spurred the growth of the IAEA's security department. In August 2023, the IAEA's positive safety review of Japan's plans to release water stored at the Fukushima nuclear power plant to the sea raised public controversy, especially in South Korea.⁴

Nonetheless, neither nuclear safety nor nuclear security are at the forefront of my narrative. In *Inspectors for Peace*, I focus primarily on the IAEA's dual mandate of promoting the civilian uses of nuclear technology while preventing this technology's proliferation to military uses. However, as Kurosaki rightly claims, I do not evaluate how successful the IAEA was in its nonproliferation mandate. I do not ask whether (and in which cases) the agency actually prevented states from acquiring nuclear weapons. I agree with Kurosaki that this is an important and interesting question, and political scientists have engaged with it (and provided different answers to it).⁵ But the aim of my book was a different one: rather than looking for quantifiable answers on how successful the IAEA was in helping to prevent the emergence of new nuclear weapons states, I wanted to understand how the agency negotiated and implemented its dual mandate of nuclear promotion and control. How did the IAEA—as both a bureaucracy and a forum for diplomats—manage its paradoxical mandate? I argue that the agency needed to carefully distinguish between the political and the technical domains to legitimize its work as a nonproliferation watchdog.

As part of his critique of my argument on institutional legitimacy, Kurosaki asks “whether the IAEA would have ceased to be a vital diplomatic arena if it had limited or denied the access of non-nuclear weapon states to nuclear knowledge and technology for the cause of nuclear nonproliferation.” This is mostly an academic question, as the IAEA's statute is based on the dual mandate of sharing and denial. While some member states regard the agency's role in technology and knowledge exchange as its prime *raison d'être*, others see its nuclear nonproliferation role as more important. In order to keep its almost universal membership, the IAEA needed to find the support and trust of all the member states and thus balance its promotional and inhibiting functions. These are very real limits for what the IAEA can and cannot do.

While most chapters of *Inspectors for Peace* focus on the time of the Cold War, it was important for me to not just tell an East-West story. I am therefore very pleased that Higuchi sees “some of the most original and fascinating insights” in those parts of the book that relate to the so-called developing countries. Already during the drafting process of the IAEA statute, in the mid-1950s, North-South relations had a lasting effect on the organization. India was a crucial founding member that acted as a speaker for the interests of developing states in the diplomatic negotiations to set up the agency. While the IAEA's creation originated

⁴ “Fukushima Nuclear Plant is Set to Flush Tonnes of Water into the Sea,” *The Guardian*, 23 August 2023, <https://www.theguardian.com/world/2023/aug/23/first-edition-fukushima-water-nuclear-power-plant>.

⁵ Robert L. Brown and Jeffrey M. Kaplow, “Talking Peace, Making Weapons: IAEA Technical Cooperation and Nuclear Proliferation,” *Journal of Conflict Resolution* 58:3 (2014), 402-428, <https://www.jstor.org/stable/i24544101>.

from a US initiative, I wanted to show that the IAEA's creation and later development was nevertheless not mainly an American Cold War story. In later chapters of the book, I pay some attention to the anti-apartheid movement and its influence on agency affairs. Early on, the anti-apartheid movement lobbied against the South African government's influence on IAEA affairs and warned that Pretoria was secretly building nuclear weapons.

Both Buns and Higuchi ask for more clarification on why I decided to focus on some actors (such as the anti-apartheid movement) while I pay less attention to others, and why I chose certain case studies over others. Specifically, they regret that I have not provided a more differentiated picture of the many other institutions and players in the global nuclear order that interact with the agency. I fully agree that looking into more actors could have been insightful, for instance when thinking about the diversity of nuclear issue-related organizations, think tanks, and NGOs in Vienna. But the exemplary approach was a deliberate stylistic choice. In writing the history of the IAEA, I hoped to combine analysis and narrative. I tried to explain major developments without missing smaller details, and all this in a—hopefully—approachable way. *Inspectors for Peace* is just one contribution to the now lively research field of historical IAEA studies and cannot answer all of the related questions. I am extremely grateful that it has been received so kindly and look forward to reading the new work that is coming out in this field.