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► **To cite this version:**

Benoît Pelopidas, Sanne Cornelia J Verschuren. Writing IR after COVID-19: Reassessing Political Possibilities, Good Faith, and Policy-Relevant Scholarship on Climate Change Mitigation and Nuclear Disarmament. *Global Studies Quarterly*, 2023, 3 (1), pp.ksad006. 10.1093/isagsq/ksad006 . hal-04017523

HAL Id: hal-04017523

<https://sciencespo.hal.science/hal-04017523v1>

Submitted on 7 Mar 2023

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Writing IR after COVID-19: Reassessing Political Possibilities, Good Faith, and Policy-Relevant Scholarship on Climate Change Mitigation and Nuclear Disarmament

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To address the COVID-19 pandemic, states around the world adopted a range of unprecedented and far-reaching policy measures, which had for a long time been presented as impossible. In this article, we argue that such actions suggest not only present but also past political possibilities and that these possibilities have been overlooked or denied by policymakers and scholars alike. We focus on two existential challenges about which pledges for transformative actions have been continuously made throughout the previous decades: climate change and the danger from nuclear weapons. We document the gap between pledges and accomplishments in these two realms and show how claims of impossibility to act do not hold up. Adopting a minimal standard of good faith as seeking to keep one's promises, we argue that the lack of adequate action renders the assumption that policymakers are acting in good faith problematic. We then diagnose a Panglossian double failure of the policy-relevant international relations scholarship: a failure to provide policymakers with the necessary tools to address the root causes of these existential problems and enable them to learn from past experiences and a failure to hold policymakers accountable. We propose three modifications to the scholarship to avoid repeating such failures and conclude with a dual call for political courage and scholarly responsibility.

Face à la pandémie de COVID-19, les États du monde entier ont adopté un éventail de mesures politiques importantes et sans précédent, longtemps considérées impossibles. Dans cet article, nous affirmons que ces actions suggèrent des possibilités politiques actuelles, mais aussi passées, qui ont été négligées ou niées tant par les législateurs que par les chercheurs. Nous nous concentrons sur deux défis existentiels qui ont constamment fait l'objet de promesses de mesures transformatrices ces dernières décennies : le changement climatique et le danger des armes nucléaires. Nous documentons l'écart entre les promesses et les accomplissements dans ces deux domaines avant de montrer que les déclarations d'impossibilité ne se tiennent pas. Un niveau minimum de bonne foi étant certainement nécessaire pour tenir des promesses, l'absence de mesures adéquates remet en question selon nous l'honnêteté des législateurs. Nous établissons ensuite un diagnostic de double échec panglossien des travaux de recherche de RI s'intéressant à la politique : l'incapacité de fournir aux législateurs les outils nécessaires pour s'attaquer aux causes profondes des problèmes existentiels et apprendre des expériences passées, mais aussi l'incapacité de les responsabiliser. Nous proposons trois modifications à la discipline pour éviter de renouveler ces échecs avant de conclure par un double appel : au courage politique et à la responsabilité académique.

Con el fin de hacer frente a la pandemia de COVID-19, los Estados de todo el mundo adoptaron una serie de medidas políticas sin precedentes y de gran alcance, las cuales se habían considerado imposibles durante mucho tiempo. En este artículo, argumentamos que estas acciones sugieren posibilidades políticas, no solo actuales sino también pasadas, que habían sido ignoradas o rechazadas tanto por los responsables políticos como por los académicos. Nos centramos en dos retos existenciales sobre los cuales se habían prometido, continuamente, acciones transformadoras a lo largo de las décadas anteriores: el cambio climático y el peligro de las armas nucleares. Documentamos la brecha entre las promesas y los logros en estos dos campos y mostramos como los argumentos acerca de la imposibilidad de actuar no se sostienen. Argumentamos, adoptando un estándar mínimo de buena fe consistente en el intento de cumplir las promesas propias, que la falta de acciones adecuadas provoca que la presunción de que los responsables políticos actúan de buena fe resulte problemática. Posteriormente, diagnosticamos un doble fracaso panglosiano de la literatura académica de las RRII relevantes para la política: un fracaso en proporcionar a los responsables políticos las herramientas necesarias para hacer frente a las causas fundamentales de estos problemas existenciales y permitirles aprender de experiencias pasadas y un fracaso en hacer responsables a los responsables políticos. Proponemos tres modificaciones a la literatura académica con el fin de evitar la repetición de estos fracasos y concluimos con una petición doble de valentía política y responsabilidad académica.

Introduction

Faced with COVID-19, states around the world adopted a range of unprecedented, far-reaching, and costly policy measures in a way that demonstrated their ability to overcome structural obstacles and adversarial forces. They enforced a slowdown of peoples' lives by implementing severe restrictions on people's freedom of movement, even among liberal democracies. They subordinated economic growth to public health priorities to such a degree that it was negative in 2020. And they enabled a rapid vaccine rollout across the Global North.

In the process, states suspended certain structural obstacles, including the dictates of unabated economic growth and austerity.¹ For instance, governments around the world

¹Rosa, for instance, observed that the response to the COVID pandemic represented an unthinkable slowdown. This reversed the trend of a perceived need to accelerate that had been present for two centuries. Rosa, Hartmut. 2020. "Le Miracle et le Monstre: Un Regard Sociologique sur le Coronavirus." *AOC*. Accessed September 5, 2020. <https://aoc.media/analyse/2020/04/07/le-miracle-et-le-monstre-un-regard-sociologique-sur-le-coronavirus/>. In addition, Allen (2018, chapter 5) demonstrated the primacy of economic growth over any other sociopolitical goal since 1945.

proposed massive public investments to deal with the economic turmoil caused by the stay-at-home orders. The pandemic response signaled a move away from austerity, a concept that had dominated policymaking for a long time. In the United States, policymakers pushed through several economic relief packages, which included stimulus checks for citizens below an income bracket that was significantly higher than the mean household income.² Many lawmakers, Republicans in particular, had previously been reluctant to implement policies that could benefit citizens directly. Across the Atlantic, the European Union adopted a historical rescue plan. This included both loans and grants for member states. The latter would not have to be repaid. These actions did not only expose a radical shift in thinking among European leaders but also demonstrated their ability to overcome the objections from the so-called frugal four, specifically Austria, Sweden, Denmark, and the Netherlands. These countries had set themselves up as veto players in the negotiations.³ Indeed, throughout much of the pandemic, states sidestepped the objections from powerful groups in society, such as the proponents of the austerity status quo or the airline industry.⁴

These actions—while by no means universally adopted, effective at combating the COVID-19 crisis, and fair to all citizens of the world—demonstrated *an unexpected form of state power*. At multiple times during the crisis, states challenged or ignored what had previously been presented as limitations on action, whether in terms of suspending structural obstacles or sidestepping adversarial forces. This stands in stark contrast with what has happened in the domains of climate change and nuclear disarmament.⁵ Although policymakers have repeatedly promised to drastically reduce greenhouse gas emissions and to eliminate nuclear weapons, the necessary action has remained elusive.

While scholars have recognized the power of crises to create opportunities for a reconfiguration of the *current* political landscape (Widmaier, Blyth, and Seabrooke 2007; Drezner 2020), we argue that state responses to COVID-19 shed light on another core feature of crises: their ability to recast the *past*.⁶ Without making any judgment about the moral value or the adequacy of state responses to the pandemic, we claim that the fight against the coronavirus reveals not only that state power was mobilized to confront the pandemic, but also that much less has been done to tackle the climate and nuclear challenges. Indeed, state action during COVID-19 enables us to reshape the scope of past possi-

bilities in these two other domains. This invites us to reopen the question of political possibility and action in good faith in the domain of climate change and nuclear dangers.

Scoping this article to the conduct of states in the Global North and scholarship from these states, we identify a consistent mismatch between the repeated promises made by policymakers to address climate change and nuclear dangers and the actions undertaken to tackle these catastrophe-inducing phenomena.⁷ Across the two domains, policymakers have routinely mobilized tropes of impossibility—in the form of structural obstacles and adversarial forces—to justify the foreseeable shortcomings of their actions or to hide the fact that those goals never became priorities. Using the fact that these forms of impossibility were suspended during COVID-19 as an illustration, policymakers' claims of impossibility in the areas of climate change and nuclear dangers can be questioned. Adopting a minimal standard of good faith as seeking to keep one's promises, the lack of adequate action renders the assumption that leaders are acting in good faith problematic. Rather than aid policymakers in overcoming these obstacles and govern in good faith, scholarship has engaged in a Panglossian diagnosis that has resulted in a double failure: a failure to provide policymakers with the necessary tools to address the root causes of these existential problems and enable them to learn from past experiences and a failure to hold policymakers accountable.⁸ In doing so, problem-solving scholarship ended up being problem-perpetuating.

Hence, we propose a different way forward. We argue that being open to the possibility of actions that would be up to the scale of these existential challenges is crucial for fulfilling the promises that were made. In doing so, we do not claim that there are easy solutions to the climate change and nuclear weapons challenges, nor that nothing was done to try to meet them—although what was done was foreseeably not up to scale. We also do not argue that structural obstacles or adversarial forces have no role to play in international politics. Instead, we employ state responses to the COVID-19 pandemic to highlight the possibilities that existed in the past and will in the future to address the problems posed by climate change and nuclear weapons. To recover good faith in the context of these promises, we call upon policymakers to undertake the action needed to align policy with what was promised, even when it would be politically costly for them to do so. The call for responsible policy action is certainly not a call for decisionism (Schmitt 2005), but instead, it is one for accountable leadership and clear priorities. Scholarship plays a crucial role in this process of accountability, but it can only assume this role if three adjustments are made: (1) scoping political possibilities better; (2) adjudicating the debate between malevolence and the failure of imagination as causes of inadequate action; and (3) reassessing the meaning of policy relevance.

²Catie Edmondson. 2020. "5 Key Things in the \$2 Trillion Coronavirus Stimulus Package." *The New York Times*. Accessed December 19, 2022. <https://www.nytimes.com/2020/03/25/us/politics/whats-in-coronavirus-stimulus-bill.html>.

³Bojan Pancevski and Laurence Norman. 2020. "How Angela Merkel's Change of Heart Drove Historic EU Rescue Plan." *The Wall Street Journal*. Accessed December 19, 2022. <https://www.wsj.com/articles/angela-merkel-macron-covid-coronavirus-eu-rescue-11595364124>.

⁴Gwyn Topham. 2020. "Coronavirus Outbreak Could Cost World's Airlines up to \$314bn." *The Guardian*. Accessed September 9, 2022. <https://www.theguardian.com/world/2020/apr/14/coronavirus-outbreak-could-cost-worlds-airlines-up-to-314bn>.

⁵For the contrast between actions to address COVID-19 and climate change, see Scheidler (2020, 508–12).

⁶As early as the 1930s, French philosopher Henri Bergson developed an argument about the politics of possibility in an essay, entitled "The Possible and the Real." He observed that when particular possibilities materialize, they reveal that such possibilities had existed before, therefore reshaping the scope of past possibilities. Specifically, he stated that "as reality is created, unpredictable and new, its image is reflected behind it in the indefinite past; it happens to have been possible at all times; but it is from this precise moment that it begins to have always been so" (Bergson 2021 [1930], 73).

⁷States in the Global North are responsible for most of the greenhouse gas emissions and nuclear weapons production. Meanwhile, states in the Global South have critiqued governments in the Global North for their lack of action, as well as the inequities that were built into the systems that govern these issues. Similarly, work by scholars from the Global South, critical legal studies, and decolonial theory have documented the gap between promises and adequate action, particularly on the part of Western leaders. See, for example, Barkawi and Laffey (2006), Prashad (2007), Biswas (2014), Méndez (2020), Alexis-Martin et al. (2021), Taha (2021), Hunt (2022), and Ogunbode (2022).

⁸Panglossian refers to Voltaire's character Master Pangloss. Pangloss claimed that everything was for the best in the best possible world while walking through Lisbon after the 1755 earthquake. In doing so, he assumed that every action that had not been taken would have made the world worse and that all action that was taken was conducted in good faith and for the greater good.

The article proceeds as follows. In the first section, we show how policymakers, despite repeated promises, have failed to address the climate change and nuclear weapon challenges. Then, we document policymakers' claims of impossibility around structural obstacles and adversarial forces and explain why those are unsatisfactory. The third section is devoted to a discussion about good faith on the part of policymakers. In the fourth section, we demonstrate how policy-relevant scholarship has failed in the domains of climate change and nuclear politics. The fifth section outlines three modifications to scholarship in these two domains to address this failure. We conclude with a dual call for political courage and scholarly responsibility.

The Unfulfilled Promises

Common across climate change and nuclear politics is the existence of a pledge, specifically the promises to reduce greenhouse gas emissions and to eliminate nuclear weapons. With the looming prospect of or an already unfolding large-scale catastrophe, policymakers have promised their domestic constituencies and the international community to take the necessary steps to transform policy in these domains. Such grand political gestures have grown into a core feature of political discourse. Leaders have regularly reiterated the pledges and almost no leader has explicitly denied or overturned them.⁹ Every time that leaders do not overturn or explicitly restate them, the horizon of accountability to the pledges is extended. This has entrenched the pledges in a way that moves them beyond cheap talk. Even policymakers themselves have accepted this. In his Prague Speech, for example, US President Obama stated in relation to a recent North Korean missile test: "Words must mean something. The world must stand together to prevent the spread of these weapons."¹⁰ Notwithstanding the continued proclamation of good intentions, little to no progress has been made on these promises. Sometimes, there even was regression. And when action was undertaken, policymakers adopted policies that were foreseeably not up to scale with the problems that they promised to tackle.

From the very beginning of the efforts to tackle climate change, policymakers have promised to adopt a legally binding international agreement, aimed at maintaining a livable biosphere through a radical reduction of greenhouse gas emissions. This call was formalized in the 1992 United Nations Framework Convention on Climate Change (UNFCCC). In an initial attempt to limit greenhouse gas emissions, thirty-seven industrialized states and the European Community adopted the Kyoto Protocol in 1997.¹¹ They promised to reduce greenhouse gasses between 2008

and 2012 to a level below the 1990 baseline. Yet, an extension of this commitment—in the form of the 2012 Doha Amendments—failed. After many years of struggling to create a legally binding instrument, states adopted the Paris Agreement in 2015. This agreement required each state to set its own target for emission reductions—in the form of nationally determined contributions—to work toward the goal of "holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels."¹² Since then, leaders have become increasingly vocal about the need to address climate change. Stressing the need for urgency, former German Chancellor Angela Merkel stated that "we have to do everything humanly possible to overcome this human challenge."¹³

Notwithstanding these recurring promises, the world's track record in reducing greenhouse gases has been abysmal. Approximately half of the anthropogenic CO₂ emissions between 1750 and 2010 has occurred since the global community realized that they were a problem in the 1970s. (*The Intergovernmental Panel on Climate Change 2021*, 157–161). Not only are states not on track to meet their nationally determined contributions, but also these pledges are insufficient to reach the goal of the Paris Agreement (*Fawcett et al. 2015; Rogelj et al. 2016*).¹⁴ One could even argue that the incremental approach behind the UNFCCC is inept to deal with the magnitude of what was promised (*Cléménçon 2016; Allan 2019; Geiges et al. 2020*). Following the publication of the Sixth Report of the IPCC, UN Secretary-General Antonio Guterres used unusually strong words to describe the world's predicament: "This report of the IPCC is a litany of broken climate promises [. . .] cataloging the empty pledges that put us firmly on track towards an unlivable world. [. . .] We are on a pathway to global warming more than doubled the 1.5°C limit agreed in Paris."¹⁵ In response to the COP 27's decision to establish a "loss and damage" fund for vulnerable states in November 2022, the Secretary-General offered an additional illustration of unfulfilled promises and the continued gap between the scale of the promises and that of the actions. He observed: "clearly this will not be enough, but it is a much-needed political signal."¹⁶ Several courts around the world made similar determinations.¹⁷

¹²Article 2. UNFCCC. 2015. Paris Agreement. Accessed September 9, 2022. https://unfccc.int/files/essential_background/convention/application/pdf/english_paris_agreement.pdf.

¹³Nienaber, Michael. 2019. "I'm Using All My Strength to Fight Climate Change, Says Merkel." *Reuters*. Accessed September 9, 2022. <https://www.reuters.com/article/us-germany-climatechange-idUSKBN1YY1IF>.

¹⁴See Carrington, Damian. 2019. "Most Countries' Climate Plans 'totally inadequate'—experts." *The Guardian*. Accessed January 10, 2023. <https://www.theguardian.com/environment/2019/nov/05/most-countries-totally-inadequate-experts>. As an example, Biden's initial budget proposal to fight climate change (\$36 billion) pales in comparison to the overall \$1.2 trillion infrastructure bill or the nuclear modernization efforts, which are estimated to cost \$2 trillion over the next 30 years. Newburger, Emma. 2021. "Biden's Budget Proposal Calls for More Than \$36 billion to Fight Climate Change." *CNBC*. Accessed September 9, 2022. <https://www.cnn.com/2021/05/28/bidens-budget-proposal-calls-for-36-billion-to-fight-climate-change.html>.

¹⁵United Nations. 2022. "Antonio Guterres on Climate Change 2022." *UN Web TV*. Accessed September 9, 2022. <https://media.un.org/en/asset/k1h/k1h5n9jq7v>.

¹⁶Guterres, Antonio. 20 November 2022. "Twitter Video Message." Accessed December 19, 2022. <https://t.co/5yh5tKXtj>.

¹⁷Setzer, Joana, and Catherine Higham. 2021. "Global Trends in Climate Change Litigation." *Policy Report of the Grantham Research Institute on Climate Change and the Environment*. Accessed December 19, 2022. <https://www.lse.ac.uk/granthaminstitute/publication/global-trends-in-climate-litigation-2021-snapshot/>. Also see Setzer and Benjamin (2020) for a discussion about legal actions in the Global South.

⁹Policymakers can overturn past promises if they are unwilling to act upon them. Former US President Donald Trump's call to revive "clean, beautiful coal" provides an example of reversing a pledge. Fairley, Peter. 20 August 2020. "How a Plan to Save the Power System Disappeared." *The Atlantic*. Accessed September 27, 2022. <https://www.theatlantic.com/politics/archive/2020/08/how-trump-appointees-short-circuited-grid-modernization/615433/>. Similarly, the Bolsonaro government in Brazil not only said that "there is no climate change catastrophe," but it also undertook a large-scale deforestation campaign. This led to the worst degradation of the rainforest in 15 years. Pauline Fricot. November 24, 2021. "Malgré Les Promesses de Jair Bolsonaro, La Déforestation En Amazonie n'a pas cessé d'augmenter." *Novethic*. Accessed December 19, 2022. <https://www.novethic.fr/actualite/environnement/agriculture/isr-rse/la-deforestation-en-amazonie-augmente-sous-le-mandat-de-bolsonaro-150330.html>.

¹⁰Remarks by President Barack Obama in Prague, April 5, 2009. Accessed September 9, 2022. <https://obamawhitehouse.archives.gov/the-press-office/2009/04/05/prague-speech>.

¹¹The United States signed the Kyoto Protocol in 1998, but never ratified it.

Many focused on governments' duty of care toward their citizens. In June 2021, for instance, a Belgian court found that despite "being fully aware of the definitive risk of dangerous changes to the climate, especially for the country's population," the country's governments have not acted in a "prudent and careful" manner.¹⁸

In the nuclear realm, pledges to disarm have been made repeatedly in different forms and settings for at least half a century (Egeland 2021a, 2017). The first resolution by the United Nations General Assembly, adopted in January 1946, already called for the elimination of atomic weapons from national armaments. The disarmament pledge was also included as a legal obligation under the Nonproliferation Treaty (NPT) in the form of article VI. While the scope and meaning of this article have been debated, it is clear that the promise of disarmament was used to secure an indefinite extension of the NPT in 1995 (Dhanapala 2010, 62; Onderco and Nuti 2020, 81). A year later, the International Court of Justice confirmed "an obligation to pursue in good faith and bring to a conclusion negotiations leading to nuclear disarmament in all its aspects under strict and effective international control."¹⁹ Nuclear disarmament remained a key subject of subsequent NPT Review Conferences. At the 2000 NPT Review Conference, states adopted thirteen practical steps toward nuclear disarmament.²⁰ A decade later, the final document of the 2010 NPT Review Conference introduced an action plan to "accelerate concrete progress on the steps leading to nuclear disarmament."²¹ Dissatisfied with the absence of nuclear disarmament, a coalition of states decided to draft and secure the entry into force of the Treaty on the Prohibition of Nuclear Weapons in 2021 (Ritchie and Egeland 2018; Egeland 2021a). The 2022 NPT Review Conference ended without agreement on a final document. A few days before the end of the Conference, the Permanent Representative of Costa Rica posted on Twitter: "Nowhere is good faith more important than in our NPT. Yet, and of the utmost regret, nowhere is this more lacking than in the nuclear-weapon states' interpretation and application of Article VI."²²

Seventy-seven years after the bombings of Hiroshima and Nagasaki, world leaders have not only failed to abolish nuclear weapons, but they have instead preserved the capability to destroy human civilization several times over. Since the onset of the nuclear age, nuclear weapon-related activities—the bombings of Hiroshima and Nagasaki, over 2,000 tests, mining fissile material, and other production-related activities and accidents—have caused a large number of excess deaths (Jacobs 2022; von Hippel 2022). Although the number of warheads has decreased since the end of the Cold War, the aggregated lethality of the global nuclear arsenal has continued to rise, at least until the 2000s (Eden 2011, 72). In this context, arms control has often been misleadingly presented as proof of states' compliance with the nuclear disarmament pledge

(Ellsberg 2017, 305; Egeland 2020). In addition, all nuclear weapon states have started nuclear modernization programs in the last few years. This promises to keep a world-ending level of nuclear arsenals for at least another half a century.

Despite repeated pledges to address these two catastrophe-producing challenges over the last three to five decades, policymakers' promises have remained unfulfilled, as no action was taken or the measures that were adopted were inadequate to meet the scale of the challenges. This was not the case with COVID-19 when policymakers promised to tackle the virus and implemented several measures that were up to scale with the problem, even if they were often not fair or entirely effective.

Political (Im)Possibilities

To justify the gap between what was repeatedly promised and the foreseeably inadequate actions that were adopted, policymakers who acknowledge climate change and the dangers posed by nuclear weapons have often argued that it was impossible for them to undertake the necessary actions due to structural obstacles or adversarial forces.²³ In terms of structural obstacles, policymakers presented the promised action as impossible, because it would have jeopardized something that was considered a more fundamental component of the social contract, such as economic growth or state security. Regarding adversarial forces, policymakers contended that action at the required scale would have been futile due to the presence of an expected veto player, in the form of certain international players, domestic interest groups, and even the broader public to whom those promises were made. Taken together, policymakers have imposed political boundaries upon what would be possible, thereby inhibiting themselves from taking the necessary action to fulfill their promises. While taking adequate action might fail for a myriad of reasons, the mode of failure that we identify in this article is a function of not even trying to implement change at an adequate scale. This, we argue, constitutes an undue narrowing of the scope of possible actions.

Political leaders have regularly deployed these two forms of impossibility discourse in the realm of climate change policy. From the beginning, actions to reduce greenhouse gas emissions have been constructed as a threat to sustaining global economic growth, particularly as growth in the current system has been predicated on an ever-increasing return to scale (Nordhaus 1974).²⁴ This dichotomy has produced two forms of boundaries in the contemporary fight against climate change: measures to address climate change can only be considered if they do not harm the economy and climate change should be tackled through market-based measures. The former has played a prominent role in the debates around climate change (Meckling and Allan 2020, 435). The UNFCCC, for example, talked about "the need to maintain strong sustainable economic growth" as part of its call for states to undertake measures to mitigate climate change.²⁵ Even more explicitly, in the 2010 Report of the Commission on Growth and Development that was written by several leading economists, Robert

¹⁸ Tribunal of First Instance, Judgment of the Fourth Civil Division. 17 June 2021. "Final Verdict of the Government Responsibility in the Environment."

¹⁹ Judgment F, International Court of Justice, *Legality of the Threat or Use of Nuclear Weapons*, Advisory Opinion, July 8, 1996.

²⁰ 2000 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, NPT/CONF.2000/28 (Parts I and II), New York, 2010, p. 14.

²¹ 2010 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, NPT/CONF.2010/50 (Vol. I), New York, 2010, p. 22.

²² Official Twitter Account of the Permanent Mission of Costa Rica to the United Nations. Accessed September 27, 2022. https://twitter.com/CostaRicaONU/status/1563315978712203265?s=20&t=7AHqmYvc_qYzOM6KrXlJrQ.

²³ The language of impossibility echoes Hirschman's observations in *The Rhetoric of Reaction* (Hirschman 1991).

²⁴ Economists such as William Nordhaus helped craft the idea that climate change could and should be addressed within the current economic framework, enabled by a faulty understanding of the implications of climate change for states' gross domestic product. For a critique of this literature, see Keen (2020).

²⁵ Article 2(a), *United Nations Framework on Climate Change*. May 9, 1992. Available at https://treaties.un.org/doc/Treaties/1994/03/19940321%2004-56%20AM/Ch_XXVII_07p.pdf.

Mendelsohn concluded: “The biggest threat climate change poses to economic growth, however, is not from climate damages or efficient mitigation policies, but rather from the immediate, aggressive, and inefficient mitigation policies” (Mendelsohn 2010, 292). Echoing such a sentiment, scholars and policymakers alike have promoted market-based solutions to combat climate change, including carbon pricing, carbon taxation, and carbon emission trading schemes (Nordhaus 1992).²⁶ Research has shown, however, that these market-based mechanisms are not capable of meeting the targets that were set in the fight against climate change (Wara 2007; Jenkins 2014; Green 2017; Ross, Hazlett, and Mahdavi 2017). Using the term “carbon lock-in,” scholars have described how carbon is deeply ingrained within the technological, economic, infrastructural, political, and social aspects of society. This has constrained the effectiveness of market-based actions to such an extent that low-carbon options have not been adopted, even when it would have been cheaper and more beneficial to do so (Seto et al. 2016, 426–27).

Policymakers have invoked a second boundary to action on climate change: expected veto players. They have argued that climate change measures would be ineffective or impossible without the support of domestic and international veto players. However, policymakers often chose to empower such players. The failure to produce a climate deal during President Barack Obama’s first term, for example, can be explained by his desire to build a cooperative relationship with powerful industrial players and Republican members of Congress, even though he held a majority of the votes in both Houses of Congress at the time. In the search for a workable compromise, the Obama administration not only gave exceptional leverage to these actors as veto players in his climate deal, but the administration also put hope where there was none: Republicans were never going to be forthcoming on climate change. At the same time, the administration alienated grassroots activists, who would have been vital for pushing through change in this domain (Skocpol 2013, 129–30).²⁷

Similar dynamics can be discerned in the plight for nuclear disarmament. Since the beginning of the nuclear age, disarmament has been pitted against short- and long-term security goals through a double move. From the moment when nuclear weapons were first employed, a postnuclear future has been promised, yet endlessly postponed. This was grounded in a fundamental valuation of nuclear weapons as irreplaceable instruments of stability and aided through the creation and reproduction of an imagined nuclear eternity. To deal with the tension between the promises and the inadequate action, policymakers have relied on two justifications: either they do not connect the present condition of a nuclear world to the goal of nuclear disarmament or they claim that the proposed actions will achieve a postnuclear future even when they cannot (Pelopidas 2021). For instance, when President Obama received the Nobel Peace Prize for his commitment to eliminate nuclear weapons, he immediately admitted that his promise to achieve a nuclear-free world was “a distant goal,” one that would “not

be reached quickly—probably not even in my lifetime.”²⁸ Yet, the diagnostic of a structural lack of agency must be recognized as incorrect. As Tom Collina and former US Secretary of Defense William Perry wrote: “Presidents [. . .] can choose to challenge conventional wisdom, stand up to the nuclear bureaucracy, take political risks, and try to do the right thing. It is in these times that true leadership emerges. For when it comes to progress on nuclear disarmament, there is one key ingredient that is required for success: presidential leadership” (Perry and Collina 2020, 195).

In addition, political leaders have regularly set limits on action through the empowerment of veto players. To obtain the ratification of the 2010 New START Treaty, President Obama sought support from those who had opposed the Treaty, most notably Senator Jon Kyl, by promising a large nuclear modernization plan, even though Vice President Biden had already shown him that such a compromise was pointless (Kaplan 2020, 226–32). In the process, he treated Senator Kyl and the nuclear weapons complex as expected veto players, capable of disrupting any ambitious arms control plans, let alone disarmament proposals. There are many other examples of this approach in US nuclear history. Between 1961 and 1964, for instance, there was a constant disconnect between what Secretary of Defense Robert McNamara claimed to be the nuclear force requirements needed to preserve US national security and the actual number of nuclear capabilities that he requested from Congress. As early as February 1961, he claimed that the missile gap was “an illusion.” Three years later, despite a significant increase in Soviet nuclear weapons’ capabilities, McNamara argued in a memo for President Johnson that 400 1-Megaton weapons would be enough to achieve “assured destruction” (Ball 1980, 93).²⁹ However, in December 1961, he asked for much more than that, requesting to purchase 1,000 Minuteman missiles and 41 submarines. Later, he explained that he thought that proposals with fewer weapons would not have been considered credible by Congress (Pelopidas 2021, 490–91).

In both climate change and nuclear disarmament, policymakers have denied the possibility of action, either by invoking structural obstacles or by empowering adversarial forces. If one compares what was done during the COVID-19 crisis, during which structural obstacles were suspended and veto players were overcome, to what was attempted within the realm of climate policy or nuclear disarmament, one can reach but one conclusion: policymakers’ many claims of impossibility to act are unfounded. Instead, policymakers imposed political boundaries upon what was possible, thereby inhibiting themselves from taking the necessary action to keep their promises. Although we do not imply that there are easy-to-find or perfect solutions to the problems posed by climate change and nuclear weapons, we contend that policymakers could have done more to overcome perceived structural obstacles or challenge veto players and that many of the possibilities to do so were not even pursued.

For example, policymakers can build winning coalitions to implement decarbonization policies or to pursue nuclear disarmament. In the realm of climate change, this can be done not just through alliances with climate change activists, but also by fostering support among industries that would benefit from such policies or by enacting green

²⁶ Summers, Lawrence. 2015. “Oil’s Swoon Creates the Opening for a Carbon Tax.” *The Washington Post*. Accessed September 5, 2021. https://www.washingtonpost.com/opinions/oils-swoon-creates-the-opening-for-a-carbon-tax/2015/01/04/3db11a3a-928a-11e4-ba53-a477d66580ed_story.html.

²⁷ Lizza, Ryan. 2010. “As the World Burns.” *The New Yorker*. Accessed September 5, 2020. <https://www.newyorker.com/magazine/2010/10/11/as-the-world-burns>.

²⁸ See footnote 10.

²⁹ McNamara, Robert. December 3, 1964. “Draft Presidential Memorandum to President Johnson.” Accessed December 24, 2015. <http://nsarchive.gwu.edu/nukevault/ebb275/20.pdf>, p. 11.

industrial policies that would generate new allies (Meckling et al. 2015; Kennard 2020). Such a strategy was successfully deployed in the Montreal Protocol, which is an international treaty designed to protect the ozone layer by phasing out the production of ozone-depleting substances. Even though major producers of these substances opposed the adoption of legislation aimed at reversing the hole in the ozone layer, the Clinton administration persevered. Instead of lowering its international commitments, the administration worked with the industry to find substitutes that were not just readily available, but that would require the type of high-tech infrastructure and know-how that these firms possessed. This turned them into supporters rather than veto players for future agreements (Gareau 2010). Taking this to the nuclear domain, one could, for instance, transform weapons production laboratories into dismantlement laboratories (Reppy 2010). Such a course of action was taken during COVID-19 when various national industries were rapidly repurposed to produce masks and hydroalcoholic gel.

These steps do not necessarily have to be pursued multilaterally. California's recent actions on climate change demonstrate the importance and effectiveness of unilateral action (Drahus and Downie 2017).³⁰ Adequate action also does not necessarily need to lead to electoral losses. Research has shown that the public supports and rewards policymakers for such measures (Mildenberger and Leiserowitz 2017; Bergquist et al. 2020; Dechezleprêtre et al. 2022). Similarly, these steps do not have to imply a relative loss in the game of (great) power politics. For instance, investment in carbon-neutral policy solutions could improve one's position in the international system, akin to the concept of the first-mover advantage. Here, one could refer to China's massive investment in solar panels as an example.³¹

Revealed Preferences: Challenging the Assumption of Good Faith

As policymakers have repeatedly promised to undertake political action across these domains but have a sustained track record of not keeping these promises, this opens up the question of good faith among policymakers. Good faith, we contend, is a function of policymakers being willing to undertake action, with the foreseeable consequences of those actions being up to scale with the pledge.³² At the core of the lessons from the COVID-19 crisis is the observation that some policymakers were willing to implement health and safety regulations even though they knew that these measures would have an unprecedented impact on society, not least through a major economic downturn, could negatively affect support among their constituencies, might decrease their states' standing in the international system, and would not necessarily be followed by other states.

This has not been the case in the domain of climate change and nuclear disarmament. The track record of the

policymaking elite over the last three to five decades suggests that either they did not intend to address the problems of climate change and nuclear weapons or that they continued making those pledges while simultaneously acting as though they could not fulfill them. As policymakers made little progress toward fulfilling their promises in either way, the case for good faith is weak. The choice for inadequate action therefore reveals policymakers' preferences—at least in terms of not prioritizing actions that would be in line with the promises made.³³

Still, there are actual boundaries to political possibility, in terms of both structural impediments and adversarial forces' veto power. In the realm of climate change, for example, one can find entrenched veto players who have been able to marshal extensive resources to oppose action aimed at lowering greenhouse gas emissions (Brulle 2014). Powerlessness does exist.³⁴ However, it is impossible to know the presence and the extent of the boundaries of the possible in the moment itself. As Roberto Unger noted: "We lack the metric with which to measure the proximity of our programs to our circumstances. We must walk, in relative darkness, the narrow path between wishful thinking and the denial of the pragmatic, prophetic residue in our understanding of transformative possibility. We lack the metric, and always will" (Unger 1998, 237). Instead, policymakers have often interpreted the unknowability of political possibilities as an objective understanding of their limits. Yet, the inaccessibility of such knowledge should not serve as a justification for inadequate action. Rather, it is the reason why creative attempts to act at a scale commensurate with the pledges should always be attempted. To return to the earlier example, the way that political coalitions around energy transitions are built shapes the possibility for opposition from veto players in this domain (Bretz, Mildenberger, and Stokes 2018).

However, if policymakers opt for foreseeably inadequate action or no action at all, it should be presented as a choice revealing their preferences, rather than hiding behind claims about the impossibility to act. For instance, market-based responses to climate change—which do not challenge the status quo in climate change politics—should have been presented as a choice in favor of short-term growth at the expense of planetary devastation and policymakers should have been honest about the subsequent failure to meet their climate targets.

Policy-Relevant IR Scholarship: A Panglossian Double Failure

The issues of climate change and nuclear disarmament allow for a reappraisal of "policy-relevant scholarship" in these two domains. Policy-relevant scholarship is supposed to be "problem-solving," as opposed to "critical scholarship," according to the famous dichotomy established by Robert Cox (1981, 128–30). As Ken Booth wrote, scholarship should not attempt to describe the future, "but to prevent its dangers from materializing" (Booth 1995, 346). To fulfill its problem-solving vocation, scholarship should first help analyze the causes of the problems that it aims to solve in order to allow policymakers to learn from past mistakes. This is the *analytical* dimension of policy relevance. Next, scholars should create a framework of accountability for

³⁰Plumer, Brad. 2022. "California Approves a Wave of Aggressive New Climate Measures." *The New York Times*. Accessed September 27, 2022. <https://www.nytimes.com/2022/09/01/climate/california-lawmakers-climate-legislation.html>.

³¹Edmond, Charlotte. 2019. "China's Lead in the Global Solar Race." *The World Economic Forum*. Accessed September 27, 2022. <https://www.weforum.org/agenda/2019/06/chinas-lead-in-the-global-solar-race-at-a-glance/>.

³²Our observations leave aside considerations about public opinion, the political contestation of ideas, and the political bargaining process. Although these are important determinants of what policymakers' promises look like and how they are made, this article only considers the relationship between the promises made and possible changes in these policy domains.

³³This notion of "revealed preferences" was introduced in economics by Paul A. Samuelson (1948).

³⁴By powerlessness, we mean an objective impossibility to act in a way that would produce intended outcomes.

policy practices that are bound to fail. This is the *accountability* dimension of policy-relevant work. In doing this work, we do not claim that scholarship could have stopped policymakers from doing what they did or that it has a massive impact on them. We are simply observing that scholarship is being written as though it seeks such relevance, and that policy impact is a required feature of it. In this section, we demonstrate that the enterprise of policy-relevant scholarship in the domain of climate change and nuclear disarmament has failed on both grounds. Problem-solving scholarship thus ended up being problem-perpetuating.

First, policy-relevant international relations (IR) scholarship encounters an analytical failure by largely overlooking the issues of climate change and nuclear disarmament, and thus not addressing their causes. Even though 51 percent of US-based IR scholars in a Teaching, Research, and International Policy (TRIP) survey from 2017 ranked climate change among the top three most important policy issues, fewer than 4 percent identified the environment as their primary area of research (Green and Nale 2017, 476). A similar observation was made by Katzenstein 3 years later: “Existing international relations scholarship ignores [. . .] the possibility of civilizational collapse in the face of environmental disasters of unimaginable scope and scale” (Katzenstein 2020, 495).³⁵ In addition, the effects of national security policies on climate change have been an overlooked aspect in policy-relevant IR scholarship (Egeland 2022). Similar dynamics can be observed in the realm of nuclear disarmament. Except in the few years around the Prague speech, policy-relevant nuclear scholarship has not treated nuclear disarmament as a policy problem (Cooper 2006; Harrington 2011; Ritchie 2019; Egeland 2021a).³⁶ Instead, scholars have focused on nonproliferation, deterrence, and strategic stability as the main issues on the research agenda, treating them as subsets of the broader problem of maintaining order in the nuclear domain (Pelopidas 2016, 331–32; Egeland 2021a; Pelopidas 2022, 44–45). While these issues fit with this overarching managerialist approach, the pursuit of disarmament does not. By overlooking the causes of those two existential threats, policy-relevant IR scholarship has failed to enable decision makers to learn from past policy failures (Lebow and Pelopidas 2023).

Second, policy-relevant IR scholarship in the domains of climate change and nuclear disarmament has failed to make policymakers accountable for their foreseeably inadequate action by legitimizing the unwarranted claims of political impossibilities and good faith. In doing so, they acted as an echo chamber and even refused to hear policymakers’ own acknowledgment of bad faith (George 1993, 137–38; Smith 1997, 513).

When IR scholars address climate change and disarmament, many have either reproduced policymakers’ claims that radical change is impossible or accepted policymakers’ reframing of the yardstick for success. Realist theory, which still has a large number of proponents in policy-relevant nuclear studies, assumes that nuclear disarmament is impossible (Tagma 2010; Müller 2013; Craig 2019).³⁷

³⁵With only a few studies devoted to climate change within the field of international political economy, Paterson (2021), for instance, points out that the discipline has yet to come to terms with the scale of the disaster—potentially leading to the collapse of human civilization—if climate change is not addressed. A similar point was made by Ashworth (2021).

³⁶Ritchie’s work and a forthcoming book on inventing nuclear disarmament, as well as Cooper’s work that is cited above, are among the few exceptions. Critical security studies scholarship deserves credit for showing that the reassertion of the nuclear disarmament pledge was intended to produce order and stability, rather than nuclear disarmament.

This assumption has persisted among realist luminaries, even after Ukraine, Belarus, Kazakhstan, and South Africa renounced their nuclear armaments after the Cold War. Beyond realism, the idea of a deliberate non-nuclear national security strategy, which could pave the way toward nuclear disarmament, has been assumed to be a contradiction in terms, despite a large majority of states opting for such strategy (Biswas 2014). In the realm of climate change, scholars have upheld the illusion of impossibility by using the language of collective action, free-riding, and other commitment problems (Keohane and Victor 2011; Nordhaus 2020).³⁸ In such a framework, action on climate change has been assumed to be possible only with the support of every country and every domestic player. Even then, cheating would remain a constant worry. This has led scholars to argue that the risk of free riding and noncommitment would jeopardize the anticipated effects of cooperation to mitigate climate change. In doing so, scholarship has regularly overlooked the possibility for and the occurrence of effective leadership in climate change policy, as well as the role of other forms of governance, such as unilateral state action, local governance, or judicial activism (Andonova, Hale, and Roger 2017; Eckersley 2020).

In addition, most scholarship has refrained from challenging the assumption of good faith on the part of the policymaking elite. As a reminder, bad faith does not necessarily equate to bad intentions on the part of the actor. Rather, we define bad faith as repeating a pledge while not acting at a scale that could conceivably allow one to keep it. As one of the few systematic attempts at engaging with lies in IR, John Mearsheimer’s *Why Leaders Lie* overlooks nuclear disarmament and climate change politics.³⁹ In fact, only a couple of scholars have shed light on what they call “obscurantist elites” acting in bad faith. However, they have done so from outside of the IR discipline (Castel 2018, 126–27; Latour 2018, 17–25). In nuclear scholarship, even among the supporters of the Treaty on the Prohibition of Nuclear Weapons, most criticism about states’ track record on nuclear disarmament has been couched as weak performance, not as a sign of bad faith on the part of those policymakers who articulated and repeated the pledges (Sagan 2009b, 161; Meyer and Sauer 2018, 63).⁴⁰ We only found two instances of scholarship acknowledging that the pledge of nuclear disarmament was a “lie” (Tellis 2017; Egeland 2021b). Yet, it is striking that one of them depicts it as a “noble lie” (Tellis 2017, 32). Similarly, in climate scholarship, the failure of policymakers to live up to their promises has often been cast as a function of the struggles inherent to international treaties, climate clubs, and other international instruments that are created to solve the collective action problems behind climate change—whether through the legally binding nature of climate change commitments, the lack of enforcement mechanisms, uncertainty

³⁷On the narrowness of realism among analysts of nuclear weapons policy, see Carina Meyn (2018).

³⁸Recently, IR literature has made a turn toward studying the distributional aspects of climate change, dissecting why and how particular groups in society could obstruct climate change measures and reflecting upon how states could overcome the objections from these groups. See Mildenerger (2020), Stokes (2020), and Colgan, Green, and Hale (2021).

³⁹Mearsheimer claims not to include threat deflation, which he considers as a possible type of strategic lie, in his book because it “rarely occurs” (Mearsheimer 2013, 23). While he states that lies at the international level are less frequent than lies at the domestic level, the consequences of lying on existential matters make the frequency of such lies insignificant.

⁴⁰For exceptions, see Doyle (2017, 17, 24) and Egeland (2021b). In addition, Craig and Ruzicka (2013, 339–341) do not write about bad faith, but about the “hypocrisy of the nuclear haves.” This encompasses bad faith.

about compliance, or the lack of reciprocity (Thompson 2010; Tingley and Tomz 2014)—rather than as the result of obstructionism (Green 2020, 153–54; Mitchell 2006).

Surprisingly, the urge to preserve the assumption of good faith has been unshaken by policymakers' confessions of bad faith. For example, US Ambassador Smith acknowledged that the United States agreed to the phrasing of article VI only because it did not commit them "to achieve any disarmament agreement, since it is obviously impossible to predict the exact nature and results of such negotiations" (Sagan 2009a, 204). In 2005, meanwhile, former director of the Central Intelligence Agency (CIA) John Deutch wrote about how "unwise" it was for the United States "to commit under Article 6 of the Nonproliferation Treaty [NPT] 'to pursue good-faith negotiations' toward complete disarmament, a goal it has no intention of pursuing" (Deutch 2005, 51).⁴¹ In the domain of climate change, UN Secretary-General Antonio Guterres, for instance, stated "some government and business leaders are saying one thing and doing another. Simply put, they are lying."⁴² Yet, scholars have not acknowledged this. One leading scholar considered policymakers' acknowledgment of bad faith "unhelpful" (Sagan 2009b, 161).⁴³

Overall, policy-relevant scholarship has failed to help decision makers and citizens with addressing the existential problems that they are facing due to an analytical and accountability failure. Instead, it has legitimized the unwarranted assumptions of impossibility and good faith (Green 2020). Scholarship has not helped policymakers learn from the foreseeable results of their inadequate actions and has not created the framework to make them accountable. It has accepted that—no matter what the circumstances are—elites are doing their best to produce the best possible world, even when they admit otherwise. This was precisely Master Pangloss' worldview.

Three Prescriptions for IR Scholarship

To avoid repeating this Panglossian double failure, we propose three amendments to IR scholarship. The first prescription that follows from our analysis has to do with *the scoping of political possibilities*. COVID-19 reminds scholars that the unprecedented and unforeseen can happen and, when it happens, it can have devastating consequences. We therefore propose four avenues for thinking about possibilities: (1) acknowledging the unknowability of the scope of present possibilities, which requires including the possibility of the end of our society in the scope of what we study (Sears 2021 opens a way in that direction); (2) introducing the concept of vulnerabilities as an organizing descriptor of the current global condition; (3) using a counterfactual methodology to assess claims of past impossibility; and (4) including imagined futures in our understanding of the production of possible worlds. To think about possible ends, we need to move beyond the "survivability bias" that underpins much of the IR field (Keen 2020; Pelopidas 2020).⁴⁴ Such bias is visible in the scope of conceivable change within the

discipline: a reconfiguration of existing power structures or a redistribution of resources. Both make irredeemable endings inconceivable.⁴⁵ This partly explains why the field has claimed to predict international politics but has missed crucial events, including the end of the Cold War. Bringing the notion of vulnerabilities to the core of our inquiries would open space to imagine unprecedented ends. In the nuclear realm, for example, this enables one to seize both the possible material consequences of nuclear war (material vulnerabilities) and the temptation to overlook the gap between the claims of control over those weapons and the unsatisfactory record of doing so in practice (epistemic vulnerability). Methodologically, counterfactual analysis would be a useful way to assess good faith, as it constitutes an instrument to examine policymakers' claims about past impossibilities (Lebow 2010). Finally, it is crucial to study imagined futures as constitutive of present and future possibilities, thus turning them into central empirical objects for IR (Berenskoetter 2011; Beckert 2016; Verschuren 2022).

Given the impact of foreseeably inadequate action in the realms of climate change and nuclear weapon politics, the second prescription revolves around the need *to create and adjudicate the debate between malevolence and failure of the imagination as a cause of inadequate action*. In recent years, non-IR scholars who document the role of elites in producing environmental and nuclear disasters have restored the notion of *malevolence* (Perrow 2010; Castel 2018, 126–27; Latour 2018, 17–25).⁴⁶ To the contrary, Günther Anders blames the *incompetence* of our imagination, not evil intent, for our inability to believe what we already know about the scale of the unfolding disasters and to contemplate the amount of harm that we can cause (Anders 1962, 496–97).

Setting and adjudicating the debate between malevolence and the failure of imagination has considerable implications for IR writing. First, it would require a more circumspect use of the tragedy trope.⁴⁷ For instance, on the failure to make progress toward disarmament, we need to distinguish between two attitudes: *deliberate failure* out of malevolence and the lack of attempts to bring about progress, notwithstanding a sincere commitment to avoid nuclear war, that is grounded in *a failure of imagination or a refusal to believe in its possibility*. While both are faulty, tragedy may apply to the latter, but should not be misused as an excuse for the former. Second, this debate has implications for contemporary discussions about populism, which have made their way into IR (Epstein, Lindemann, and Sending 2018, 792–93). Because current scholarship assumes good faith on the part of policymaking elites and naturalizes their claims of impossibility to act, scholars have sometimes blamed the public for its anger, anti-elitism, and naïveté or incompetence. They have condemned the public for believing that these pledges were sincere and that they could have been kept in the first place. Yet, if the cause of inadequate action turns out not to be malevolence, but a failure to imagine the consequences of one's action, as

⁴⁵ This article should not be read as assuming that the problem of CO₂ emissions is the only existential threat related to planetary boundaries that should be addressed.

⁴⁶ The fact that the oil industry was informed about the effects of carbon emissions on global warming as early as the late 1950s and validated that information in the 1970s but then developed campaigns to spread doubt about its validity constitutes an apt example of malevolence (Conway and Oreskes 2010, chapters 6 and 7; Franta 2021; Bonneuil, Choquet, and Franta 2021).

⁴⁷ In the nuclear weapons realm, Charles Thorpe has documented how Robert Oppenheimer used the tragedy trope to avoid discussions of responsibility and guilt, for instance (Thorpe 2006; Borgwardt 2008). Daniel Levine offers a skeptical engagement with the ability of the "tragic frame" to account for the fundamental vulnerability of a nuclearized world (Levine 2018).

⁴¹ Also see quotes from former Australian representative Richard Butler (2001, 146) and former Assistant Secretary-General of the United Nations Ramesh Thakur (2018).

⁴² United Nations. 2022. "Antonio Guterres on Climate Change 2022." *UN Web TV*. Accessed September 27, 2022. <https://media.un.org/en/asset/k1h/k1h9jq7v>.

⁴³ Also see Futter and Williams (2016, 254).

⁴⁴ One could also refer to the work of post-World War II futurologists as an example of thinking about and making space for the possibility of an end (Andersson 2018, 17).

Anders would claim, then the diagnostic of populism should be flipped (Anders 2008, 194). Instead of populism being the emotional expression of an ignorant populace who does not understand the complexity of politics, it becomes the expression of resentment against unfulfilled promises by elites who are equally lacking the required imagination.⁴⁸

The third prescription that follows from this analysis has to do with the notion of *policy relevance*, which is widely considered to be one of the central requirements of the discipline. To avoid repeating the Panglossian double failure, the conceptualization of policy relevance should be broadened and modified in terms of its audience, temporality, and normativity. As a result, scholars would not feel like they must accept the existing framing of the debate, defend the claims of political impossibility and good faith on the part of policymakers, or even contradict the words of policymakers when they acknowledge bad faith. Policy-relevant work would be empowered to expand decision makers' horizons, challenge their preconceived notions, and ensure that they remain accountable to their democratic constituencies.

In terms of audience, as indicated by early post-Cold War discussions about the requirements of policy relevance, citizens from all parts of the world should be included in the target audiences (Wallace 1993, 304–309; Smith 1997, 508–509). This allows for the possibility of citizens becoming elected officials and contributes to maintaining the democratic character of representative democracies, even for issues commonly characterized as belonging to “high politics.”

Temporally, the notion of policy relevance should move beyond presentism. If the three proposed shifts are implemented, scholars will become responsible not just toward current policymaking elites, but also *vis-à-vis* citizens of a future in the making and victims of past harm due to the lack of adequate action. In other words, it is crucial to realize that climate change and nuclear arsenals have already produced and are presently producing harmful outcomes, and not just in some possible distant future. A consistent regime of accountability should thus include much more than the present generation. In order to do that in a way that is compatible with our earlier recommendation regarding contemplating the possibility of ends to power structures and civilizations, we recommend that scholarship constructs timescapes—the temporal horizons in which agency is defined and accountability is organized—in the shadow of possible ends. This allows for a reallocation of responsibilities (Adam 1998).

Normatively, while current mainstream scholarship has rejected normative stances as nonscientific, we argue that our predicament confronts us with a utopian imperative. The nuclear weapons realm offers a clear illustration of this (Pelopidas 2020). Given the potential devastation due to nuclear weapons technology, the radical unacceptability of nuclear weapon-related disasters, and the decades of commitment that nuclear modernization plans are asking us to make, we cannot escape utopia. On one hand, one could bet on nuclear weapons technology never failing or only failing in non-catastrophic ways within the next five to seven decades. This would represent a technological utopia. On the other hand, one could gamble on the adoption of radical measures of nuclear disarmament that would bring us below the nuclear winter threshold before unwanted nuclear explosions happen. Such a form of change is currently presented as a political utopia by policymakers and scholars.

Without adequate action to meet the nuclear disarmament pledge, only two possible alternatives remain: either a non-nuclear catastrophe will kill us before a nuclear disaster happens or nuclear war is considered inevitable, but its effects could be mitigated by developments such as effective missile defenses. The latter would bring us back to a form of technological utopianism. As a result, there is no nonutopian course of action, if utopian means “unusually challenging” or “unprecedented.”⁴⁹ This is what we call the utopian imperative. Acknowledging the fact that utopia cannot be escaped other than by accepting death from a third cause becomes crucial in this context. Policy-relevant scholarship, which claims to be non-normative, has denied and rejected the utopian imperative. In doing so, it has unduly restricted the policy options that it allows one to entertain and has become an unacknowledged defense of existing power structures (Ish-Shalom 2006; Meyn 2018; Green 2020).

Conclusion: A Call for Political Courage and Scholarly Responsibility

In the context of decades of repeated promises and failed attempts to address the existential problems posed by climate change and nuclear weapons, this article has argued that state responses during COVID-19 can shed a light on possibilities for action commensurate with the challenge—not just for the contemporary moment, but also for the past. This has led us to question the assumption of good faith, widely ascribed to policymakers in these realms.

Without presuming the relevance, efficacy, or fairness of the measures to tackle COVID-19, an important lesson from this crisis is that consequential action in good faith was possible: policymakers can, have, and should undertake action to implement policy change, even when it is politically costly for them to do so. The call for courageous policy action is not a call for decisionism, but rather one for accountable leadership acting in good faith. This means that policymakers should take the necessary steps to abide by what they are promising. In doing so, political leaders should embrace the polarizing dimension of politics by challenging structural boundaries and upsetting veto players, particularly as the scale of the problem requires it and because not doing so would entail a foreseeable failure to keep their promises. It should be noted, however, that being held accountable for the foreseeable consequences of one's actions is only a minimum criterion. To tackle climate change and nuclear disarmament, policymakers should address questions of equity and justice, in line with the kind of societies that they claim to represent and the values that those societies regard as foundational (Schell 2000, xxxvii–ix; Klinsky et al. 2017).

Scholarship plays a crucial role in exploring the frontier of possibility and ensuring that policymakers cannot escape accountability from their constituencies. Yet, it can only assume that role with three adjustments to IR: (1) rescoping political possibilities; (2) adjudicating the debate between malevolence and failure of imagination as causes of inadequate action; and (3) reassessing the meaning of policy relevance. While these implications may sound grand, they are apt for the current state of the world. We are in the middle of an environmental crisis at a planetary scale with the ever-present risk of nuclear disaster, after constant failures to act at the adequate scale (Booth 2007, 2, 6, 396–98; Burke et al. 2016; Harrington 2016; Deudney 2018;

⁴⁸We do not claim that malevolence or failure to imagine are the only two possible causes for inadequate action or that non-elite citizens are free from prejudices, such as anti-intellectualism or racism.

⁴⁹Kütt and Mian (2022) have documented the absence of any technological impossibility, as we can dismantle all the remaining nuclear weapons under 10 years based on what has been achieved so far, without assuming any progress.

Deudney 2020). This is ironically consistent with the canonical, if disputed, history of the discipline itself, which was created at a time when scholars realized the abysmal failure of World War I and were trying to prevent World War II.

Acknowledgments

The authors would like to thank the three anonymous reviewers for their thoughtful feedback and the editors for their excellent guidance in revising this article. The authors also want to thank Kjølve Egeland, Jan Ruzicka, Ken Booth, Zia Mian, Neil Renic, Debak Das, and the participants of the AIRE workshop at Sciences Po, the summer work-in-progress meetings at Brown University, and the Social Sciences Reading Group at CISAC, Stanford University, for their helpful comments on earlier drafts of the article.

Funder Information

This article has been made possible by funding from the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation program (grant agreement no. 759707), NUCLEAR. It also received funding from European Union's Horizon 2020 research and innovation program under grant agreement no. 101027421 (BNE), Marie Skłodowska-Curie Actions.

References

- ADAM, BARBARA. 1998. *Timescapes of Modernity: The Environment and Invisible Hazards*. London: Routledge.
- ALLAN, BENTLEY B.. 2018. *Scientific Cosmologies and International Orders*. Cambridge: Cambridge University Press.
- ALLAN, JEN IRIS. 2019. "Dangerous Incrementalism of the Paris Agreement." *Global Environmental Politics* 19 (1): 4–11.
- ALEXIS-MARTIN, BECKY, MATTHEW B. BOLTON, DIMITY HAWKINS, SYDNEY TISCH, AND TALEI LUSCIA MANGIONI. 2021. "Addressing the Humanitarian and Environmental Consequences of Atmospheric Nuclear Weapon Tests: A Case Study of UK and US Test Programs at Kiritimati (Christmas) and Malden Islands, Republic of Kiribati." *Global Policy* 12 (1): 106–21.
- ANDERS, GÜNTHER. 1962. "Theses for the Atomic Age." *The Massachusetts Review* 3 (3): 493–505.
- . 2008. "L'Homme Sur Le Pont." In *Hiroshima est Partout*. Paris: Seuil. 67–287.
- ANDERSSON, JENNY. 2018. *The Future of the World*. Oxford: Oxford University Press.
- ANDONOVA, LILIANA B., THOMAS N., HALE, CHARLES B., AND ROGER. 2017. "National Policy and Transnational Governance of Climate Change: Substitutes or Complements?" *International Studies Quarterly* 61 (2): 253–68.
- ANNE HARRINGTON DE SANTANA. 2011. "The Strategy of Non-proliferation: Maintaining the Credibility of an Incredible Pledge to Disarm." *Millennium* 40 (1): 3–19.
- ASHWORTH, LUCIEN M. 2021. "A Forgotten Environmental International Relations: Derwent Whittlesey's International Thought." *Global Studies Quarterly* 1 (2): 1–10.
- BALL, DESMOND. 1980. *Politics and Force Levels: The Strategic Missile Program of the Kennedy Administration*. Berkeley, CA: University of California Press.
- BARKAWI, TARAK, AND MARK LAFFEY. 2006. "The Postcolonial Moment in Security Studies." *Review of International Studies* 32 (2): 329–52.
- BECKERT, JENS. 2016. *Imagined Futures*. Cambridge: Harvard University Press.
- BERENSKOETTER, FELIX. 2011. "Reclaiming the Vision Thing: Constructivists as Students of the Future." *International Studies Quarterly* 55 (3): 647–68.
- BERGQUIST, PARRISH, MATTO MILDENBERGER, AND LEAH C. STOKES. 2020. "Combining Climate, Economic, and Social Policy Builds Public Support for Climate Action in the US." *Environmental Research Letters* 15 054019.
- BERGSON, HENRI. 2021 [1930]. "Le Possible et Le Réel [the Possible and the Real]." *The possible and the real*. Paris: Flammarion. 40–89.
- BISWAS, SHAMPA. 2014. *Nuclear Desire*. Minneapolis, MN: University of Minnesota Press.
- BONNEUIL, CHRISTOPHE, PIERRE-LOUIS CHOQUET, AND BEN FRANTA. 2021. "Early Warnings and Emerging Accountability: Total's Responses to Global Warming, 1971–2021." *Global Environmental Challenge* 71 (102386): 1–10.
- BOOTH, KEN. 1995. "Dare Not to Know: International Relations Theory versus the Future." In *International Relations Theory Today*, edited by Ken Booth and Steven Smith, 328–50. Philadelphia, PA: Pennsylvania University Press.
- . 2007. *Theory of World Security*. Cambridge: Cambridge University Press.
- BORGWARDT, ELISABETH. 2008. "Site Specific: The Fractured Humanity of J. Robert Oppenheimer." *Modern Intellectual History* 5 (3): 547–71.
- BREITZ, HANNA, MATTO, MILDENBERGER, LEAH, AND STOKES. 2018. "The Political Logics of Clean Energy Transitions." *Business & Politics* 20 (4): 492–522.
- BRULLE, ROBERT J. 2014. "Institutionalizing Delay: Foundation Funding and the Creation of U.S. Climate Change Counter-Movement Organizations." *Climatic Change* 122 (4): 681–94.
- BURKE, ANTHONY, STEFANIE FISHEL, AUDRA MITCHELL, SIMON DALBY, AND DANIEL J. LEVINE. 2016. "Planet Politics: A Manifest from the End of IR." *Millennium: Journal of International Studies* 44 (3): 499–523.
- BUTLER, RICHARD. 2001. *Fatal Choice*. Boulder, CO: Westview Press.
- CASTEL, PIERRE-HENRI. 2018. *Le Mal qui Vient: Essai Hâtif sur la Fin des Temps*. Paris: Le Cerf.
- CLÉMENTON, RAYMOND. 2016. "The Two Sides of the Paris Climate Agreement: Dismal Failure or Historic Breakthrough." *Journal of Environment & Development* 25 (1): 3–24.
- COLGAN, JEFF D., JESSICA F. GREEN, AND THOMAS N. HALE. 2021. "Asset Revaluation and the Existential Politics of Climate Change." *International Organization* 75 (2): 586–610.
- CONWAY, ERIK, AND NAOMI ORESKES. 2010. *Merchants of Doubt: How a Handful of Scientists Obscured the Truth on Issues from Tobacco Smoke to Global Warming*. New York: Bloomsbury.
- COOPER, NEIL. 2006. "Putting Disarmament Back in the Frame." *Review of International Studies* 32 (2): 353–76.
- COX, ROBERT W. 1981. "Social Forces, States and World Orders: Beyond International Relations Theory." *Millennium: Journal of International Studies* 10 (2): 126–55.
- CRAIG, CAMPBELL. 2019. "Solving the Nuclear Dilemma: Is a World State Necessary?" *Journal of International Political Theory* 15 (3): 349–66.
- CRAIG, CAMPBELL, AND JAN RUZICKA. 2013. "The Nonproliferation Complex." *Ethics & International Affairs* 27 (3): 329–48.
- DECHEZLEPRÉTE, ANTOINE, ADRIEN FABRE, TOBIAS KRUSE, BLUEBERY PLANTEROSE, ANA SANCHEZ CHICO, AND STEFANIE STANTCHEVA. 2022. "Fighting Climate Change: International Attitudes toward Climate Policies." Working Paper. Accessed January 30, 2023. https://scholar.harvard.edu/files/stantcheva/files/international_attitudes_toward_climate_change_sept22.pdf.
- DEUDNEY, DANIEL. 2018. "Turbo Change: Accelerating Technological Disruption, Planetary Geopolitics, and Architectonic Metaphors." *International Studies Review* 20 (2): 223–31.
- . 2020. *Dark Skies: Space Expansionism, Planetary Geopolitics and the Ends of Humanity*. Oxford: Oxford University Press.
- DEUTCH, JOHN. 2005. "A Nuclear Posture for Today." *Foreign Affairs* 84 (1): 49–60.
- DHANAPALA, JAYANTHA. 2010. "The Management of NPT Diplomacy." *Daedalus* 2: 57–67.
- DOYLE, THOMAS E. 2017. "A Moral Argument for the Mass Defection of Non-Nuclear-Weapon States from the Nuclear Nonproliferation Treaty Regime." *Global Governance* 23 (1): 15–26.
- DRAHOS, PETER, AND CHRISTIAN DOWNIE. 2017. "Regulatory Unilateralism: Arguments for Going It Alone on Climate Change." *Global Policy* 8 (1): 32–40.
- DREZNER, DANIEL W. 2020. "The Song Remains the Same: International Relations after COVID-19." *International Organization Special* 74 (S1): E18–E35.
- ELLSBERG, DANIEL. 2017. *The Doomsday Machine: Confessions of a Nuclear War Planner*. New York: Bloomsbury.
- ECKERSLEY, ROBYN. 2020. "Rethinking Leadership: Understanding the Roles of the US and China in the Negotiation of the Paris Agreement." *European Journal of International Relations* 26 (4): 1178–1202.
- EDEN, LYNN. 2011. "The U.S. Nuclear Arsenal and Zero: Sizing and Planning for Use—Past, Present, and Future." In *Getting to Zero: The Path to Nuclear Disarmament*, edited by Catherine M Kelleher and Judith. Reppy, 69–89. Palo Alto, CA: Stanford University Press.

- EGELAND, KJØLV. 2017. "The Road to Prohibition: Nuclear Hierarchy and Disarmament, 1968–2017." PhD dissertation, Department of Political Science and International Relations, Oxford University, Oxford.
- . 2020. "Who Stole Disarmament?" *International Affairs* 96 (5): 1387–1403.
- . 2021a. "The Ideology of Nuclear Order." *New Political Science* 43 (2): 208–30.
- . 2021b. "Bursting the Abolitionist Consensus." *Journal for Peace and Nuclear Disarmament* 4 (1): 107–15.
- . 2022. "Climate Security Reversed: The Implications of Alternative Security Policies for Global Warming." *Environmental Politics, Early View*. <https://www.tandfonline.com/doi/full/10.1080/09644016.2022.2146934>
- EPSTEIN, CHARLOTTE, THOMAS LINDEMANN, AND OLE J. SENDING. 2018. "Frustrated Sovereigns." *Review of International Studies* 44 (5): 787–804.
- FAWCETT, ALLEN A., GOKUL C. IYER, LEON E. CLARKE, JAMES A. EDMONDS, NATHAN E. HULTMAN, HAEWON C. MCJEON, AND JOERI ROGELJ et al. 2015. "Can Paris Pledges Avert Severe Climate Change?" *Science* 350 (6265): 1168–69.
- FRANTA, BENJAMIN. 2021. "Early Oil Industry Disinformation on Global Warming." *Environmental Politics* 30 (4): 663–68.
- FUTTER, ANDREW, AND HEATHER WILLIAMS. 2016. "Questioning the Holy Trinity: Why the U.S. Nuclear Triad Still Makes Sense." *Comparative Strategy* 35 (4): 246–59.
- GAREAU, BRIAN J. 2010. "A Critical Review of the Successful CFC Phase-Out versus the Delayed Methyl Bromide Phase-Out in the Montreal Protocol." *International Environmental Agreements: Politics, Law and Economics* 10 (3): 209–31.
- GEIGES, ANDREAS, ALEXANDER NAUELS, PAOLA YANGUAS PARRA, MARINA ANDRIJEVIC, WILLIAM HARE, PETER PLEIDERER, MICHIEL SCHAEFFER, AND CARL-FRIEDRICH SCHLEUSSNER. 2020. "Incremental Improvements of 2030 Targets Insufficient to Achieve the Paris Agreement Goals." *Earth System Dynamics* 11 (3): 697–708.
- GEORGE, ALEXANDER L. 1993. *Bridging the Gap: Theory and Practice in Foreign Policy*. Washington, DC: United States Institute for Peace.
- GREEN, JESSICA F. 2017. "Don't Link Carbon Markets." *Nature* 543 (7646): 484–86.
- . 2020. "Less Talk, More Walk: Why Climate Change Demands Activism in Academia." *Daedalus* 149 (4): 151–62.
- GREEN, JESSICA F., AND THOMAS NALE. 2017. "Reversing the Marginalization of Global Environmental Politics in International Relations: An Opportunity for the Discipline." *PS: Political Science and Politics* 50 (2): 473–79.
- HARRINGTON, CAMERON. 2016. "The Ends of the World: International Relations and the Anthropocene." *Millennium* 44 (3): 478–98.
- HIRSCHMAN, ALBERT O. 1991. *The Rhetoric of Reaction: Perversity, Futility, Jeopardy*. Cambridge: Harvard University Press.
- HUNT, JONATHAN. 2022. *The Nuclear Club: How America and the World Policed the Atom from Hiroshima to Vietnam*. Stanford, CA: Stanford University Press.
- ISH-SHALOM, PIKI. 2006. "The Triptych of Realism, Elitism, and Conservatism." *International Studies Review* 8 (3): 441–68.
- JACOBS, ROBERT. 2022. *Nuclear Bodies*. New Haven, CT: Yale University Press.
- JENKINS, JESSE D. 2014. "Political Economy Constraints on Carbon Pricing Policies." *Energy Policy* 69: 467–77.
- KAPLAN, FRED. 2020. *The Bomb: Presidents, Generals and the Secret History of Nuclear War*. New York: Simon & Schuster.
- KATZENSTEIN, PETER. 2020. "Protean Power: A Second Look." *International Theory* 12 (3): 481–99.
- KEEN, STEVE. 2020. "The Appallingly Bad Neoclassical Economics of Climate Change." *Globalizations* 18 (7): 1149–77.
- KENNARD, AMANDA. 2020. "The Enemy of My Enemy: When Firms Support Climate Change Regulations." *International Organization* 74 (2): 187–221.
- KEOHANE, ROBERT O., AND DAVID G. VICTOR. 2011. "The Regime Complex for Climate Change." *Perspectives on Politics* 9 (1): 7–23.
- KLINSKY, SONJA, TIMMONS ROBERTS, SALEEMUL HUQ, CHUKWUMERIE OKEREKE, PETER NEWELL, PETER DAUVERGNE, AND KAREN O'BRIEN et al. 2017. "Why Equity Is Fundamental in Climate Change Policy Research." *Global Environmental Change* 44: 170–3.
- KÜTT, MORITZ, AND ZIA MIAN. 2022. "Setting the Deadline for Nuclear Weapon Removal from Host States under the Treaty on the Prohibition of Nuclear Weapons." *Journal for Peace and Nuclear Disarmament* 5 (1): 148–61.
- LATOUR, BRUNO. 2018. *Down to Earth: Politics in the New Climatic Regime*. London: Polity.
- LEBOW, RICHARD N. 2010. *Forbidden Fruit: Counterfactuals and International Relations*. Princeton, NJ: Princeton University Press.
- LEBOW, RICHARD N., AND BENOÎT PELOPIDAS. Forthcoming. "Facing Nuclear War: Luck, Learning and the Cuban Missile Crisis." In *Oxford Handbook in History and International Relations*, edited by Christian Reus-Smit, Mlada Bukovansky, Edward Keene and Maja Spanu. Oxford: Oxford University Press.
- LEVINE, DANIEL J. 2018. "After Tragedy: Melodrama and the Rhetoric of Realism." *Journal of International Political Theory* 15 (3): 316–31.
- MEARSHEIMER, JOHN J. 2013. *Why Leaders Lie*. New York: Oxford University Press.
- MECKLING, JONAS, AND BENTLEY A. ALLAN. 2020. "The Evolution of Ideas in Global Climate Policy." *Nature Climate Change* 10 (5): 434–38.
- MECKLING, JONAS, NINA KELSEY, ERIC BIBER, AND JOHN ZYSMAN. 2015. "Winning Coalitions for Climate Policy." *Science* 349 (6253): 1170–71.
- MENDELSON, ROBERT. 2010. "Climate Change and Economic Growth." In *Globalization and Growth: Implications for a Post-Crisis World*, edited by Michael Spence and Danny Leiziger, 285–96. Washington, DC: The International Bank for Reconstruction and Development/World Bank.
- MÉNDEZ, MICHAEL. 2020. *Climate Change from the Streets: How Conflict and Collaboration Strengthen the Environmental Justice Movement*. New Haven, CT: Yale University Press.
- MEYER, PAUL, AND TOM SAUER. 2018. "The Nuclear Ban Treaty: A Sign of Global Impatience." *Survival* 60 (2): 61–72.
- MEYN, CARINA. 2018. "Realism for Nuclear Policy Wonks." *Nonproliferation Review* 25 (1–2): 111–28.
- MILDENBERGER, MATTO. 2020. *Carbon Captured: How Business and Labor Control Climate Politics*. Cambridge: The MIT Press.
- MILDENBERGER, MATTO, AND ANTHONY LEISEROWITZ. 2017. "Public Opinion on Climate Change: Is There an Economy–Environment Tradeoff?" *Environmental Politics* 26 (5): 801–24.
- MITCHELL, RONALD B. 2006. "Part Two: The Effectiveness of International Environmental Regimes—Problem Structure, Institutional Design, and the Relative Effectiveness of International Environmental Agreements." *Global Environmental Politics* 6 (3): 72–89.
- MÜLLER, HARALD. 2013. "Icons off the Mark: Waltz and Schelling on a Perpetual Brave Nuclear World." *Nonproliferation Review* 20 (3): 545–65.
- NORDHAUS, WILLIAM D. 1992. "An Optimal Transition Path for Controlling Greenhouse Gases." *Science* 258 (5806): 1315–19.
- . 1974. "Resources as a Constraint on Growth." *American Economic Association* 62 (2): 22–26.
- . 2020. "The Climate Club: How to Fix a Failing Global Effort." *Foreign Affairs* 99 (3): 10–17.
- OGUNBODE, CHARLES A. 2022. "Climate Justice Is Social Justice in the Global South." *Nature Human Behavior* 6 (1443): .
- ONDERCO, MICHAL, AND LEOPOLDO NUTI, eds. 2020. *Extending The NPT? A Critical Oral History of the 1995 Review and Extension Conference*. Washington, DC: Woodrow Wilson International Center for Scholars.
- PATERSON, MATTHEW. 2021. "Climate Change and International Political Economy: Between Collapse and Transformation." *Review of International Political Economy* 28 (2): 394–405.
- PELOPIDAS, BENOÎT. 2016. "Nuclear Weapons Scholarship as a Case of Self-Censorship in Security Studies." *Journal of Global Security Studies* 1 (4): 326–36.
- . 2020. "Power, Luck and Scholarly Responsibility at the End of the World(s)." *International Theory* 12 (3): 1–12.
- . 2021. "The Birth of Nuclear Eternity." In *Futures*, edited by Jenny Andersson and Sandra Kemp, 484–500. Oxford: Oxford University Press.
- . 2022. *Repenser les Choix Nucléaires: La Séduction de l'Impossible*. Paris: Presses de Sciences Po.
- PERROW, CHARLES. 2010. "The Meltdown Was Not an Accident." In *Markets on Trial: The Economic Sociology of the U.S. Financial Crisis*, edited by Michael Lounsbury and Paul M. Hirsch, 307–30. Bingley: Emerald.
- PERRY, WILLIAM J., AND TOM Z. COLLINA. 2020. *The Button: The New Arms Race and Presidential Power from Truman to Trump*. Dallas, TX: BenBella Books.
- PRASHAD, VIJAY. 2007. *The Darker Nations: A People's History of the Third World*. New York: The New Press.
- REPPY, JUDITH. 2010. "US Nuclear Weapons Laboratory in a Nuclear Zero World." *Bulletin of the Atomic Scientists* 66 (4): 42–57.
- RITCHIE, NICK, AND KJØLV EGELAND. 2018. "The Diplomacy of Resistance: Power, Hegemony and Nuclear Disarmament." *Global Change, Peace and Security* 30 (2): 121–141.

- RITCHIE, NICK. 2019. "Inventing Nuclear Disarmament." *Critical Studies on Security* 7 (1): 73–77.
- ROGELJ, JOERI, MICHEL DEN ELZEN, NIKLAS HÖHNE, TARYN FRANSEN, HANNA FEKETE, HARALD WINKLER, ROBERTO SCHAEFFER, FU SHA, KEYWAN RIAHI, AND MALTE MEINSHAUSEN. 2016. "Paris Agreement Climate Proposals Need a Boost to Keep Warming Well below 2°C." *Nature* 534 (7609): 631–39.
- ROSS, MICHAEL L., CHAD HAZLETT, AND PAASHA MAHDAVI. 2017. "Global Progress and Backsliding on Gasoline Taxes and Subsidies." *Nature Energy* 2 (16201): 1–6.
- SAGAN, SCOTT D. 2009a. "Good Faith and Nuclear Disarmament Negotiations." In *Abolishing Nuclear Weapons: A Debate*, edited by George Perkovich and James Acton, 203–12. Washington, DC: Carnegie Endowment for International Peace.
- . 2009b. "Shared Responsibilities on Nuclear Disarmament." *Daedalus* 138 (4): 157–68.
- SAMUELSON, PAUL A. 1948. "Consumption Theory in Terms of Revealed Preference." *Economica* 15 (60): 243–53.
- SCHIEDLER, FABIAN. 2020. *La Fin de la Mégamachine*. Paris: Seuil.
- SHELL, JONATHAN. 2000. *The Fate of the Earth and the Abolition*. Stanford, CA: Stanford University Press.
- SCHMITT, CARL. 2005. *Political Theory: Four Chapters on the Concept of Sovereignty*, translated by George Schwab. Chicago, IL: University of Chicago Press.
- SEARS, NATHAN. 2021. "International Politics in the Age of Existential Threats." *Journal of Global Security Studies* 6 (3): oga027.
- SETO, KAREN C., STEVEN J. DAVIS, RONALD B. MITCHELL, ELEANOR C. STOKES, GREGORY UNRUH, AND DIANA ÜRGE-VORSATZ. 2016. "Carbon Lock-in: Types, Causes, and Policy Implications." *Annual Review of Environment and Resources* 41 (1): 425–52.
- SETZER, JOANA, AND LISA BENJAMIN. 2020. "Climate Change Litigation in the Global South: Filling in Gaps." *American Journal of International Law* 114: 56–60.
- SKOCPOL, THEDA. 2013. "Naming the Problem: What It Will Take to Counter Extremism and Engage Americans in the Fight against Global Warming." *Prepared for the Symposium on The Politics of America's Fight against Global Warming*. Accessed January 30, 2023. https://climateaccess.org/system/files/Skopcol_Naming%20the%20Problem.pdf.
- SMITH, STEVE. 1997. "Power and Truth: A Reply to William Wallace." *International Studies Review* 23 (4): 507–16.
- STOKES, LEAH C. 2020. *Short Circuiting Policy: Interest Groups and the Battle over Clean Energy and Climate Policy in the American States*. Oxford: Oxford University Press.
- TAGMA, HALIT M. 2010. "Realism at the Limits: Post-Cold War Realism and Nuclear Rollback." *Contemporary Security Policy* 31 (1): 165–88.
- TAHA, HEBATALLA. 2021. "Misremembering the ACRS: Economic Imaginations and Nuclear Negotiations in the Middle East." *Global Affairs* 7 (3): 327–42.
- TELLIS, ASHLEY J. 2017. "No Escape: Managing the Enduring Reality of Nuclear Weapons." In *Strategic 2013–2014: Asia in the Second Nuclear Age*, edited by Ashley J. Tellis, Abraham M. Denmark and Travis Tanner, 3–34. Seattle, WA: The National Bureau of Asian Research.
- THAKUR, RAMESH. 2018. "Nuclear Turbulence in the Age of Trump." *Diplomacy and Statecraft* 29 (1): 105–28.
- THE INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE. 2021. "Climate Change 2021: The Physical Science Basis."
- THOMPSON, ALEXANDER. 2010. "Rational Design in Motion: Uncertainty and Flexibility in the Global Climate Regime." *European Journal of International Relations* 16 (2): 269–96.
- THORPE, CHARLES. 2006. *The Tragic Intellect*. Chicago, IL: University of Chicago Press.
- TINGLEY, DUSTIN, AND MICHAEL TOMZ. 2014. "Conditional Cooperation and Climate Change." *Comparative Political Studies* 47 (3): 344–68.
- UNGER, ROBERTO. 1998. *Democracy Realised: The Progressive Alternative*. London: Verso.
- VERSCHUREN, SANNE C.J. 2022. "Imagining the Unimaginable: War, Weapons, and Procurement Politics." PhD dissertation, Department of Political Science, Brown University, Providence, RI.
- VON HIPPEL, FRANK N. 2022. "The Long-Term Global Health Burden from Nuclear Weapon Test Explosions in the Atmosphere: Revisiting Andrei Sakharov's 1958 Estimates." *Science & Global Security* 30 (2): 54–61.
- WALLACE, WILLIAM. 1993. "Truth and Power, Monks and Technocrats: Theory and Practice in International Relations." *International Studies Review* 22 (3): 301–21.
- WARA, MICHAEL. 2007. "Is the Global Carbon Market Working?" *Nature* 445 (7128): 595–96.
- WIDMAIER, WESLEY, MARK BLYTH, AND LEONARD SEABROOKE. 2007. "Exogenous Shocks or Endogenous Constructions? The Meanings of Wars and Crises." *International Studies Quarterly* 51 (4): 747–59.