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# Disarming Arguments: Public Opinion and Nuclear Abolition

**Ondrej Rosendorf, Michal Smetana and Marek Vranka**

On Easter weekend 1962, the United Kingdom's Campaign for Nuclear Disarmament drew a record 150,000 people for the final part of an annual four-day march from Aldermaston to London's Trafalgar Square. Twenty years later, New York's Central Park saw up to one million people protesting nuclear weapons in one of the largest political demonstrations in US history. Lawrence Wittner, a historian of peace movements, estimates that in October 1983 alone, some 5m people participated in nuclear-disarmament rallies around the world.<sup>1</sup>

Today, such high levels of public interest in nuclear disarmament are hardly imaginable. After the Cold War ended, the need to control, reduce and eventually abolish nuclear weapons lost prominence as a matter for public debate, and is now confined to what Nina Tannenwald has described as 'largely an inside-the-beltway, elite-driven process'.<sup>2</sup> While post-Cold War opinion polls indicate that nuclear abolition is not something that global publics oppose, there has been a steep decline in public involvement in and support for pro-disarmament activities.<sup>3</sup> Meanwhile, the nuclear threat, far from disappearing, may be greater than ever thanks to continuing nuclear proliferation and rising mistrust between nuclear-armed states.<sup>4</sup>

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To invigorate public support for a nuclear-weapons-free world, disarmament advocates have framed their arguments in favour of nuclear abolition in a variety of ways. For example, in their famous op-ed published in the *Wall Street Journal* in 2007, Cold War veterans George Shultz, William Perry, Henry Kissinger and Sam Nunn called for global disarmament to prevent nuclear proliferation among terrorist groups and 'dangerous states' such as North Korea and Iran.<sup>5</sup> The International Campaign to Abolish Nuclear Weapons (ICAN), which was awarded the 2017 Nobel Peace Prize, frames its own disarmament advocacy in terms of human rights and human security, foregrounding the humanitarian consequences of any use of nuclear weapons.<sup>6</sup>

Among scholars interested in nuclear disarmament, there have been some limited attempts to disaggregate individual pro-disarmament arguments and discuss their pros and cons.<sup>7</sup> However, rigorous studies that examine how the public perceives these arguments and that identify which of them are considered the most persuasive have been lacking. To fill this gap and empirically test the strength of the various cases for nuclear disarmament, we surveyed a large, representative sample of American citizens. In the survey, we asked the participants about their general attitudes towards global nuclear disarmament, as well as their views on the six arguments that are commonly used by disarmament advocates to justify nuclear abolition: the risk of nuclear terrorism; the behaviour of nuclear-armed 'rogue states'; the prospect of catastrophic nuclear war; the potential humanitarian impact of nuclear use; the danger of nuclear accidents; and the economic costs of nuclear arsenals.<sup>8</sup>

Before we present our findings, however, it is worth considering the critical role of public engagement in achieving nuclear arms control and disarmament during the Cold War and afterwards. A key theme emerges: throughout our nuclear history, public pressure has significantly shaped states', and particularly US, policies. To be effective, however, advocates of disarmament need to engage the public with arguments that resonate.

### **Nuclear disarmament and public engagement**

Even in democratic countries, nuclear-weapons programmes are often shrouded in secrecy and controlled by a small group of elite political stakeholders without much public scrutiny.<sup>9</sup> Nevertheless, during the Cold War,

public activism was frequently a key force driving the emergence of anti-nuclear norms, as well as more formal international cooperation in nuclear arms control and disarmament.<sup>10</sup>

After the atomic bombings of Hiroshima and Nagasaki, a popular movement against nuclear weapons gradually emerged in the United States and elsewhere.<sup>11</sup> This early anti-nuclear activism gained strength throughout the 1950s and seemed to be instrumental in the stigmatisation of nuclear weapons as an unacceptable instrument of warfare, and in the gradual establishment of the 'nuclear taboo' – the norm of nuclear non-use.<sup>12</sup> As Tannenwald notes in her seminal 2007 book *The Nuclear Taboo*:

domestic public opinion was an important factor both in constraining US leaders' resort to use of nuclear weapons and in forming the taboo itself. US leaders were sensitive to public attitudes toward nuclear weapons because they perceived that domestic support for US security policies was essential to waging the Cold War against the Soviet Union.<sup>13</sup>

The invention and atmospheric testing of the 'H-bomb' incited another powerful wave of worldwide protests against nuclear armaments.<sup>14</sup> Mounting public pressure was a key reason why the United States and the Soviet Union declared unilateral testing moratoria in 1958 and started negotiating a formal non-testing agreement. This process, given added impetus by the near miss of the 1962 Cuban Missile Crisis, eventually culminated in 1963 with the signature of the Partial Test Ban Treaty, which prohibits all but underground nuclear tests. This treaty was the first formal arms-control instrument to regulate the arms race between the nuclear powers.<sup>15</sup>

Popular resistance to nuclear weapons slowed somewhat through the mid-1970s, only to be revived in the second half of the decade.<sup>16</sup> One of the anti-nuclear movement's tangible successes of that period was the cancellation of the Carter administration's plan to develop and deploy a neutron bomb, a decision taken primarily in response to both domestic and allied public pressure.<sup>17</sup> Plans to deploy intermediate-range *Pershing II* nuclear missiles in Europe and the continuation of the nuclear arms race under the Reagan administration led to massive anti-nuclear demonstrations in the

Western bloc and the consolidation of the grassroots 'Nuclear Freeze' movement in the United States. In its heyday in the first half of the 1980s, Nuclear Freeze managed to gain the support of a wide array of peace organisations, politicians, religious bodies, and academic, professional and women's associations, exerting considerable influence on American politics.<sup>18</sup>

Moved in part by public pressure, but also in part by his own personal aversion to nuclear weapons, US president Ronald Reagan eventually reversed what had been a hawkish approach to nuclear issues. In his November 1983 speech to the Japanese parliament, he called for significant reductions in the US and Soviet nuclear arsenals, and declared that 'our dream is to see the day when nuclear weapons will be banished from the face of the earth'.<sup>19</sup> This alteration of Washington's position, which was strongly influenced by the demands of the freeze movement, led to the resumption of talks with the Soviets on the control of intermediate-range nuclear weapons. These negotiations resulted in the adoption of the Intermediate-Range Nuclear Forces (INF) Treaty of 1987, the first arms-control treaty to eliminate a whole class of nuclear weapons.<sup>20</sup>

Since the end of the Cold War, nuclear disarmament has lost urgency in the eyes of the general public. Despite the Obama administration's support for nuclear abolition and the adoption of the Treaty on the Prohibition of Nuclear Weapons (TPNW) in 2017, disarmament advocates have struggled to attract public attention.<sup>21</sup> Yet public support has clearly been a key factor in changes to the global nuclear order. As noted by American philosopher Jacob Nebel, 'the support of the American people is essential to disarm the US nuclear arsenal. This power may not be a sufficient factor, but it is a necessary one. Disarmament advocates should try to persuade the president, legislators, and international leaders, but most fundamentally, they must persuade other people.'<sup>22</sup>

### **Six arguments for nuclear abolition**

To promote nuclear disarmament as a worthy policy goal, pro-abolition advocates have put forward a range of arguments about its desirability. The six broad arguments identified earlier were first suggested by Anne Harrington, Eliza Gheorghe and Anya Loukianova Fink in their 2017 article for the *Bulletin of the Atomic Scientists*.<sup>23</sup>

The nuclear-terrorism argument relates to the threat of non-state actors acquiring and detonating a nuclear device. While speculation about this threat was present during the Cold War, after the events of 9/11 fears grew that a crude nuclear device might be detonated in a populated area.<sup>24</sup> The argument that nuclear disarmament makes sense in the context of terrorist activities builds on the premises that terrorists are actively seeking nuclear weapons and are willing to use them against the civilian population; that, so long as there are nuclear weapons in the world, they can be stolen and misused by terrorists; and that terrorists, because they have no territory of their own, cannot be deterred by a threat of nuclear retaliation as state actors can.<sup>25</sup> In other words, the existence of nuclear weapons makes their use by terrorist groups a possibility, but nuclear weapons cannot be used to counter this threat.

The 'rogue states' argument centres on a similar problem: there are state actors that do not play by the rules of international order. These states are governed by leaders who do not make decisions based on rational calculations of utility cost and therefore are 'undeterrable' according to the logic of deterrence theory. So long as there are nuclear weapons in the world, these actors can acquire and use them.<sup>26</sup> The problem of 'rogue states' took on great importance in post-Cold War American politics – particularly under the George W. Bush administration – and was frequently connected with the proliferation of nuclear and other weapons of mass destruction.<sup>27</sup> As Kissinger, Shultz, Perry and Nunn noted in their call for a nuclear-weapons-free world, 'North Korea's recent nuclear test and Iran's refusal to stop its program to enrich uranium ... highlight the fact that the world is now on the precipice of a new and dangerous nuclear era'.<sup>28</sup>

The nuclear-war argument seriously questions the notion of 'eternal stability' in the strategic relationship between nuclear powers. Proponents of this argument suggest that as long as there are nuclear weapons, there is also the possibility of their use, and any use of nuclear weapons in a conflict between nuclear-armed actors could escalate to the level of nuclear war. Such a war could destroy human civilisation as we know it. Moreover, mutual deterrence always involves some probability of failure. This problem has been exacerbated by the gradual disintegration of the world's arms-control

architecture, which has caused some analysts to suggest that the world is currently closer to an extinction-level nuclear war than at any time since 1945.<sup>29</sup>

The humanitarian argument approaches the problem of nuclear disarmament from a human-security perspective, following a similar logic to that employed by the successful campaigns to ban landmines and cluster munitions.<sup>30</sup> Proponents of this argument suggest that any use of nuclear weapons would have catastrophic humanitarian consequences, resulting in untold human suffering and the violation of fundamental human rights. Moreover, since there are no circumstances in which the use of nuclear weapons would be legitimate, the weapons themselves are immoral and should be abolished. Such humanitarian framing has been employed by many disarmament actors in recent years, most notably by ICAN and its 'Humanitarian Initiative' campaign that culminated in the adoption of the TPNW.<sup>31</sup>

The accidents argument suggests that the complex systems used for the management of states' nuclear arsenals are prone to accidents with potentially catastrophic consequences, even when highly supervised. Indeed, it is their very complexity that makes accidents inevitable.<sup>32</sup> Some have pointed out that the history of nuclear-weapons programmes is full of technical malfunctions, human errors and 'close calls', in which nuclear weapons were almost used by mistake.<sup>33</sup> Given the inevitability and potentially severe consequences of such accidents, the only sure way to prevent an accidental catastrophe is to abolish all nuclear weapons.

The costs argument highlights the economic trade-offs that societies must make to develop and maintain nuclear arsenals. Given that such arsenals are exceedingly expensive, their dismantlement would free up resources that could be used elsewhere, such as in healthcare, education or domestic infrastructure projects. This argument has been particularly prominent in recent years as all nine nuclear-armed countries have pursued nuclear-modernisation programmes.<sup>34</sup>

Disarmament advocates frequently use several arguments simultaneously. However, the persuasiveness of each argument may vary in the eyes of different audiences, and even some analysts have suggested that certain arguments are inefficient, counterproductive or otherwise problematic, while expressing a preference for others. For example, Zia Mian argues

that ‘it is possible to overcome some of the potential problems over nuclear weapon abolition that result from arguments based purely on national security and national interest by broadening the frame to include normative, moral, and legal considerations’.<sup>35</sup> A report of the US in the World Initiative, on the other hand, argues that ‘the fact that nuclear weapons are a source of risk – not the fact that they are morally wrong – should be presented as the underlying reason why the issue of nuclear weapons matters’.<sup>36</sup> Nebel proposes that ‘the risk-reduction framework, combined with moral and legal arguments that appeal to people’s basic beliefs, should be the baseline strategy’.<sup>37</sup> Finally, in their original piece, Harrington, Gheorghe and Fink suggest that the costs argument has relatively fewer downsides and ‘stands out for its potential to spark a more informed debate and greater public engagement on the issue’.<sup>38</sup> Yet there has been little empirical data on public attitudes to support such conclusions.

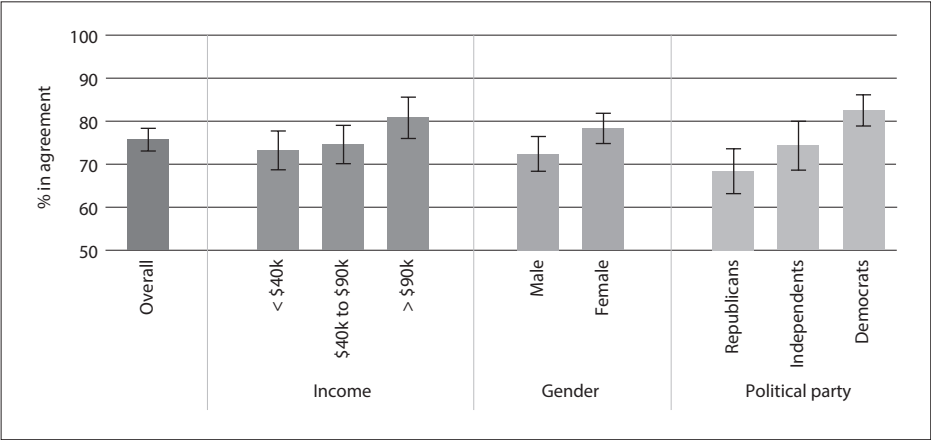
### **Surveying public attitudes**

To examine public attitudes towards specific pro-disarmament arguments, we worked with Ipsos, a prominent polling company, to survey a representative sample of 1,000 American adults in April 2021.<sup>39</sup> As shown in Figure 1, we found that 76% of Americans agreed that the United States ‘should now take the lead and start negotiating with other nuclear-armed countries to make immediate steps to achieve global nuclear disarmament’, whereas 24% disagreed with this statement. This result corresponds to the 2008 World Public Opinion poll, in which 77% of American respondents agreed and 20% disagreed with a proposed plan to completely eliminate nuclear weapons according to a specific timeline, as well as the Simons Foundation’s 2007 poll, in which 73% of respondents supported and 14% opposed the elimination of all nuclear weapons through an enforceable agreement.<sup>40</sup>

In Figure 1, we also show that taking the initiative towards disarmament was more supported by people identifying as Democrats (83%) than as Independents (74%) or Republicans (68%). Women and those reporting a yearly household income above \$90,000 were slightly more likely to express support. The age and education of respondents were not found to be significant in determining respondents’ attitudes.



Figure 1: **Percentage of 1,000 survey respondents who agreed the US should lead negotiations to achieve global nuclear disarmament**



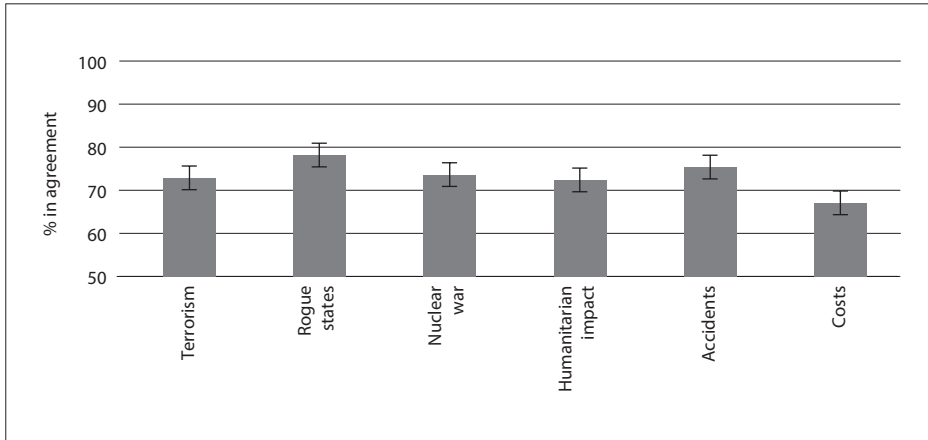
Error bars represent 95% confidence intervals.

To examine the relative effectiveness of various pro-disarmament arguments, we asked our respondents about their attitudes towards the six most common ones (nuclear terrorism, nuclear-armed ‘rogue states’, catastrophic nuclear war, humanitarian impact, nuclear accidents and economic costs). Contrary to the expectations of Harrington and her colleagues, however, American citizens seem to find the costs argument to be the least persuasive (see Figure 2).<sup>41</sup> We found more support for the arguments about the threat of nuclear war, nuclear terrorism and the humanitarian impact of nuclear use.

The two arguments that performed the best were those related to the possibility of nuclear accidents and the threat of nuclear-armed rogue states. While another study would be required to rigorously explain why these two arguments stand out, we can offer some tentative propositions here. Firstly, recent scholarship shows that the 2011 Fukushima Daiichi disaster had an impact on public attitudes towards nuclear power in general and the prospect of nuclear accidents in particular.<sup>42</sup> Some anti-nuclear activists suggest that public perceptions might have been further influenced by the highly popular 2019 TV series *Chernobyl* that portrays the 1986 nuclear accident in the former Soviet Union.<sup>43</sup>

As for the ‘rogue states’ argument, our findings are in line with the Simons Foundation poll that indicated over 95% of Americans see the goal

Figure 2: **Percentage of 1,000 survey respondents who agreed with a given reason for the elimination of nuclear weapons**



Error bars represent 95% confidence intervals.

of preventing the spread of nuclear weapons as important, while 82% agree that countries that do not possess nuclear weapons should be prevented from developing them.<sup>44</sup> The problem of foreign ‘rogues’ seeking weapons of mass destruction has been a prominent theme in US politics since the 1990s,<sup>45</sup> and has strongly influenced the development of the country’s nuclear strategy since the end of the Cold War.<sup>46</sup> Iran’s breaches of non-proliferation norms, and North Korea’s clandestine development and testing of nuclear weapons and long-range ballistic missiles, have featured prominently in the foreign policies of several administrations since the early 2000s.<sup>47</sup> Yet diplomatic efforts have failed to resolve the issue, meaning there is still reason for Americans to perceive rogue states as a serious security threat, and even an existential threat in the case of North Korea, which has already acquired the capability to deliver its nuclear weapons on intercontinental ballistic missiles.<sup>48</sup>

### Choosing the right argument

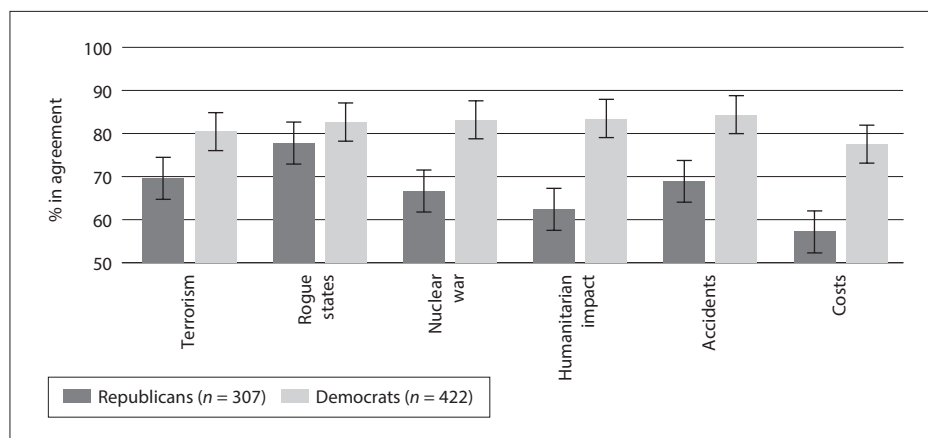
From the perspective of nuclear-disarmament advocates, it is useful to further disaggregate these findings in a way that allows campaigns to target their messaging to different subgroups. Figure 3 shows the relative persuasiveness of the six pro-disarmament arguments when survey respondents are broken down according to their party affiliation.

The data suggests that, for those who identify with the Democratic Party, all the arguments except for costs are similarly effective. In other words, Democrats seem responsive to five of the arguments about the desirability of nuclear disarmament and only slightly less so to the sixth.

Differences in the persuasiveness of individual arguments become much more prominent when we look at the Republican respondents. Among Republicans, the argument about nuclear-armed rogue states seems to be the most effective by far – perhaps not surprisingly, considering the prominence of the ‘rogue state’ narrative in the public discourse of Republican administrations since the Cold War.<sup>49</sup> Support drops for arguments about nuclear terrorism, accidents and nuclear war, and even more so for arguments about the humanitarian impact and costs of maintaining a nuclear arsenal.

These findings allow us to draw some tentative conclusions of potential use to disarmament campaigns. Importantly, the arguments about the possibility of nuclear accidents – frequently employed by ICAN and other pro-disarmament non-governmental organisations – can be safely used to target broad audiences irrespective of their political orientation. However, arguments about the humanitarian impact of nuclear-weapons use will likely resonate much less with Republican voters than with Democrats.

Figure 3: **Percentage of 1,000 survey respondents who agreed with a given reason for the elimination of nuclear weapons, by party affiliation**



Error bars represent 95% confidence intervals.

To persuade more conservative Republicans, who are less supportive of nuclear abolition overall, disarmament campaigns should consider using the ‘rogue states’ argument, which appears the most likely to influence their attitudes. The argument about nuclear terrorism – as used by Kissinger, Shultz, Perry and Nunn – appears to be relatively less persuasive for both groups. Finally, the argument concerning the high costs of nuclear arsenals underperforms with both Republicans and Democrats.

Even though respondents found some arguments in our survey to be less persuasive, this does not necessarily imply that disarmament advocates should completely avoid using them. Research on framing strategies in the field of human rights shows that the use of multiple frames does not detract from the effects of the most persuasive frame.<sup>50</sup> To maximise their chances of success, it may thus prove beneficial for disarmament advocates to incorporate additional arguments to expand their support base. To that end, the combination of arguments about the possibility of nuclear accidents and nuclear-armed ‘rogue states’ seems to be the most promising.

\*            \*            \*

Our research into the effectiveness of various arguments in favour of disarmament points to some promising avenues for further research. Firstly, while our data reveals some trends in attitudes towards specific arguments about the desirability of nuclear abolition, we currently do not have a clear answer as to *why* individuals hold these attitudes. Secondly, our research investigated only the most common arguments *in favour* of nuclear disarmament. Similar studies could be undertaken to examine why individuals *oppose* nuclear abolition – perhaps because they fear the instability that might result from the absence of nuclear deterrence, or because they worry about ‘cheaters’ who would maintain clandestine arsenals – and to devise specific counter-framing that could attempt to sway opponents in the other direction.<sup>51</sup>

Finally, our study shows that, as indicated in earlier polls, the American public in general is strongly supportive of global nuclear disarmament and would like to see the United States take the lead in bringing the world

closer to this goal. This finding militates against the notion that nuclear disarmament is a utopian fantasy. It is also true, however, that the pro-disarmament majority appears not very likely to make political choices on that basis. Nuclear disarmament has not been a particularly salient issue in the United States. In recent years there has been little public pressure on elected officials to take steps in this direction – particularly in comparison with the Cold War era. One possible explanation for this might be that many Americans are sceptical of the notion that a world without nuclear weapons is attainable given the contemporary geopolitical climate. Some people may perceive nuclear disarmament as a noble yet hardly realisable idea, something akin to ‘world peace’. Studies that might persuade the public about the *feasibility* of nuclear abolition may therefore be crucial for disarmament advocacy. As Margaret Beckett, then the UK’s secretary of state for foreign and Commonwealth affairs, stated in a 2007 address, ‘believing that the eventual abolition of nuclear weapons is possible can act as a spur for action on disarmament. Believing, at whatever level, that it is not, is the surest path to inaction.’<sup>52</sup>

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## Notes

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- <sup>23</sup> Harrington, Gheorghe and Fink, 'What Arguments Motivate Citizens to Demand Nuclear Disarmament?'
- <sup>24</sup> See Thomas C. Schelling, 'Thinking About Nuclear Terrorism', *International Security*, vol. 6, no. 4, 1982, pp. 61–77; Brian Michael Jenkins, *The Likelihood of Nuclear Terrorism* (Santa Monica, CA: RAND Corporation, 1985); Graham Allison, *Nuclear Terrorism: The Ultimate Preventable Catastrophe* (New York: Macmillan Press, 2004); Michael A. Levi, *On Nuclear Terrorism* (Cambridge, MA: Harvard University Press, 2009); and Charles D. Ferguson et al., *The Four Faces of Nuclear Terrorism* (Abingdon: Routledge, 2005).
- <sup>25</sup> See Shultz et al., 'A World Free of Nuclear Weapons'; Sam Nunn, 'Taking Steps Toward a World Free of Nuclear Weapons', *Dædalus*, vol. 138, no. 4, 2009, pp. 153–6; and Ban Ki-moon, 'Secretary-General's Remarks to Security Council Open Debate on the Non-proliferation of Weapons of Mass Destruction', 23 August 2016, <https://www.un.org/sg/en/content/sg/statement/2016-08-23/secretary-generals-remarks-security-council-open-debate-non>.
- <sup>26</sup> See Harrington, Gheorghe and Fink, 'What Arguments Motivate Citizens to Demand Nuclear Disarmament?', p. 257. The term 'rogue states' appears in quotation marks to highlight the highly politicised nature of the phrase. For some critical perspectives on the concept of 'rogue states', see Anna Geis and Carmen Wunderlich, 'The Good, the Bad, and the Ugly: Comparing the Notions of "Rogue" and "Evil" in International Politics', *International Politics*, vol. 51, no. 4, 2014, pp. 458–74; Wolfgang Wagner, Wouter Werner and Michal Onderco (eds), *Deviance in International Relations: 'Rogue States' and International Security* (London: Palgrave Macmillan, 2014); Alexandra Homolar, 'Rebels Without a Conscience: The Evolution of the Rogue States Narrative in US Security Policy', *European Journal of International Relations*, vol. 17, no. 4, 2011, pp. 705–27; Michal Smetana, *Nuclear Deviance: Stigma Politics and*



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- 27 See Tanya Ogilvie-White, 'The Defiant States: The Nuclear Diplomacy of North Korea and Iran', *Nonproliferation Review*, vol. 17, no. 1, 2010, pp. 115–38; Robert Litwak, *Outlier States: American Strategies to Change, Contain or Engage Regimes* (Washington and Baltimore, MD: Woodrow Wilson Center Press and Johns Hopkins University Press, 2012); and Michael Klare, *Rogue States and Nuclear Outlaws: America's Search for a New Foreign Policy* (New York: Hill and Wang, 1996).
  - 28 Shultz et al., 'A World Free of Nuclear Weapons'.
  - 29 See Bulletin of the Atomic Scientists, Science and Security Board, 'Closer than Ever: It Is 100 Seconds to Midnight', 2020 Doomsday Clock Statement, <https://thebulletin.org/doomsday-clock/current-time/>.
  - 30 See John Borrie, 'Humanitarian Reframing of Nuclear Weapons and the Logic of a Ban', *International Affairs*, vol. 90, no. 3, 2014, pp. 625–46; and Matthew Bolton and Elizabeth Minor, 'The Humanitarian Initiative on Nuclear Weapons: An Introduction to Global Policy's Special Section', *Global Policy*, vol. 7, no. 3, September 2016, <https://doi.org/10.1111/1758-5899.12326>.
  - 31 The humanitarian argument has also been used by the International Committee of the Red Cross (ICRC), Abolition 2000, Pax Christi, Women's International League for Peace and Freedom (WILPF), Mayors for Peace, International Physicians for the Prevention of Nuclear War (IPPNW) and even many pro-disarmament states, perhaps most prominently Austria. See, for example, 'Pledge Presented at the Vienna Conference on the Humanitarian Impact of Nuclear Weapons by Austrian Deputy Foreign Minister Michael Linhart', 8–9 December 2014, [https://www.bmeia.gv.at/fileadmin/user\\_upload/Zentrale/Aussenpolitik/Abruestung/HINW14/HINW14\\_Austrian\\_Pledge.pdf](https://www.bmeia.gv.at/fileadmin/user_upload/Zentrale/Aussenpolitik/Abruestung/HINW14/HINW14_Austrian_Pledge.pdf).
  - 32 See Scott Sagan, *The Limits of Safety: Organizations, Accidents, and Nuclear Weapons* (Princeton, NJ: Princeton University Press, 1995).
  - 33 See Patricia Lewis, Heather Williams and Benoît Pelopidas, 'Too Close for Comfort: Cases of Near Nuclear Use and Options for Policy', Chatham House Report, April 2014.
  - 34 See SIPRI, 'Sipri Yearbook 2019: Armaments, Disarmament and International Security', 2019, especially Part II, chapter 6, 'Overview', <https://www.sipriyearbook.org/view/9780198839996/sipri-9780198839996-chapter-6.xml#sipri-9780198839996-chapter-6-div1-033>. The costs argument has been frequently employed by ICAN, Greenpeace, the WILPF, the UK's Campaign for Nuclear Disarmament, the International Peace Bureau and more. See, for example, ICAN, 'Enough Is Enough: 2019 Global Nuclear Weapons Spending', May 2020, <https://d3n8a8pro7vhmxc.cloudfront.net/ican/pages/1549/attachments/original/1589365383/>

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- <sup>35</sup> Mian, 'Beyond the Security Debate: The Moral and Legal Dimensions of Abolition', p. 297.
- <sup>36</sup> US in the World Initiative, 'Talking About Nuclear Weapons with the Persuadable Middle', 2009, p. 2.
- <sup>37</sup> Nebel, 'The Nuclear Disarmament Movement: Politics, Potential, and Strategy', p. 239.
- <sup>38</sup> Harrington, Gheorghe and Fink, 'What Arguments Motivate Citizens to Demand Nuclear Disarmament?', p. 7.
- <sup>39</sup> See the appendix containing a comprehensive description of our data-collection method and the detailed results of our survey at [https://prcprague.cz/s/SVO\\_Survival\\_2021\\_Appendix.zip](https://prcprague.cz/s/SVO_Survival_2021_Appendix.zip).
- <sup>40</sup> World Public Opinion, 'Publics Around the World Favor International Agreement to Eliminate All Nuclear Weapons'; and Simons Foundation, 'Global Public Opinion on Nuclear Weapons', p. 15.
- <sup>41</sup> See Harrington, Gheorghe and Fink, 'What Arguments Motivate Citizens to Demand Nuclear Disarmament?', p. 7.
- <sup>42</sup> See Martin W. Bauer et al., 'The Fukushima Accident and Public Perceptions About Nuclear Power Around the Globe: A Challenge and Response Model', *Environmental Communication*, vol. 13, no. 4, 2019, pp. 505–26; and Michael Siegrist, Bernadette Sütterlin and Carmen Keller, 'Why Have Some People Changed Their Attitudes Toward Nuclear Power After the Accident in Fukushima?', *Energy Policy*, vol. 69, June 2014, pp. 356–63.
- <sup>43</sup> See, for example, Jessica R. Towhey, 'Will HBO's "Chernobyl" Miniseries Impact Perceptions of Nuclear Power?', *Inside Sources*, 23 June 2019, <https://www.insidesources.com/will-hbos-chernobyl-miniseries-impact-perceptions-of-nuclear-power/>.
- <sup>44</sup> Simons Foundation, 'Global Public Opinion on Nuclear Weapons', pp. 5, 6.
- <sup>45</sup> See Shereen Kotb and Gyung-ho Jeong, 'The US Congress and Rogue States', *Foreign Policy Analysis*, vol. 17, no. 3, July 2021, pp. 1–20.
- <sup>46</sup> See David S. McDonough, *Nuclear Superiority: The 'New Triad' and the Evolution of Nuclear Strategy*, Adelphi 383 (Abingdon: Routledge for the International Institute for Strategic Studies, 2006); and Michal Smetana, 'A Nuclear Posture Review for the Third Nuclear Age', *Washington Quarterly*, vol. 41, no. 3, 3 July 2018, pp. 137–57.
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- <sup>48</sup> On the threat from North Korea, see Michael Elleman, 'The Secret to North Korea's ICBM Success', *Survival*, vol. 59, no. 5, October–November 2017, pp. 25–36.
- <sup>49</sup> See Robert I. Rotberg (ed.), *Worst of the Worst: Dealing with Repressive and Rogue Nations* (Washington DC and Somerville, MA: Brookings Institution Press, 2007); Alexander T.J. Lennon and Camille Eiss, *Reshaping Rogue States: Preemption, Regime Change,*

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<sup>50</sup> See Kyla J. McEntire, Michele Leiby and Matthew Krain, 'How Combining Framing Strategies Affects Human Rights Micromobilization', *Research & Politics*, vol. 4, no. 2, 2017, pp. 1–11.

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<sup>52</sup> Margaret Beckett, 'Keynote Address: A World Free of Nuclear Weapons?', remarks at the Carnegie International Nonproliferation Conference, 25 June 2007, <https://carnegieendowment.org/2007/06/25/keynote-address-world-free-of-nuclear-weapons-event-1004>.