

## Philanthropy, Nuclear Nonproliferation, and Threat Reduction

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In this essay, I analyze several case studies that illustrate the role of philanthropy in promoting nuclear nonproliferation and threat reduction and examine the evidentiary bases behind their claims of impact. The influence of social movements, activism, public opinion, and philanthropy on national security policy is notoriously difficult to measure: policymakers are reluctant to credit outsiders for fear of looking weak, while accounts of social movements are often written by participants or by people sympathetic to movements' goals. Furthermore, when sources do credit philanthropy with achieving nonproliferation or threat reduction, their assertions are most often vague or difficult to verify. Nonetheless, these sources, flawed as they are, offer evidence that philanthropy has influenced threat reduction (including nuclear nonproliferation) and highlight the need for continued research on the subject. This essay proceeds chronologically, covering threat reduction from the early 20th century through the Second World War, then Cold War nonproliferation, and lastly post-Cold War nonproliferation and threat reduction. The final section covers in detail the activities of the Ploughshares Fund and the Nuclear Threat Initiative (NTI) and looks closely at philanthropy's influence on the Iran nuclear agreement of 2015.

Activists, philanthropists, and ordinary citizens have dedicated a tremendous amount of time and money to nuclear arms control, disarmament, and nonproliferation. Although observers tend to lump arms control and disarmament together, they are distinct: arms control aims to limit the use or number of nuclear weapons, whereas disarmament aims to eliminate nuclear weapons from arsenals and has therefore been exceedingly rare. Moreover, nonproliferation is also distinct, involving efforts to ensure that countries and other entities without nuclear weapons do not develop or acquire them. In fact, nonproliferation can be in complete opposition to arms control and disarmament because it codifies nuclear powers' right to maintain and further develop nuclear weapons while forbidding other nations to do so. To nations that premise their national security on nuclear deterrence, nonproliferation provides an important measure of security and threat reduction. Many nonnuclear countries, meanwhile, have argued that nonproliferation, especially as practiced by the United States and Russia, merely maintains a status quo nuclear caste system whereby powerful, nuclear-armed nations dominate the weak; a French policymaker once vividly described nonproliferation as the neutering of the impotent (Seaborg 1987, 356). The current nonproliferation regime, established by the 1968 Nuclear Nonproliferation Treaty (NPT), pledges the signatories with nuclear weapons to pursue disarmament, though the signatories have not always taken this provision seriously. Nonproliferation, then, appears insulated from broader antinuclear causes, and the actors involved are restricted more to nation states and a handful of elite foundations.

Nuclear security is clearly affordable for governments: according to the Project on Managing the Atom at the Harvard Kennedy School, \$500 million (a small portion of the US defense budget) “can be spent flexibly on high-priority actions to reduce the risk of nuclear theft as they arise” (Bunn 2008, x, xvii–xviii, 124). In fact, money may not be the most important factor: one study found that limited cooperation between nations is a much bigger challenge than budget constraints (Bunn 2008, xvii–xviii, 124). Even so, what is affordable for a government is not necessarily affordable for a philanthropic organization. According to the Peace and Security Funders Group, between 2008 and 2011, 43 foundations provided \$130 million in grants to individuals and nongovernmental organizations working on nuclear security, with just three foundations (the Carnegie Endowment for International Peace [CEIP], the MacArthur Foundation, and the Ploughshares Fund) providing two-thirds of that funding.<sup>1</sup> According to a 2013 estimate, the US government spends \$56 billion annually on nuclear weapons, whereas foundations on average distribute \$33 million in grants annually to nuclear security causes; a 2017 study found 203 grants totaling \$48.1 million (Cirincione 2013, 183).<sup>2</sup> Large-scale threat reduction is, according to one analyst, “a multimillion dollar job requiring a high degree of technical expertise, elaborate security precautions, and the cooperation of dozens of government agencies” (Taubman 2012, 61). To take one example, the Global Threat Reduction Initiative, begun under President Obama, spent \$60 million of taxpayer money in Poland in 2010 on “an unusual amalgam of diplomacy, technology, and bribery” to convince Polish officials it made sense to dispose of their highly enriched uranium. The removal of the Polish fuel “was an intricately choreographed operation akin to a complex military maneuver, requiring the precise coordination of hundreds of preparatory and operational steps involving Americans, Russians, and Poles” (Taubman 2012, 61–63). Though not impossible, philanthropy’s direct achievement of nonproliferation and threat reduction appears to be limited to the most elite and wealthy groups and donors, such as Warren Buffett (discussed later). Philanthropic money has had more influence by funding organizations aimed at swaying public opinion, lobbying, and petitioning governments, and such funding appears able to strongly influence threat reduction and nuclear nonproliferation: the examples cited in this essay demonstrate that well-funded campaigns aimed at influencing policymakers, congressional debate, and presidential candidates—campaigns that are usually combined with access to political elites—can push US leaders toward nuclear nonproliferation and threat reduction.

## Threat Reduction from the Imperial Age to the World Wars

Although the term “threat reduction” emerged relatively recently, the concept has existed as long as nations have attempted to reduce the risk of war. During the age of imperialism in the 19th century, the rapid expansion of military and communications technology drastically reduced the amount of time it took to mobilize a nation’s troops and start a war. During the same period, the dwindling number of noncolonized regions heightened imperial competition over remaining lands, risking large-scale conflict. At international conferences held at The Hague in 1899 and 1907, the western empires attempted to

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<sup>1</sup> That study is discussed in Cirincione (2013, 185–86).

<sup>2</sup> “Peace and Security Funding Index: An Analysis of Global Foundation Grantmaking: 2019 Edition,” Candid, accessed October 29, 2020, <https://www.issuelab.org/resources/35761/35761.pdf>.

agree on methods of arbitrating international disputes to avoid recourse to war. These efforts failed fantastically with the onset of the First World War, after which the western powers tried again with the Kellogg-Briand Pact of 1928. Although now mocked for trying to outlaw war, the pact was an important show of internationalism during a supposedly isolationist era. The League of Nations, another attempt to arbitrate international disputes, likewise failed to prevent the Second World War. The United Nations, created in 1945, represented yet another attempt to resolve conflicts peacefully, with mixed results. Lastly, the Geneva Conventions, now nearly 70 years old, set guidelines for limiting the loss of civilian lives during war but did little to stop war itself.

These measures involved nation states and international diplomatic agreements, although philanthropy played a role in reflecting and catalyzing public opinion. For example, the Nobel Peace Prize, created at the dawn of the 20th century, aimed to reward peacemakers, and the Carnegie Endowment for International Peace, founded in 1910, attempted to reduce the threat of war by putting \$10 million and Andrew Carnegie's prestige behind the cause of peace. Most often, CEIP funded studies of the causes of war, international cooperation, international law, court decisions, munitions industries, and the settlement of international disputes. In a different vein, CEIP also financed a production of Euripides's antiwar play *The Trojan Women* that toured the US around the time of World War I. Despite his good intentions, Carnegie's efforts, as one historian writes, had "no power to force anyone to do anything meaningful to create a more peaceful world" (Kazin 2017, 2, 7, 45). Fellow industrialist Henry Ford also dedicated money (though far less than \$10 million) to the cause of peace. After meeting peace activist Jane Addams, Ford promised to "devote [his] life" to stopping World War I. In a quixotic effort, he hired a ship, filled it with a motley crew of activists and oddballs, and arrived in Norway in 1916 in hopes of having neutral nations agree to a peace plan to end the conflict. The conference went nowhere, though Ford received praise for trying to do *something* to end the slaughter (Kazin 2017, 69–76).

A grassroots peace movement based on voluntary membership and donations also emerged just before, during, and after World War I. The movement comprised prominent people like Addams and important groups including the Fellowship of Reconciliation (1914), the Women's International League for Peace and Freedom (known as the Woman's Peace Party before 1915), the American Friends Service Committee (1917), and the War Resisters League (1923). Between the world wars, the World Federalist Movement made yet another attempt to create a supranational government to settle disputes without violence. Many long-standing groups merged into the United World Federalists in 1947, but in the wake of World War II and with the onset of the Cold War, pacifism and world federalism fell out of favor as methods of preventing conflicts between the major powers.

## The Cold War and Nuclear Nonproliferation

Despite a massive antinuclear movement during the Cold War, preventing the spread of nuclear weapons to nonnuclear nations remained a concern mostly of elite policymakers rather than activists or philanthropic benefactors. Most antinuclear activists opposed the spread of nuclear weapons, to be sure, but so did the nations that already possessed them. Besides the relationships established through the North Atlantic Treaty Organization and the Warsaw Pact, states generally had no interest in sharing

their nuclear weapons. Even ostensible allies, such as the Soviet Union and the People's Republic of China, refused to cooperate on nuclear weapons development. In 1962, the Cuban Missile Crisis showed how seriously the US took the transfer of nuclear weapons even among Soviet allies outside the Warsaw Pact. Citizens and their governments usually agreed on this subject—Indian activists, for example, did not have to convince their leaders to oppose Pakistani nuclear weapons.

Early Cold War nonproliferation proposals, from the Franck Report to the Baruch Plan to Atoms for Peace, were either disingenuous—intended to monopolize atomic weapons for the US—or, if genuine, scuttled by Red Scare paranoia (Cirincione 2008, 15). In the 1960s, enthusiasm for nonproliferation revived in earnest, beginning with the 1963 Limited Test Ban Treaty, continuing with the signing of NPT in 1968, and culminating in its ratification in 1970. But the impetus for and funding of nonproliferation efforts stemmed largely from government (or quasi-government) sources, such as the UN Atomic Energy Commission, the International Atomic Energy Agency, the European Atomic Energy Community, and the US Atomic Energy Commission. The current nonproliferation regime was established by diplomatic negotiations and binding agreements; individual persuasion was also a preferred tactic, as Lyndon B. Johnson assigned Glenn Seaborg (chair of the UN Atomic Energy Commission) to personally convince Australia, Brazil, India, Israel, and Pakistan to forgo nuclear weapons (Seaborg was only partially successful) (Seaborg 1987, 249–59). Histories of nuclear arms control indicate that it was policymakers and statesmen who put nonproliferation on government agendas during the Cold War, not activists or philanthropic foundations. United States antinuclear groups of that period were much more concerned with the threat of nuclear fallout and with achieving a nuclear test ban.

Though activism and philanthropy are not foremost in Cold War threat reduction scholarship, Shane Maddock's history of nonproliferation and Hal Brands's history of the LBJ administration's arms control achievements show that antinuclear activists and organizations embraced the cause to an extent (Brands 2006, 253–85). Fears of proliferation grew in 1960 with the French nuclear test and soared in 1964 when China joined the nuclear club. In those years, the prominent antinuclear figures Norman Cousins, a journalist, and Leo Szilard, a nuclear physicist, relying on their own charisma, managed to float ideas of nuclear disarmament and nonproliferation to President Kennedy and Soviet leader Nikita Khrushchev, respectively (Maddock 2010, 198). Szilard convinced Khrushchev to establish a direct line of communication (the so-called hotline) between the White House and the Kremlin, and Cousins contributed to Kennedy's 1963 American University speech, which has been credited with spurring negotiations for the Limited Test Ban Treaty and inaugurating the era of détente. (Primarily an arms control measure, the Limited Test Ban Treaty had aspects of nonproliferation, specifically ensuring that West Germany would not acquire or possess nuclear weapons.) Both men led antinuclear efforts and raised money in different ways, though neither relied especially on philanthropic organizations: Cousins raised thousands of dollars for various peaceful causes through appeals in his *Saturday Review* magazine, and Szilard created the Council for a Livable World (CLW), asking people to donate a certain percentage of their income to antinuclear politicians. That said, it bears noting that their influence owed as much to their fame and access to world leaders as to their funding (CLW continues to rely on relatively small public donations). While researching CLW, I found archival materials, including press releases and fundraising appeals, in which the group took credit for aiding the

election or reelection of dozens of senators and representatives since its founding. Candidates that CLW supported in 1962 (not long after its founding) included Senators Joseph Clark (Pennsylvania), Wayne Morse (Oregon), and George McGovern (South Dakota), all Democrats who supported arms control and disarmament (Rubinson 2017). Given the myriad factors determining a congressional candidate's victory in a given election, though, it would seem too much to give major credit to CLW's efforts.

Indeed, a preliminary look at sources on these 1962 elections suggests CLW support was not especially influential in these candidates' victories. In the early 1960s, Clark was known for his support of civil rights, particularly his role in drafting the civil rights plank for John F. Kennedy's New Frontier agenda. Newspaper sources discussing his 1962 reelection credit Kennedy's endorsement of Clark and his numerous campaign appearances on Clark's behalf. Funding from CLW may have helped, as Clark defeated his GOP challenger by just 104,000 votes, but CLW's nuclear concerns do not appear in these accounts (Clark 1991).<sup>3</sup> Morse's 1962 campaign contrasts starkly with Clark's, as he "easily won reelection to the Senate," according to an Oregon newspaper. Morse was most famous as a critic of US policy in Vietnam and of US foreign policy in general, though Vietnam could only have been a side note in a 1962 election. Obituaries of Morse focus almost entirely on his ardent opposition to the Vietnam War; nuclear weapons are not mentioned.<sup>4</sup> Likewise, coverage of McGovern's 1962 election does not mention nuclear weapons. A *New York Times* article from the campaign trail notes that McGovern's appeal to South Dakota voters was based on support for the New Frontier program, the Kennedy administration's farm program, and medical care.<sup>5</sup> Considering that the 1962 senatorial elections occurred less than a month after the Cuban Missile Crisis, which Kennedy received almost universal praise for managing, one would expect nuclear weapons to have been an important issue for voters and to have even helped candidates from the president's party, such as Clark, McGovern, and Morse. Yet one historian who has considered this question surprisingly found that the Cuban Missile Crisis had little effect on that year's midterm elections (Coleman 2014). (These findings about the impact that CLW may have had are of course tentative, as substantive research into the archives and newspapers could reveal a different conclusion or a fuller picture. The Council for a Livable World was also active during the 1980s, when antinuclear activism peaked. While researching that period, I found that CLW devoted tremendous amounts of effort and money to defeating Ronald Reagan in the 1984 election, and the group felt utterly defeated after Reagan's landslide victory [Rubinson 2017, 139].)

Other opposition to nuclear proliferation in the 1960s took aim at the Multilateral Force (MLF), a US proposal to create a nuclear weapons force for the North Atlantic Treaty Organization. Maddock lists CLW, the Committee for a Sane Nuclear Policy, and Women Strike for Peace as opponents of MLF, which was quite clearly a form of proliferation. Although the Johnson administration gave up on MLF, it

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<sup>3</sup> "Joseph Clark, Former Senator and Philadelphia Mayor, Dies," *Washington Post*, January 16, 1990, <https://www.washingtonpost.com/archive/local/1990/01/16/joseph-clark-former-senator-and-philadelphia-mayor-dies/c40a8d18-dfca-4f99-a973-770a0711c2c8/>.

<sup>4</sup> "Morse loses last of many battles," *Eugene Register-Guard*, July 22, 1974.

<sup>5</sup> Donald Janson, "McGovern Wages Uphill Battle in Senate Race in South Dakota," *New York Times*, October 20, 1962, <https://www.nytimes.com/1962/10/20/archives/mcgvorn-wages-uphill-battle-in-senate-race-in-south-dakota.html>.

is not at all clear that these organizations influenced the debate much: Johnson dealt away MLF as a bargaining chip when negotiating NPT with the Soviets (Brands 2006, 262–70; Maddock 2010, 225, 261). After NPT was ratified, according to former secretary of defense William Perry, nonproliferation was not a priority during the 1970s (Perry 2015, 56). In fact, one could argue that progress was drastically reversed during that decade as India went nuclear (inspiring Pakistan to follow suit), South Africa began its nuclear weapons program, and a journalist revealed that Israel possessed nuclear weapons.

Evaluating the success of the nonproliferation regime depends on perspective—nine nations possess nuclear weapons, which might make NPT seem like a failure. But the Kennedy administration had, in the early 1960s, identified some two dozen nations it worried might go nuclear. Indeed, far more nations could have nuclear weapons, but Egypt, Italy, Japan, Norway, Sweden, and West Germany abandoned their nuclear programs before NPT, and 16 more have done so since it took effect (these are Argentina, Australia, Belarus, Brazil, Canada, Iraq, Kazakhstan, Libya, Romania, South Africa, South Korea, Spain, Switzerland, Taiwan, Ukraine, and Yugoslavia) (Cirincione 2013, 154). In sum, it can be argued that the activism and philanthropy aimed at NPT made some modest contributions to the nonproliferation cause, but it is unlikely that they were deciding factors. That treaty served the interests of the leaders of the nuclear states, who were not inclined to pay attention to antinuclear activists. It would almost certainly have been achieved even without any impetus from the public for nonproliferation.

Many groups interested in arms control and nonproliferation, including CEIP, CLW, and the Federation of American Scientists (FAS) did their best to sway policymakers toward nonproliferation and threat reduction by testifying at congressional hearings during the Cold War. While their impact in doing so cannot be quantified, it is reasonable to think their testimony swayed some legislators, as historical studies of arms control and disarmament have shown that congressional testimony did influence nuclear policy in general and the Atomic Energy Act of 1946 and the Limited Test Ban Treaty in particular.<sup>6</sup> The physicist George Rathjens, for instance, represented CLW and FAS at 1972 hearings where he testified in favor of the Anti-Ballistic Missile Treaty, which was ratified by the Senate. It cannot be said that such testimony was determinative, but having researched thousands of pages of congressional testimony, I can say that members of Congress usually took such testimony seriously when weighing the decisions before them.

To a lesser extent, the Cold War era also saw momentum toward eliminating the threat of chemical weapons. Although FAS directed most of its effort toward antinuclear activities, it also addressed chemical weapons, especially during the Vietnam War. The group originated as the Federation of Atomic Scientists in 1945, relying on membership fees and donations; it grew so quickly that it soon

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<sup>6</sup> The Federation of American Scientists and other scientists' organizations very clearly swayed public and congressional opinion against the May-Johnson Bill and motivated Brien McMahon to submit his own atomic energy bill, which passed as the Atomic Energy Act. Scientists' efforts included lectures, articles, and lobbying (Boyer 1994, 52). Moreover, scientists from the United States and the Soviet Union did a great deal to establish basic agreement on what a nuclear test ban would look like during negotiations, and they provided many hours of congressional testimony in favor of the Limited Test Ban Treaty.

broadened its name and efforts. Though current FAS donors include the Carnegie Corporation, the Hewlett Foundation, the MacArthur Foundation, and the Ploughshares Fund, the group started with a \$10,000 grant from the University of Chicago. Later that decade, the Emergency Committee of Atomic Scientists, chaired by Albert Einstein, raised funds for FAS and other groups by appealing to the public and to scientists for donations (Wittner 1995, 59). Advocating chemical threat reduction, FAS criticized biological and chemical weapons and supported US ratification of the Geneva Protocol, while the Pugwash conferences of scientists attempted to devise a treaty to ban production of such weapons and its members inspected labs in Austria, Czechoslovakia, Denmark, and Sweden. (For an account of philanthropic funding of Pugwash, see my 2019 [essay](#).) The Stockholm International Peace Research Institute produced much research on biological and chemical warfare, while smaller groups, such as the Union of Concerned Scientists and Physicians for Social Responsibility, protested US use of chemical weapons in Vietnam (Cirincione 2008, 131; Guillemin 2005, 117–18). Scientists' efforts did have some impact: in 1965, Secretary of Defense Robert McNamara halted the use of tear gas in Vietnam, though he soon reinstated it. Scientists successfully challenged the use of defoliants in Vietnam, winning tough restrictions on Agent Orange in 1969 (Bridger 2015, 81–114). The sources that refer to these minor victories attribute them to individual initiative. Historian Sarah Bridger, for example, shows that opposition to chemical weapons in Vietnam came from scientists—some of whom had conducted research that led to the development of those chemicals—allied with presidential science advisors including Donald Hornig and Lee DuBridge, who recommended against the use of tear gas and Agent Orange, respectively. However, although this faction sometimes succeeded in restraining the use of chemical weapons, it was usually overruled by the Pentagon, which had scientific experts who advocated the use of chemical weapons. Further research into activists who belonged to this faction (e.g., Eugene Rabinowitch, Bernard Feld, Arthur Galston, and Matthew Meselson) and interviews with those still living could demonstrate how much philanthropy contributed to their efforts, though available research suggests that these scientists acted as individual academics or government advisers. Notably, Feld and Rabinowitch were leaders of the US Pugwash group that relied heavily on philanthropy, although Pugwash never prioritized chemical weapons.

Control of chemical weapons seemed closer when the Nixon administration signed the Biological Weapons Convention and the Ford administration ratified the Geneva Protocol (Cirincione 2008, 35). However, much of this success occurred because of a significant loophole: the term “biological weapon” was defined to refer only to certain classes of chemicals that actually excluded herbicides and defoliants, the chemical agents most often used in the Vietnam War. For the most part, opposition to chemical and biological weapons during the Vietnam War was framed not as threat reduction but as opposition to an immoral practice, though chemical and biological weapons are included in present-day threat reduction.

## **Nunn-Lugar and Cooperative Threat Reduction**

The end of the Cold War saw the beginning of cooperative threat reduction, which involved efforts to secure Soviet nuclear sites, weapons, waste, and scientists. The Nunn-Lugar Cooperative Threat Reduction program, named after its Senate sponsors Sam Nunn (D-GA) and Richard Lugar (R-IN), was

developed in response to the tremendous uncertainty about the Soviet Union’s nuclear arsenal in the wake of its 1991 collapse, an arsenal that US leaders referred to as the “inheritance from hell.” Biographies of Lugar attest (though without elaboration) that the Carnegie Corporation “played a role” supporting the passage of Nunn-Lugar (Diller and Stefani 2019, 137).

Benjamin Soskis’s 2013 report to GiveWell’s (now Open Philanthropy’s) history of philanthropy project elaborates on the role of philanthropy in this effort, finding that contributions from the Carnegie Corporation and MacArthur Foundation were an “enormous success” in getting the Nunn-Lugar program going. The evidence behind this assertion is robust: for example, Carnegie and MacArthur grants funded reports on the potential danger of so-called loose nukes that convinced the Senate of the urgency of the problem and of the need to spread knowledge about such dangers. Although Soskis notes that Senator Nunn may have pursued such a program without the influence of philanthropy, he argues that philanthropy at least catalyzed the process. This seems the likeliest scenario, as it is reflected in other literature about cooperative threat reduction. After all, it took very little to convince politicians that loose nukes were a threat to US national security—the dilemma was what to do about it. As Soskis recognizes, giving money directly to Russia looked bad, but the data and recommendations crafted with philanthropic grants were so specific and convincing (perhaps even to the point of being incorporated into the wording of the legislation) as to demonstrate that money going to Russia would serve US national interests.<sup>7</sup>

As a nonproliferation and threat reduction program, Nunn-Lugar succeeded beyond all expectations as Belarus, Kazakhstan, and Ukraine peacefully gave up their nuclear weapons; later, one scientist involved in the program praised the efforts and resources the US government provided, writing that “science and diplomacy served each other to avert the nuclear dangers that arose with the breakup of the Soviet Union” (Hecker 2016, xxv). Moreover, a Lugar biography states that the program eliminated 7,617 warheads, 926 intercontinental ballistic missiles, 906 air-to-surface missiles, 695 submarine-launched ballistic missiles, and 33 nuclear silos (Diller and Stefani 2019, 140). However, from a longer-term geopolitical perspective, the program’s impact can seem more ambiguous. Although Russia had the infrastructure and expertise to inherit the former Soviet states’ nuclear weapons, it has hardly been an ally of the West. The geopolitical map might well look different if, say, Ukraine had somehow retained its nuclear weapons: the US might have been better served in the long run if its ally Ukraine had a nuclear deterrent against Russia.

Other threat reduction initiatives stemming from Nunn-Lugar, either formally or informally, included the Initiatives for Proliferation Prevention, which paired American firms including Halliburton with former Soviet weapons scientists, and the US Civilian Research and Development Foundation, a nonprofit that was started by the State Department to move Eurasian science industry away from weapons research and that assisted 6,600 scientists, most of them in Ukraine (Busch and Joyner 2009, 310). Funding came from the US Department of Energy, defense contractors, and private laboratories that participated in the program. It appears that the impetus for these initiatives came not from

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<sup>7</sup> For Soskis’s case study on Nunn-Lugar, see Open Philanthropy’s account of its History of Philanthropy project at <https://www.openphilanthropy.org/research/history-of-philanthropy>.

philanthropic efforts but from government, private industry, and national laboratories. This does not mean there was no role for philanthropy, but the (admittedly scant) materials that discuss these programs do not mention any. More research on this front might be useful.

After the so-called loose Soviet nukes were secured, nuclear terrorism and rogue states came to be seen as the greatest nuclear danger to the West. Despite the success of Nunn-Lugar, many feared that terrorists might access inadequately guarded stockpiles of potential bomb material located well outside the former Soviet Union, as when a South African nuclear facility was raided in 2007 (Bunn 2008, v; Taubman 2012, 42). After the 9/11 terrorist attacks, the Bush administration launched threat reduction efforts to address these nuclear dangers, including the Global Threat Reduction Initiative, the Global Initiative to Combat Nuclear Terrorism, and the Domestic Nuclear Detection Office. According to one analysis, “These programs are excellent investments in U.S. and world security, deserving strong support” (Bunn 2008, 13). As with earlier threat reduction initiatives, funding came from government sources, particularly the Department of Energy and the Pentagon. The Bush administration also joined the G8 Global Partnership against the Spread of Weapons and Materials of Mass Destruction, to which the US and Russia each pledged \$10 billion over 10 years (the other G8 states committed a combined \$10 billion over that period) (Bunn 2008, 20, 69, 134; Nikitin and Woolf 2013). If philanthropy played a role in these programs, evidence would be found in archival materials relating to them. However, primary sources on these programs are unlikely to be available because they are so recent. Government sources typically remain closed for 20 or more years after being created, and sources involving nuclear weapons and energy are even more restricted.

Nonetheless, it seems fair to give philanthropy some credit for these initiatives because they appear to be a direct outgrowth of the Nunn-Lugar program, whose development philanthropy significantly assisted. Nunn-Lugar demonstrated that the threat of nuclear weapons outlasted the Cold War, and although it addressed the weapons of the former Soviet Union, it was not meant to cover nuclear threats from other nations or groups. However, Nunn and Lugar clearly hoped threat reduction would expand beyond the US and Russia. For example, both senators endorsed the George W. Bush administration’s plans for a cooperative agreement with Russia aimed at curbing Iranian nuclear ambitions and expanding the US global nuclear energy program.<sup>8</sup> (It bears mentioning that the Bush administration did tremendous harm to the nonproliferation regime by abrogating arms control treaties and supporting nuclear energy development in India in defiance of NPT.)

## The Ploughshares Fund and Threat Reduction

Though few in number, the philanthropic institutions that have focused on threat reduction are prestigious. The MacArthur Foundation, for example, awarded \$13.4 million to 16 nuclear security organizations in 2012 to train “nuclear experts to make policy recommendations for preventing nuclear terrorism and enhancing nuclear non-proliferation.” According to the foundation’s website, it has maintained that commitment, having given \$98.5 million to 85 organizations since 2014 (Cirincione

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<sup>8</sup> “U.S.-Russian Nuclear Agreement Raises Serious Concerns,” Robert Alvarez, *Bulletin of the Atomic Scientists*, June 16, 2008, <https://thebulletin.org/2008/06/u-s-russian-nuclear-agreement-raises-serious-concerns/>.

2013, 175). The foundation expects its investments to “contribute to a stronger, more stable nuclear regime, a more influential nuclear field, and stronger relationships between key countries on nuclear issues. Long term, we seek increased adoption and implementation of policies to end the production and eliminate the stockpiles of weapons-usable material.”<sup>9</sup> The impact of this money is difficult to assess; as of this writing, the MacArthur Foundation does not appear to have posted any evaluations of its recipients’ achievements. Assessing the impact of these projects would require determining what each recipient has done with its funding and then researching the results.

The philanthropy that appears most in accounts of nuclear threat reduction is the Ploughshares Fund, which since 1981 has engaged in efforts to meet the “global threat of nuclear weapons” (Cirincione 2013, 176). In 2010, it had a \$10 million budget and distributed \$6.2 million in grants aimed at reducing nuclear arsenals, reducing conflict, and preventing nuclear proliferation. Despite this long-standing work, there appears to be little scholarship on the Ploughshares Fund; the information I’ve gathered comes mostly from a book written by its current president, Joseph Cirincione. He notes that at least one study of large-scale philanthropy has praised Ploughshares for “using its budget with strategic brilliance” to fund campaigns to ban land mines and support private negotiations between US analysts and North Korean officials. This assessment appears in Paul Brest and Hal Harvey’s *Money Well Spent: A Strategic Plan for Smart Philosophy* (2008), which bills itself as a “car repair manual” for strategic philosophy. The book hardly provides an in-depth analysis of Ploughshares: the foundation only appears on one of its nearly 300 pages and does not appear at all in the 2018 second edition. Brest and Harvey’s book is based on a “large-scale study” of the philanthropic industry and is not a large-scale study of Ploughshares. Further research on Ploughshares shows that Cirincione has a tendency to attribute success and influence to Ploughshares without laying out robust evidence (besides his own testimony) for his claims.

Ploughshares, along with the Stimson Center, also funded the Campaign for the Non-Proliferation Treaty (CNPT), which in the 1990s united arms control organizations to promote the extension of NPT. Efforts of the campaign included drafting briefing papers and setting up discussions with the chair of the NPT Review Conference, the US secretary of energy, and other influential figures. Cirincione writes that CNPT “achieved its goal,” and to be sure, NPT was renewed indefinitely in 1995 (2013, 176–79, 182). That said, support for his suggestion that CNPT deserves credit for this is mixed. On the one hand, the *New York Times* quoted Cirincione in an article about NPT’s renewal and mentioned CNPT by name. In addition, the fact that the treaty lacked enough votes for renewal when negotiations began suggests CNPT’s efforts were worthwhile. However, the US government supported renewal from the start—opposition to renewal came less from within the United States than from developing nations. Furthermore, Secretary of State Madeleine Albright did not mention the group in her comments on the successful renewals. Such nonrecognition by policymakers is not unusual, but it remains possible that

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<sup>9</sup> “Nuclear Challenges,” MacArthur Foundation, accessed November 11, 2020, <https://www.macfound.org/programs/nuclear/strategy/>.

official diplomacy with developing nations was the determining factor in the treaty's renewal.<sup>10</sup> I was unable to find works that investigate whether Cirincione's claims hold up to scrutiny. The *Bulletin of the Atomic Scientists* would be the logical place to find contemporary discussion of the NPT renewal and the groups involved, but its site has nothing on CNPT, although it bears noting that the site's search capability seems inadequate. More evidence with which to judge the claim of impact might be found by asking relevant actors (for example, policymakers in Albright's state department) involved in the NPT renewal debate about the role of Ploughshares and CNPT.

Cirincione appears especially proud of Ploughshares' leadership of a public awareness campaign in support of the New START Treaty during the Obama administration. In this campaign, Ploughshares collaborated with CLW, the Arms Control Association, the American Values Network, the American Security Project, the National Security Network, ReThink Media, and dozens of other organizations. Ploughshares' campaign pressured military and national security leaders to support the treaty, lobbied editorial boards to endorse it, and mobilized constituents in states represented by senators holding key swing votes in the ratification debate. The campaign also funded lobbyists, researchers, call centers, advertisements in newspapers, and semiweekly emails to congressional offices, journalists, and experts. Ultimately, the treaty passed the Senate by a vote of 71 to 26 on December 22, 2010, reducing the number of nuclear warheads in both the US and Russia from 2,200 to 1,550 and imposing a limit on the number of launchers deployed to 700 (Taubman 2012, 364–66).

Ploughshares' role was at least significant enough for the press to turn to Cirincione for comments when the treaty passed.<sup>11</sup> This attention, however, might reflect the group's capacity for public relations more than its actual influence. So the question remains: would New START have passed without Ploughshares' efforts? Although the final tally of 71 to 26 votes suggests the treaty passed with relative ease, 67 votes were needed, meaning it received only four more than necessary. Moreover, as soon as the treaty was signed, observers anticipated a "tortuous" approval process, given the "bitterly divided" Senate whose Republican minority hoped to thwart Obama at every turn. Hopes for GOP support seemed to vanish when John McCain (R-AZ), whose vote the Obama administration anticipated, turned against the agreement. Three other Republicans (Jon Kyl [R-AZ], Jeff Sessions [R-AL], and James Inhofe [R-OK]) who supported such a treaty in principle also ended up voting against it. Getting 13 Republican senators to vote for the treaty was actually a tremendous achievement.<sup>12</sup> The successful vote also overcame an "unwarranted...delaying tactic": Kyl's demand that the negotiation records be released, based on his belief that the agreement included a secret US promise to disarm unilaterally.<sup>13</sup> Thus, it

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<sup>10</sup> Barbara Crossette, "Treaty Aimed at Halting Spread of Nuclear Weapons Extended," *New York Times*, May 12, 1995, <https://www.nytimes.com/1995/05/12/world/treaty-aimed-at-halting-spread-of-nuclear-weapons-extended.html>.

<sup>11</sup> Alan Greenblatt, "In Win for Obama, New START Clears Senate," *NPR*, December 22, 2010, <https://www.npr.org/2010/12/22/132235420/after-new-start-arms-control-gets-more-difficult>.

<sup>12</sup> John Isaacs, "START Follow-on: The Senate Calculus," *Bulletin of the Atomic Scientists*, March 29, 2010, <https://thebulletin.org/2010/03/start-follow-on-the-senate-calculus/>.

<sup>13</sup> Kingston Reif and Travis Sharp, "Sharing New START's negotiating record is unwarranted," *Bulletin of the Atomic Scientists*, September 17, 2010.

seems fair to say that ratification was by no means assured, and that Ploughshares' efforts, though not undeniably influential, cannot be dismissed as inconsequential.

New START was a treaty, and treaties create extensive public records. The influence of Ploughshares on New START, then, should be fairly straightforward to investigate. Researchers could consult the records of senators who voted for it, interview senators' staffers, examine their public statements, parse Senate hearings on the treaty, and scan the *Congressional Record*, among other sources. Little of this work, though, appears to have been done.

In his analysis of New START, Cirincione quotes one survey that found that the Ploughshares campaign "made a difference" on the treaty ratification debate. The validity of this claim is difficult to determine because the survey remains unpublished, but skepticism might be warranted given it was conducted by ReThink Media, which actively participated in the New START campaign. In fact, efforts to learn more about the survey have been continually frustrated, yielding no indication of its content. The website Influence Watch [writes](#) that the New START ratification was "one of ReThink Media's earliest successes," and that the group won influence by placing "twice as many op-eds favoring the treaty in...newspapers than those opposed could," but the citation for those claims is an article by Cirincione. Thus, all the most prominent assessments of Ploughshares' role in the New START campaign (and indeed of *all* of Ploughshares' campaigns), appear to emanate from Ploughshares itself. This is not to suggest that these claims are necessarily false, merely that they have sustained almost no independent scrutiny.

Since New START, Cirincione has credited Ploughshares with getting a chemical research facility scuttled and with initiating important discussions in national security circles about how to prevent war in the Middle East (this is discussed more in a later section) (Cirincione 2013, 178–84). Ploughshares also contributes to the International Campaign to Abolish Nuclear Weapons (ICAN), a coalition of antinuclear groups. Formed by Australian members of International Physicians for the Prevention of Nuclear War in 2006, ICAN's signature achievement is the United Nations' passage of the Treaty on the Prohibition of Nuclear Weapons (TPNW), which 80 nations have signed and 34 have ratified as of this writing. (The treaty will enter into force once 50 nations ratify it.) Under the treaty, nations are forbidden from developing, manufacturing, transferring, or using nuclear weapons. The influence of philanthropy on this treaty seems, at least on a basic level, direct and clear: if ICAN had not existed, there would be no TPNW, as none of the other projects or organizations discussed here have pursued a UN treaty. It remains unclear, however, whether the treaty will enter into force and whether it will achieve concrete disarmament rather than being a symbolic gesture. At any rate, ICAN received the Nobel Peace Prize in December 2017 for its work on TPNW. My analysis leads me to believe that even without Ploughshares, ICAN would have been able to achieve its breakthrough with the treaty because other significant benefactors fund its mission, particularly the venerable International Physicians for the Prevention of Nuclear War, also a Nobel Peace Prize recipient. ICAN's 2019 annual report states that 42 percent of its funding comes from foundations and organizations; donors mentioned by name besides the Ploughshares Fund include the Future of Life Institute, the Gould Family Foundation, Religions for Peace, and Soka Gakkai International (ICAN 2019, 21).

Another recipient of Ploughshares funding is Global Zero, which like ICAN is dedicated to nuclear abolition. Other benefactors of Global Zero include the Skoll, Carnegie, and Simons Foundations. Global Zero has no achievement as substantial as TPNW, but in 2019, it began campaigning for countries to adopt a no-first-use pledge—a promise never to use nuclear weapons preemptively. During the Cold War, antinuclear activists unsuccessfully argued for such a pledge, and they moved no closer to getting one after the Cold War. The Obama administration considered making such a pledge but decided against it, and the Trump administration stated that one is not needed. However, some momentum has begun to build for a no-first-use policy in political circles. Former presidential candidate Elizabeth Warren endorsed the concept at a Democratic debate in August 2019, and earlier that year, she introduced no-first-use legislation in the Senate.<sup>14</sup> Press coverage does not demonstrate any clear indication that Global Zero was directly responsible for Warren’s proposal, but such influence would be exactly the type of impact Global Zero hopes to have (and notably, Global Zero [heavily publicized](#) Warren’s no-first-use proposal and even built an online petition around it). Research in Warren’s Senate and campaign records, along with interviews of her staff and comparisons of her public statements with Global Zero materials, would help unearth a connection if one exists. Although Global Zero appears to lack an archive, it has staff and volunteers who could speak to the question.

## The Nuclear Threat Initiative

Founded in 2001 by Sam Nunn and media magnate Ted Turner, the Nuclear Threat Initiative is, in the words of one journalist, “a Washington, D.C.-based nonprofit organization dedicated to reducing nuclear and other unconventional threats” (Perry 2015, 184–89; Taubman 2012, xvii). Turner provided initial funding for NTI, personally pledging \$250 million. He had hoped the initiative would pursue nuclear disarmament, though Nunn believed the pursuit of such a utopian goal might impede more feasible efforts toward threat reduction (NTI 2001, 7; Taubman 2012, 23).

No dedicated history of NTI has been written, but its activities can be gleaned from other sources, which indicate that it can take credit for some significant concrete achievements. It created the World Institute for Nuclear Security, a forum for operators and experts to exchange information, lessons, and expertise (Bunn 2008, 138). The initiative also publishes *Securing the Bomb*, an annual report about global nuclear threats (Taubman 2012, 42). And according to Cirincione, when the United States transported 45 kilograms of weapons-grade uranium (two bombs’ worth) from Serbia to Russia, NTI contributed \$5 million for cleanup, without which Serbia would not have agreed to the deal (Cirincione 2008, 142). The evidence for this claim is not overwhelming: in the passage on this topic, Cirincione essentially cites himself, providing only a reference to a *New York Times* article in which he is quoted making the claim. Certainly the article suggests that the money was wisely spent: Turner’s role is documented, and the author discusses how Serbia’s inability to secure the material could have easily

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<sup>14</sup> Rebecca Kheel, “Warren’s Pledge to Avoid First Nuclear Strike Sparks Intense Pushback,” *The Hill*, August 4, 2019, <https://thehill.com/policy/defense/456006-warrens-pledge-to-avoid-first-nuclear-strike-sparks-intense-pushback>; Paul Sonne, “Top Democrats Introduce Bill to Prevent U.S. from Striking First with Nuclear Weapons,” *Washington Post*, January 30, 2019, [https://www.washingtonpost.com/world/national-security/top-democrats-introduce-bill-to-prevent-us-from-striking-first-with-nuclear-weapons/2019/01/30/a5959ee6-24bc-11e9-ba08-caf4ff5a3433\\_story.html](https://www.washingtonpost.com/world/national-security/top-democrats-introduce-bill-to-prevent-us-from-striking-first-with-nuclear-weapons/2019/01/30/a5959ee6-24bc-11e9-ba08-caf4ff5a3433_story.html).

resulted in rogue states acquiring it, though there is otherwise not much information about specific aspects of the agreement.<sup>15</sup> Again Cirincione provides a compelling claim that is difficult to assess. To gain additional insight, scholars would need to wait for access to the relevant documents, which would likely be decades away. One could interview the principal actors involved in the agreement, though it remains unclear who that would be besides Cirincione, who has already gone on record.

The Nuclear Threat Initiative has made concerted efforts to communicate with Congress: Nunn and other representatives of the initiative have testified frequently at various hearings over the past 15 years, including sessions on the threat of bioterrorism, State Department nonproliferation programs, and the Obama administration's nuclear agenda. They also testified in support of the Treaty on Strategic Offensive Reductions of 2002, which was ratified and in effect from June 2003 to February 2011, when it was replaced with the New START Treaty (Christiansen 2002; Gottemoeller 2016).<sup>16</sup> The Nuclear Threat Initiative claims to have directly influenced government programs addressing nuclear terrorism, stating, "Since NTI first commissioned...the Managing the Atom Project in 2002, the report and its recommendations have increased public awareness of the nuclear terrorism threat and helped spur increased government action to reduce nuclear dangers." Publications produced by NTI offer ways to evaluate its claims of influence. The annual *Securing the Bomb* reports, for example, outline dozens of specific recommendations for government agencies. As with so many other cases, in-depth comparisons of those recommendations with steps taken by the Bush and Obama administrations, along with research in news articles and government documents and interviews of government and NTI officials, might prove fruitful in assessing NTI's influence.<sup>17</sup>

The initiative's most visible effort has been its Nuclear Security Project (NSP), whose history Philip Taubman traces in his 2012 book *The Partnership: Five Cold Warriors and Their Quest to Ban the Bomb*. By 2005, Nunn had changed his mind about the pursuit of total nuclear disarmament. He and NTI were looking for an "audacious move," Taubman writes, "to advance their threat reduction agenda" (2012, 305). Influenced by the antinuclear ideas of physicist Sidney Drell, Nunn contacted George Shultz (secretary of state in the Reagan administration), William Perry (secretary of defense in the Clinton administration), and, eventually, former national security adviser Henry Kissinger to draft a manifesto calling for complete nuclear disarmament. They did not all believe that total disarmament was possible, but they agreed that trying to achieve disarmament "might jump-start some constructive new thinking about nuclear weapons," as Taubman paraphrases Kissinger (Taubman 2012, 26). The unlikely alliance between these four, and the equally unlikely nuclear disarmament campaign they began, marked an expansion of NTI's goals and vision (Taubman 2012, 305, 322). When these elder statesmen launched a public campaign for disarmament, NTI served as their "secretariat," meaning it provided most of the

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<sup>15</sup> James Dao, "Nuclear Material Secretly Flown From Serbia to Russia for Safety," *New York Times*, August 23, 2002, <https://www.nytimes.com/2002/08/23/world/nuclear-material-secretly-flown-from-serbia-to-russia-for-safety.html>.

<sup>16</sup> *The Threat of Bioterrorism and the Spread of Infectious Diseases: Hearing before the Senate Committee on Foreign Relations*, 107th Cong. (2001); *Nonproliferation Programs of the Department of State: Hearing before Senate Committee on Foreign Relations*, 108th Cong. (2003).

<sup>17</sup> "Report Cites Dangerous Gap in Efforts to Thwart Nuclear Terrorism; Calls for Urgent Global Campaign to Reduce the Risk," Nuclear Threat Initiative, September 26, 2007, <https://www.nti.org/newsroom/news/securing-bomb-2007-released/>.

funds, staff, and publicity for the venture (Taubman 2012, 6, 34). According to NTI's annual reports, this amounted to some \$3 million in 2007 and 2008.

The manifesto took the form of an op-ed signed by the four (though largely written by Drell) that appeared in the *Wall Street Journal* in October 2008. It called for a “reassertion of the vision of a world free of nuclear weapons and practical measures toward achieving that goal.” This “bold initiative” would be “consistent with America’s moral heritage.” It also outlined nine initial steps, including ending the sale of fissile material and reducing the size of nuclear arsenals around the world.<sup>18</sup> According to Shultz, the goal of the op-ed was “to give the next president [Obama or McCain] the political space and the technical support to launch a major initiative to reduce and eventually eliminate the world’s arsenals.” The op-ed quickly met with widespread approval. Former Soviet leader Mikhail Gorbachev hailed the statement, while Pulitzer Prize-winning historian Martin Sherwin called it “transformative” (Kelly 2007, 453; Rhodes 2010, 296).<sup>19</sup> A *New York Times* commentary stated that the op-ed “has grabbed the attention of the national security establishment here and abroad,” and that an additional 14 former secretaries of state and defense and national security advisers endorsed the call. The *New York Times* optimistically deemed the op-ed “progress.”<sup>20</sup>

Would the op-ed have been written without NTI? Certainly—indeed, the op-ed was begun independently of the organization. But it seems that without NTI, the op-ed would have been less likely to have become the launching pad for a dedicated antinuclear campaign with meetings, conferences, publicity, and even a documentary film. After all, many op-eds are published every day, but few spark movements, and NTI’s support is one significant factor that other op-eds do not have.

Writing in the *Bulletin of the Atomic Scientists*, the former director of international peace and security at the MacArthur Foundation stated that because of the 2007 op-ed, “New organizations have drawn attention to nuclear dangers and mobilized high-level former government officials, military commanders, Nobel laureates, and celebrities around the world to support the cause.”<sup>21</sup> On the heels of these elite endorsements, NTI launched the Nuclear Security Project with \$3 million in grants from CEIP and the MacArthur Foundation and with support from the Hoover Institution at Stanford University, where Drell, Perry, and Shultz held appointments. Perry, Shultz, Nunn, and Kissinger took part in conferences, lobbying, and public education, and more op-eds by the four followed: their second was signed by former secretaries of state Albright, James Baker, Colin Powell, and Warren Christopher, and by former secretary of defense Melvin Laird. In 2013 the four published their fifth op-ed on the

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<sup>18</sup> George P. Shultz, William J. Perry, Henry A. Kissinger, and Sam Nunn, “A World Free of Nuclear Weapons,” *Wall Street Journal*, January 4, 2007, <https://www.wsj.com/articles/SB116787515251566636>.

<sup>19</sup> Martin Sherwin, “An About Face to Stave off Nuclear Winter,” *Washington Post*, March 4, 2012.

<sup>20</sup> Carla Anne Robbins, “Thinking the Unthinkable: A World Without Nuclear Weapons,” June 30, 2008, *New York Times*, <https://www.nytimes.com/2008/06/30/opinion/30mon4.html>.

<sup>21</sup> Kennette Benedict, “Most Likely to Succeed against Nuclear Weapons,” *Bulletin of the Atomic Scientists*, September 17, 2013, <https://thebulletin.org/2013/09/most-likely-to-succeed-against-nuclear-weapons/>.

subject, though a writer in *Time* claimed in 2011 that “these opinion pieces are becoming increasingly chastened and unambitious as time goes on” (Cirincione 2013, 38, 117; Taubman 2012, 328).<sup>22</sup>

Taubman’s sympathetic and, according to reviews by prominent scholars in the *San Francisco Chronicle*, the *Washington Post*, and the *New York Times*, reliable account documents several ways in which NSP shaped nuclear weapons policy.<sup>23</sup> Accounts seem to support Taubman’s claim that although the George W. Bush administration largely ignored the four, they influenced Obama’s presidential campaign and administration (Taubman 2012, 330). At an April 2007 campaign event, Obama quoted Shultz, Perry, Nunn, and Kissinger; later at DePaul University, he endorsed their cause, stating that “America seeks a world in which there are no nuclear weapons” (Taubman 2012, 333–35). In January 2008, before state primaries began, the *Bulletin of the Atomic Scientists* accused McCain (the GOP candidate) of having a “lack of understanding of the realities of missile defense,” and criticized him for failing to support severe reductions in the nuclear stockpile. Obama, in contrast, had already stressed “the ultimate goal of removing nuclear weapons from the planet.”<sup>24</sup> In fact, the *Bulletin* wrote that Obama and then-candidate Hillary Clinton “do explicitly adopt the eminently sensible recommendations of former secretaries of state George Shultz and Henry Kissinger, former Defense Secretary William Perry, and former Georgia Sen. Sam Nunn for near-term reductions in the size of our arsenal, the need to take ballistic missiles off hair-trigger alert, and lessening our reliance on nuclear weapons.”<sup>25</sup> Another *Bulletin* piece argued that in his efforts to reduce the risk of nuclear disasters, Obama “was acting on a growing bipartisan consensus most closely associated with Henry Kissinger, George Shultz, William Perry, and Sam Nunn.”<sup>26</sup> At a campaign speech in Chicago in April 2007, Obama himself stated, “As leaders from Henry Kissinger to George Shultz to Bill Perry to Sam Nunn have all warned, the actions we are taking today on this issue are simply not adequate to the danger” (Taubman 2012, 333, 349–51, 355). These comments suggest that the authors’ op-ed and their subsequent efforts did influence candidate Obama’s views and indirectly shaped McCain’s—only in the general election did the latter endorse nuclear abolition, presumably in response to Obama’s stand on the issue (Taubman 2012, 342).<sup>27</sup>

It appears that NSP’s efforts shaped Obama’s antinuclear agenda. In fact, considering Clinton had also endorsed nuclear abolition, it seems reasonable to argue that NSP shaped the Democratic Party’s stance on the issue more generally. The GOP does not appear to have been similarly influenced, as evidenced by its hostility to Obama’s nuclear agreements—in fact, one study shows that the GOP

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<sup>22</sup> Eben Harrell, “The Four Horsemen of the Nuclear Apocalypse,” *Time*, March 10, 2011, <https://science.time.com/2011/03/10/the-four-horsemen-of-the-nuclear-apocalypse/>.

<sup>23</sup> Michael Gordin, “‘The Partnership,’ by Philip Taubman: Review,” *SFGate*, January 8, 2012, <https://www.sfgate.com/books/article/The-Partnership-by-Philip-Taubman-review-2446739.php>; Gary Bass, “How They Learned to Hate the Bomb,” *New York Times*, December 30, 2011, <https://www.nytimes.com/2012/01/01/books/review/the-partnership-five-cold-warriors-and-their-quest-to-ban-the-bomb-by-philip-taubman-book-review.html>; Sherwin, “An About Face to Stave off Nuclear Winter.”

<sup>24</sup> Lawrence Krauss, “Where the Presidential Candidates Stand on Nuclear Issues,” *Bulletin of the Atomic Scientists*, January 8, 2008, <https://thebulletin.org/2008/01/where-the-presidential-candidates-stand-on-nuclear-issues/>

<sup>25</sup> Kingston Reif, “Prague, Revisited,” *Bulletin of the Atomic Scientists*, Sept. 17, 2012, <https://thebulletin.org/2012/09/prague-revisited/>.

<sup>26</sup> Reif, “Prague, Revisited.”

<sup>27</sup> Krauss, “Where the Presidential Candidates Stand on Nuclear Issues.”

consistently votes against any nuclear arms control agreement signed by a Democrat (Jett 2017, loc. 1011). The “growing bipartisan consensus” on nuclear weapons that the *Bulletin of the Atomic Scientists* refers to is vague, but is most likely a reference to a common embrace of a moderate approach to the threat posed by new nuclear states in contrast to the Bush Doctrine, part of which involved support for preemptive war. After all, the Iraq War would have been at its nadir around 2007, making that doctrine unpalatable to many.

Although there appear to have been no concrete connections between Obama and NTI, many connections do exist between him and influential senators who supported nuclear arms control. As a senator, Obama would have known Lugar, and he was familiar with Nunn, whose endorsement he received in April 2008 and who had been at least briefly considered as a running mate by the Obama campaign. Nunn also served as an informal advisor to Obama during the postelection transition. Articles from the time suggest that Nunn’s endorsement was critical to winning over national-security establishment figures and superdelegates to the Democratic National Convention.<sup>28</sup> It therefore seems highly unlikely that Obama would not have discussed nuclear policy with Nunn, though of course this connection was not dependent on NTI.

By June 2008, NTI had raised \$2.25 million for the Nuclear Security Project. For Shultz, Nunn, Perry, and Kissinger, this meant more conferences, speeches, and meetings with foreign ministers and elder statesmen, including one with Germany’s chancellor Angela Merkel in 2010. (It appears that this meeting produced few concrete results, perhaps unsurprising given Germany has no nuclear weapons and has long advocated for nuclear nonproliferation.) The group even reached out to evangelical leaders, resulting in the creation of the Two Futures Project, involving evangelicals who support nuclear abolition (Taubman 2012, 337–38, 341, 350, 354).

The group’s influence continued after Obama’s inauguration. Taubman, relying on numerous interviews with political elites, writes that Obama made nuclear disarmament a signature initiative of his presidency “thanks in no small measure to the groundwork laid by Shultz, Kissinger, Perry, Nunn, and Drell” (Taubman 2012, 344). In a landmark speech in Prague early in his administration, Obama pledged the US to the abolition of nuclear weapons, and promised to pursue Senate ratification of the Comprehensive Test Ban Treaty and a global treaty ending the production of fissile material and warheads (Taubman 2012, 347–48). A speechwriter who contributed to Obama’s Prague address said of Nunn, Shultz, Kissinger, and Perry, “A lot of things we took for the Prague speech came right out of their op-ed.” Elsewhere Obama publicly credited the “four horsemen,” as he called them, with shaping his nuclear policy, and he hosted them in the Oval Office and attended a White House screening of NTI’s documentary *Nuclear Tipping Point* (Taubman 2012, 333, 349–51, 355).

No other significant sources have addressed the connections between Obama and NTI. For firsthand evidence, historians often consult political memoirs, but the recently published first volume of

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<sup>28</sup> Associated Press, “Former Georgia Senator Nunn to Aid Obama,” *NBC News*, Nov. 12, 2008, <https://www.nbcnews.com/id/wbna27675375>; Brent Budowsky, “Sam Nunn Endorses Barack Obama,” *The Hill*, April 19, 2008, <https://thehill.com/blogs/pundits-blog/presidential-campaign/32783-sam-nunn-endorses-barack-obama>.

Obama's presidential memoirs reveals disappointingly little. *A Promised Land* does mention his work on curbing nuclear proliferation as well as his famous Prague speech, but when the former president discusses these events in detail, he reveals nothing about the influence of NTI. Instead, he seems to suggest that the impetus for his antiproliferation endeavors stemmed from his immediate advisors within the White House (Obama 2020, chapter 14). (The first volume covers only up to 2011, so there is no discussion of the Iran Joint Comprehensive Plan of Action [JCPOA].) Regarding archival sources, the Sam Nunn papers in Georgia do not yet appear to be publicly accessible, nor has Nunn himself yet published a memoir. If they could be interviewed, staffers for Obama and Nunn would be able to confirm a link between the White House and NTI. From the historian's perspective, then, Taubman's book appears to be the most thorough publicly available account of this connection. Evidence from contemporary news articles supports his work: Obama did publicly credit the four on May 19, 2009, stating, "I just had a wonderful discussion with four of the most preeminent national security thinkers that we have—a bipartisan group of George Shultz, Henry Kissinger, Bill Perry, and Sam Nunn—all who've come together and helped inspire policies of this administration in a speech that I gave to Prague, which set forward a long-term vision of a world without nuclear weapons."<sup>29</sup> Of the four men, Taubman writes, "Their greatest accomplishment is the wave of renewed interest in nuclear disarmament generated by their *Journal* op-ed and subsequent proselytizing. Government rhetoric so far has outdistanced government action, but garnering the support of President Obama and other world leaders...was no small achievement" (2012, 364–66).

In addition to the Obama administration, NTI leaned on its own big-money donors in pursuing threat reduction. In 2006 Nunn and NTI convinced Warren Buffett to pay for an international nuclear fuel bank run by the International Atomic Energy Agency that would supply low-enriched uranium for nuclear power plants and research reactors in hopes of discouraging national enrichment plants that could be used to produce weapons-grade uranium (Taubman 2012, 367). According to news reports, Buffett was the first—and only—individual to put up any money at all for the fuel bank, and to pressure countries to contribute, he issued a deadline after which he would revoke his funds. Only then did other countries chip in. Buffett's contribution totaled \$50 million, and the United States and 30 other nations gave \$100 million in total. The fuel bank opened in Kazakhstan in 2017 and Buffett's money appears to have been essential, as his \$50 million represents one-third of the total funding.<sup>30</sup>

## The Iran Nuclear Agreement

For decades, policymakers have worried that Iran might develop nuclear weapons. When George W. Bush dubbed Iran part of the "axis of evil" in 2002, experts identified only two options to prevent it from going nuclear: military strikes or diplomacy. Philanthropic organizations have supported both sides of this struggle, though in 2015 those favoring a diplomatic approach scored a resounding success with the

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<sup>29</sup> The White House, "Remarks by the President after meeting with Shultz, Kissinger, Nunn and Perry to discuss Key Priorities in U.S. Non-Proliferation Policy," May 19, 2009.

<sup>30</sup> "Mr. Buffett's Excellent Idea," *New York Times*, September 28, 2006, <https://www.nytimes.com/2006/09/28/opinion/28thu2.html>; Ramamurti Rajaraman, "Despite Qualms, Fuel Banks Hold Promise," *Bulletin of the Atomic Scientists*, August 30, 2012, [https://thebulletin.org/roundtable\\_entry/despite-qualms-fuel-banks-hold-promise/](https://thebulletin.org/roundtable_entry/despite-qualms-fuel-banks-hold-promise/).

Joint Comprehensive Plan of Action, informally known as the Iran deal. Observers have credited organizations funded by several of the philanthropic donors discussed in this essay with helping achieve the deal.

Iran's potential for going nuclear was part of the impetus for the Nuclear Security Project and the Nunn-Shultz-Perry-Kissinger op-ed. From their perspective, it was important to achieve nuclear abolition before North Korea and Iran developed nuclear weapons. However, regarding what to do about Iran's nuclear program, the four "have no easy answers for Iran," according to Taubman. Because other states in the region would endeavor to acquire nuclear weapons in response, Perry believed there would be too many nuclear threats to address if Iran went nuclear, which would render their work meaningless (Taubman 2012, 324, 378). The Carnegie Endowment for International Peace has also identified Iranian nuclear weapons as an urgent issue, and since 1997 has often had a representative address the Senate on the issue.<sup>31</sup>

Much more influential on US-Iranian policy has been the Iran Project (IP), formed in 2002. That project is funded by the Foundation for a Civil Society, which describes itself as "a small New York-based nonprofit," and by other "private foundation grants," including grants from the Rockefeller Brothers Fund (RBF), the United Nations Association of the USA, and Ploughshares.<sup>32</sup> The Rockefeller Brothers Fund's involvement with US-Iranian relations has been, according to Cirincione, "deeper and longer than that of any other major U.S. foundation," and it "remains the biggest American funder of projects and activities focused on U.S.-Iranian diplomacy" (2013, 184–85). A Bloomberg journalist traced how RBF has spent \$4.3 million since 2003 advocating and actively pursuing a nuclear agreement with Iran, with most of that money going to IP. In 2001, the head of RBF, Stephen Heintz, discussed nuclear threats with William Luers (president of the United Nations Association of the USA), who was eager to start a dialogue with Iran. With funding from Ploughshares and RBF, IP grew into "a group of highly regarded former senior American officials led by Ambassador Bill Luers, who produced numerous influential reports on the nuclear crisis that paved the way for diplomacy" (Cirincione 2013, 184–85).

The group's efforts gained momentum in 2002 when IP members set up a meeting with a think tank in Tehran called the Institute for Political and International Studies, hosted by the Stockholm International Peace Research Institute. The Iran Project then contacted the latter for a neutral location to conduct talks with Iranian representatives, and 14 such meetings occurred in Stockholm until 2005. The participants included Iranian and US academics, officials (current and former), and lawmakers. After each meeting, IP briefed President Bush's national security advisor and then-secretary of state Condoleezza Rice. Peter Waldman of Bloomberg News quotes then-undersecretary of state R. Nicholas Burns on IP's contribution: "As we had no contacts at all with Iran at the time, their insights were very valuable"—a telling but frustratingly vague assertion. These contacts were cut off, however, in 2005

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<sup>31</sup> *Iran and Proliferation: Is the U.S. Doing Enough? The Arming of Iran: Who Is Responsible?*, 105th Congress (1997); *Iran: Where Are We Today: A Report to the Committee on Foreign Relations*, 111th Congress (2009); *Iran: Weapons Proliferation, Terrorism, and Democracy*, 109th Congress (2005); *Iranian Political and Nuclear Realities and United States Policies*, 111th Congress (2009).

<sup>32</sup> "About Us," the Foundation for a Civil Society, accessed November 12, 2020, [http://fcsny.org/?page\\_id=6](http://fcsny.org/?page_id=6).

when Mahmoud Ahmadinejad was elected president of Iran. In addition to this back-channel diplomacy, IP produced op-eds, provided speakers, set up meetings, briefed the media and Congress, and published reports, advocating diplomacy rather than military strikes to halt Iran's nuclear program. It eventually counted on support from a bipartisan array of more than 100 members of the political, diplomatic, military, and intelligence communities.

The Iran Project's 2012 report, *Weighing Benefits and Costs of Military Action Against Iran*, was praised in the *New Yorker*, with Laura Secor writing that it "persuasively argues that a sustained U.S.-Israeli bombing campaign...could delay the Iranian nuclear program by at most four years, and that it would do so at considerable costs to American and Israeli interests." Secor argues that the report shifted political opinion to oppose military action against Iran. Signatories of the report included establishment heavyweights such as Cirincione, Nunn, Richard Armitage, Zbigniew Brzezinski, Chuck Hagel, Tim Wirth, and Brent Scowcroft (Cirincione 2013, 184–85).<sup>33</sup> In 2013, IP's talks with Iran resumed when Ahmadinejad was succeeded as president by Hassan Rouhani. At that point, IP "conducted a dialogue with well-placed Iranians, including...Tehran's chief nuclear negotiator," while its members met with members of Obama's National Security Council five or six times, and the same number of times with the State Department, including then-deputy secretary of state William Burns. In 2013 Burns reached a secret interim agreement that led to the 2015 Vienna summit that resulted in the Joint Comprehensive Plan of Action. An unnamed State Department official explained the utility of IP's briefings: "It proves useful both to have knowledgeable former officials and country experts engaging with their counterparts and in reinforcing our own messages when possible."<sup>34</sup> In an article otherwise critical of the Rockefeller Brothers Fund's grant practices, a journalist quoted the executive director of the Arms Control Association, who said that the IP meetings "facilitated an exchange of views that would not otherwise have happened through official channels...creat[ing] the opportunity for key players to imagine how the Iran nuclear program could possibly be resolved despite the long odds." The then-acting under secretary for terrorism and financial intelligence, meanwhile, stated at an IP symposium that the Iran Project had "contributed so much to the debate over the Joint Comprehensive Plan of Action." The "long and healthy debate," he added, was "made all the more vigorous by many of you here today."<sup>35</sup>

In addition to the funding for IP, RBF gave \$3.3 million to Ploughshares, which began its own campaign alongside IP in 2010, spending \$4 million of its own money pushing for a diplomatic solution to the Iranian nuclear dilemma. Trita Parsi, former president of the National Iranian American Council, wrote an account of this process. He explains that Cirincione maneuvered Ploughshares to become the central nervous system of some 85 organizations that opposed war with Iran as a method of

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<sup>33</sup> Laura Secor, "Road Show," *New Yorker*, October 8, 2012, 37.

<sup>34</sup> Peter Waldman, "How Freelance Diplomacy Bankrolled by Rockefellers has Paved the Way for an Iran Deal," Bloomberg, June 6, 2015, <https://www.bloomberg.com/news/articles/2015-07-02/how-freelance-diplomacy-bankrolled-by-rockefellers-has-paved-the-way-for-an-iran-deal>; Armin Rosen, "The Rockefeller Brothers Fund and BDS," *Tablet Magazine*, May 24, 2017, <https://www.tabletmag.com/sections/news/articles/rockefeller-brothers-fund-gets-behind-bds>.

<sup>35</sup> Rosen, "The Rockefeller Brothers Fund and BDS"; US Department of the Treasury, "Remarks by Acting Under Secretary for Terrorism and Financial Intelligence Adam Szubin at the Atlantic Council and The Iran Project Symposium," December 17, 2015, <https://www.treasury.gov/press-center/press-releases/Pages/jl0304.aspx>.

nonproliferation and thus enabled “a tectonic policy shift toward diplomacy.” Starting in 2013, Obama administration officials began meeting with members of the Ploughshares coalition (including IP), requesting advice on negotiations with Iran and the broader public debate. In 2015, with a deal being forged, Ploughshares invested millions of dollars in organizations that mobilized grassroots pressure on Congress and the president and resources and information for experts who favored diplomacy with Iran. Other members of the Ploughshares coalition generated 150,000 phone calls to Congress, more than 30,000 emails, more than a million signatures on petitions, some 600 editorials and op-eds, and 200 letters to the editor supporting a nuclear deal. “These feats would not have been possible had it not been for the central hub Ploughshares had established,” Parsi writes, given the lavish spending by the American Israel Public Affairs Committee, which opposed a deal with Iran, and given Republicans controlled the House and Senate (2017, 326–30).

In contrast to Parsi’s useful account, Dennis Jett’s *The Iran Nuclear Deal: Bombs, Bureaucrats, and Billionaires* offers little of relevance to address the question of philanthropic impact. Jett’s book does list the people and organizations who participated in the debate over JCPOA and describes their actions, but it does not address the influence they had in any systematic way. The book is highly partisan in favor of the Obama administration’s efforts (Jett himself admits, “I fall into the pro-deal camp on the Iran nuclear accord,” which is “reflected in what I write” [2017, loc. 79]), and more than half of it consists of the full (lengthy) text of JCPOA.

Although JCPOA did not require ratification by the Senate, Republican members of Congress planned to pass a resolution denouncing the agreement, while Israeli prime minister Benjamin Netanyahu personally lobbied more than 20 Democratic lawmakers to oppose the deal. These actions made Congress a favored target of the Iran Project, and Obama administration officials praised the group after the agreement became official. At another IP symposium, then-deputy national security advisor Ben Rhodes said, “For years, you have done extraordinary work on one of the toughest issues in our foreign policy...thanks for your persistent work for many years—it has made a huge difference.” Speaking to the *New York Times*, an unnamed White House official listed IP as one of JCPOA’s “validators” (that is, a group that publicly stated the agreement’s virtues) and described the close coordination of the two: “There’s been a steady drumbeat of people outside the day-to-day politics making the case with us and that is by design. We’ve been working with all the outside groups on this.”<sup>36</sup> Some criticism emerged from Bloomberg complaining that IP was seeking to corrupt the debate with outside spending; in reality, the group acted like a conventional lobby. In fact, groups opposed to the Iran deal spent far more than those in favor: a *Washington Post* estimate calculated that groups in favor had spent less than \$1.5 million promoting it, whereas groups opposed to a diplomatic agreement had

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<sup>36</sup> Adam Entous, “Inside Israel’s Bid to Derail Iran Pact,” *Wall Street Journal*, September 4, 2015, <https://www.wsj.com/articles/inside-israels-bid-to-derail-iran-pact-1441329584>; The White House, “Remarks by Deputy National Security Advisor Ben Rhodes at the Iran Project,” June 16, 2016, <https://obamawhitehouse.archives.gov/the-press-office/2016/06/16/remarks-deputy-national-security-advisor-ben-rhodes-iran-project>; Karen DeYoung, “As an Iran Deal Nears, the Lobbying, Pro and Con, Intensifies,” *Washington Post*, June 11, 2015, [https://www.washingtonpost.com/world/national-security/as-an-iran-deal-nears-the-lobbying-pro-and-con-intensifies/2015/06/11/1dd56d4c-0f8a-11e5-adec-e82f8395c032\\_story.html](https://www.washingtonpost.com/world/national-security/as-an-iran-deal-nears-the-lobbying-pro-and-con-intensifies/2015/06/11/1dd56d4c-0f8a-11e5-adec-e82f8395c032_story.html); Julie Hirschfeld Davis, “Iran Deal Pits Cash-Infused Lobbyists in Summer Duel,” *New York Times International Edition*, August 18, 2015.

spent some \$13 million since 2010.<sup>37</sup> Historians have yet to assess the role of social activism and philanthropy in achieving JCPOA. But evidence from government officials, journalists, and other writers indicates that the Iran Project, with funding from the Ploughshares Fund and RBF, managed to put a new way of addressing the threat of a nuclear Iran on the Obama administration's agenda and facilitated discussion between Iran and the US. Ploughshares and IP also coordinated with the White House to buttress congressional and public opinion for the agreement in the face of strong partisan opposition. Debate over the Iran deal "play[ed] out like hand-to-hand combat in Congress," as one journalist put it.<sup>38</sup> Ploughshares and IP therefore appear deserving of considerable credit for the deal (though the Trump administration withdrew from it).

## Conclusion

When ratification of the Iran deal was being negotiated, nuclear nonproliferation activists issued a call for help. Unlike many antinuclear activist organizations, these younger activists considered nonproliferation an important part of nuclear disarmament. They warned that nonproliferation efforts were drastically underfunded and that progress on nonproliferation would be wasted without revitalized funding and effort. "The nonproliferation community is lagging in its efforts to mobilize youth and build the future of anti-nuclear activism," three young activists wrote in 2015. Having met at programs sponsored by Global Zero and the Pugwash conferences, they write that they belong "to a rapidly shrinking cohort of twenty-somethings actively engaged in the grassroots fight for nuclear disarmament" and that the nonproliferation community lacks resources to build an infrastructure for the movement. "Even the best and brightest organizations," they write, "are chronically underfunded and understaffed. In the competition among non-profits of all kinds for donors, resources, and attention, the nonproliferation cause is increasingly muscled out." Moreover, resources "barely cover their survival." Out of touch with "electronic outreach" and "online fundraising," movement leaders are not prioritizing youth engagement because of their "focus on limited geographical areas and...shoestring budgets." Many organizations overlap, "the result of a dearth of resources to invest in coordination and the absence of a comprehensive strategy" without "internal communication channels, a shared game plan, or the capacity to develop either on its own."<sup>39</sup>

Underfunded and understaffed, nuclear-disarmament and nuclear-nonproliferation groups are relying more on philanthropic benefactors. Several influential foundations believe that philanthropy can aid threat reduction and nuclear nonproliferation. Compelling, if not conclusive, evidence supports this belief, particularly the impact of philanthropy on the Iran deal and the efficacy of efforts made by the

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<sup>37</sup> Eli Lake, "The Secret History of the Iran-Deal 'Echo Chamber,'" Bloomberg, May 24, 2016, <https://www.bloomberg.com/opinion/articles/2016-05-24/the-secret-history-of-the-iran-deal-echo-chamber>; Catherine Ho, "Mega-donors opposing Iran deal have upper hand in fierce lobbying battle," *Washington Post*, August 13, 2015, <https://www.washingtonpost.com/news/powerpost/wp/2015/08/13/mega-donors-opposing-iran-deal-have-upper-hand-in-fierce-lobbying-battle/>.

<sup>38</sup> Ho, "Mega-donors opposing Iran deal have upper hand in fierce lobbying battle."

<sup>39</sup> Selim Can Sazak, Marie Luise Schwarzenberg, and Beenish Pervaiz, "Will there be a next generation in the fight for nuclear nonproliferation?," *Bulletin of the Atomic Scientists*, February 19, 2015, <https://thebulletin.org/2015/02/will-there-be-a-next-generation-in-the-fight-for-nuclear-nonproliferation/>.

Nuclear Threat Initiative, the Nuclear Security Project, and Ploughshares. The determination with which the Trump administration scrapped the Iran deal reminds us of the fragility of nonproliferation agreements and the constant vigilance required by activists, organizations, and philanthropies to achieve and maintain them.

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