Nunn-Lugar Report

Benjamin Soskis 7/2013

**SOURCES**:

There are three types of sources that I looked at this for report (see below for full source list with links to those most useful):

* Foundation reports (mostly from the Carnegie Corporation)
* Secondary literature on arms control, nonproliferation, cooperative threat reduction
* Testimonials and reflections from principals involved in Nunn-Lugar legislation

Of these, the most helpful were the testimonials from N-L actors, as well as a 2001 dissertation on the history of the N-L act, and a case-study from the National Defense University

**PROCESS**:

I started by trying to find reflections on the origins of the N-L act by those involved in its enactment, and by searching for material on the act published by the Carnegie Corporation. The Carnegie Corporation did have several relevant documents, and then by using the sources within those documents, I was able to cast a wider net.

**TYPES of IMPACT**

• I didn’t focus on the discussions of ‘humanitarian’ philanthropic impact vis a vis the Nunn-Lugar Act, though nearly all the sources did address the topic, and there seems to be a general consensus that the cooperative threat reduction program initially supported by the Carnegie Corporation and the MacArthur Foundation represented an enormous success. The impact is measured through the concrete achievements of the Nunn-Lugar Act—as of 2009, the dismantling or elimination of 7,514 nuclear war-heads, 768 ICBMs, 498 ICBM sites, 155 bombers, 651 submarine-launched ballistic missiles, 32 nuclear submarines, and 960 metric tons of chemical weapons. There is another claim of humanitarian impact made as well, one premised on what didn’t happen as opposed to what did. Most of the sources claim that the Nunn-Lugar Act had a significant role in averting the possibility of a nuclear catastrophe, which, given the precariousness of the situation in the wake of the disintegration of the Soviet Union, was very much a possibility.

• Most of the sources also directly engage the question of the mechanistic impact of philanthropy in the origins of the Nunn-Lugar Act. There are several different versions of such an impact in this case. The most obvious is the fact that foundation-funded research and a foundation-funded report—“Soviet Nuclear Fission: Control of the Nuclear Arsenal in a Disintegrating Soviet Union,” produced by a Prevention of Proliferation Task Force, which was funded by Carnegie and MacArthur grants—played a significant role in convincing both Sens. Nunn and Lugar, as well as their senate colleagues, of the urgency of the situation in the Soviet Union and the need for a cooperative threat reduction strategy in response. Call this the proximate knowledge production role. One open question in regards to this version of impact is the extent to which the philanthropy-funded research directly informed the Nunn-Lugar Act’s specifics (and then its implementation) vs. convincing the senators of the urgency of the problem and the need for the act in general. The sources do report that one of the principal authors of the “Soviet Nuclear Fission” report, Harvard’s Ashton Carter, after briefing Sens. Nunn and Lugar on the report in Lugar’s office, worked with staff from both senators on writing up a bill. This narrative would lead one to think that much of the report’s proposals made it into the bill, though I have not confirmed to what extent this was the case. Another question that I still need to resolve is how reliant these experts were on philanthropic funding to produce the research that proved so influential in the run-up to the Nunn-Lugar bill, versus support they received from their host academic institutions (ie, could they have conducted some form of this research w/o philanthropic support).

One way in which claims of this sort of philanthropic impact are substantiated in the sources is through the scientific “control” provided by an unsuccessful attempt to pass legislation that would address the problem of the Soviet Union’s nuclear arsenal. Sen. Sam Nunn attempted to pass such legislation with Rep. Les Aspin, but for a variety of reasons—largely because of the lack of support from the White House and the perception that the legislation amounted to humanitarian aid to the SU—the effort proved unsuccessful. But just a few weeks later, Congress passed the Nunn-Lugar Act, which included many of the provisions that were in the Nunn-Aspin amendment. What happened in the time in between? Nunn teamed up with Lugar, giving the effort bipartisan credentials. But also the senators encountered the research of the Prevention of Proliferation Task Force; the “Soviet Nuclear Fission” report’s chief author briefed Nunn and Lugar and then, a few days later, a larger group of senators. The briefing convinced many of them of the urgent need to address the situation in the Soviet Union, and several who had voted against Nunn-Aspin changed their votes. Nunn and Lugar called this the fastest turnaround in the fate of a piece of legislation that they had ever seen and the report does seem to have played a major role in producing it.

[For a timeline of the events in this version of impact, see Sara Zahra Kutchesfahani’s dissertation, discussed below, p. 166]

 Yet it is also worth noting in thinking about the impact of philanthropy in this case that both Nunn and Lugar were considering similar legislation even before they encountered the philanthropically-funded research. Philanthropy no doubt was essential in getting Nunn-Lugar passed in such a short period of time (before the actual break up of the SU), but similar legislation might have been passed even without the intervention of philanthropy, given the intense interest of Nunn on the issue, and the knowledge of his own staff. On the other hand, in this case, with the Soviet Union on the brink of disintegration, time was certainly of the essence; it was necessarily to secure the nukes ASAP, given the volatile political and social climate in the Soviet Union and in the Newly Independent States. So in response to the counterfactual, it is possible that Nunn might have been able to get a similar bill passed through his own devices without the “Soviet Nuclear Fission” report, but almost undoubtedly not as fast, and in this case, that difference in time might have meant the difference btw secure and un-secure nuclear material.

- Another version of impact is the knowledge diffusion role played most prominently by the Carnegie Corporation and its president, David Hamburg. Hamburg organized a meeting between the principal author of the “Soviet Nuclear Fission” report (Harvard’s Ashton Carter) and Nunn and Lugar; the MacArthur Foundation funded various meetings at which Nunn, Lugar, and various non-proliferation experts met and exchanged ideas. This is the role of proximate knowledge diffusion.

- Then there is a final type of impact that is less well covered in the sources I consulted. This is the long-term impact of the funding from the Carnegie Corporation and MacArthur Foundation that seeded the field of arms control, non-proliferation and cooperative security research, through more than a decade of multiple grants to a variety of institutions. Many of the sources I examined mention this, but they do not discuss it in enough detail to get a clear picture of how philanthropy shaped these fields.

**OTHER ACTORS**

This is a question that many of the sources also directly engage, since a central part of the story of the origins of the Nunn-Lugar Act is the collaboration between the academic/think-tank community (funded by philanthropy) and Congress (the White House is generally absent in these accounts, since it did little to support the act). Many of the sources do at least mention the fact that Sam Nunn (and to some extent Les Aspin) had been interested in a program of cooperative security arrangements between the US and the SU and had been concerned about the fate of the SU’s nuclear arsenal, for some time. So one set of actors to consider alongside philanthropy is the senators (Nunn, Lugar) and their respective staffs—and how they engaged the problem of Soviet “loose nukes” alongside but independent of the academic/think tank community. Nunn-Lugar was clearly a result of a close working relationship between the two. The expert community had been researching the possibility of cooperative security arrangements btw the US and the Soviet Union as well as the dangers of Soviet nukes falling into dangerous hands as the nation teetered on the point of breaking up. But Sam Nunn and Les Aspin had also considered those issues deeply, if perhaps with less technical expertise and knowledge. So how should one evaluate the impact of philanthropy alongside the work within Congress? Philanthropy-funded research likely convinced a number of other senators to sign onto the Nunn-Lugar initiative; it might have also convinced Lugar himself. And clearly the content of the final Nunn-Lugar legislation was highly indebted to that research, but to what extent is still an open question for me.

Another set of actors to consider are the Soviet officials who traveled to the US to brief Nunn on the dire situation and the need for assistance in securing Soviet nuclear weapons. In Kutchesfahani’s dissertation, it was the Soviets more than anyone else who communicated a sense of crisis and urgency to the key senators involved, who then made use of the research provided by foundation-funded experts to make their case to Congress.

A final set of actors are the other foundations involved. The involvement of the Carnegie Corporation is the best-chronicled in the sources; that of the MacArthur Foundation less so. And only a few sources mention the significance of the funding of the W. Alton Jones Foundation of nuclear arms control research. An important question which I have not fully answered is the relative weight to give each of these philanthropic actors in the passage of the Nunn-Lugar Act.

**WHAT NEXT?**

The basic questions of impact are more fully resolved by these sources than in those of the other case studies I have encountered. But there are still a number of possible avenues for further research, several of which I have signaled in the sections above.

• Getting a better sense of the extent to which philanthropy-funded research, and especially (but not exclusively) that of the Prevention of Proliferation Task Force, directly informed the Nunn-Lugar legislation, and then the implementation of the act in the years after its passage. This might require reading the “Soviet Nuclear Fission” report, which proved so important in convincing senators of the urgency of the problem of loose nukes in Newly Independent States. Or it might involve interviewing some of the staffers responsible for drafting the legislation.

• More work on the ways in which the Carnegie Corporation and the MacArthur Foundation assisted with the implementation of the Nunn-Lugar program in the years after its passage. Several of the experts whose research was funded by foundations later assumed prominent places in the Clinton Administration, responsible for implementing the N-L program (William Perry, for instance, would go on to serve as the Secretary of Defense, and Ashton Carter wold serve as assistance secretary of defense with the specific responsibility for the Nunn-Lugar program).

• More work on the decade of funding by Carnegie and MacArthur on the field of nuclear nonproliferation and how it shaped the Cooperative Security program and the Nunn-Lugar Act. This would also include a better understanding of the total amount spent by Carnegie and MacArthur, in the 1980s and 1990s, on the field—and how those amounts relate to other possible funding sources for the research community. I began doing this with some of the Carnegie Corporation annual reports, but only looked at a few years.

• More work on the other foundations, besides the Carnegie Corporation, that supported research on nuclear nonproliferation and cooperative threat reduction, especially the MacArthur Foundation. The annual reports that would discuss Nunn-Lugar were not available through the Library of Congress, but other earlier reports might be. The Fleishman case-study on Nunn-Lugar (which credits the MacArthur Foundation with sponsoring much of the early research in the field) cites what seem to be a number of internal program reports from MacArthur, which I have not been able to find online but which would be valuable to consult. It also might be useful to speak to someone at the Foundation about sources that they might recommend; in this case, I only conducted a web search.

SOURCES CONSULTED [most helpful bolded]:

RECOLLECTIONS:

• **Ashton B. Carter, “Origins of the Nunn-Lugar Program,” Presentation to the Presidential Conference On William Jefferson Clinton: The “New Democrat” from Hope, Hofstra University, November 10-12, 2005**

<http://belfercenter.ksg.harvard.edu/files/hofstra_presidential_conference_presentation_november2005.pdf>

[Carter was the director of the Center for Science and International Affairs at Harvard’s Kennedy School of Government, where he lead a team working on arms control in the Soviet Union]

• **Ashton Carter and William J. Perry, *Preventive Defense: A New Security Strategy for America* (1999)**

• Sen. Sam Nunn, “Changing Threats in the Post-Cold War World,” in *Dismantling the Cold War: U.S. and NIS Perspectives on the Nunn Lugar Cooperative Threat Reduction Program*, eds. John M. Shields and William C. Potters (1997)

 • Richard Combs, “U.S. Domestic Politics and the Nunn-Lugar Program” in *Dismantling the Cold War* [Combs was an aide to Nunn who helped draft Nunn-Lugar]

• **Sam Nunn and Richard Lugar, “The Nunn-Lugar Initiative: Cooperative Demilitarization in the Former Soviet Union,” in *The Diplomatic Record, 1992-1993*, ed. Allan Goodman**

• Jane Wales, *Advancing Stability in an Era of Change: Project on World Security*, Rockefeller Bros Fund (2000)

<http://rbfdev.forumone.com/sites/default/files/Advancing_Stability_in_Era_of_Change.pdf>

[Wales was a program officer at the Carnegie Corporation who worked closely with David Hamburg on cooperative threat reduction]

FOUNDATION REPORTS:

• Backgrounder: Carnegie Corporation of New York and Carnegie Endowment for International Peace Investments in Nuclear Security (DATE?)

<http://carnegie.org/fileadmin/Media/Heroes/ceip_ccny_background_nunn_lugar.pdf>

• *Carnegie Results: Toward Nuclear Nonproliferation: An Evolving Strategy* (Summer 2004)

<http://carnegie.org/fileadmin/Media/Publications/summer_04nuclear.pdf>

• Carnegie Corporation of New York, *Annual Report*, 1991, 1992

MISC SECONDARY:

• **Paul Bernstein and Jason D. Wood, The Origins of Nunn-Lugar and Cooperative Threat Reduction, Case Study Series #3, Center for the Study of Weapons of Mass Destruction, National Defense University (2010)**

<http://www.ndu.edu/press/lib/pdf/CSWMD-CaseStudy/CSWMD_CaseStudy-3.pdf>

• Kennette Benedict, On Arms Control and Nonproliferation, *Bulletin of the International Network of Engineers and Scientists against Proliferation*, January 2004

<http://www.macfound.org/press/commentary/paper-kennette-benedict-disarmament-arms-control-and-non-proliferation-view-funding-community-january-2004/#_ftn2>

• Avis Bohlen, “The Rise and Fall of Arms Control,” *Survival* (Sept. 2003).

<http://faculty.maxwell.syr.edu/rdenever/PPA-730-27/Bohlen.pdf>

• Matthew Evangelista, *Unarmed Forces: The Transnational Movement to End the Cold War* (2000)

• Scott Kohler, Cooperative Security and the Nunn-Lugar Act,” Case #67 in *Casebook for the Foundation: A Great American Secret*, ed. Joel Fleishman (2007).

<http://cspcs.sanford.duke.edu/sites/default/files/descriptive/cooperative_security_and_the_nunn-lugar_act.pdf>

**•** Ellen Condliffe Lagemann, *The Politics of Knowledge: the Carnegie Corporation, Philanthropy, and Public Policy* (1989)

**• Sara Zahra Kutchesfahani, “Politics & The Bomb: Exploring the Role of Epistemic Communities in Nuclear Non-Proliferation Outcomes,” PhD diss., University College London, 2010**

<http://discovery.ucl.ac.uk/767199/1/767199.pdf>

[see especially “Case Study Two: From the Uncertainty of Command, Control, and Safety of Soviet Nuclear Weapons to the Denuclearisation of Belarus, Kazakhstan, and Ukraine: The Role of an American and Soviet/Russian Nuclear Non-Proliferation Epistemic Community in the Creation of the Nunn-Lugar Cooperative Threat Reduction (CTR) Program.” Chapters 6-7]

IN QUEUE:

• John D. and Catherine T. MacArthur Foundation, *Report on Activities* [not at the Library of Congress]

• Sam Nunn’s remarks at the White House Forum on the Role of Science and Technology in Promoting National Security and Global Stability, March 29-30, 1995 [unable to find online; Fleishman cites]

• Richard G. Lugar, “Perspectives on Congress’s role in foreign policy,” speech delivered in Washington, DC at the Library of Congress as part of the inaugural Bernard and Irene Schwartz Lecture on Congress, September 15, 2005 [not available online]

• Ashton Carter, et. al, *Soviet Nuclear Fission: Control of the Nuclear Arsenal in a Disintegrating Soviet Union* (1991)

EXTENDED REPORT

[excerpts (or summaries) from the key sources, with minimal editorializing on my part; divided into four sections, roughly corresponding to those above: Background material; discussions of the philanthropically-funded research; discussions of mechanistic impact; discussions of other actors; implementation of Nunn-Lugar. There is some overlap in the material presented below, but I thought it was important to demonstrate how the various sources present the material in slightly divergent ways]

 - BACKGROUND:

• “….the Nunn-Lugar Cooperative Threat Reduction Act, a policy innovation which committed taxpayer dollars to drawing down former Soviet military forces. This policy tool is a key example of a new trend, described by former Defense Secretary William J. Perry as a strategy of “preventive defense.” The strategy aims to protect U.S. interests through multilateral action and by cooperatively financing or directly carrying out tasks that reduce threats emanating from abroad. In the case of the Nunn-Lugar program, former Soviet warheads were separated from missiles and transported to secure Russian sites by U.S. corporate contractors who were paid out of the federal defense budget. Those sites have been rendered more secure by technical experts from the U.S. Department of Energy and the Sandia, Lawrence Livermore, and Los Alamos National Laboratories [Wales].”

• In their account, Nunn and Lugar begin the story in August 1991. That month, shortly after an unsuccessful coup attempt against Gorbachev, Nunn attended an Aspen Institute conference in Budapest to discuss the situation in the Soviet Union. At the meeting, he was invited by a participant to come to Moscow and meet Gorbachev. Nunn came away from meeting Gorb convinced that the US must do more in assisting Soviet economic reform and ensuring that central control over huge Soviet stockpile of nuclear weapons, materials, technology and knowledge does not fall into dangerous hands (Nunn and Lugar, *Diplomatic Record*, 141).

• “After his visit to Moscow, Nunn was convinced that Washington had to do all it could to help the Soviet leadership maintain control over its nuclear weapons. Nunn soon called for funds to be authorized to assist the Soviet Union in converting its defense establishment. He also called for confidence-building measures and military exchanges as part of an effort to put in place quickly some measures that could shore up stability in the Soviet military and convey Washington’s goodwill and support of a safe transition to a post-Soviet world. At about the same time, Les Aspin, Chairman of the House Armed Services Committee (HASC), had developed a separate proposal to provide humanitarian aid to the Soviet Union.”

 “As both the House and Senate Armed Services Committees had proceeded to conference to reconcile their respective FY92 defense authorization bills, Nunn and Aspin agreed to combine their proposals into a single new initiative. This amendment would authorize the expenditure of defense funds to provide Moscow with humanitarian aid; technical assistance to safely transport, store, and dismantle nuclear and chemical weapons; and assistance in defense conversion, environmental cleanup of defense sites, and training and housing for decommissioned officers of the Strategic Rocket Forces [Bernstein and Wood].”

 With little support from the WH, considerable opposition to Nunn and Aspin’s move and they have to pull the amendment. After this setback, Nunn teams with Lugar. [Kutchesfahani provides more details of Nunn and Aspin’s efforts]

• “The failed August 1991 coup provided the starting point for the emergence of the epistemic community that devised the CTR [Cooperative Threat Reduction] Program. A week after the attempted coup, the U.S. House Armed Services Committee heard a $1 billion humanitarian aid proposal for the Soviet Union by Les Aspin (D-WI) [Kutchesfahani].”

• “When the Soviet Union broke apart and the Cold War was declared over in the early 1990s, the [Carnegie] Corporation reassessed the priorities of its work in the area of promoting international peace and security. The initial emphasis on reducing the danger of a nuclear confrontation between the United States and the Soviet Union “shifted toward exploring opportunities for global engagement with Russia and promoting democracy and civil society in the newly independent post-Soviet states,” explains Deana Arsenian, chair of the Corporation’s International Peace and Security program, “as well as direct U.S-Soviet collaborative research on security issues.” Another concern was that thousands of nuclear weapons and tons of fissile material that were formerly under the command and control of one nation—the Soviet Union—were now dispersed across three countries, besides Russia: Ukraine, Kazakhstan and Belarus, which then, respectively, had the third, fourth and eighth largest nuclear arsenals in the world [Carnegie Results].”

• “There were four stages to the emergence of the epistemic community, which took place over a five month period (outlined in Table 6.3). The first stage was marked by the imminent collapse of the Soviet Union and Aspin‘s immediate reaction to the failed August coup. The second stage was marked by the “Cooperative Security” initiative, an American-funded research project, which promoted an American-Soviet/Russian cooperative approach to arms control. The third stage was marked by the visit of four Soviet research analysts (from in and out of government) to Washington D.C. asking the U.S. for assistance in storing and dismantling Soviet nuclear weapons. In the final stage, members of the epistemic community were brought together culminating in the drafting of the Nunn-Lugar CTR Program [Kutchesfahani].”

[Kutchesfahani provides a timeline in Table 6.3]

• Nunn’s essay in the Shields and Potters collection provides background on the origins of his own understanding of the risks posed by the breakup of the Soviet Union and the fate of their nuclear arsenal. Important material in establishing the fact that foundation-funded research did not implant this idea in him.

 Similar material is also provided in Carter and Perry’s book. “Senator Sam Nunn and Senator Richard Lugar began to worry about loose nukes long before the Soviet Union disintegrated and Russia, Ukraine, Kazakhstan, and Belarus were born.”

 - PHILANTHROPIC FUNDED RESEARCH:

• “In 1983, the year after David Hamburg became president of the foundation…the Corporation launched the Avoiding Nuclear War program. Taking note of the escalating dangers of confrontation between nuclear-armed nations and public discussion about the possible scenarios in which they might be used, Carnegie Corporation, under Dr.

Hamburg’s guidance, decided, initially, to focus a sizeable portion of its grantmaking activities on avoiding nuclear war between the U.S. and the Soviet Union.”

 “The Avoiding Nuclear War program was designed to help fill the gaps in knowledge about the U.S.-Soviet relationship and nuclear policy. Under the program, the

Corporation provided grants related to arms control, supported cooperative U.S.-Soviet linkages and strengthened U.S. institutions working in these areas. The thrust of these grants was to revitalize the study of international security and also to promote a corpus of scholarly and intellectual analysis on nuclear issues and on U.S.-Soviet relations.”

“In the early 1990s with the breakup of the Soviet Union and a weaker, but a still nuclear-armed Russia emerging, Carnegie Corporation of New York initiated a number of grants to facilitate the convening of high-level experts concerned with post-Soviet nuclear nonproliferation issues. The first such effort was the Committee on Reducing the Nuclear Danger, formed at the request of Carnegie Corporation and chaired by McGeorge Bundy, a former advisor to President John F. Kennedy, Sidney Drell of New York University, and Admiral William Crowe, former chairman of the Joint Chiefs of Staff. The formation of a Prevention of Proliferation Task Force followed, funded through grants to the Brookings Institution. It was this task force whose report *Soviet Nuclear Fission: Control of the Nuclear Arsenal in a Disintegrating Soviet Union* shook up the policy establishment with its explanation of how the Soviet Union’s system of control for its nuclear weapons—weak to begin with, and riddled with problems—could break down under political revolution, republican secession and widespread civil chaos, resulting in nuclear weapons, fissile material or nuclear know-how falling into dangerous hands. The report in turn led to the development of the landmark Soviet Nuclear Threat Reduction Act of 1991—renamed the Cooperative Threat Reduction Program in 1993 but

commonly known as “Nunn-Lugar” after the bipartisan team of Democratic Senator Sam

Nunn of Georgia and Republican Senator Richard Lugar of Indiana who sponsored and

vigorously lobbied for the legislation [CC Backgrounder].”

• “The changing focus of the [Carnegie] Corporation’s work in this area was signaled by renaming the Avoiding Nuclear War program: through much of the 1990s it was known by a title that more aptly described it main concern—the Cooperative Security program, an idea reflective of new post-Cold War realities and aspirations developed by Corporation grantees William Perry of Stanford University, Ashton Carter of

Harvard University and John Steinbruner of the Brookings Institution.”

“During the 1990–1994 period, the Cooperative Security program made a number of grants to facilitate the convening of high-level experts concerned with nuclear nonproliferation issues in a post-Soviet climate. The first such effort was the Committee on Reducing the Nuclear Danger, formed at the request of Carnegie Corporation and spearheaded by McGeorge Bundy, a former advisor to President John

F. Kennedy, Sidney Drell of New York University and William Crowe, former chairman of the Joint Chiefs of Staff. The formation of a Prevention of Proliferation Task Force followed, funded through grants to the Brookings Institution; it was this task force that produced a report instrumental in the development of the Nunn-Lugar Cooperative Threat Reduction Program. Entitled Soviet Nuclear Fission: Control of the Nuclear Arsenal in a Disintegrating Soviet Union, the 1991 report shook up the policy establishment with its explanation of how the Soviet Union’s system of control—weak to begin with, and riddled with problems—for its nuclear weapons could break down under political revolution, republican secession and widespread civil chaos, resulting in nuclear weapons, fissile material or nuclear know-how falling into dangerous hands [Carnegie Results].”

“The notion of a culture of nonproliferation evolved and took root at the Corporation in the 1990s, prompting grants to the Monterey Institute in California and to the Stimson Center for research and education in this area. A few years later, funding was aimed at stimulating the nonproliferation culture in Russia through the Center for Policy Studies in Russia, a Monterey Institute “spin-off.” Integral to the Corporation’s focus on cooperative threat reduction has been the work of the Russian American Nuclear Security Advisory Council, which worked with Russia and other former Soviet states to develop programs aimed at preventing breakdown in the Russian nuclear complex. The grant supported efforts to develop new and peaceful pursuits for the scientists and technicians engaged in the nuclear field and enabled outreach activities aimed at policymakers in the United States and Russia, journalists, national laboratories and foreign governments to draw international attention to the issue [CC Results].”

• “It should be noted, however, that while Aspin and Nunn were working on their initiative, two research teams at the universities of Harvard and Stanford were collectively studying the impending collapse of the Soviet Union and what this might mean for U.S. national security. Their research was part of a broad “Cooperative Security” project, a collaborative effort between Harvard University, Stanford University, and the Brookings Institution funded by the Carnegie Corporation of New York (under Dr. David Hamburg‘s presidency). The research was being led by Dr. Ashton Carter (Harvard University), Dr. William Perry (Stanford University), and Dr. John Steinbruner (Brookings Institution). At the same time, four Soviet foreign policy experts (from both within and outside of government) went to Washington D.C. asking for U.S. assistance in storing and dismantling Soviet nuclear weapons, which prompted joint engagement on a cooperative research initiative. Consequently, these experts met with one another to discuss policies the U.S. could implement that would facilitate the control of the 27,000 nuclear weapons [Kutchesfahani].”

 [Kutchesfahani offers a listing, on Table 6.2, of the members of the “epistemic community,” of academic and government experts, that helped to produce Nunn-Lugar]

• “My [Carter’s] Harvard colleagues and I wrote a detailed study of this unprecedented problem [disintegration of Soviet Union, major nuclear power] and what to do about it called *Soviet Nuclear Fission: Control of the Nuclear Arsenal in a Disintegrating Soviet Union*. The recommendation we made at the end of that volume was that the United States government should create a program of assistance to the fragments of the Soviet Union to make sure the vast Soviet nuclear legacy was not abused.

“We had the study but not yet the audience of people in power who shared our concern.” [Carter, “Origins”]

• “The [Carter] study provided the “knowledge” of the issue at hand and lent empirical and analytical weight to the argument Nunn (and to some extent Aspin) had been making earlier. Further, it validated the urgency Nunn attached to the need to adapt policy to confront the security dangers that political turmoil in the Soviet Union posed (Bernstein and Wood 2010: 6). The report provided substantial background information on the entire Soviet nuclear weapons enterprise, including the nuclear command and control system (191).” [Kutchesfahani]

• “We [Perry and Carter] were then [at the time of meeting with Nunn] both outside of government, Perry leading a research team at Stanford, and Carter a research team at Harvard, both studying national security problems. Perry’s group at Stanford had been studying the giant military-industrial complex of the Soviet Union and the opportunities it presented to be the engine of recovery for the Soviet Union’s backward economy once the cold war ended. Carter’s team at Harvard had just completed a study [*Soviet Nuclear Fission*] of the Soviet nuclear arsenal. This study predicted that the breakup of the Soviet Union posed the biggest proliferation threat of the Atomic Age and outlined a new form of “arms control” to stop it: joint action by the two former cold war opponents against the common danger [Carter and Perry].”

• “Soon after Gorbachev became the Soviet president, the Carnegie Corporation of New York joined with the John D. and Catherine T. MacArthur Foundation and the W. Alton Jones Foundation, as Jane Wales, then a Carnegie program officer, recounts, “in supporting a group of U.S. and Soviet scientists that served as a brain trust to the Soviet president developing options for nuclear arms control and disarmament.” This partnership marked the first time nuclear scientists from the two nations had had any sort of sanctioned collaboration [Fleishman].”

“Throughout the 1980s, MacArthur and Carnegie in particular were major funders of research and exchange efforts aimed at bridging the Soviet-American divide. Much of this support was aimed at think tanks, particularly the Washington-based Brookings Institution.” [Note 1002: Between December 1984 and December 1989, for example, the MacArthur Foundation made seven grants to Brookings. The last of these, a $5 million investment over five years, funded much of the policy research described later in this case.]

 In 1989, MacArthur Foundation made a $5 million grant to Brookings. “With that grant, as well as support from Carnegie and its own endowment, researchers at Brookings began to develop the framework for a collaborative approach to de-escalation and nuclear threat reduction. This approach, dubbed “cooperative security,” called for transparency in securing nuclear technologies and reducing each nation’s respective arsenal of weapons of mass destruction (WMD).”

 With support of Carnegie Corp and Mac Found, Brookings “formed a consortium with the Center for Science and International Affairs at Harvard, the Center for International Security and Arms Control at Stanford, and the Carnegie Endowment for Peace in Washington.” Arrive at consensus on import of cooperative security.

 Especially significant was the collaboration of John Steinbruner, director of Brookings’ Foreign Policy Studies Program, with Ashton Carter of the Kennedy School of Government at Harvard, and William Perry, then a professor at Stanford. With

funding from MacArthur and Carnegie, the three laid out an approach to Soviet-American cooperative threat reduction in *A New Concept of Cooperative Security*, pub in 1992 [Fleishman].

• “The John D. and Catherine T. MacArthur Foundation, the Carnegie Corporation of

New York, and the W. Alton Jones Foundation supported the early work of Steinbruner and his Brookings colleagues in developing the concept of cooperative security and considering its operational consequences. The concept was further developed and applied to the problem of weapons proliferation by the Carnegie-supported Cooperative Security Consortium, comprised of scholars from Brookings, Harvard’s Center for Science and

International Affairs (CSIA), Stanford’s Center for International Security and Arms

Control (CISAC), the Carnegie Endowment for International Peace (CEIP), and

Russia’s Institute for the Study of U.S.-Canada (ISKAN). That effort resulted in a

Brookings-edited volume, Global Engagement, Janne E. Nolan, editor [Wales].”

• “Several foundations have sought to advance both new ideas and new methods of analysis by systematically engaging policy-makers and elected officials in discussions with scholars and activists. In the late 1980s and early 1990s, the Carnegie Corporation and the W. Alton Jones Foundation supported a Washington dinner series to discuss long-term “Security Options” among their grantees and officials from the legislative and executive branches of government.

MacArthur and Carnegie have supported Congressional seminars convened by former Senator Dick Clark of the Aspen Institute, in which U.S. and other legislators and scholars devote a week to the discussion of issues relating to U.S.-Russian relations, China’s future, the global environment, or the transition to post-apartheid South Africa. These foundations and others have supported the Aspen Strategy Group, an annual, week-long session of current, past, and likely future senior officials to discuss papers put forth by outstanding scholars with area and functional expertise [Wales].”

 “After Mikhail Gorbachev came to power in the mid-1980s, Carnegie joined the W. Alton Jones and MacArthur foundations in supporting a group of U.S. and Soviet scientists that served as a brain trust to the Soviet president, developing options for nuclear arms control and disarmament. All three foundations supported the Natural

Resources Defense Council’s path-breaking experimentation with verification techniques. And several foundations have provided funding for the National Academy of Sciences and its collaboration with counterparts abroad. After the fall of Communism, both the Soros network of foundations and MacArthur provided steady support to scientists in the former Soviet Union, although Soros’s International Science Foundations recently have been phased out [Wales].”

- MECHANISTIC IMPACT:

• “How was Congress influenced to pass the Nunn-Lugar legislation in December 1991 three months after it strongly criticised Aspin‘s initial humanitarian aid package? I argue that an epistemic community, which emerged during the uncertainty surrounding the break-up of the Soviet Union, was able to persuade Congress that securing former Soviet nuclear weapons was in the U.S. national security interest, and indeed in the interest of international security and, as such, an assistance programme was necessary [Kutchesfahani].”

 Describes a three-stage process: policy innovation🡪policy diffusion🡪policy selection.

 “During the first stage, policy innovation (marked by 1 in Figure 7.1), members of the American-Soviet/Russian epistemic community used the issues of international security and the threat of further nuclear weapons proliferation to frame the CTR Program. During the second stage, policy diffusion (marked by 2 in Figure 7.1), members of the epistemic community participated in periodic meetings where they engaged in a mutual exchange of information, regular scientific and technical consultative exchanges, and participated in discussions surrounding the nature of the technical and financial assistance programme. During the third stage, policy selection (marked by 3 in Figure

7.1), the roles of David Hamburg and Senators Nunn and Lugar were especially important since Hamburg connected the senators to the non-governmental experts (e.g.,

Carter, Perry, and Steinbruner), and the senators –having heard from the Soviet/Russian experts – presented the experts‘ proposals to the U.S. Congress. After the U.S. Congress passed the Soviet Nuclear Threat Reduction Act of 1991, policy persistence, the final stage (marked by 4 in Figure 7.1), was marked by the subsequent implementation of the

CTR Program.”

 Kutchesfahani also cites interviewees who emphasize the importance of David Hamburg to the process; one described him as the “principal instigator” of the meeting btw Nunn and Lugar and the arms control experts, and another stating that Hamburg’s “personal relationships” and “trust” were very important in connecting the non-governmental experts to Senators Nunn and Lugar.

• “Ashton Carter and his colleagues at Harvard’s John F. Kennedy School of Government, supported by David Hamburg, president of the Carnegie Corporation, produced a compelling analysis of control of nuclear weapons in a disintegrating Soviet Union. In a briefing in Senator Richard Lugar’s office in mid-November, Carter documented the urgency of the existing problem and recommended immediate action. The briefing coincided with a visit to the Senator by Victor Mikhaylov, Soviet deputy minister of atomic energy; the discussion focused on Soviet problems with storing, destroying, and controlling nuclear weapons. Visiting staffers Sergey Rogov and Andrey Kokoshin, from Moscow’s USA-Canada Institute, also briefed senators on nuclear control issues. The overall message was clear: there was a grave danger building in the former SU. It demanded a prompt US response (Nunn and Lugar, *Diplomatic Record*, 144).”

 Nunn and Lugar invite 16 senators to working breakfast on Nov 21, 1991 to hear repeat of Carter’s briefing. “Once acquainted with Carter’s analysis, these colleagues agreed that US domestic political hostility to Soviet aid paled in comparison to the dangers in question.” Group decided to propose $500 million for weapons destruction and $200 million for humanitarian aid. Nunn and Lugar publish *Washington Post* column next day urging passage. Put forward amendment, titled Soviet Nuclear Threat Reduction Act of 1991.

 Within two-week period, a number of senators changed their views on the issue [after voting against Nunn-Aspin], agreeing that it wasn’t foreign aid but prudent investment in US national security. “This was the most abrupt change in Senate opinion that Nunn and Lugar had ever experienced in Washington.”

• “On November 19, 1991, David Hamburg, president of the Carnegie Corporation of New York, invited the two of us [Carter and Perry] and our colleague John Steinbruner of the Brookings Institution to a meeting in Nunn’s office. Hamburg had a knack for bringing the right people together at the right time to work on the right problems, stimulating common thoughts and common action. Through the Carnegie Corporation of New York, a foundation devoted to peace and education, Hamburg and his associate Jane Wales had for many years supported exchanges and discussions between Soviet and American scholars and officials, even through the darkest days of the cold war. We had participated in many Carnegie-sponsored meetings and had frequently met with Senator Nunn and Senator Lugar through these meetings….

 “Carter briefed the senators on the Harvard study. It turned out that Senator Nunn and Senator Lugar and their staff members, Robert Bell, Ken Myers, and Richard Combs, were working on a similar scheme for joint action. After the meeting broke up, Carter, Bell, Myers, and Combs stayed behind to draft what became known as the Nunn-Lugar legislation. Two days later, Nunn and Lugar convened a bipartisan group of senators at a working breakfast. Carter repeated his briefing, warning of the potential dangers of the Soviet nuclear arsenal as the state that had controlled it fell apart. Nunn and Lugar asked the senators to support legislation that would authorize the Pentagon to initiate U.S.-funded assistance to stem the “loose nukes” problem of the former Soviet arsenal. In the ensuing discussion, the needed support was garnered from the senators in attendance, not all of it motivated strictly by the problem at hand. (Nunn swore Carter to secrecy; not many outsiders get to witness democracy’s horse trading at work.)

“On November 28, 1991, just nine days after the legislation had been drafted in Lugar’s office, the Nunn-Lugar amendment to the annual defense bill passed the Senate by a vote of 86 to 8. Les Aspin gathered the necessary support in the House of Representatives, and the legislation passed the House shortly thereafter on a voice vote [Carter and Perry].”

• “On November 19, 1991, just 6 days after withdrawal of the Nunn-Aspin amendment, Ashton Carter, the study director [Soviet Nuclear Fission: Control of the Nuclear Arsenal in a Disintegrating Soviet Union], briefed the findings to a small group that included Nunn, Lugar, a few of their staff aides, William Perry of Stanford University, John Steinbruner of the Brookings Institution, and David Hamburg, president of the Carnegie Corporation, which had funded the Harvard study.”

 “*Soviet Nuclear Fission* lent empirical and analytic weight to the argument Nunn had been making for several months and **validated** the urgency he attached to the need to adapt policy to confront the security dangers that political turmoil in the Soviet Union posed….The study examined specific threats that could result from deficiencies in Soviet nuclear safeguards and controls and suggested a range of measures to improve these controls and thus ensure safe custody of Soviet (and post-Soviet) nuclear weapons during a period of political transition [emphasis mine].”

“The impact of the November 19 meeting was instantaneous. Nunn and Lugar were reinforced in their commitment to revive the key elements of the Nunn-Aspin amendment, and the work to draft the new legislation began that day.”

“Nunn and Lugar convened a followup breakfast meeting 2 days later that included a bipartisan group of 16 senators. Carter repeated his briefing of the Harvard study. Recalling the opposition that had doomed Nunn-Aspin, the two Senators later remarked, “Once acquainted with Carter’s analysis, these colleagues agreed that U.S. domestic political hostility to Soviet aid paled in comparison to the dangers in question.” “In the discussion that took place that morning, Nunn and Lugar gathered the support of the senators in attendance for a $500 million proposal to provide assistance for the safe transport, storage, destruction, and nonproliferation of Soviet weapons of mass destruction (WMD).”

The Nunn-Lugar legislation was offered as an amendment to an unrelated bill. Titled the “Soviet Nuclear Threat Reduction Act of 1991,” the amendment had 24 cosponsors and was adopted in the Senate by a vote of 86–8 on November 25. To Nunn and Lugar, this vote represented the most dramatic reversal of opinion they had ever experienced in the Senate.” Bush signs it into law Dec. 12, 1991. [Bernstein and Wood].”

• “Despite the anti-foreign backlash in Congress, Lugar and Nunn agreed it was unthinkable to send no help and no signal of U.S. support at such a crucial moment in the Soviet Union. [...] Lugar and Nunn agreed it was essential to pass at least a narrow, nuclear-related Soviet aid plan in the few days left before Congress recessed for the year (1991: 2).” [Here is where the foundation-funded experts come into the narrative]

 Six days after failed Nunn-Aspin legislation was withdrawn, Carnegie’s Hamburg invites everyone to Nunn’s office. Lugar claims that he had been following the issue and approaches Nunn to see if he could help in time before senate adjourns. “At this meeting, an informal exchange of ideas on the security of strategic weapons in the Soviet Union took place.”

 After this meeting, Nunn and Lugar organised a breakfast meeting with “15–20 key senators” featuring a briefing by Carter on the findings from the Harvard study, Soviet Nuclear Fission (Nunn 1997: xvi). In the meeting, it became clear that Senators Nunn and Lugar and their staff members, Robert Bell, Ken Myers, and Richard Combs, had also been working on a similar scheme for joint action.”

 Interviewee VII (a Senior U.S. official, National Security Council; former staff assistant at Harvard‘s Belfer Center International Security Program): “Nunn was searching for policy tools to address the grave concerns he had about the WMD consequences of the Soviet dissolution, and found several appealing ideas in our Soviet Nuclear Fission project. I can say with confidence that Ash [Carter] did not attend that meeting with Nunn with the intent of pitching any particular program, and Nunn‘s interest certainly accelerated the pace of our effort and gave it sharper focus….“Without the ready availability of the project‘s [*Soviet Nuclear Fission*] early findings and analytical support, Congress may not have had the content with which to fill its legislative response to a very real and dangerous problem, but without the wisdom and legislative skill of Nunn, Lugar, Aspin and others, we at CSIA [Harvard Center for Science and International Affairs] would certainly never have been bring our ideas into law or policy. And of course, without a platform of established prior relationships among the principal actors, these two elements may never have connected at all.”

 “[At the breakfast meeting with senators] Carter and his team suggested that the senators examine a set of policy recommendations outlined in the book; notably, that joint action by the two former Cold War enemies was needed against the common danger of further proliferation. Nunn and Lugar asked the senators to support legislation that would authorise the Pentagon to initiate U.S.-funded assistance to stem the “loose nukes” problem of the former Soviet arsenal [Kutchesfahani].”

Three days later, the Senate held a debate on this issue with floor statements from Senators Nunn and Lugar, and Chairman Aspin. The Senate voted 86–8 to provide $500 million from Pentagon funds to assist control and destruction of Soviet nuclear weapons. On November 26, Public Law 228, the Conventional Forces in Europe Treaty Implement Act amendment entitled the “Soviet Nuclear Threat Reduction Act” of 1991 authorising $500 million in aid to the Soviet Union was passed. Two weeks later, on December 12, Nunn-Lugar was signed into law.

• “[Lugar] noted that as of December 2009, the Nunn-Lugar program had dismantled or eliminated 7,514 nuclear war-heads, 768 ICBMs, 498 ICBM sites, 155 bombers, 651 submarine-launched ballistic missiles, 32 nuclear submarines, and 960 metric tons of chemical weapons [Bernstein and Wood].”

• “To draw a straight line from the grants made by Carnegie and MacArthur to the passage of the Nunn-Lugar Act would be a gross oversimplification, and would probably exaggerate the foundations’ role in a story that is far bigger than any one of its parts. But it is undeniable that, from at least the mid1980s, those two foundations were promoting strategic collaboration between the U.S. and the U.S.S.R., particularly in the area of WMD control. The foundations helped shape the research agenda, as described in a Brookings report stating that “the purposes of the MacArthur Foundation effort have been made integral to our research planning. . . .” They organized and supported the consortium that produced a groundswell of research and analysis, culminating in the work of Carter, Perry, and Steinbruner to propose a cooperative threat reduction plan. The two foundations also helped to orchestrate the crucial meeting at which the arguments of the former were presented to Senators Nunn and Lugar [Fleishman].”

• “As two interviewees argued, the “Nunn-Lugar idea came from academics” (Interview IX) and that ―“non-governmental thinking under-girded the thought process of CTR” (Interview XXII). These experts provided the intellectual impetus behind the CTR Program [Kutchesfahani].”

• “Shortly after this legislation [Nunn-Aspin] was withdrawn, Senator Nunn joined Senator Richard Lugar…for an informal briefing in Sen. Lugar’s office on the subject of the security of strategic nuclear weapons in the Soviet Union in the midst of political and military turmoil there. The briefer, Dr. Ashton Carter of Harvard University’s Center for Science and International Affairs, had, together with several Harvard colleagues, recently completed a detailed study of this problem [Combs].”

 “The Harvard study **reinforced** Sen. Nunn’s conviction that it was in the national security interest of the Untied State to assist the Soviet Union, which appeared to be on the brink of total collapse, to secure and control its vast stocks of weapons of mass destruction [Combs 44; my emphasis].” Carter’s briefing also impressed Lugar, who agreed to join Nunn in an effort to revive key parts of the Nunn-Aspin legislation

 - OTHER ACTORS:

• Kutchesfahani has the best documentation of the efforts of Soviet officials to raise the dangers involved in “loose nukes.” Interviews one official (a “U.S. expert in arms control and non-proliferation issues and a senior associate at a renowned U.S. public policy research institution”) who states: “Russia was very involved. None of this would have happened without Russian involvement.”

 Lugar (in a 1999 article cited by Kutchesfahani) also suggests that it was warnings from Russian leaders—and not foundation-supported US experts—that precipitated the Nunn-Lugar Act.

“Between the end of October and 15 November 1991, four Soviet visitors went to

Washington D.C. to ask for U.S. assistance in storing and dismantling Soviet nuclear

weapons. These visitors included Gorbachev emissary and senior advisor Aleksandr

Yakovlev, civilian defence analysts Dr. Sergey Rogov and Dr. Andrey Kokoshin, and

Deputy Minister of Atomic Energy and Industry Dr. Viktor Mikhailov.” Respected think tank fellows. “Towards the end of October (circa 24 October), Mikhailov gave a presentation to the Senate Arms Control Observer Group detailing the “loose nukes” problem. He warned of the inadequate facilities and funds to store and dismantle the nuclear weapons, and asked the members of the Senate Arms Control Observer Group, “Can you help? We [Soviet Union] need your help.”

 “In addition, Senators Nunn and Lugar heard from the Soviet visitors to Washington (Mikhailov, Kokoshin, Rogov, and Yakovlev) that the Soviet Union needed

U.S. assistance in safely securing and dismantling the Soviet nuclear arsenal. Through their knowledge and expertise, these experts reinforced the national security frame by shifting the discourse from humanitarian aid (initially proposed by Aspin and Nunn) to a

national security imperative.” [I do not find Kutchesfahani’s claim that it was the Soviet’s that encouraged Nunn and Lugar to switch to a national security frame to be convincing; this seems to have been a common theme in much of the American research on the subject as well]

 - IMPLEMENTATION:

 • In March 1992, after the legislation had gone into effect, we [Carter and Perry] joined Senators Nunn, Lugar, Warner, and Jeff Bingaman, as well as David Hamburg and staffers Bell, Myers, and Combs on a trip to look at the problem firsthand. By then, however, we were visiting not the Soviet Union, but the newly independent states of Russia and Ukraine. Leaders in the new states were eager to learn more about the program and to meet the two senators whose names were soon known throughout the weapons of mass destruction archipelagos of the former Soviet Union. [Carter and Perry]

• “Following a March 1992 trip to the former Soviet Union [which Carnegie subsidized], Senators Nunn and Lugar—who had been accompanied by Senators John Warner and Jeff Bingaman, as well as by Ashton Carter of Harvard, defense conversion specialist William Perry of Stanford, and Carnegie Corporation President David Hamburg—succeeded in adding authority for defense conversion, environmental cleanup, and housing assistance for displaced Soviet strategy weapons officers to the FY 1993 Nunn-Lugar legislation [Combs].”

 Nunn and Lugar also discuss this trip in their essay in *Diplomatic Record*. They issue a report on the trip and brief other senators. Eventually discuss trip with President Bush and get his support for additional funding. Both senators credit the Carnegie Corporation with funding the trip.