

# The Origins of Scientific Internationalism in Postwar U.S. Foreign Policy, 1938-1950

By Clark A. Miller\*

## Abstract

This article tracks seeks to explain the origins and prominence of *scientific internationalism* in postwar U.S. foreign policy—the idea that scientific and technical cooperation among governments could contribute to broader U.S. goals of promoting international peace and prosperity. It tracks the development and honing of these ideas in U.S. Latin American policy during World War II and their uptake into U.S. policy vis-à-vis the United Nations and the developing world after 1945. In so doing, it highlights the importance of events in fields other than atomic physics in shaping postwar U.S. science policy, especially in regards to the management of global affairs. The article also focuses attention on a relatively little known institution, the U.S. Interdepartmental Committee for Scientific and Cultural Cooperation, whose wartime activities in Latin America served as an important model for postwar policies and which emerged as a center of coordination within the Truman Administration for promoting the value of scientific and technical expertise in the conduct of international diplomacy.

## **Introduction<sup>1</sup>**

The years immediately following World War II brought a geopolitical and organizational transformation of world order. Geopolitically, the United States' wartime victory and monopoly of the atomic bomb left it temporarily dominant, militarily and industrially, until the Soviet Union exploded its own nuclear weapons in 1950. Rivalry between the two emerging superpowers consolidated the division of Europe and, as it spread to other parts of the world, dismantled Europe's colonial empires, creating a rising tide of newly independent states. Organizationally, the defeat of Germany and Japan brought a new effort to institutionalize relations among nations. Transforming the United Nations from a wartime alliance into a multilateral organization for securing a peaceful and prosperous postwar era, the United States and its allies established the General Assembly, the Security Council, and the Specialized Agencies. Between 1943 and 1950, governments created, among others, the Food and

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<sup>1</sup> The documentary record on which this paper draws is taken primarily from the records of the U.S. Department of State and the Interdepartmental Committee on Scientific and Cultural Cooperation. These documents can be found in the U.S. National Archives and Records Administration, at their College Park, MD, facility. Except where specifically noted otherwise, they are found in Record Group 353. Records of Interdepartmental and Intradepartmental Committees (Department of State). Section 3. Interdepartmental Advisory Council on Technical Cooperation and Its Predecessors. Hereafter, I refer to these records as NARA-RG353.3. I also use the following two abbreviations: SCC - Interdepartmental Committee on Scientific and Cultural Cooperation; CAR - Interdepartmental Committee on Cooperation with the American Republics.

Agriculture Organization, International Monetary Fund, World Bank, United Nations Educational, Scientific, and Cultural Organization, International Civil Aviation Organization, World Health Organization, and World Meteorological Organization, many of which remain central in the management of world affairs today.<sup>2</sup> The late 1940s also saw the United States establish extensive programs of economic and technical assistance, first in Europe, with the Marshall Plan, and later to what Truman would label in his 1948 inaugural as the world's "underdeveloped countries." The end of the early postwar era, and the onset of the Cold War, also brought the establishment of a new set of formal alliances radiating outward from the United States and the Soviet Union, spanning much of the globe in spheres of military and industrial competition.<sup>3</sup>

Less well appreciated is the extent to which the postwar transformation of world order went hand-in-hand with a fundamental shift in the practice and conduct of global diplomacy and in the organization of the state for world affairs. This latter transformation centered on the

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<sup>2</sup> The United States initiated or actively promoted the UN Conference on Food and Agriculture in 1943, followed by the Bretton Woods Conference in 1944, which established the International Monetary Fund and the World Bank, the United Nations Educational, Scientific, and Cultural Organization in 1945, and the International Health Conference in 1946. By 1947, agreements had been signed constituting the majority of these organizations, although some would not come into force until the late 1940s or early 1950s.

<sup>3</sup> On the institutionalization of postwar international organization, see, especially, G. John Ikenberry, *After Victory: Institutions, Strategic Restraint, and the Rebuilding of Order After Major Wars* (Princeton, 2001), and John G. Ruggie, *Multilateralism Matters: The Theory and Praxis of an Institutional Form* (New York, 1993).

rapidly expanding presence of scientific and technical experts in diplomatic affairs. On issues ranging from arms control and the stabilization of financial markets to public health and airline navigation, experts lent their expertise to the day-to-day business of foreign policy during the immediate postwar era, almost always supplementing and sometimes even displacing diplomats.<sup>4</sup> Especially in the UN Specialized Agencies and in programs of economic and

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<sup>4</sup> The precise balance among diplomatic and expert delegates often varied, across fields and at specific meetings. In meteorology, for example, U.S. legal experts were present during the negotiation of the World Meteorological Convention, although the primary negotiations took place among the heads of national weather services. Subsequent to the creation of the World Meteorological Organization, U.S. representation to the organization was housed fully within the U.S. Weather Bureau and the Chief of the U.S. Weather Bureau served as the organization's first President. See Clark A. Miller, "Scientific Internationalism in American Foreign Policy: The Case of Meteorology (1947-1958)," in C. Miller and P. Edwards, eds., *Changing the Atmosphere: Expert Knowledge and Environmental Governance* (Cambridge, 2001). In postwar arms control, by contrast, diplomats retained control over most activities, even as scientists began to join in meetings. Separate technical meetings became an important part of the arms control process, but even here diplomatic representatives kept a careful eye on the proceedings. See Kai Henrik Barth, "Science and Politics in Early Nuclear Arms Control Negotiations," *Physics Today*, 51 (1998): 34-39. See also Harold K. Jacobson and Eric Stein, *Diplomats, Scientists, and Politicians: The United States and the Nuclear Test Ban Negotiations* (Ann Arbor, 1966). By the late 1990s, scientists formed a large portion of the representatives to international environmental organizations such as the Intergovernmental Panel on Climate Change (IPCC). Even at meetings of international climate negotiators, where the U.S. delegation

technical assistance, scientists, engineers, economists, agronomists, and other technical experts became frontline participants in the negotiation, creation, and management of new global institutions and policy programs. This shift toward growing involvement of experts in the conduct and organization of world affairs both reflected and drove state-level changes in the organization of diplomacy. Especially in the United States, which led much of the effort to institutionalize expertise in world affairs, agencies other than the Department of State often took the lead in managing U.S. policy with respect to the expert institutions of the United Nations and the burgeoning technical assistance programs. Building on trends during the Progressive and New Deal eras that had seen a wide range of federal agencies acquire new policy responsibilities through the mobilization of science and expertise, these agencies now asserted important new roles in conducting U.S. policy abroad, ending the State Department's traditional monopoly over U.S. foreign policy.<sup>5</sup>

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was headed by a representative of the State Department, the other 20+ members of the delegation were technically-trained experts from other agencies of the federal government. See Clark A. Miller, "Challenges to the Application of Science to Global Affairs: Contingency, Trust, and Moral Order," in C. Miller and P. Edwards, eds., *Changing the Atmosphere: Expert Knowledge and Environmental Governance* (Cambridge, 2001) and Clark A. Miller, "Climate Science and the Making of a Global Political Order," in S. Jasanoff, ed., *States of Knowledge: The Co-production of Science and Social Order* (London, 2004). for detailed discussion of the role of science in the IPCC and the climate negotiations.

<sup>5</sup> On the growing role of science, technology, and expertise in the transformation of early 20<sup>th</sup> century U.S. policymaking, see, e.g., Samuel P. Hays, *Conservation and the Gospel of Efficiency* (Oxford, 1959).

The growing prevalence of experts in diplomatic affairs after 1945 corresponded to a novel commitment to *scientific internationalism* in the ideological underpinnings of postwar U.S. foreign policy. Scientific internationalism can be understood as the idea that cooperation among governments in the areas of science, technology, and other forms of expertise contributes in important ways to the furtherance of broader goals of international peace and prosperity. Elsewhere, I have identified the broad outlines of scientific internationalism in postwar U.S. foreign policy and tracked its influence on the negotiation and operation of the World Meteorological Organization from its creation in 1947 through the 1958 International Geophysical Year.<sup>6</sup> To date, however, the origins of scientific internationalism in American foreign policy remain largely unexplored. Where did the idea originate that intergovernmental cooperation in science and technology could serve as a “positive instrument for the development among nations and peoples of the soil and climate essential to the growth of peace.”<sup>7</sup> Where did

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<sup>6</sup> Clark A. Miller, “The Globalization of Human Affairs: A Reconsideration of Science, Political Economy, and World Order,” in M. Tetreault, R. Denmark, K. Burch, and K. Thomas, eds., *Rethinking Global Political Economy: Emerging Issues, Unfolding Odysseys* (New York, 2003) and Miller, “Scientific Internationalism” (cit. n. 3). See also Anne-Marie Burley, “Regulating the World: Multilateralism, International Law, and the Projection of the New Deal Regulatory State,” in J. Ruggie, ed., *Multilateralism Matters: The Theory and Praxis of an Institutional Form* (New York, 1993): 125-156 and G. John Ikenberry, “A World Economy Restored: Expert Consensus and the Anglo-American Postwar Settlement.” *International Organization* 46(1992): 289-322.

<sup>7</sup> Olcott H. Deming, “In the Minds of Men: Speech given before the alumni and faculty of Rollins College,” Feb. 24, 1946. NARA – RG 353.3. Entry #14. Subject Files, 1938-53. Box

this model of science and international diplomacy get its initial hearing among American officials? What justifications did American scientists and officials offer on its behalf, in support of its broader utility to the pursuit of American foreign policy goals? How did these justifications evolve, over time, into a coherent and stable logical framework for supporting scientific and technical cooperation programs? In turn, as a matter of practical organization, how did scientists and officials coordinate the development of a foreign policy for science across a wide range of federal agencies and research communities?

To address these questions, this article is organized into four sections. First, I explore the question of international cooperation among atomic scientists. The development and use of the atomic bomb placed science at the center of postwar U.S. foreign policy debates, and atomic scientists actively participated in U.S. policymaking and argued extensively for the need for international cooperation in atomic energy.<sup>8</sup> I will argue, however, that the ideas of scientific internationalism in U.S. foreign policy do not originate among atomic scientists, nor are atomic scientists successful in persuading U.S. leaders in the White House, Congress, or the State

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#25. Reports; Project Reports, Quarterly; Library of Congress—Statistical Data. Folder – Speeches. Hereafter cited as SCC Speeches.

<sup>8</sup> On the impact of the atomic bomb on American popular and political discourse, see Boyer. On its impact on postwar American diplomacy, see Gregg Herken, *The Winning Weapon: The Atomic Bomb and the Cold War 1945-1950* (Princeton, 1981). On the postwar activities of the atomic scientists, see Richard Hewlett and Oscar Anderson, *The New World: A History of the United States Atomic Energy Commission Volume 1 1939-1946* (University Park, 1962) and Alice Kimball Smith, *A Peril and A Hope: The Scientists' Movement in America, 1945-47* (Chicago, 1965).

Department of the need to share nuclear secrets with the rest of the world. In the second section, I turn to earlier debates about the value of science and technology to U.S. foreign policy that took place in the context of a relatively little known wartime committee, the Interdepartmental Committee on Scientific and Cultural Cooperation, which coordinated the first U.S. technical assistance programs to Latin America from 1938 through 1945. This committee, I argue, served as a site where key U.S. leaders from across a range of federal departments and agencies met together and forged a new rationale for promoting international cooperation in science and technology as an important element of U.S. foreign policy. After the war, this committee took on important additional roles, first coordinating U.S. policy vis-à-vis the UN Specialized Agencies, which I describe in section three, and later preparing the rationale for and helping to organize Truman's new technical assistance programs to developing countries, which I describe in the final section. More than anywhere else during this time period, I believe we see evolve in the deliberations and activities of this committee a coherent and consistent rationale among U.S. administrative officials for involving large numbers of experts in the conduct of postwar foreign affairs.

### **Scientific Internationalism in American Foreign Policy**

“A nation that lags in the laboratory will not only have no chance of victory in a future war ... it will not survive.” – Robert Patterson, Secretary of War, October

1945.<sup>9</sup>

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<sup>9</sup> Cited in Michael A. Dennis, “‘Our First Line of Defense’ Two University Laboratories in the Postwar American State.” *Isis* 85 (1994): 427-455.

“Science is international in character. Do you know of any instance in which it is not? As Joseph Smithson, English founder of our Smithsonian Institution said, ‘The man of science is of no country. His country is the world.’” – Raymund Zwemer, Executive Director, Interdepartmental Committee on Scientific and Cultural Cooperation, September 1945.<sup>10</sup>

In the years immediately following World War II, American foreign policy pursued an extensive array of initiatives designed to foster international cooperation among scientific, technical, and technological experts. The United States led efforts to create the United Nations Specialized Agencies, to promote technical assistance programs, and, later, in the 1950s, to coordinate international research programs like the International Geophysical Year and its successors. The result was a rapid expansion in the presence of experts in international diplomacy. By the end of the 1940s, and still today, the majority of individuals involved on a day-to-day basis in the conduct of international relations are neither members of the foreign service nor employees of foreign ministries; rather, they are experts who work in hundreds of government departments, ministries, and agencies, many of which have separate, internal international offices. As a consequence, diplomacy has come to be organized largely as an interagency process, especially but by no means solely in the United States, a fact that can be traced, I argue, to the specific form and logic of international institutions introduced by the United States in the immediate postwar years and the prominence that this logic gave to expert cooperation and coordination of international policymaking.

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<sup>10</sup> Raymond Zwemer, CBS Radio Broadcast. *Adventures in Science*. September 8, 1945. 2:15-2:30 p.m., SCC Speeches.

In pursuing these initiatives, U.S. experts and officials justified their actions on the basis of a logic that connected international cooperation in science and technology to broader aims of U.S. foreign policy. This logic is perhaps most clearly and comprehensively laid out in the 1951 Berkner Report, *Science and Foreign Relations*; however, elements of this logic are widely present in the rhetoric of U.S. experts and foreign policy officials dating back even to before the end of the war. Indeed, the Berkner Report, which was compiled and written for U.S. State Department officials toward the end of the period I am concerned with in this article, corresponded to a growing concern among scientists that the State Department was retreating from the prior enthusiasm it had shown for international scientific, technical, and technological cooperation during the early postwar years. Consistent with the history I will develop later in the paper, the Berkner Report can be seen as an effort to revitalize interest among foreign policy officials in science as an effective means of international cooperation, justified on the basis of a well-worked out logic with which foreign policy officials were already deeply conversant.

The Berkner Report offered a four-fold rationale for a foreign policy of promoting expert cooperation. First, “science is essentially international in character”; “it is therefore an effective instrument of peace.” Scientists, by virtue of their unique moral character, could avoid the political difficulties of cooperation faced by others, and scientific cooperation could serve as a model for other forms of international cooperation. Second, American science depended for its success on “access to foreign scientific sources,” which could be best achieved through free and open “scientific intercourse.” Third, science contributed to “economic welfare,” which in turn contributed to “political security and stability,” and therefore helps to “counter the occurrence of economic depression and thus to offset the threat of Communist infiltration.” Finally, science had become the keystone of national defense, which demanded that “the scientists of this nation

be kept currently aware of the latest advances of modern technology, in whatever nation these may occur.”<sup>11</sup>

What are the origins of this logic of scientific internationalism? Where does the idea come from, as the Berkner Report puts it that “international cooperation and exchange in scientific matters” could contribute to “the furtherance of understanding and cooperation among the nations of the world ... and to the maintenance of that measure of security of the free peoples of the world required for the continuance of their intellectual, material, and political freedom”? In what context was this idea first articulated and developed? How did it gain wider currency among scientists and foreign policy officials such that it could justify a wide range of U.S. foreign policy activities? I will argue in the rest of the article that the initial articulation and development of this idea occurred in the context of U.S. Latin American policy during the war, but before I do so, I want to address the relationship between this logic and the importance of the atomic bomb and the atomic physicists in postwar policy debates in the United States.

Among historians, the immediate postwar years and the ensuing period of the Cold War have been studied primarily in terms of rapidly expanding ties between scientists and the security state. Physics, perhaps, epitomized this relationship most clearly. No other discipline was as deeply implicated in the postwar transformation of the sciences into instruments of national security. In the wake of their wartime successes in radar, proximity fuses, and the atomic bomb, physics laboratories became “our first line of defense,” and a great deal of physics research

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<sup>11</sup> Lloyd V. Berkner, *Science and Foreign Relations*. Washington, DC: Department of State, 1951. For a more detailed discussion of the Berkner Report, see Miller, “Scientific Internationalism” (cit. n. 3). See also Allan Needell, *Science, Cold War, and the American State: Lloyd V. Berkner and the Balance of Professional Ideals* (Amsterdam, 2000).

retreated behind the walls of secrecy. The military invested heavily in science, building its own “national laboratories,” transforming the modern research university, and creating what Eisenhower would later decry as the military-industrial-academic complex. Physicists, in turn, became high profile political advisors to the military, the State Department, and the Presidency. Other countries followed suit, forging tightly knit communities linking physicists to the national defense establishment.<sup>12</sup>

There can be little doubt that Truman’s announcement in August 1945 that the United States had dropped an atomic bomb on Japan immediately brought science to the center of American cultural and policy debates.<sup>13</sup> There seems equally little room to question the conjecture that the prominence of science on the postwar diplomatic agenda of the United States is a direct result of the cultural and policy shifts brought about by the new weapon. As the quotes highlighted at the beginning of this section suggest, the role of science in world affairs became a central subject for conversation at the highest levels of American policy and in the wider American public—launching a wary fascination with nuclear science, its use, and its implications

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<sup>12</sup> Daniel J. Kevles, *The Physicists: The History of a Scientific Community in Modern America* (Cambridge, 1987). Dennis, ““Our first line of defense”” (cit. n. 9). Stuart W. Leslie, *The Cold War and American Science : The Military-industrial-academic Complex at MIT and Stanford* (New York, 1993). James Killian, *Sputnik, Scientists, and Eisenhower: A Memoir of the First Special Assistant to the President for Science and Technology* (Cambridge, 1977). Etel Solingen, ed., *Scientists and the State: Domestic Structures and the International Context* (Ann Arbor, 1994).

<sup>13</sup> Paul Boyer, *By the Bomb’s Early Light: American Thought and Culture at the Dawn of the Atomic Age* (Princeton, 1985).

for world order that continues to the present. As the quotes also suggest, however, American conversations about science and world affairs, even in the days immediately following the dramatic revelation of the bomb's existence, operated according to two distinct conceptual and institutional logics.

On the one hand, science was now viewed as an essential component of national security and a source of potentially significant conflict as nations sought primacy over their rivals in the laboratory. Among U.S. scientific leaders, however, this created concern. One problem was the long term potential for the United States to lag in science. As the Berkner Report put it, "American preeminence as demonstrated thus far is in the application of scientific discovery." U.S. scientists and officials feared that the United States would not be able to compete successfully in science unless they were assured access to foreign science. Another problem was the possibility of a dangerous arms race prompted by the U.S. lead in the ability to construct atomic bombs. As early as September, 1944, Vannevar Bush argued to Stimson and Roosevelt that the United States could stave off Russian efforts to secretly develop the bomb, and thus preempt a military arms race following the war, only by promoting widespread international exchange of scientific material. Disturbed by the possibility that Roosevelt would pursue a secret Anglo-American agreement to retain bilateral control over the new technology, Bush suggested consideration of an international organization to share control over atomic energy among all nations.<sup>14</sup>

On the other hand, science was portrayed as a source of potential international good will, through its "international character" and its ability to promote economic progress and long-term political stability for the nations of the world. As U.S. Assistant Secretary of State Garrison

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<sup>14</sup> Hewlett and Anderson, *The New World* (cit. n. 8), 328.

Norton portrayed them in his opening welcome in 1947 to delegates to the negotiation of the World Meteorological Convention, scientists were uniquely morally situated for international cooperation. They shared a “global outlook,” an “appreciation of international cooperation,” and an ability “in the search for scientific truths” to avoid “the more uncertain and selfish motives that complicate and hinder co-operation in some fields of international interest.” Scientists, Norton suggested, shared “a universal language” such that “language differences and international boundaries present no barrier to your exchange of information.” Just as importantly, their scientific advances would, in Norton’s estimation, contribute to the ability to solve real problems in the world, from increasing the safety of international travel to promoting improved agricultural production, that would foster “an era of progress ... a higher standard of living for all peoples ... [and] the aims of permanent world peace and prosperity.”<sup>15</sup>

The postwar record makes clear that the first logic dominated discussions regarding policy toward the atomic bomb and atomic energy. U.S. control over “atomic secrets” remained a source of constant debate in postwar U.S. security policy. Key scientific leaders advocated international scientific cooperation as a central element of a plan for international control of atomic energy. In November 1945, Bush reiterated his proposal for a United Nations scientific agency to promote full dissemination of scientific information in all fields. In the same month, the Federation of Atomic Physicists formed to advocate for a restoration of the free flow of scientific information among countries. In December, the Federation released a memorandum

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<sup>15</sup> G. Norton, “Address of Welcome by Mr. Garrison Norton, Assistant Secretary of State” in International Meteorological Organization, *Conference of Directors, Washington, September 22 - October 11, 1947* (Geneva, 1947): 372-376.

detailing the feasibility of international control over atomic energy monitored by inspections carried out by “an international laboratory” made up of scientists from many countries.<sup>16</sup>

For the most part, however, U.S. foreign policy leaders remained unpersuaded by this logic. For military planners and their allies, science was better understood as a source of competition and potential conflict in world affairs than a source of international peace and prosperity—and those who favored retaining America’s monopoly over the atomic bomb as long as possible consistently won out over those proposing scientific exchange and cooperation. In October 1944, as he sought to dissuade Roosevelt from concluding a secret deal with the British that would lock out the Russians, Bush wrote to Conant of the potential to use international exchange among biological warfare experts as a first step toward exchange among atomic scientists. This idea didn’t catch on, and despite Bush’s arguments, Roosevelt went ahead with his secret agreement with the British.

U.S. postwar policies continued the insistence that international scientific exchanges in the field of atomic energy could only follow the achievement of a successful settlement of the broader question of international control of atomic energy. In this, these policies contrasted starkly with other policy arenas in which the U.S. argued that international scientific and technical cooperation should come first, leading the way toward greater cultural and political cooperation. The Truman-Atlee-King declaration of November 1945 seemed to suggest at first that United Nations Atomic Energy Commission, which would begin work in January 1946, might start with consideration of an international scientific exchange and move on, subsequently, to consideration of safeguards and the elimination of atomic weapons. However, later clarifications of the policy made clear that the agreement ruled out an exchange of information

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<sup>16</sup> Smith, *A Peril and A Hope* (cit. n. 8), 257.

on the application of atomic energy until safeguards were in place. Even this went too far for key members of the Administration and Congress, who opposed any release of atomic secrets without prior agreement on safeguards. By the time Secretary of State Byrnes was ready to make a proposal to the Soviets in late December, Truman had been persuaded to change his position and now insisted on the primacy of safeguards.

Even the atomic scientists seemed to agree. Oppenheimer helped infuse their ideas into the Acheson-Lilienthal Report, which was drafted in early 1946 and became a key document in shaping Baruch's negotiating position.<sup>17</sup> The report called clearly for the release of U.S. scientific information only subsequent to the establishment of an effective Atomic Development Authority with complete control over nuclear materials, unfettered inspections, and safeguards against national or private misuse of atomic energy. Notably, the report does not suggest that the proposed Authority function as an expert agency like the other early UN Specialized Agencies; rather, it imagines the organization as an international corporation, requiring extensive experience in international business and government relations, with ownership over all nuclear materials and the sole right to license atomic technologies. Expertise was clearly important in carrying out its functions, but the report insisted that it would be a mistake to "overemphasize the advantages that may arise from the free association of the Authority's scientists and experts with those engaged in private or national undertakings." The report denied that scientists would

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<sup>17</sup> Smith, *A Peril and A Hope* (cit. n. 8), 455-460. Hewlett and Anderson, *The New World* (cit. n. 8), 531-554.

naturally opt for international over natural or private allegiances. Cultivation of such feelings, the report noted, would require “serious effort” on the Authority’s part.<sup>18</sup>

The primacy of safeguards and international control over scientific exchange continued to be U.S. policy through the opening of negotiations at the United Nations in 1946, and the subsequent development of the Baruch Plan only solidified this position.<sup>19</sup> Up front, the proposal required a system of international monitoring and inspection that would enable verification that no countries were pursuing independent atomic energy programs. Baruch insisted that the Soviets would have to agree to a provision for sanction and punishment, up to and including war, should a nation violate the agreement, before the United States would be willing to share sensitive atomic secrets or give up its nuclear weapons. He even insisted that the United Nations be restructured to eliminate its veto provisions to ensure that such punishments could be carried out, ultimately sinking the negotiations. With ongoing Soviet rejection of the Baruch plan throughout 1946 and 1947, American policy on the bomb became increasingly clear. The United States based its security policy on sole possession of the scientific, technological, and material basis of atomic energy. Not until after the Soviets had exploded this logic by detonating their own nuclear weapons, in 1949 and 1950, did “atoms for peace” once

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<sup>18</sup> Chester I. Barnard, J. R. Oppenheimer, Charles A. Thomas, Harry A. Winne, and David E. Lilienthal, *A Report on the International Control of Atomic Energy* (Washington, 1946), 41. Bush and Szilard agreed. Countering the idea that scientists somehow were naturally inclined toward internationalism, both argued that active steps would have to be taken to ensure that atomic scientists maintained a truly international perspective if international control were to work effectively over the long-term. See, e.g., Hodes 1982.

<sup>19</sup> Hewlett and Anderson, *The New World* (cit. n. 8), 455-477.

again become a serious topic of discussion. Perhaps even more importantly, formal international cooperation in atomic science had to wait for the creation of the International Atomic Energy Agency in 1957, along with its system of safeguards for ensuring against the military use of atomic energy.<sup>20</sup> Among fields of expertise, the atomic scientists were among the last to obtain a UN Specialized Agency dedicated to their field.

The atomic bomb virtually guaranteed the place of science at the center of U.S. foreign policy discussions after World War II. That said, however, atomic physics offered little evidence of the ability of international scientific cooperation to contribute positively to U.S. foreign policy goals in the immediate postwar era. For over a decade after the bomb's first public appearance, Bush and the atomic scientists failed to persuade U.S. foreign policy officials or the U.S. public of the desirability of free exchange of scientific information about atomic energy. Nor did they argue strongly for scientific and technical cooperation in other fields. During the period from 1943 to 1949, however, international scientific cooperation underwent a major boom in other fields of scientific endeavor. Indeed, this activity had begun as early as 1938 in U.S. policy toward Latin America. Unlike their counterparts in debates about atomic security, U.S. foreign policy officials concerned about other challenges to a secure postwar order, from starvation and disease to the need for financial stability in international currency markets and a stable dismantling of European colonial empires, were easily persuaded of the potential value of international scientific, technical, and technological cooperation to their goals and objectives. It is to the origins of this logic, which stressed the positive role of science in world affairs, as a

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<sup>20</sup> Herken, *The Winning Weapon* (cit. n. 8), 171-191; Hewlett and Anderson, *The New World* (cit. n. 8), 531-619.

source not of fear and insecurity but of international good will, mutual understanding, and effective problem solving, that I turn in the rest of the article.

### **Enrolling Our Latin Neighbors**

Governments have long embarked upon limited programs of international scientific cooperation, including in colonial science policies as well as technical exchanges and missions between countries.<sup>21</sup> After World War II, however, United States foreign policy invested these activities with a broader meaning and significance for world order. In doing so, it built on efforts to promote intellectual cooperation and exchange among the nations of the world in the late 19<sup>th</sup> and early 20<sup>th</sup> centuries, many of which had led to the creation of international organizations and had been incorporated into the League of Nations. There are important differences, however, between international scientific cooperation during these two periods. First, many prewar international organizations operated as private entities, in which individuals not governments cooperated with one another, for professional not geopolitical reasons.<sup>22</sup> Second, much of the prewar activity was justified by a logic that connected scientific exchange to broader forms of intellectual and cultural exchange. By contrast, postwar justifications connected scientific

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<sup>21</sup> Merle Curti and Kendall Birr, *Prelude to Point Four: American Technical Missions Overseas 1838-1938* (Madison, 1954). William K. Storey, *Science and Power in Colonial Mauritius* (Rochester, 1997). William K. Storey, "...” in S. Jasanoff, ed., *States of Knowledge: The Co-production of Science and Social Order* (London, 2004).

<sup>22</sup> See, for example, the discussion of the differences between the prewar International Meteorological Organization and the postwar World Meteorological Organization in Miller, “Scientific Internationalism” (cit. n. 3).

cooperation to technological, economic, and security concerns. These two shifts in logic were forged, I argue, in the development of U.S. Latin American policy from 1938 to 1945.

When U.S. President Franklin D. Roosevelt came to office in 1933, his immediate concerns were naturally on the depression that haunted the American economy. During his first one hundred days, however, Roosevelt took time to put in place new foreign policy objectives for at least one region of the world, Latin America. During his inaugural speech, Roosevelt announced that his foreign policy would make the United States into a “good neighbor” to the countries of the world, and in an April speech, he articulated new ideas for what that would mean for Latin America. The following summer, he put his principles into action, refusing to use American treaty rights to intervene militarily during a series of changes in Cuban government, winning both public and official admiration in many of the Latin American republics.<sup>23</sup>

Increasingly referred to as his Good Neighbor Policy, inter-American relations acquired a new importance in Roosevelt’s eyes with the rise of tensions in Europe. Roosevelt now saw the need to enroll Latin America in security agreement that would prevent war from spreading to this hemisphere. U.S. and Latin American leaders met in 1936 in Buenos Aires and again in 1938 in Lima to lay down ground rules for inter-American cooperation should Europe plunge into active war. Following the Lima meeting, Roosevelt indicated his desire to build upon these dramatic successes through “a concrete program designed to render closer and more effective the relationship between the Government and people of the United States and our neighbors in the twenty republics to the south.” In response, Roosevelt’s advisors set up a new committee, appropriately if unimaginatively titled the Inter-departmental Committee on Cooperation with

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<sup>23</sup> See, for example, the account of Roosevelt’s prewar policies laid out by Assistant Secretary of State Sumner Welles. Sumner Welles, *The Time for Decision* (New York, 1944).

the American Republics. The committee set to work in May 1938 to identify projects and activities “in which the Government of the United States is in a position to cooperate with the other American republics for their mutual advantage.” The committee, composed of key government leaders, was chaired by Sumner Welles, Under Secretary of State, and its November 1938 report, detailing a proposed slate of projects, was submitted to Roosevelt under the signatures of his key cabinet officials.<sup>24</sup>

The program laid out in the committee’s first report proposes approximately \$1 million in projects to be carried out by each of the 13 agencies involved, with the largest contributions to go to Agriculture (\$350,000), the National Emergency Council (\$176,000), and the Public Health Service (\$100,080). Proposed projects ranged broadly, including but not limited to such subjects as soil and forest surveys, training in meteorological techniques, construction of the inter-American highway, loan of experts in fisheries, improvement of statistical services, films for distribution to both U.S. and Latin American audiences, fellowships for librarians, collections of

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<sup>24</sup> Sumner Welles et al. “Report of the Inter-Departmental Committee on Cooperation with the American Republics Together with the Program of Cooperation Endorsed by the Committee,” Nov. 10, 1938. NARA RG353.3. Entry #13. Records Relating to the History and Development of the Council and its Predecessors, 1938-1953. Box 1. Folder – History and Development of the Committee. Hereafter cited as “Council History Documents.” The report was signed by the Secretaries of Interior, Agriculture, Commerce, Labor, the Assistant Secretary of the Treasury, the Librarian of Congress, the Secretary of the Smithsonian Institution, the Chairman of the Federal Communications Commission, the Vice Chairman of the U.S. Maritime Commission, the President of the Export-Import Bank, the Executive Director of the National Emergency Council, and the Chairman of the Civil Aeronautics Authority.

folk music, ethnological studies of “aborigines of the New World,” establishment of a central Translating Office in the State Department, research on tropical diseases, and studies of means to simplify passport and landing requirements and liberalize tourist regulations.<sup>25</sup>

Justifying the projects proposed, the report notes that they include “studies, investigations and enterprises to be carried out in such of the American republics as are desirous of engaging in them,” as well as “projects for extending the educational, scientific and technical facilities of the several agencies.” Attention is given to “intergovernmental cooperation,” “expert assistance,” “offer of service training for accredited foreign officials,” “exchanges of students and professors,” and translations of U.S. government publications, “especially those relating to public health, educational, scientific and technical matters, commerce, conservation, et cetera.” The projects were put together with an eye toward “the increasing importance of cultural relationships” and “the premise that the republics of the New World have the same aspirations, that the welfare of the community of American nations demands their increasingly close and friendly association, and that through a program of practical, reciprocal cooperation the fulfillment of our common American ideals can be brought appreciably closer to achievement.”<sup>26</sup>

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<sup>25</sup> CAR, “Description of the Program Endorsed by the Committee Together with Estimates of the Appropriations Required to put the Program into Effect,” Nov. 10, 1938, Council History Documents.

<sup>26</sup> Welles et al., “Report” (cit. n. 24). Committee records unfortunately provide no direct evidence of how Latin American governments and citizens responded to the committee’s activities. That said, however, committee records contain no materials that would indicate that either governments or individuals in Latin America took exception to the committee. Moreover,

The committee was able to take almost immediate advantage of Public Law No. 535 (1938), amended again by Public Law No. 63 (1939), which authorized the President to detail U.S. government employees for temporary service for periods of up to one year to the governments of the American Republics “if such government is desirous of obtaining the services of a person having special scientific or other technical or professional qualifications.” Congressional appropriations for other kinds of projects were delayed for a year, however, until the passage of Public Law No. 355 (1939), in August, provided the necessary enabling legislation to allow the United States “to utilize the services of the departments, agencies, and independent establishments of the Government in carrying out ... reciprocal undertakings and cooperative purposes” set forth in the 1936 and 1938 inter-American treaties.

Based on the committee records alone, it is not possible to ascertain in any detail what impacts these projects had in Latin America or how they were viewed by Latin American leaders or publics. Assessing the reaction in Washington is made somewhat easier by the steady, if incremental growth in the committee’s programs. Between 1940 and 1944, the committee budget grew by an order of magnitude to \$4.5 million.<sup>27</sup> By 1944, the committee had coordinated 72 details of U.S. government experts to other countries, averaging 6 months per detail, at an

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there is plenty of evidence in the committee records that Latin American governments availed themselves extensively of the committee’s programs. U.S. law required that all committee projects be initiated by requests from Latin American governments.

<sup>27</sup> Appropriations for sixteen committee projects totaling \$370,000 were legislated beginning in fiscal year 1940-41. In 1942, Congress appropriated \$600,000 to the committee, and in 1943, committee appropriations grew again to \$1,685,000. By 1944, Congressional appropriation for the committee had risen to \$4.5 million (over \$50 million in 2003 dollars).

additional cost of \$270,000. Clearly the committee, its supporters in the Roosevelt Administration, and its Congressional funders were satisfied, albeit probably not overwhelmed by the success of the program. The war had not crossed the Atlantic into Latin America, and that alone one might speculate could be argued as sufficient reason to continue to support anything that looked like it had any value at all.

What is more important for our purposes here, however, is the evolving rationale offered by the committee for its actions. During its first few years of operation, committee documents highlight the importance of “practical, reciprocal cooperation” in identifying projects. The two largest categories of details were agricultural and fisheries experts (13 and 12, respectively).<sup>28</sup> Committee reports indicate that projects were chosen out of a common belief “in the efficiency of practical day-to-day collaboration” and that the goals of “friendship in a peaceful American world” required that they be “cooperative” and “of practical value” and convey “reciprocally mutual benefits.” In this fashion, the committee sought to undermine two potential criticisms, that the projects were being undertaken for propaganda purposes and that they were simply giveaways of U.S. money and resources to Latin America. Thus, committee selection rules insisted that both the United States and its partner benefit from potential projects. U.S. benefit was determined by the sponsoring agency, but benefit to the host country was more difficult to ensure. To address this concern, Public Law No. 63 (1939) required that any detail of U.S.

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<sup>28</sup> CAR, “An Account of Its Organization and Present Activities,” 1943, Council History Documents. “Act of May 25, 1938 as Amended by the Act of May 3, 1939 (Public No. 63, 76<sup>th</sup> Congress), Recapitulation of Statistical Data,” Oct. 14, 1944, Council History Documents. “Program for ‘Cooperation with the American Republics,’” Aug. 15, 1947, Council History Documents.

experts to a foreign government be preceded by a formal request for the project by the host country. Likewise, host governments were encouraged and in some cases required to share in the costs of many committee projects. In short, at least in its early years, the committee went out of its way to choose projects that it could defend as having clear, tangible benefits for all of the countries involved and that it could argue would bring U.S. and Latin American partners together in a spirit of good will and with the intention of building “closer relationships with the other American republics.”<sup>29</sup>

In late 1941 and early 1942, however, two events combined to alter the committee’s outlook. The bombing of Pearl Harbor in December 1941 radically altered the stakes of inter-American cooperation and quickly brought nearly all of the American republics into a state of war with both Germany and Japan. Soon thereafter, in Spring 1942, the committee’s formal housing in the State Department was moved from the Division of American Republics to the Division of Cultural Relations as part of a larger Departmental reorganization. Although always officially an inter-departmental committee, by 1942 with 27 member agencies, the committee’s chair and staff had always resided within the State Department.

Given the evolving logic of the committee’s work, geared as it was toward improving relations between the peoples and governments of the Americas, this moved seemed at first blush obvious. The State Department’s Division of Cultural Relations had been created in 1938 “for

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<sup>29</sup> SCC, “Objectives of the Program of the Interdepartmental Committee on Scientific and Cultural Cooperation (SCC) and Criteria Which Have Been Used in Selection of Projects,” Nov. 30, 1948. NARA – RG353.3. Entry #26. Interdepartmental Committee on Scientific and Cultural Cooperation. Box #30. Records of the Full Committee. Folder – Memos #2-45. Hereafter cited as SCC Memos.

the purpose of encouraging and strengthening cultural relations and intellectual cooperation between the United States and other countries.” However, DCR, as the Division was called, had operated at a fairly small scale and received little notice until the outbreak of war. By 1942, the budget of the Committee on Cultural Relations with the American Republics far outstripped that of DCR. By moving the committee to DCR, the State Department would combine under one umbrella all of its efforts to strengthen cultural relations between the United States and other countries of the world.<sup>30</sup>

Within the State Department, the move caused few complaints. Rhetoric in defense of the committee underwent a subtle shift, reflecting the emphasis at DCR on cultural cooperation and understanding. Sumner Welles and Assistant Secretary of State G. Howland Shaw spoke of the committee in terms that emphasized their “scientific, economic, cultural, and social endeavor” and pointed to its value in generating “better understanding of our ways, means, and methods of life” and improving “inter-nation and inter-people understanding.” Consistent with DCR’s mission, the new rhetoric of justification stressed the construction of a positive image of the United States and the export of that image abroad. As Welles framed the committee’s mission at a meeting in August 1942, “Effective international cooperation cannot exist unless there is an appreciation and understanding in each country of those problems of other countries which arise from national customs, traditions, achievements, and philosophies of life. ... We have the task of learning to appreciate and understand the viewpoints, traditions, and customs of our neighbors in the other American Republics and of making it possible for them to see our problems and ways

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<sup>30</sup> “Administrative Relations of the Secretariat of the Interdepartmental Committee on Cooperation with the American Republics within the Department [of State],” Council History Documents.

of life—not by propaganda or proselyting, but rather by the joint execution of useful undertakings and through the personal associations incident thereto.”<sup>31</sup>

For many of the other members of the committee, however, relations with their new hosts in DCR quickly soured. While the new rhetoric was not, in and of itself, a problem, the committee’s location in DCR led to an emphasis on the cultural projects, especially in budgetary terms, where culture was defined in relatively narrow terms. For committee members from other government departments, the program had derived significant early success from its emphasis on projects of practical value, especially in areas of scientific and technical expertise and competence, and that success was now in danger of evaporating. The shift to DCR also gave rise to a second set of questions about the administrative positioning of the committee. Initially, the committee had operated as an independent program in the office of the Under Secretary of State. The shift to DCR lowered the committee two tiers within the State Department organization, well below not only its previous position in the Department but its organizational status with respect to most other federal agencies as well.<sup>32</sup>

By the end of 1943, dissatisfaction with the new arrangements had reached sufficiently high levels that, in January 1944, the State Department returned the committee to independent status within the Office of American Republic Affairs and assigned it a permanent Chairman and an Executive Secretary, reestablishing its former status and significantly boosting its institutional infrastructure. Two years of deliberations under DCR had honed what most members outside the

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<sup>31</sup> Undersecretary of State Sumner Welles, Meeting of the Interdepartmental Committee on Scientific and Cultural Cooperation, Aug. 12, 1942, Quoted in SCC, “Objectives” (cit. n. 29).

<sup>32</sup> “The Interdepartmental Committee on Cooperation with the American Republics: An Analysis of its Administration,” 1944, Council History Documents.

State Department saw as the committee's core mission—scientific and technical cooperation—and after the 1944 reorganization that mission was given new prominence, independent of the goal of improving cultural relations.<sup>33</sup> In his February 1944 Report to the President on Closer Relationship Between the American Republics, Acting Secretary of State Edward Stettinius (who had replaced Cordell Hull) outlined the new logic of the committee's operations:

Programs of this character are an effective means of achieving international, hence national, security. Measures which spread an understanding of the democratic way of life and diffuse scientific knowledge useful in organizing it may be made the support of political and economic peace measures. In this connection it should be emphasized that the amelioration of the lives of common men is actually achieved only as they learn new ways of doing things. Thus the cooperative program may provide means of creating necessary conditions for orderly and peaceful development. In providing the world's peoples with the means of doing better for themselves, the American people will be creating conditions favorable to the development of their own way of life; and in this prospect alone is true national security.<sup>34</sup>

For the first time in defending the committee, Stettinius articulates in this statement the connections between scientific cooperation, development, and peace and security that would be highlighted in postwar programs of technical assistance. For the first time, too, as foreign policy

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<sup>33</sup> SCC, "Program" (cit. n. 28).

<sup>34</sup> Acting Secretary of State Edward R. Stettinius, "Report to the President on Closer Relationship Between the American Republics," Feb. 21, 1944. House Document 474, 78<sup>th</sup> Congress. Quoted in SCC, "Objectives" (cit. n. 29).

officials began to look toward war's end, we see the glimmerings of the idea that what is necessary for American security is a significant reordering of world affairs—as well as the role that scientific and technological cooperation might play in bringing that transformation about through stable, peaceful means. Highlighting further the new importance attached to scientific cooperation by the committee, Raymund L. Zwemer was appointed as its new Chairman. Zwemer was the son of a missionary preacher and a professor of anatomy at Columbia University with a PhD from Yale. He had spent the previous two years giving lectures on medical topics in Latin America through the committee's programs, and so was uniquely suited to lead the committee under its new mandate, especially, as we will see, in the crucial years of transition between that followed. Eventually, after leaving the committee, Zwemer went on to become Executive Secretary of the National Academy of Sciences and the National Research Council, Chief of the Science and Technology Division of the Library of Congress, and Chief of the Division of International Cooperation in Scientific Research for UNESCO.<sup>35</sup>

### **Science at the United Nations**

By 1944, the committee had thus achieved a great deal. They had a proven record of successful organization (since 1938) and implementation of projects (since 1940). They had the backing of Secretary of State Stettinus, who as described above had defended the program to Congress as “an effective means of achieving international, hence national, security.” Their leadership was now in the hands of well respected scientist. They operated an effective interagency coordination

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<sup>35</sup> Joseph Sullivan (with the assistance of Paul Colton), *Raymund L. Zwemer: A Register of His Papers in the Library of Congress* (Manuscript Division, Library of Congress: Washington, DC), 1996.

mechanism that allowed the Committee to both call upon the skills, expertise, and resources of the entire federal government and coordinate their deployment to various Latin American countries.<sup>36</sup> The committee's position within the State Department was independent of any particular division, and especially of the Department of Cultural Relations. Most importantly, for purposes of my argument here, its members had articulated a new logic that distinguished scientific and technical cooperation from other forms of cultural and intellectual exchange and that highlighted the unique capacity of scientific and technical cooperation to achieve certain kinds of outcomes in international cooperation not possible through other kinds of activities.

Despite its successes, however, the committee remained solely focused on Latin America. After 1945, that changed with the dropping of the atomic bombs on Japan and the new prominence of science in world affairs. The committee garnered new responsibilities that positioned its members to inject their ideas into important debates on how to structure postwar U.S. foreign policy on a number of fronts, particularly vis-à-vis the United Nations Specialized Agencies and U.S. and UN technical assistance programs. This is important because it is precisely in these two areas that scientific internationalism flourishes most extensively in postwar U.S. foreign policy. I want to be clear, however, on the nature of the argument I am making. In the years from 1945 to 1949, the committee did not emerge as a powerful bureaucratic actor, capable of imposing its will on the State Department and other agencies—far from it. However, its high-level membership and new responsibilities did enable it to facilitate

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<sup>36</sup> The importance of this mechanism can hardly be overstated. At war's end, the Truman Administration turned to interagency mechanisms to coordinate US policy vis-à-vis a wide range of international issues. Today, such institutions are legion, and a key element of governance. At the time, only five models for such committees existed, of which none predated this committee.

communication and policy coordination. In the process, committee members were able to inject the ideas they had developed about the value of scientific and technical cooperation into a range of U.S. and international policy debates. In this section, I examine the growth of the committee's responsibilities vis-à-vis the United Nations Specialized Agencies. In the next section, I track the committee's role in influencing technical assistance debates.

The dropping of the atomic bombs on Japan had important ramifications for the committee. As Paul Boyer has described at length in *By the Bomb's Early Light*, public reaction to the news that U.S. scientists had developed an extremely powerful new weapon was immediate and fearful. Front and center in the debate were the implications of this new science and its enormous destructive potential for relationships among states. The committee, whose self-defined mission was, by this point, to promote peace and security through international scientific cooperation seemed to some at least to offer a partial answer to these concerns. Immediately following the close of the war in the Pacific, the committee's name was changed to the Interdepartmental Committee on Scientific and Cultural Cooperation and Zwemer was asked to speak out about the committee's accomplishments. On Sept. 8, less than one week after Japanese surrender, Zwemer spoke to a nationwide audience on the Columbia Broadcasting System's (CBS) *Adventures in Science* program. In speaking to "the role of science in foreign relations," Zwemer opened by quoting Truman from the San Francisco meeting of the United Nations: "The world has learned again that nations, like individuals, must know the truth if they would be free—must read and hear the truth, learn and teach the truth. We must set up an

effective agency for constant and thorough interchange of thought and ideas. For there lies the road to a better and more tolerant understanding among nations and peoples.”<sup>37</sup>

Zwemer continued on to explain that the United States had operated a program designed to promote “cooperative projects of a scientific nature between the United States and the other American republics” since 1938. Describing several specific projects carried out by the committee in the areas of geology, agriculture, meteorology, and anthropology, Zwemer explained that these projects increased knowledge, had practical benefits for both the United States and its neighbors, and built closer relations between the scientists and people of the Americas. Zwemer noted that the committee’s work was expanding beyond Latin America to include China, the Near East, and Africa, and also that European scientific leaders were increasingly looking to the United States to replace Germany as a source of scientific knowledge, training, and instruments. Toward the end of the interview, the CBS anchor turned to the question of atomic science. “You have pointed out many of the values of scientific interchange. What about the dangers?” Zwemer responded: “We are discussing only the free interchange of those scientific facts available to all scientists in their professional work. Science has always been international in character. Do you know of any scientific discipline, the study of which is restricted to one nation? ... In the words attributed to James Smithson, English founder of our Smithsonian Institution over 100 years ago: ‘The man of science is of no country. The world is his country and all mankind his countrymen.’”<sup>38</sup>

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<sup>37</sup> Harry S. Truman, Speech to the United Nations, San Francisco, April 25, 1945. Quoted in Raymund L. Zwemer, CBS Radio Broadcast (cit. n. 10).

<sup>38</sup> Zwemer, CBS Radio Broadcast (cit. n. 10).

Olcott Deming, the Executive Secretary of the newly renamed committee, also took to the road to promote international scientific cooperation. In a speech to Rollins College in early 1946, Deming contrasted the United Nations Security Council—“a negative instrument of international cooperation” designed “with sweeping powers to stop aggression”—with the newly forming United Nations Educational, Scientific, and Cultural Organization (UNESCO): a “positive instrument for the development among nations and peoples of the soil and climate essential to the growth of peace.” Deming quoted the newly written UNESCO Constitution: “It is in the minds of men that the defenses of peace must be constructed,” and here science had a special role to play. Not only would scientific cooperation promote knowledge and mutual understanding, but it would also “encourage those who have the techniques essential to an abundant economy to share these techniques with those anxious to help themselves in overcoming poverty, disease, and hunger—the parents of ignorance, despotism and war.”<sup>39</sup>

Over the course of 1946, as Zwemer and Deming canvassed on behalf of legislation supporting UNESCO and expanding their committee’s authority to build cooperative projects around the world, they developed this logic into a tightly conceived and argued package. Zwemer’s speech to the American Chemical Society in Sept., 1946, in Chicago, epitomizes the evolving logic. Giving a keynote address to the collected assembly of the Society on Friday evening, entitled “The Role of the Government in Assisting International Cooperation between Scientific Groups,” Zwemer opened: “It has been rightly said that scientists are probably the world’s oldest internationalists.” He then went on to explain that, “until recently, most scientific collaboration between countries was carried out by scientists themselves independently of their governments. In this the scientific unions and large national Congresses performed services of

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<sup>39</sup> Deming, “In the Minds of Men” (cit. n. 7).

widely recognized value.” However, “during the war it became more and more evident that science and human affairs are inseparable. Industrial progress and high living standards depend in the final analysis upon the scientific development of the fullest use of natural resources.” Without this, he argued, a faltering economy would give rise to ongoing war and conflict.<sup>40</sup>

As a result, he suggested, governments were increasingly beginning to cooperate in the pursuit of science, and scientists were increasingly “being drawn into political and international life.” Two programs stood out, in particular: first, the burgeoning United Nations Specialized Agencies (which included the Atomic Energy Commission of the UN Security Council, the Food and Agriculture Organization, the Provisional International Civil Aviation Organization, the World Health Organization, and UNESCO), in which government experts were working together to address key problems of social and economic welfare; and, second, the programs of the Interdepartmental Committee on Scientific and Cultural Cooperation, in which the United States was actively promoting international scientific cooperation with other countries. These programs, Zwemer argued, had value “in promoting hemispheric solidarity,” “improving health conditions,” “improving standards of living in other countries, and “assisting in promoting a more stable world economy.” He concluded with a brief reminiscence: “Our cooperative scientific and technical projects with the nations of this hemisphere have served in a way as a laboratory experiment. They have shown us that the kind of cooperation that can win a war can also be effective in building up a friendly neighborhood of nations. I trust that we can continue to

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<sup>40</sup> Raymund L. Zwemer, “The Role of the Government in Assisting International Cooperation between Scientific Groups: Address at the meeting of the American Chemical Society, Chicago, Illinois,” SCC Speeches.

build good neighborhoods throughout the world—a world which science has made too small for war.”<sup>41</sup>

Zwemer’s inclusion in his remarks to the ACS of an extensive discussion of the UN Specialized Agencies and his promotion of U.S. legislation and scientific activism on behalf of UNESCO reflects the changing mission of the committee he chaired. After 1946, the committee acquired an important new set of responsibilities for coordinating U.S. policy vis-à-vis the UN Specialized Agencies. The problem was simple. Primary responsibility within the U.S. government for each of the Specialized Agencies was assigned to a particular government agency. For example, the U.S. Department of Agriculture served as the primary interface with the UN Food and Agriculture Organization.<sup>42</sup> But what happened if another agency of the U.S. government also cared about the outcome of a particular question being addressed by one of the Specialized Agencies? How would U.S. government policy be coordinated?<sup>43</sup>

In 1946, this growing problem was addressed by assigning the Committee on Scientific and Cultural Cooperation the responsibility of coordination in such circumstances. Writing in a

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<sup>41</sup> Zwemer, “The Role of Government” (cit. n. 40).

<sup>42</sup> Ross B. Talbot, *The Four World Food Agencies in Rome* (Ames, 1990). See also n. 4.

<sup>43</sup> Today, the U.S. government would establish an interagency task force or committee to prepare a U.S. position regarding the issue. Contemporary sources point to the SCC as one of the very first such committees. See Executive Committee on Economic Foreign Policy, “Proposal for Interdepartmental Participation in the Formulation of Policy for the Guidance of United States Representatives on International Economic and Social Organizations,” Jan. 23, 1946. NARA – RG 353.3. Entry #29. Interdepartmental Committee on Scientific and Cultural Cooperation. Box #32. Subcommittee Reports, 1943-49.

proposal to establish a governmental mechanism for coordinating U.S. policy vis-à-vis the UN organizations, Robert Carr, Executive Secretary of the Executive Committee on Economic Foreign Policy, outlined the rationale for this action. He began his analysis by highlighting the problem of interdepartmental coordination using the example of worldwide cotton surpluses. Any resolution of that problem would have consequences for domestic agriculture, which fell under the purview of the Department of Agriculture. Carr proceeded to note that the Department of Commerce would be interested in its consequences for international trade and the Department of Treasury in its consequences for international balance of payments. The Department of Justice might be concerned about the formation of a cartel in the textile industry, and the Department of Labor in the impacts of the agreement on the cost of living and employment. Carr concluded by noting the interest of the Department of State, “particularly from the point of view of promoting peaceful relations with other countries.”<sup>44</sup>

The solution to these problems, Carr insisted, was to establish “interdepartmental machinery for the formulation of policy relating to many of the fields of activity covered by existing or proposed international organizations in the economic and social fields.” Carr noted that several such committees already existed.<sup>45</sup> In the future, Carr noted, many more

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<sup>44</sup> Executive Committee on Economic Foreign Policy, “Proposal” (cit. n. 43).

<sup>45</sup> He listed, specifically, the Executive Committee on Economic Foreign Policy, established April 5, 1944; the National Advisory Council on International Monetary and Financial Problems, established by the Bretton Woods Agreements Act of July 31, 1945; the Air Coordinating Committee, which coordinated aviation policies across the Secretaries of War, Navy, State, and Commerce; and the Interdepartmental Committee on Scientific and Cultural Cooperation. Executive Committee on Economic Foreign Policy, “Proposal” (cit. n. 44).

international organizations would likely emerge and need interagency coordination. To address this concern, Carr went on to recommend that “the [Committee on Scientific and Cultural Cooperation] be examined with a view to revising, if necessary, its membership and its terms of reference so that it can serve for policy coordination in the broad field of social, cultural, educational, scientific, and health matters.”<sup>46</sup>

Carr’s recommendations led to the reorganization of the committee in early 1946. A February 25, 1946, organizational chart shows the reorganized committee structure, including the newly established Sub-committee on International Organizations. This new sub-committee was charged with coordinating government policy vis-à-vis the rapidly growing array of UN organizations operating in fields other than economics and finance. As the list of members notes, the sub-committee’s membership was selected from those departments with operational responsibility for coordinating U.S. policy vis-à-vis the key international organizations in existence in 1946, with overall coordination provided by the Department of State.<sup>47</sup> Subsequent to its creation, the sub-committee met regularly to consider a variety of topics. These included how U.S. policy for international organizations could best be coordinated; provision of policy guidance on U.S. relations with international organizations, e.g., whether or not to establish a national commission for the Food and Agriculture Organization; and coordination of U.S. policy

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<sup>46</sup> Executive Committee on Economic Foreign Policy, “Proposal” (cit. n. 44).

<sup>47</sup> Sub-committee membership included: the Department of Agriculture (responsible for the Food and Agriculture Organization), the Civil Aeronautics Administration (responsible for the Provisional International Civil Aviation Organization), the Foreign Security Agency (responsible for the World Health Organization), the Department of Labor (responsible for the International Labor Organization), and the Library of Congress (responsible for UNESCO).

toward UNESCO, including taking overall responsibility for the establishment of a national commission for UNESCO.<sup>48</sup>

### **Science and Technology for the Developing World**

Just as the committee acquired new responsibilities vis-à-vis the United Nations in 1945 and 1946, it also saw its responsibilities for U.S. technical assistance expand after the war. By the winter of 1946, the extent of economic debilitation in Europe was becoming increasingly clear, as many Europeans struggled to survive harsh weather and food shortages. Communist movements were also an increasing concern, as economic weakness continued. In June 1947, U.S. Secretary of State George Marshall announced plans for the largest peacetime aid program ever carried out by the United States. By September, Europeans had formulated a plan for putting American aid to use, and Americans began sending money, food, and expertise to Europe in an effort to stave off an even more calamitous winter.

The political push in Washington to fund the Marshall Plan had spillover effects for the activities and plans of Zwemer's Interdepartmental Committee on Scientific and Cultural Cooperation. Since 1943, the committee and the State Department had sought approval from Congress to expand the committee's range of operations beyond Latin America. A small program had been approved for China and the Near East during the war. In 1946, the committee was assigned the task of formulating and managing the technical training programs for the Philippine Rehabilitation Act and the Greek Aid Act, the former to help reinforce democracy in the wake of Japanese occupation, the latter to help prevent the spread of communism in Europe. By the end of 1946, however, despite three years of efforts to promote expanded legislation that

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<sup>48</sup> SCC, "Committee Organization," Feb. 25, 1946, Council History Documents.

would cover a broad range of other countries, only the U.S. House of Representatives had acted on the matter.<sup>49</sup>

State Department officials and members of the committee began work early in 1947 to establish the basis for that legislation, articulating the fit between the committee's activities, the growing emergency assistance programs sought by the U.S., and the goals proclaimed by the charter of the United Nations. On May 22, 1947, the State Department released a policy statement on the committee's activities, noting: "The United States is today a storehouse of scientific and technical knowledge urgently needed by other countries to quicken their economic development." Quoting Secretary Marshall from a March 3, 1947, speech to the House Committee on appropriations, the report argued that through programs of "scientific, technical, educational, and cultural" exchange: "We are continuing to encourage those conditions which will lead to the development of a free and democratic way of life for the peoples of the world." The report highlighted the mandate of Article 55 of the UN Charter: "With a view to the creation of conditions of stability and well-being which are necessary for peaceful and friendly relations

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<sup>49</sup> CAR, "Memorandum on the Origin of the Cultural Relations Program, Its Geographic Growth, Broad Accomplishments, Major Projects, and Personnel," Oct. 22, 1943, Council History Documents. Raymond L. Zwemer, "Interdepartmental Committee on Cooperation with the American Republics," *Department of State Bulletin* 9(274): 319, Council History Documents. CAR, "Replies Received from Members of the Interdepartmental Committee in Regard to Proposed Expansion of the Program of the Interdepartmental Committee on Cooperation with the American Republics Under HR-5350," 1944, and CAR, "Meeting of Long-Range Planning Subcommittee," NARA – RG353.3. Entry #17. Subcommittee Records, 1944-49. Box #27. Folder – Subcommittees, Executive Subcommittee, Project Subcommittee, 1944.

among nations based on respect for the principle of equal rights and self-determination of people, the United Nations shall promote: (a) higher standards of living, full employment, and conditions of economic and social progress and development; (b) solutions of international economic, social, health, and related problems; and international cultural and educational cooperation; and (c) universal respect for, and observance of, human rights and fundamental freedoms for all without distinction as to race, sex, language, or religion.”<sup>50</sup>

Building on this logic, the committee leadership once again set out to sell a broad program of technical assistance as an aid to expanding democracy and containing communist advances in poorer parts of the world. In so doing, they argued quite bluntly that the old policies of American exceptionalism, in which America provided an example and guiding light for others desirous of liberty, were no longer enough. Speaking to the Mid-Atlantic Conference of the National Council of Jewish Women, for example, the committee’s Executive Secretary, Olcott Deming observed: “The United States is now engaged as never before in the task of ‘selling democracy abroad.’ This is accomplished both by setting a good example at home and letting the world know about it, and by supplying U.S. goods and U.S. know-how to other peoples so they may help themselves establish that economic and social stability necessary to the survival of democratic principles and world peace.” Offering the example of the committee’s Latin American programs, Deming continued: “The United States cannot indefinitely ‘support’ Democracy throughout the world with money and materials, but it can, at relatively small cost,

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<sup>50</sup> SCC, “Policy Statement for the Guidance of Agency Members in the Preparation of their Fiscal 1949 Budgets for ‘Cooperation with the American Republics,’” May 22, 1947, Council History Documents.

continue to support and transfer to the minds and hands of other people the special knowledge and skills needed by these peoples to establish healthy economies in a free society.”<sup>51</sup>

The committee’s efforts finally met with success on January 27, 1948, when the 80<sup>th</sup> Congress approved Public Law No. 402, “The United States Information and Educational Exchange Act of 1948” (the Smith-Mundt Act). The act authorized the U.S. government to pursue cooperative scientific and cultural projects and educational exchanges with other countries of the world as “a permanent peacetime policy.” Under the new law, “scientific and technical” projects included lending U.S. technical experts to other governments, training foreign experts, exchanges of data and publications, and assistance in the collection of scientific and technical information. In the State Department’s proposed plans for 1950, put together in December 1948, scientific and technical projects amounted to approximately one-half of the overall initiative (for a total of approximately \$13.5 million), the other half being comprised of cultural and educational exchanges. State Department policy described the objective of this scientific and technical program as: “to make available to other countries the scientific and technical knowledge and skill of the United States and its citizens, in order to assist them in their social and economic development.”<sup>52</sup>

Even with new legislative support, however, many in the Truman Administration remained dissatisfied with the level of commitment for programs of this sort, especially in the

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<sup>51</sup> Olcott H. Deming, “Summary of Remarks before the Mid-Atlantic Conference of the National Council of Jewish Women,” Oct. 27, 1947, SCC Speeches.

<sup>52</sup> SCC, “The Scientific and Technical Program Under Public Law 402,” Dec. 8, 1948. NARA – RG353.3. Entry #26. Interdepartmental Committee on Scientific and Cultural Cooperation. Box #30. Records of the Full Committee. Folder – SCC Memos.

wake of growing Soviet intransigence on a broad range of issues. Increasingly, Truman himself felt that the United States was moving into a new phase of conflict with the Soviet Union that would take place not only in Europe but also elsewhere around the world. Flush from a narrow, come-from-behind electoral victory in November, Truman and his advisors began planning for “a bold new program” to bring American aid to the world’s poorest peoples. While it is widely recognized that Truman modeled his ideas on the Marshall Plan, which had proved an enormous success in Europe, the language used in his inaugural speech on January 20, 1949, in announcing the new program, makes clear that the committee’s programs also served as an important model.

Fourth, we must embark on a bold new program for making the benefits of our scientific advances and industrial progress available for the improvement and growth of underdeveloped areas. More than half the people of the world are living in conditions approaching misery. Their food is inadequate. They are victims of disease. Their economic life is primitive and stagnant. Their poverty is a handicap and a threat both to them and to more prosperous areas. For the first time in history, humanity possesses the knowledge and skill to relieve the suffering of these people. The United States is pre-eminent among nations in the development of industrial and scientific techniques. The material resources which we can afford to use for assistance of other peoples are limited. But our imponderable resources in technical knowledge are constantly growing and are inexhaustible. I believe that we should make available to peace-loving peoples the benefits of our

store of technical knowledge in order to help them realize their aspirations for a better life.<sup>53</sup>

The Point Four Program, as it became known, made 1949 and 1950 extremely busy years for the committee. Many committee members were assigned to the new organization set up to plan and oversee Point Four, the Advisory Committee on Technical Assistance (ACTA), which relied heavily on their experience in developing its initial programs.<sup>54</sup> In May, ACTA's budget request for Point Four was submitted to the Bureau of the Budget for approval and presentation to Congress. This request authorized \$68 million for the Point Four Program in 1950, five times the budget the Committee on Scientific and Cultural Cooperation had been planning to request prior to Truman's announcement.<sup>55</sup> The committee's influence remained important, however. The budget request followed the same basic outlines as committee programs had long followed, in Latin America and subsequently, although public health (\$17 million) had taken the lead from agriculture (\$12 million) in terms of overall support and two new categories had emerged that would have enormous implications down the road: general economic development (\$5.5 million) and reclamation, hydroelectric power, and flood control (\$6.5 million).<sup>56</sup>

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<sup>53</sup> Harry S. Truman, "Inaugural Address," Jan. 20, 1949. *Public Papers of the Presidents of the United States* (Washington: USGPO), 1964.

<sup>54</sup> The Interdepartmental Committee on Technical Assistance.

<sup>55</sup> The 1950 Act for International Development would ultimately authorize \$35 million in funding through June 30, 1951.

<sup>56</sup> Interdepartmental Advisory Committee on Technical Assistance, "Explanatory Book for the Presentation of the Development Cooperation Program," May 18, 1949. SCC Memos.

The creation of Point Four ultimately signalled the committee's end, however. As technical assistance programs expanded rapidly, interagency coordination became increasingly difficult. Too many agencies were now involved in the business of providing technical assistance in too many parts of the world. After 1950, at the behest of Congress, the State Department undertook a series of major reorganizations of technical assistance programs. These reorganizations ultimately folded the committee into the Technical Cooperation Administration and, in 1953, the Mutual Security Agency, which would, in turn, become the Agency for International Development in 1961.

### **Conclusion**

During its life, the Interdepartmental Committee on Scientific and Cultural Cooperation oversaw the dramatic expansion of scientific internationalism in U.S. foreign policy. It's wartime activities in Latin America served as a site in which members were able to work out and hone a new logic connecting international cooperation in science and technology to broad U.S. policy goals of promoting international peace and security through economic development and political stability. After the war, committee members continued to develop and deploy this logic in arguing for the expansion of technical assistance programs around the world and in their coordination of U.S. policies with respect to the UN Specialized Agencies. They also frequently drew upon the Latin American experience as an illustration that the logic of international cooperation in science and technology actually worked in practice.

With the committee's end, however, a gaping hole was left in the State Department's ability to mobilize science in pursuit of U.S. foreign policy goals. Not surprisingly, scientists were the first to note the problem. Already, by 1950, scientists complained that science was

getting short shrift in the Point Four Program. Contributions for economic and financial assistance, they argued, were far larger than contributions for scientific and technical exchange. Prompted by these and other concerns, the State Department established the Berkner Committee in 1950 to advise it on how to improve the connection between science and foreign relations, the product of which is the now famous report *Science and Foreign Relations* to which I alluded earlier. By this point, however, the die was cast. Other U.S. agencies had enormous reserves of scientific and technical talent and neither they nor Congress were enthusiastic about duplicating those resources inside the State Department. Nor were these agencies enthusiastic about giving back to the State Department the hard won positions they had achieved in foreign policy.

I contend, therefore, that the committee played an important role in sowing the seeds of a new world order, grounded in a new organization of the state for foreign policy. The committee didn't make science important in world affairs—the atomic bomb did that—but it did help make scientific and technical cooperation an important element in the management of global challenges. The committee helped to shape U.S. policy toward the UN Specialized Agencies and to establish a working model for interagency cooperation, which today has become the norm for diplomatic affairs in the United States. The committee also fostered the global expansion of technical assistance programs. All of these activities helped to enable technical agencies to secure leadership positions in important arenas of U.S. foreign policy. The upshot was, and remains today, extensive expert involvement in world affairs, across numerous policy arenas, from economic and financial market regulation to communication, transportation, and the environment. It is telling, I believe, that institutions like the International Atomic Energy Agency remain important today. In considerations of global security, the postwar goal of international control over atomic weapons remains a distant pipe dream. Nonetheless, the world still pins

many of its hopes for a future free from the scourge of nuclear war on international cooperation among nuclear experts. Not all of them, of course, but many.

\*Clark A. Miller, Robert M. La Follette School of Public Affairs, University of Wisconsin-Madison, 1225 Observatory Drive, Madison, WI, 53706, miller@lafollette.wisc.edu.

Clark A. Miller is assistant professor in the Robert M. La Follette School of Public Affairs and the Robert and Jean Holtz Center for Science and Technology Studies at the University of Wisconsin-Madison. He is the editor, with Paul Edwards, of *Changing the Atmosphere: Expert Knowledge and Environmental Governance*. He writes on the politics of science and technology in a global world.