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Patterns of Science: Developing Knowledge for a World Community at Unesco

Abstract

In the aftermath of World War II, many internationalists diagnosed the fundamental cause of international conflict as humanity's failure to realize the ideals of a world community grounded in global political institutions and common values. To prevent an apocalyptic third world war, internationalists affiliated with the United Nations Educational, Scientific and Cultural Organization (Unesco) identified two ways science could engineer a peaceful and prosperous world community: "technologically, by changing the material conditions of life, work and production; and intellectually, by changing the way in which men think." Grounded in archival research in four countries, "Patterns of Science" explores both strategies through studies of Unesco's environmental and social sciences programs. Environmental scientists emphasized the need to balance nature's books by adapting the pattern of natural resources exploitation to the requirements of global population growth. They conceived of scientifically guided development as a moral equivalent of war that could unite an international army for the conquest of nature. Social scientists stressed the importance of reforming parochial cultural patterns to construct "the defences of peace in the minds of men." By facilitating intercultural understanding, social scientists would help nations realize the ideal of "unity in diversity." The goal of both strategies was to produce objective global knowledge that would make the world scale real—"in the minds of men" as well as for politicians and planners. "Patterns of Science" reveals how internationalist scientists attempted to navigate the politics of the cold war, decolonization, and bureaucratic rivalries through case studies that demonstrate the interaction of international, national, and local scales. These cases range from the Los Angeles School District's implementation of a "Unesco program" during the height of McCarthyism to the establishment of a university chair of race relations in Southern Rhodesia, and from an arid lands research program that pitted "men against the desert" to the production of a Soil Map of the World. Although often mired in controversy or dismissed as naïve, Unesco's work produced an international community of experts and global social and environmental knowledge that proved crucial to the emerging imperative for sustainable development in the early 1970s.

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PATTERNS OF SCIENCE
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PATTERNS OF SCIENCE: DEVELOPING KNOWLEDGE FOR A WORLD
COMMUNITY AT UNESCO

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2011

PERRIN SELCER

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ABSTRACT

PATTERNS OF SCIENCE

DEVELOPING KNOWLEDGE FOR A WORLD COMMUNITY AT UNESCO

Perrin Selcer

M. Susan Lindee

In the aftermath of World War II, many internationalists diagnosed the fundamental cause of international conflict as humanity's failure to realize the ideals of a world community grounded in global political institutions and common values. To prevent an apocalyptic third world war, internationalists affiliated with the United Nations Educational, Scientific and Cultural Organization (Unesco) identified two ways science could engineer a peaceful and prosperous world community: "technologically, by changing the material conditions of life, work and production; and intellectually, by changing the way in which men think." Grounded in archival research in four countries, "Patterns of Science" explores both strategies through studies of Unesco's environmental and social sciences programs. Environmental scientists emphasized the need to balance nature's books by adapting the pattern of natural resources exploitation to the requirements of global population growth. They conceived of scientifically guided development as a moral equivalent of war that could unite an international army for the conquest of nature. Social scientists stressed the importance of reforming parochial cultural patterns to construct "the defences of peace in the minds of men." By facilitating

intercultural understanding, social scientists would help nations realize the ideal of “unity in diversity.” The goal of both strategies was to produce objective global knowledge that would make the world scale real—“in the minds of men” as well as for politicians and planners. “Patterns of Science” reveals how internationalist scientists attempted to navigate the politics of the cold war, decolonization, and bureaucratic rivalries through case studies that demonstrate the interaction of international, national, and local scales. These cases range from the Los Angeles School District’s implementation of a “Unesco program” during the height of McCarthyism to the establishment of a university chair of race relations in Southern Rhodesia, and from an arid lands research program that pitted “men against the desert” to the production of a Soil Map of the World. Although often mired in controversy or dismissed as naïve, Unesco’s work produced an international community of experts and global social and environmental knowledge that proved crucial to the emerging imperative for sustainable development in the early 1970s.

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Introduction

The opening line of the United Nations Charter invoked the moral authority of those who had suffered unspeakable wrongs: “We the peoples of the United Nations determined to save succeeding generations from the scourge of war, which twice in our lifetime has brought untold sorrow to mankind...” If the United Nations Organization represented the realization of a grand internationalist vision, its idealism was a reaction to the insanity of the battles of the Somme and Ypres, Stalingrad and Okinawa, not an expression of innocence. In fact, despite the allusion to popular democracy in the Preamble’s first words, the twenty-nine substantive chapters of the Charter were “based in the principle of the sovereign equality” of member states—except, of course, that they simultaneously institutionalized the ultimate authority of the great powers in the Security Council. In other words, the UN was intended to organize the existing international order, not create a new world order. Similarly in the economic sphere, the Bretton Woods institutions were designed to facilitate and stabilize the international financial system, not fundamentally transform it. And yet there is no denying the utopian strains in the dream of a world without war.

This idealism, still anchored in the harsh reality of “the great and terrible war” that had just ended, was given full expression in the Constitution of the United Nations Educational, Scientific, and Cultural Organization (Unesco),¹ which declared that “a peace based exclusively upon the political and economic arrangements of governments would not be a peace which could secure the unanimous, lasting and sincere support of the peoples of the world, and that the peace must therefore be founded, if it is not to fail,

¹ During the period of this study, the organization’s acronym was officially written Unesco (not UNESCO).

upon the intellectual and moral solidarity of mankind.” The only realistic foundation for an enduring peace was a world community—a world in which “We the peoples of the United Nations” represented not merely a rhetorical flourish but the deeply felt affiliation of world citizens. This study explores the efforts of scientists, civil servants, and activists affiliated with Unesco to use science to build a peaceful and prosperous world community during the quarter-century following World War Two.

Postwar internationalists were acutely sensitive to the charge of idealistic naiveté from realists, and many acknowledged the futility of international political cooperation to transcend power politics. Instead of the explicitly political United Nations Organization in New York, these intellectuals pinned their hopes to the UN specialized agencies, which relied on expert knowledge to solve mundane problems like hunger (the Food and Agriculture Organization—FAO), disease (World Health Organization—WHO) and illiteracy (Unesco). By engaging nations in their border-crossing projects, these functional agencies would quietly erode national and bureaucratic boundaries and thus “overlay political divisions with a spreading web of international activities and agencies, in which and through which the interests and life of all the nations would be gradually integrated,” as the British political scientist David Mitrany put it. For proponents of this strategy, termed functionalism, the explicitly apolitical quality of science was a powerful political resource.²

² David Mitrany, *A Working Peace System* (Chicago, 1966), 96. The title essay in this collection was originally published in 1943, although Mitrany dates the origins of his “functionalist” theory of international organization to 1932. On functionalism, see Ernst Haas, *Beyond the Nation-State: Functionalism and International Organization* (Stanford, 1964); Craig Murphy, *Global Institutions, Marginalization, and Development* (London, 2005), in particular chapters 3 “The Dialectic of Liberal Internationalism” and 4 “The Promise of Democratic Functionalism”. On science as a political resource, see Yaron Ezrahi, *The Descent of Icarus: Science and the Transformation of Contemporary Democracy*

As the UN specialized agency with jurisdiction over science, Unesco had a particular interest in elaborating how science could be mobilized as an instrument of progressive global social and political reform. In 1950, Unesco's Natural Sciences Department published the first issue of *Impact of Science on Society*, a journal dedicated to what contemporaries called the social relations of science. "Science impinges on society in two main ways," the inaugural editorial began, "technologically, by changing the material conditions of life, work and production; and intellectually, by changing the way in which men think." The intellectual impact of science might ultimately prove "far more important to humanity than its contribution to material welfare," but "in the present state of the world it [was] not practical politics to envisage the spreading of the scientific attitude to mankind as a whole." Before they could be expected to adopt the scientific attitude, the "starving millions" had to be fed (and the working millions afforded leisure time).³

Neither critics nor supporters were likely to accuse Unesco of following the dictates of "practical politics," however. In fact, Unesco's mandate to cultivate the intellectual and moral solidarity of mankind fit awkwardly with the logic of functionalism. Replacing irrational, parochial patterns of thought with a "critical sense" and "objective attitude" was the fundamental task—a world citizen was a scientific citizen.⁴ In practice, Unesco pursued both the technological and the intellectual strategies

(Cambridge, 1990); Theodore Porter, *Trust in Numbers: The Pursuit of Objectivity in Science and Public Life* (Princeton: Princeton University Press, 1995); Steven Shapin and Simon Schaffer, *Leviathan and the Air-Pump: Hobbes, Boyle, and the Experimental Life* (Princeton: Princeton University Press, 1985).

³ Anon, "The Impact of Science on Society," *Impact of Science on Society* 1: 1 (Apr.-June 1950), 1-2, 1.

⁴ Unesco, *In the Classroom with Children under Thirteen Years of Age: Towards World Understanding V* (Paris: Unesco, 1952), 53.

for using science to develop a prosperous and peaceful world community, but a commitment to the intellectual strategy for improving the world—to intervening “in the minds of men,” as its Constitution put it—was deeply embedded in the organization’s institutional culture.

For many participants in Unesco’s program, the technological and the intellectual approaches were complementary; both were a means of eroding political boundaries in order to facilitate the peaceful integration of the world community. The technological approach focused on society’s base; by guiding the development of the planet’s natural resources, science promised to build the stable economic foundation on which a world community could be built. The intellectual approach targeted the superstructure; by providing a universal epistemology that enabled diverse peoples to collaborate, science would accelerate the development of common values and norms. But the two approaches pulled in opposite directions, too. The technological strategy purposefully eschewed controversial political questions to focus on practical problems that crossed borders. In contrast, the intellectual strategy directly confronted emotionally charged prejudices and rigid political ideologies with the deliberative rationality of science. Most importantly, the technological approach depended on an elite core of cosmopolitan experts; whereas the intellectual approach attempted to foster a popular community of world citizens. Rather than directly contradictory, these two strategies for effacing community boundaries existed in constant, potentially productive tension. Analyzing how civil servants and experts managed this fundamental tension in practice is a major task of this study.

Neither of these strategies was new in 1945, but they existed in a new world—or at least, internationalists insisted that they did. The Second World War had obliterated the old balance of power and demonstrated the apocalyptic consequences of a third war. As President Truman told a UN conference a month after ordering the atomic bombing of Japan, “Let us not fail to grasp the supreme chance to establish a world-wide rule of reason.” The rule of reason was the goal, but the key to achieving it was recognizing the urgency and opportunity of the unique historical moment for a fresh start. The contemporary insistence on the novelty of the new world order enhances the importance of situating the moment in historical perspective.⁵

For the architects of the United Nations, the stakes in breaking with the past were high; the past was the League of Nations and the League was perceived as a failure. And yet even contemporary observers recognized that the United Nations was a product “of continuous evolutionary development” and a direct descendent of the League of Nations; thus the first article of the new journal *International Organization* was titled “From League of Nations to United Nations.”⁶ Recently, Mark Mazower has again drawn attention to the UN’s close correspondence to the League in order to illuminate the UN’s ideological foundations in the ideals of British imperial internationalism. Imperial internationalism has an oxymoronic ring to it now, but this largely reflects the history of

⁵ Truman quotation in Paul Kennedy, *The Parliament of Man: The Past, Present, and Future of the United Nations* (New York: Random House, 2006), 46. The whole speech is reproduced in the appendix of Stephen Schlesinger, *Act of Creation: The Founding of the United Nations* (Boulder, Colo.: Westview Press, 2003). On the founding, see also Townsend Hoopes and Douglas Brinkley, *FDR and the Creation of the U.N.* (New Haven: Yale University Press, 1997). On the bomb and the postwar internationalist moment, Paul S. Boyer, *By the Bomb’s Early Light: American Thought and Culture at the Dawn of the Atomic Age* (New York: Pantheon, 1985), 1-105.

⁶ Leland M. Goodrich, “From League of Nations to United Nations,” *International Organization* 1: 1 (Feb. 1947), 3-21, 4.

the UN, which turned out to be an important facilitator of the triumph of nationalism over imperialism. In fact, key intellectuals of international organization like Jan Smuts and the classicist Alfred Zimmern were also key intellectuals of liberal imperialism. For this school of thought, the League and then the UN were means of shoring up the machinery of international cooperation between civilized nations and thus stabilizing the world order so that European imperialists could perform their lofty civilizing missions in the backward territories.⁷

The Commonwealth, which distinguished the white dominions from the colonial possessions, provided a model for this layered international structure, in which it also was embedded. But for Zimmern and other imperial internationalists the Commonwealth was even more important as an ideological resource; it represented, in theory, an international community founded in intellectual and moral solidarity. A similar cultural conception of a cosmopolitan French empire inspired key French international intellectuals like René Cassin.⁸ The connections to Unesco's philosophy were direct. Zimmern, for example, was a key figure in Unesco's predecessor organization, the League of Nation's affiliated International Institute of Intellectual Cooperation, and was briefly slated to be the first Director-General of Unesco. As Glenda Sluga has shown, his replacement, the biologist Julian Huxley, was also a committed imperialist with essentially Victorian sensibilities. Huxley saw the organization's role as both fostering a world culture rooted in scientific

⁷ Mark Mazower, *No Enchanted Palace: The End of Empire and the Ideological Origins of the United Nations* (Princeton, 2009); Frank Trentmann, "After the Nation-State: Citizenship, Empire and Global Coordination in the New Internationalism, 1914-1930," in *Beyond Sovereignty: Britain, Empire and Transnationalism, c. 1880-1950*, Kevin Grant, Philippa Levine, and Frank Trentmann, eds. (New York: Palgrave, 2007), 34-53.

⁸ Glenda Sluga, "René Cassin: *Les Droits de l'homme* and the History of Human Rights" in Stegan Ludwig-Hoffman, ed. *The Twentieth Century History of Human Rights* (Cambridge: Cambridge University Press, 2009).

humanism and helping European empires with their noble civilizing mission. This was an essentially antinationalist internationalism, which viewed the fragmentation of empires as detrimental to the goal of integrating the world community. The concept of a world community had deep roots in the ideals of imperialism.⁹

Mazower draws a sharp distinction between spiritual-psychological world community internationalism and what Zimmern derided as “gas and water internationalism.”¹⁰ As I have suggested, however, there was no necessary contradiction between the intellectual and technological strategies. But it is true that postwar internationalists were less enamored with international law and ethics than they had been during the interwar years (and Zimmern was certainly ill-disposed towards science). They were more project-oriented. Typical in this respect, international scientific cooperation underwent a transformation from relatively informal associations that held periodic congresses in the interwar period to project-oriented organizations with permanent secretariats after the war.¹¹ To a certain extent, Unesco fit this pattern, too. Although it

⁹ Mazower, “Alfred Zimmern and the Empire of Freedom,” *No Enchanted Palace*, 66-103; On the Commonwealth and the League, see also Peter Mandler, “The Impact of War on Democracy,” in *The English National Character: The History of an Idea from Edmund Burke to Tony Blair* (New Haven: Yale University Press, 2006), 143-163. Glenda Sluga, “UNESCO and the (One) World of Julian Huxley,” *Journal of World History* 21: 3 (Sep. 2010), 393-418. On Huxley, imperialism and Unesco, see also Peder Anker, *Imperial Ecology: Environmental Order in the British Empire, 1895-1945* (Cambridge, Mass.: Harvard University Press, 2001).

¹⁰ Mazower, *No Enchanted Palace*, 80. In fact, Mazower mistakenly describes Huxley’s appointment as Director-General as a victory for a program of rather boring international scientific exchange. But Huxley was a walking controversy who, influenced by his sometime collaborator H. G. Wells, believed that enduring peace depended on the mental adaptation of the human race. (Other than God, it is hard to find many things Huxley did not believe in.) See also, John Toye and Richard Toye, “One World, Two Cultures? Alfred Zimmern, Julian Huxley and the Ideological Origins of UNESCO,” *History* 95: 319 (July 2010), 308-319. Cf. Julian Huxley, *UNESCO: Its Purpose and Its Philosophy* (Paris: UNESCO Preparatory Commission, 1946); H.G. Wells, *The Outlook for Homo Sapiens: An unemotional Statement of the Things that are happening to him now, and of the immediate Possibilities confronting him* (London: Readers Union and Secker & Warburg, 1942).

¹¹ Frank Greenaway, *Science International: A History of the International Council of Scientific Unions* (Cambridge, U.K.: Cambridge University Press, 1996).

continued the International Institute for Intellectual Cooperation's tradition of elite intellectual exchange, it focused more resources on practical problems like illiteracy. Unesco's other institutional predecessor is revealing here. This was the wartime Council of Allied Ministers of Education. Initiated by the British Board of Education, CAME focused on sharing information, coping with the difficulties of wartime schooling, and planning for the postwar reconstruction of educational systems. Delegates to the Conference of the United Nations for the Establishment of an International Organization for Education and Culture, held in London in November 1945, synthesized a French proposal to revive the Institute for Intellectual Cooperation and a rival U.S.-CAME proposal. The compromise was symbolized by the agreement to locate the Secretariat in Paris and appoint a British Director-General.¹² It is tempting here to identify the intellectual elite approach with the past or the French and the technological project-based approach with the new or Anglo-American, but neither distinction can be sustained. Instead, it was characteristic of Unesco and of the historical moment that no possibilities had been eliminated.

In any case, "gas and water internationalism" also had deep imperial roots. Zimmern's dismissive comment suggests the origins of functionalism in International Public Unions like the International Telegraphic Union or the Universal Postal Union that emerged in Europe during the second-half of the nineteenth century (and which became

¹² The story of Unesco's founding has been told many times. For a general overview see, H. H. Krill De Capello, "The Creation of the United Nations Educational, Scientific and Cultural Organization," *International Organization* 24: 1 (Winter, 1970), 1-30. Fernando Valderrama, *A History of Unesco* (Paris: UNESCO Publishing, 1995), 19-32; "D'une société des esprits à la création de l'UNESCO," in *60 ans d'Histoire de l'UNESCO* (Paris, 2007)57-99.

UN specialized agencies).¹³ These mundane international organizations focused on international standard setting; by facilitating trans-border flows of information and goods they became indispensable institutions that performed mundane governance operations at the international level. But functionalism also called for bold border-crossing projects designed to increase agricultural productivity, harness the power of rivers, train workers, and enhance public health. In fact, the social and economic development of “underdeveloped” countries quickly became the *raison d’être* of the specialized agencies. As a vast literature details, the intellectual roots of development were firmly planted in the colonial civilizing mission—a phrase which captures the tight relationship between the technological and intellectual approaches, between the material and the moral. Science and technology were both a means and a measure of civilized progress. Decolonization only reinforced the imperial connection; UN agencies replaced colonial institutions and colonial experts became international experts.¹⁴

The unexpected speed of postwar decolonization suggests that, in some respects at least, contemporaries underestimated the historical rupture of the Second World War. Yet despite claims to novelty, the institutions and ideas that constituted the United Nations

¹³ Paul S. Reinsch, *Public International Unions: Their Work and Organization: A Study in International Administrative Law* (Boston: Ginn and Co., 1911); Leonard Woolf, *International Government* (London: G. Allen & Unwin, Ltd., 1916); Craig Murphy, *The International Organization for Standardization (ISO): Global Governance through Voluntary Consent* (London: Routledge, 2009).

¹⁴ Michael Adas, *Machines as the Measure of Men: Science, Technology and the Ideology of Western Dominance* (Ithaca: Cornell University Press, 1989); Alice Conklin, *A Mission to Civilize: The Republican Idea of Empire in France and West Africa, 1895-1930* (Stanford: Stanford University Press, 1997); Fredrick Cooper and Randall Packard, eds., *International Development and the Social Sciences: Essays on the History of Politics and Knowledge* (Berkeley: University of California Press, 1997); Joseph Morgan Hodge, *Triumph of the Expert: Agrarian Doctrines of Development and the Legacies of British Colonialism* (Athens: Ohio University Press, 2007); Richard Jolly, Louis Emmerij, Dharam Ghai, and Frederic Lapeyre, *UN Contributions to Development Thinking and Practice* (Bloomington: Indiana University Press, 2004); Gilbert Rist, *The History of Development: from Western Origins to Global Faith* (London: Zed Books, 1997); Amy Staples, *The Birth of Development: How the World Bank, Food and Agriculture Organization, and World Health Organization Changed the World, 1945-1965* (Kent: Kent State University Press, 2006).

System were inherited from the imperial past. Decolonization, therefore, was a painful yet empowering experience for Unesco and other international organizations. A process that Unesco contributed to almost inadvertently, it fundamentally transformed the organization. As this study shows, decolonization tested the depth of the convictions of many internationalists—it made the question of just who ought to be included in the world community unavoidable.

Of course, when the United Nations System was established, the British Empire was no longer the preeminent world power. With Europe struggling just to make it through the winter, Britain deep in debt and reduced to rationing, Japan in submission, and the devastated Soviet Union turned in upon itself, the United States' extraordinary monopoly of economic and military power translated into global hegemony. At its founding, popular enthusiasm for the UN in the United States was overwhelming—as Townsend Hoopes and Douglas Brinkley point out, the 1944 election provided a “clear-cut mandate for American participation in the United Nations,” as isolationist incumbents from both parties were tossed out of office.¹⁵ And as the opening words of the UN Charter (“We the peoples”) made explicit, the United States provided a model for the organization of the international community. Like imperial internationalism, American internationalist aspirations had been vested in the League of Nations, of course. But while the UN's boosters might want to dissociate it from the League, the reputation of Wilsonian liberalism retained much of its luster—the League's weakness could be blamed on Wilson's failure to win Senate ratification for American participation rather than the quality of the ideas. It is symbolically appropriate that Smuts and the American

¹⁵ Hoopes and Brinkley, *FDR and the Creation of the U.N.*, 164.

geographer Isaiah Bowman, both key players at the Paris Peace Conference a generation earlier, collaborated in writing the Charter's famous Preamble. Given the evolutionary development of intergovernmental organizations, however, the fact of U.S. power was more consequential than the relative influence of related intellectual traditions. Five powers had a veto, but American resources underwrote the system.¹⁶

American hegemony was not uncontested, of course. Already by 1947 the Cold War had hardened, and the U.S. and Soviet government's primary concern quickly became how to use UN agencies in the global ideological conflict. Unesco, with its mandate to intervene in the minds of men, occupied particularly valuable turf in a war for hearts and minds. Being the battlefield was not necessarily rewarding for the organization, but it does make its history revealing of important shifts in international relations policy.¹⁷

Although the Soviet Union did not join Unesco until after Stalin died, U.S. policy makers still found navigating Unesco treacherous. In the early years, the United States contributed nearly forty percent of the budget, and so enjoyed a sort of *de facto* veto, but Unesco was an organization of member states and the U.S. voice was just the loudest of

¹⁶ G. John Ikenberry, *After Victory: Institutions, Strategic Restraint, and the Rebuilding of Order after Major Wars* (Princeton: Princeton University Press, 2001); Neil Smith, *American Empire: Roosevelt's Geographer and the Prelude to Globalization* (Berkeley: University of California Press, 2003). Of course, the roots of development doctrines are as obvious in American international relations as European imperialism; Cf. Michael Adas, *Dominance by Design: Technological Imperatives and America's Civilizing Mission* (Cambridge, Mass.: Belknap Press of Harvard University Press, 2006).

¹⁷ On the cultural cold war, see Illya Gaiduk, "L'Union Soviétique et l'UNESCO pendant la Guerre Froide," in *60 ans d'Histoire de l'UNESCO* (Paris, 2007), 281-286; Tony Judt, *Postwar: A History of Europe Since 1945* (New York: The Penguin Press, 2005), 197-225; Bernard S. Morris, "Communist International Front Organizations: Their Nature and Function," *World Politics* 9: 1 (Oct. 1956), 76-87; Caroline Kennedy-Pipe, *Stalin's Cold War: Soviet Strategies in Europe, 1943 to 1956* (Manchester, 1995); Frances Stonor Saunders *Who Paid the Piper? The CIA and the Cultural Cold War* (London, 1999); Giles Scott-Smith & Hans Krabbendam, *The Cultural Cold War in Western Europe, 1945-1960* (London: F. Cass, 2003).

dozens. Then, too, Americans were of many voices regarding the value of Unesco. Most dramatically, the organization got caught in the crossfire of rabid U.S. anticommunism, which caused fundamental changes in the organization's character and mission. But part of the difficulty with using Unesco to wage an ideological campaign was inherent in American liberal internationalism. In terms of international cultural relations, the diplomatic historian Frank Ninkovich describes the dilemma as "how to use intellectual freedom as propaganda without turning it into propaganda in the process."¹⁸ This dilemma is analogous to the challenge of using the apolitical reputation of science as a political resource, and both ultimately stem from the self-denying quality of liberal ideology (that is, liberalism denies that it is ideological).¹⁹

Like decolonization exposed the contradictions of imperial internationalism, the Cold War revealed the ideological foundations of American liberal internationalism—and tested internationalists' true commitment to its principles.²⁰ In this study, I examine

¹⁸ Frank A. Ninkovich, *The Diplomacy of Ideas: U.S. Foreign Policy and Cultural Relations, 1938-1950* (Cambridge: Cambridge University Press, 1981), 176.

¹⁹ On Soviet and American ideologies, see in particular Odd Arne Westad, "The Empire of Liberty: American Ideology and Foreign Interventions" and "The Empire of Justice: Soviet Ideology and Foreign Interventions," in *The Global Cold War: Third World Interventions and the Making of Our Times* (Cambridge: Cambridge University Press, 2005), 8-72. On the UN as an alternative path in U.S. foreign relations, see Jessica Wang, "The United States, the United Nations, and the Other Post-Cold War World Order: Internationalism and Unilateralism in the American Century," in Ellen Schrecker, ed., *Cold War Triumphalism: The Misuse of History after the Fall of Communism* (New York, 2004), 201-234. On American experts efforts to use knowledge to manage the problem of American hegemony for democratic values, see David C. Engerman, "Bernath Lecture: American Knowledge and Global Power," *Diplomatic History* 31: 4 (Sep. 2007), 599-622. On the tensions generated by liberal imperialism, see Fredrick Cooper and Ann Laura Stoler, eds., *Tensions of Empire: Colonial Cultures in a Bourgeois World* (Berkeley: University of California Press, 1997).

²⁰ Part of what made the United States a model for the international community was that it was a multiracial society, but this made it a decidedly suspect model, of course. The key contradiction of American internationalism was the United States' record on race. Carol Anderson, *Eyes Off the Prize: The United Nations and the African American Struggle for Human Rights, 1944-1955* (Cambridge: Cambridge University Press, 2003); Thomas Borstelmann, *The Cold War and the Color Line: American Race Relations in the Global Arena* (Cambridge & London: Harvard University Press, 2001); Mary L. Dudziak,

international scientific programs to see how scientists, civil servants, and activists negotiated the interwoven tensions of decolonization and the Cold War to cultivate transnational communities and produce knowledge.²¹

Although my subject is the co-production of international institutions and international science, this is emphatically not an institutional history of Unesco or even a history of its science programs.²² Indeed, many of the Natural and Social Sciences Departments' most notable accomplishments (and disastrous failures) go unmentioned, while considerable space is devoted to projects that would appear trivial from the perspective of a standard institutional history.²³ My interest is in the ideals, theories, and practices of science in that abstract space that is everywhere and nowhere, the international, not in Unesco per se. Unesco was part of a complex network of IGOs, nongovernmental organizations (NGOs), national government agencies, and universities.²⁴ It was a key institution in this network, but its roles were usually defined as coordinating, catalyzing, and facilitating. Although Unesco Headquarters in Paris is the common node connecting the diverse transnational networks delineated in the individual chapters, at times it appears as a peripheral node; the main action unfolds in the field or

Cold War Civil Rights: Race and the Image of American Democracy (Princeton and Oxford: Princeton University Press, 2000).

²¹ Decolonization and the Cold War were far from the only international political forces with which internationalists had to contend; for example, in Chapter Four I investigate how managing Arab-Israeli and Indo-Pakistani tensions posed key challenges.

²² On co-production, see Sheila Jasanoff, ed., *States of Knowledge: The Co-production of Science and Social Order* (London: Routledge, 2004).

²³ The best political-institutional history of Unesco's first decades remains James P. Sewell, *Unesco and World Politics: Engaging in International Relations* (Princeton: Princeton University Press, 1975). See also, Roger-Pol Droit, *Humanity in the Making: Overview of the Intellectual History of Unesco, 1945-2005* (Paris: Unesco, 2005). For an encyclopedic history of the natural sciences program, see Patrick Petitjean et al., eds, *60 Years of Science at UNESCO, 1945-2005* (Paris: Unesco Publishing, 2006).

²⁴ I use network theory as a research methodology but do not grant networks in and of themselves much explanatory purchase. Bruno Latour, *Reassembling the Social: An Introduction to Actor-Network-Theory* (Oxford: Oxford University Press, 2005).

even in another UN specialized agency. The common thread that unites the six chapters, and which defined my criteria for selecting projects, is the purposeful use of science to develop a world community. This thread, however, is composed of many thematic strands. In what follows, I introduce the five most important of these strands: epistemology; science fictions; bureaucracy and boundaries; cosmopolitanism; and scales.

Epistemology

The great promise of science in the international community was that it could provide a universally accepted way of determining the truth. Although this did not automatically equate to a community of shared interests and identity, it would provide a solid foundation for mutual understanding and collective action. Producing objective knowledge was a particularly tricky proposition in the international community, however, for the very reason it would be so valuable. As Lorraine Daston and Peter Galison remind us, “Objectivity is always defined by its more robust and threatening complement, subjectivity.”²⁵ Objectivity required a community whose members saw the world from the same perspective, recognized the same patterns in the world’s complexity. The production of objective knowledge could not be separated from the production of an international community. Whereas Daston and Galison eschew the “remote causes” of political and social forces in their history of objectivity, however, these were part of the immediate context of science in the UN System. Epistemologies in the international community were theories of knowledge and of social and political reform.

²⁵ Lorraine Daston and Peter Galison, *Objectivity* (New York: Zone Books, 2007), 258.

The intellectual and technological strategies for using science to develop a world community were associated with different epistemological theories and practices. I explore the intellectual approach's epistemology through projects connected to Unesco's Social Sciences Department. I call it the view from everywhere.²⁶ It emerged out of the vibrant interwar interdisciplinary field of social psychology and manifested the praxis of "action-research," in which social research became a form of group therapy.²⁷ Experts themselves were supposed to be transformed through international cooperation. The view from everywhere attempted to turn the problem of subjectivity into a means of achieving objectivity by operationalizing internationalists' most cherished concept, unity in diversity. By coordinating the perspectives of experts who represented distinct national cultural patterns in interdisciplinary research projects, it sought to produce a synthetic international perspective. This notion of perspectives converging through participation in transnational networks resonates with recent work in constructivist international relations, especially Margaret Keck and Kathryn Skikkink's justly influential *Activists Beyond Borders*.²⁸ Chapter One places these ideas in historical context and analyzes social scientists' attempts to establish the institutional infrastructure of the view from everywhere.

²⁶ This is in comparison to the classic description of objectivity in Thomas Nagel, *The View from Nowhere* (Oxford: Oxford University Press, 1986).

²⁷ This point connects to literature on the "therapeutic state" and the rise of psychology in political culture. Ellen Herman, *The Romance of American Psychology: Political Culture in the Age of Experts* (Berkeley: University of California Press, 1995); James Nolan, Jr., *The Therapeutic State: Justifying Government at Century's End* (New York: New York University Press, 1998).

²⁸ Margaret Keck and Kathryn Skikkink, *Activists Beyond Borders: Advocacy Networks in International Politics* (Ithaca: Cornell University Press, 1998); see also, Sanjeev Khagram, *Dams and Development: Transnational Struggles for Water and Power* (Ithaca: Cornell University Press, 2004).

I investigate the epistemology of the technological strategy, which I call the view from above, through the Natural Sciences Department's environmental sciences program. In the postwar international scientific community, the view from above was closely associated with holistic ecological thinking and the norms of natural resources conservation. Where the view from everywhere attempted to synthesize diverse cultural perspectives, the view from above struggled to suppress the judgment of observers in the field through standardization. It was based in a faith in the unity of nature. The natural world was one world, but on this solid base, humans had constructed a patchwork of cultural, economic, and political structures that did not conform to natural boundaries. A unified world science was necessary to develop a global view from above that would reveal the underlying natural patterns to which a world community must be adjusted. In Chapter Three, I examine a series of international conservation conferences to reveal the norms and logic of the view from above, as well as map the emerging network of international organizations with an interest in conservation.

For historians of science, the view from above is quite familiar, and has become closely associated with imperialism and the oppressive hubris of the high modern state, especially through James Scott's compelling *Seeing Like a State*.²⁹ But if this study has a single overarching argument, it is that epistemologies do not have politics; that is,

²⁹ James Scott, *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed* (New Haven: Yale University Press, 1998). For the view from above in connection to the UN and Unesco the following two studies are especially important: Peder Anker, *Imperial Ecology: Environmental Order in the British Empire, 1895-1945* (Cambridge, Mass.: Harvard University Press, 2001); Neil Smith, *American Empire: Roosevelt's Geographer and the Prelude to Globalization* (Berkeley: University of California Press, 2003).

epistemologies are inherently flexible and so do not determine power relations.³⁰ In practice, the epistemic virtues (to borrow a phrase from Daston and Galison) of the view from everywhere and the view from above did not exist in isolation but were in constant, potentially productive tension.

Science Fictions

One implication of my argument regarding the non-determinative nature of epistemologies is that deciphering the political implications of the view from everywhere and the view from above requires analyzing how they played out in practice. Chapter Two follows the view from everywhere into the field by exploring the popular response to Unesco in the United States, focusing especially on a controversy over a Unesco Education for International Understanding Program in the Los Angeles School District during the height of McCarthyism. Chapter Four analyzes the view from above in practice through a study of the Natural Sciences Department's Arid Zone Program, which, in the context of Malthusian projections of overpopulation, was dedicated to producing the knowledge necessary to increase the carrying capacity of deserts. These chapters also introduce the theme of science fictions, to borrow a phrase from Donna Haraway.³¹

³⁰ This argument is formulated in the terms of Langdon Winner's classic essay, "Do Artifacts Have Politics?" *Daedalus* 109: 1, (Winter 1980), 121-136.

³¹ Donna Haraway, "A Cyborg Manifesto: Science, Technology and Socialist Feminism in the Late Twentieth Century," in *The Cyberculture Reader*, ed. David Bell and Barbara M. Kennedy (New York: Routledge, 2000) 291-323; Donna Haraway, *Primate Visions: Gender, Race, and Nature in the World of Modern Science* (New York: Routledge, 1989).

To work together for a common cause, people need a shared vision of the future—as democratic theorists assert, utopias (and dystopias) are quite practical things.³² The fiction animating the Education for International Understanding program was the fiction of a world community itself. In fact, because the intellectual strategy for producing a world community depended upon intervening in the minds of men, persuading citizens to believe in the world community could become the means and the end—the line between analysis and exhortation blurred. But the “soft” fiction of a world community competed with harder nationalistic narratives that, although just as preposterous, did not acknowledge their fictional basis.³³

Fictions were equally important to providing a common mission for participants in the Arid Zone Program. Scholars of agricultural development describe how development narratives, provide diverse participants with a common framework for making sense of overwhelmingly complex issues. Environmental scientists themselves have described the development narrative that energized the Arid Zone Program as the “myth of desertification.” This myth was the ultimate expression of an environmental declensionalist narrative with deep cultural roots.³⁴ It warned that “man’s” abuse of the

³² Cf. David Held, “Democratic Thought Experiment” in *Democracy and the Global Order: From the Modern State to Cosmopolitan Governance* (Stanford: Stanford University Press, 1995), 160-167. On the significance of utopian schemes for historical analysis, see Ann Laura Stoler, “Developing Historical Negatives: Race and the (Modernist) Visions of a Colonial State,” in Brian Keith Axel, *From the Margins: Historical Anthropology and Its Futures* (Durham, 2002), 156-188.

³³ Richard Hofstadter, *The Paranoid Style in American Politics: And Other Essays* (New York: Vintage Books, 1967).

³⁴ William Cronon, “A Place for Stories: Nature, History, and Narrative,” *The Journal of American History* 78: 4 (March 1992), 1347-1376; Diana K. Davis, *Resurrecting the Granary of Rome: Environmental History and French Colonial Expansion in North Africa* (Athens: Ohio University Press, 2007); James Fairhead and Melissa Leach, *Misreading the African Landscape: Society and Ecology in a Forest-Savanna Mosaic* (Cambridge, UK: Cambridge University Press, 1996); Emery Roe, “Development Narratives, Or Making the Best of Blueprint Development,” *World Development* 19: 4 (1991), 287-300; David S. G.

land through exploitative or careless agricultural practices threatened to turn fertile fields into barren deserts. The catastrophic consequences of desertification, the narrative contended, were heightened by explosive population growth; in fact, the future depended on “reclaiming” desert lands to keep nature’s books balanced. The myth of desertification provided a compelling reason for member states to support Unesco’s environmental sciences program, which was particularly appealing to governments since it justified state intervention in peasant agricultural practices. Although the word “myth” is meant to expose the narrative of desertification as fictional, it is more important for signaling the religious undertones of the Arid Zone Program, and of international development missions more generally.³⁵ The fiction of a world community and the myth of desertification both sought to foster the intellectual and moral solidarity of mankind.

Bureaucracy and Boundaries

Studies of the United Nation Organizations tend to focus on the act of creation and debates between powerful member states. The political scientists Michael Barnett and Martha Finnemore point out that these emphases reflect an assumption that IGOs are merely the agents of states; therefore, the actions of UN agencies amount to the sum of their member states’ interests.³⁶ But UN agencies are bureaucracies, and as such develop their own independent bureaucratic cultures and interests. Indeed, the actions of the UN specialized agencies reflected turf battles between these organizations as much as the

Thomas and Nicholas J. Middleton, *Desertification: Exploding the Myth* (Chichester, UK: John Wiley & Sons, 1994).

³⁵ Richard Grove, *Green Imperialism: Colonial Expansion, Tropical Island Edens and the Origins of Environmentalism* (Cambridge: Cambridge University Press, 1995); Richard Drayton, *Nature’s Government: Science, Imperial Britain and the ‘improvement’ of the World* (New Haven: Yale University Press, 2000).

³⁶ Michael Barnett and Martha Finnemore, *Rules for the World: International Organizations in Global Politics* (Ithaca: Cornell University Press, 2004).

pressures of international politics. The insights of organizational theory inform my analysis of the UN bureaucracy, especially Daniel Carpenter's *The Forging of Bureaucratic Autonomy*, which argues that agencies can win a significant capacity for independent action by earning a reputation for technical competence and building robust coalitions of supporters.³⁷ Unesco's reputation for competence was decidedly mixed, but there is no doubt that the agency pursued bureaucratic autonomy by engaging other international organizations, government agencies, and influential experts in its program. In fact, since a core internationalist objective was building the international institutional infrastructure that would make world government possible, expanding the organization's mandate and capacity was, in a sense, the mission of the organization.

Conceiving of Unesco as independent actor, however, risks reification. In fact, these were complex organizations with competing internal interests. The political scientists Thomas Weiss, Tatiana Carayannis, and Richard Jolly usefully identify three layers of UN organizations: member states, institutionalized in the General Conference which negotiated the program and budget; the Secretariat, composed of international civil servants who executed the program; and consultative NGOs, advisory committees, and international experts.³⁸ In practice, the boundaries between these three UNs were extremely porous. Indeed, one of my arguments is that the porosity of these boundaries was part of an osmotic theory of reform; flows of individuals, ideas, and norms across the

³⁷ Daniel P. Carpenter, *The Forging of Bureaucratic Autonomy: Reputation, Networks, and Policy Innovations in Executing Agencies, 1862-1928* (Princeton: Princeton University Press, 2001); Max Weber, "Bureaucracy," in *From Max Weber: Essays in Sociology*, H. H. Gerth and C. Wright Mills, eds. (New York: Oxford University Press, 1958), 196-244.

³⁸ Thomas Weiss, Tatiana Carayannis, and Richard Jolly, "The 'Third' United Nations," *Global Governance* 15 (2009), 123-142. See also, Inis Claude Jr.'s distinction between two UNs, *Swords Into Plowshares: The Problems and Prospects of International Organization* (New York: Random House, 1956).

boundaries of the three UNs—and thus between international and national organizations—would accelerate the integration of the international community.³⁹

As this last point suggests, bureaucratic boundary work of the kind Thomas Gieryn has compellingly theorized was at the center of scientific practice in the international community.⁴⁰ Since the view from above stressed the interdependency of everything, a program that began in one functional sector—e.g., nature protection—could easily end up with an interest in another area—e.g., soil conservation. In the functional organization of the UN System, therefore, bureaucratic turf battles manifested as contests over agencies' areas of competence. For the technological strategy, the boundary between basic and applied science was particularly important; by alternately reinforcing and blurring this boundary, the Natural Sciences Department was able to establish its competence in aspects of the environmental sciences that the Food and Agriculture Organization attempted to claim as exclusively its own. More importantly, much of the reform potential of the view from above depended on substituting ecological boundaries for political boundaries on the map of the world. Because reserves of natural resources crossed political boundaries and were unevenly distributed between nations, their rational conservation and utilization required—and could facilitate—international cooperation. Chapters Three and Four develop these points in depth.

³⁹ On international organizations and international normative convergence, see John Boli and George Thomas, eds., *Constructing World Culture: International Nongovernmental Organizations since 1875* (Stanford: Stanford University Press, 1999); Paul F. Diehl ed., *The Politics of Global Governance: International Organizations in an Interdependent World* (Boulder: University of Colorado Press, 1997).

⁴⁰ Thomas Gieryn, *Cultural Boundaries of Science: Credibility on the Line* (Chicago: University of Chicago Press, 1999).

The most fundamental boundary work was maintaining the boundary between science and politics, which was particularly fragile in the work of the Social Sciences Department. Bureaucratic autonomy depended on the functional agencies' claim to be nonpolitical, technical organizations. Yet Unesco's attempts to cultivate world citizens or the Race Program (discussed in Chapter Five) made this distinction difficult to maintain. Several scholars have analyzed episodes in the politicization of Unesco, inevitably concluding that the organization was already political, which implies that some sort of pure knowledge, uncorrupted by politics, was possible.⁴¹ As a historian of science, I begin with the assumption that the boundary between science and politics is a social construct that is always subject to renegotiation. But just because it was socially constructed does not mean it was not "real." This basic assumption is particularly important in this study because the nonpolitical reputation of science was understood as a political resource by my historical actors.

Cosmopolitanism

Cosmopolitan identity is at the center of this study in two distinct but related ways.⁴² First, cosmopolitanism as an internationalist project; the cultivation of world citizens (a literal translation of the Greek word) was a primary goal. Second, international civil servants and experts were supposed to embody world-mindedness; working for a UN agency, their job required them to see the world from an international perspective (or

⁴¹ Cf. Sagarika Dutt, *The Politicization of the United Nations Specialized Agencies: A Case Study of UNESCO* (Lewiston, N.Y.: Mellen University Press, 1995); S.E. Graham, "The (Real)politik of Culture: U.S. Cultural Diplomacy in Unesco, 1946-1954," *Diplomatic History* 30: 2 (April 2006), 231-251.

⁴² For collections of recent work on cosmopolitanism, see Carol A. Breckenridge, Sheldon Pollock, Homi K. Bhabha, and Dipesh Chakrabarty, eds., *Cosmopolitanism* (Durham, N.C.: Duke University Press, 2000); Glenda Sluga and Julia Horne, eds., *Journal of World History: Special Issue: Cosmopolitanism in World History* 21: 3 (Sep. 2010); Steven Vertovec and Robin Cohen, *Conceiving Cosmopolitanism: Theory, Context, and Practice* (Oxford, 2002).

at least try to) and place loyalty to the international organization above loyalty to their home nation. The sense that international experts exemplified the qualities that lay citizens ought to emulate reflected the mid-twentieth century conviction (among scientists at least) that the scientific community represented a model for a democratic society.⁴³

The theory of world citizenship that Unesco promoted was a classic vision of cosmopolitanism: loyalty to the world community did not supplant loyalty to nation but rather was the outermost ring of a concentric circle of loyalties, beginning with the family, school, and city, and expanding to include nation and even, perhaps, one's religious community and ethnicity. Yet in the aftermath of two nationalist world wars, this project did include an element of antinationalism and was explicitly antiracist. Chapter Two (on the world citizenship movement during McCarthyism) and Chapter Five (on an attempt to establish a university Chair of Race Relations in Rhodesia) explore how these challenges to deeply held affiliations—and exclusive privileges—provoked vitriolic backlashes. Ultimately, the political opportunity structures open to a postwar intergovernmental organization included space for antiracist but not antinationalist projects.

The cosmopolitan character of the international civil service was critical to the theory of world community, but I am equally interested in cosmopolitanism as a lived

⁴³ Jamie Cohen-Cole, "The Creative American: Cold War Salons, Social Science, and the Cure for Modern Society," *Isis* 100: 2 (June 2009), 219-262; David A. Hollinger "Science as a Weapon in *Kulturkämpfe* in the United States During and After World War II," *Isis*, 86 (1995), 440-454; Everett Mendelsohn, "Robert K. Merton: The Celebration and Defense of Science," *Science in Context* 3 (Spring 1989), 269-289. On scientists' ability to balance national and international loyalties, see Allan Needell, *Science, Cold War and the American State: Lloyd V. Berkner and the Balance of Professional Ideals* (Amsterdam: Harwood Academic Publishers, 2000).

experience, as “a way of being in the world.”⁴⁴ How strongly felt were civil servants’ and experts’ affiliation to this amorphous international community? How did national rivalries, Cold War and Arab-Israeli tensions, for instance, affect relationships between members of the international scientific community? What was it like to be an expert in a completely unfamiliar country? In fact, the erratic migratory patterns of international experts, traveling from country to country on technical assistance missions doled out from an agency in the metropole, resembled the careers of colonial experts and bureaucrats, and studies of imperial transnationalism inform my analysis.⁴⁵

Scale

In a study of the purposeful attempt to construct a world community, the question of scales, especially the much discussed relations of the global to the local, is unavoidable. The intellectuals I write about grappled with this question, of course. I most intensively explore the intellectual history of efforts to reconcile the global and the local in Chapter Six, a study of the making of the FAO-Unesco Soil Map of the World. This project was a critical episode in the postwar construction of a global environment in which it became commonsense to think of global population, global health, global hunger, global biodiversity, global forest cover, global soil erosion, and a global

⁴⁴ Glenda Sluga and Julia Horne, “Cosmopolitanism: Its Past and Practices,” *Journal of World History* 21: 3 (Sep. 2010), 369-373, 370.

⁴⁵ Kevin Grant, Philippa Levine, and Frank Trentmann, *Beyond Sovereignty: Britain, Empire and Transnationalism, c. 1880-1950* (New York: Palgrave, 2007); Catherine Hall, *Civilising Subjects: Colony and Metropole in the English Imagination, 1830-1867* (Chicago: University of Chicago Press, 2002); Drayton, *Nature’s Government*. Although not imperial, other internationalist movements are relevant; Cf. Leila Rupp, *Worlds of Women: The Making of an International Women’s Movement* (Princeton: Princeton University Press, 1997).

climate.⁴⁶ It reveals the hard work that was required to make the world scale meaningful, as well as the tenuous connections of the global environment to local realities.

But the relationship of the global and the local also poses a pressing methodological problem for any transnational history. Although I do think world history and global meta-narratives make vital contributions to historiography, my solution here has been more modest than attempting even a global history of Unesco's sciences programs.⁴⁷ Instead, I tell stories (nonfiction, of course) about particular projects. Some of these stories stay within the fuzzy boundaries of the international scientific community, which I define as the network of actors that I have reconstructed from the historical archive. Far from representing the global, this international community was relatively small (with many fewer members than a large town), even if geographically dispersed. Other stories follow projects from Unesco's headquarters into the field. They investigate the relationship between the international community and local communities. In particular, these stories illuminate the way competing representations of the international community have been used in local political conflicts. International politics structures all of these narratives, but it is mediated through the international bureaucracy or domestic social and political tensions. This methodology results in a patchy,

⁴⁶ Alison Bashford, "Nation, Empire, Globe: The Spaces of Population Debate in the Interwar Years," *Comparative Studies in Society and History* 49: 1 (2007), 170-201; Matthew Connelly, *Fatal Misconception: The Struggle to Control World Population* (Cambridge, Mass.: Belknap Press of Harvard University Press, 2008); Paul N. Edwards, "Meteorology as Infrastructural Globalism," in John Krige and Kai-Henrik Barth, eds., *Global Power Knowledge: Science and Technology in International Affairs: Osiris* 21 (2006), 229-250; Paul N. Edwards, *A Vast Machine: Computer Models, Climate Data, and the Politics of Global Warming* (Cambridge, Mass.: MIT Press, 2010).

⁴⁷ Many critiques and defenses of world history have been written. I find the two most compelling on either side of the debate to be Fredrick Cooper, "Globalization," *Colonialism in Question: Theory, Knowledge, History* (Berkeley: University of California Press, 2005) and Kenneth Pomeranz, "Social History and World History: From Daily Life to Patterns of Change," *Journal of World History* 18: 1 (March 2007), 69-98.

fragmented history, but it is my contention that it better reflects postmodern reality than a comprehensive, seamless narrative arc would.

Chapter One
The View from Everywhere
Disciplining Diversity in post-WWII International Social Science

“True,” he replied. “And for a while it achieves what one expected of it. But freedom is really another word for subjectivity, and there comes a day when it can no longer stand itself, despairs at some point of the possibility of being creative on its own, and seeks protection and security in objectivity. Freedom always has a propensity for dialectic reversal. It very quickly recognizes itself in restraint, finds fulfillment in subordinating itself to law, rule, coercion, system—finds fulfillment in them, but that does not mean it ceases to be freedom.”⁴⁸

In the late-1940s and early-1950s, experts associated with Unesco’s Social Sciences Department (SSD) consciously sought to create a scientific way of knowing that would bring unity to diversity. This project depended on a novel system of international disciplinary associations modeled on the American Social Science Research Council. Like the SSRC, the new system idealized interdisciplinarity. The new international associations were intended to equitably share the power of technical knowledge to improve social welfare and to create transnational affiliations that cultivated loyalty to an emergent world community. Social scientists also saw them as a means of determining truth in the international community, a particularly difficult problem in the realm of social knowledge. In the international associations, scholars would represent national perspectives but share a common technical language. By coordinating these diverse yet disciplined perspectives in interdisciplinary projects, the SSD hoped to produce what I call a “view from everywhere.”

⁴⁸ Adrian speaking in the grip of a migraine in Thomas Mann, *Doctor Faustus: The Life of the German Composer Adrian Leverkun as Told by a Friend*, translated from the German by John E. Woods (New York: Vintage Books, 1997 [1947]), 203.

In an important sense, the view from everywhere resembled the God's-eye "view from nowhere" that the natural sciences attempted to manufacture.⁴⁹ Like the view from nowhere, it was an impossible ideal that sought to transcend partial perspective. Yet while detachment from particular values characterized the view from nowhere, the view from everywhere depended on deep engagement with particular values. International social science was, and was intended to be, value laden. And while the view from nowhere promoted a universal scientific perspective, the view from everywhere claimed to represent diverse national points-of-view. It was, after all, embedded in an international political order that idealized inclusive representation. As Lorraine Daston and Peter Galison point out, objectivity is always defined in contradistinction to the problem of subjectivity.⁵⁰ But in this strategy, the challenge of multiple subjectivities was an opportunity to achieve a more perfect objectivity. Coordinating the view from everywhere was an attempt to operationalize the core value of the advocates of world community: unity in diversity.⁵¹

Soliciting diverse perspectives proved easier than synthesizing them into a unity. As agents of the international community, the experts and civil servants who worked for intergovernmental organizations aspired to represent an international perspective, but

⁴⁹ Thomas Nagel, *The View from Nowhere* (Oxford: Oxford University Press, 1986).

⁵⁰ Lorraine Daston and Peter Galison, *Objectivity* (New York: Zone Books, 2007), 258.

⁵¹ For historical and sociological studies of social strategies for determining truth, see Lorraine Daston, "Objectivity and the Escape from Perspective," *Social Studies of Science* 16 (1992), 597-618; Margaret Keck and Kathryn Skikkink, *Activists beyond Borders: Advocacy Networks in International Politics* (Ithaca: Cornell University Press, 1998); Alan Megill, ed., *Rethinking Objectivity* (Durham: Duke University Press, 1994); Steven Shapin, *A Social History of Truth* (Chicago: University of Chicago Press, 1994); and the special issue dedicated to epistemic communities, Peter Haas, ed., "Knowledge, Power, and International Policy Coordination," *International Organization* 46: 1 (Winter, 1992). For a more recent call for an intellectual program that in many ways resembles (self-consciously) the one described here, see David Hollinger, *Postethnic America* (New York: Basic Books, 1995).

each was still a product of a particular cultural pattern. Coordinating the view from everywhere was thus a demanding practice. As much as transnational institutions, it demanded mature, humble, world-minded personalities. The SSD's goal of cultivating an international community of cosmopolitan social scientists was a version of the mid-twentieth-century conviction that the rational scientist was an exemplar of the democratic citizen and that the scientific community manifested in microcosm the appropriate norms of a democratic polity.⁵² Yet before scientists could offer themselves as models for world citizens, they had to shed their own nationalist blinders. Guided by the burgeoning field of human relations, internationalist social scientists attempted to manage the tension between diversity and unity through "action-research" in group dynamics that simultaneously discovered and produced the conditions in which cooperative interpersonal relations thrived. In this therapeutic approach to social reform, intersubjective acuity was as important as statistical acumen; objectivity merged with empathy.⁵³

Unesco's reliance on the tools of social psychology to construct (as the agency's constitution put it) "the defences of peace" in "the minds of men" was an international example of what Ellen Herman has described as the infusion of psychological rationality into the political culture of the postwar United States—the ascendance of the "therapeutic state."⁵⁴ Whether they were political scientists like Walter Sharp, sociologists like Stein

⁵² Jamie Cohen-Cole, "Thinking about Thinking in Cold War America" (Ph.D. diss.: Princeton University, 2004); David A. Hollinger, "Science as a Weapon in *Kulturkämpfe* in the United States During and After World War II," *Isis*, 86 (1995), 440-454; Everett Mendelsohn, "Robert K. Merton: The Celebration and Defense of Science," *Science in Context* 3 (Spring 1989), 269-289.

⁵³ On intersubjectivity, see Cathryn Carson, "Objectivity and the Scientist: Heisenberg Rethinks," *Science in Context* 16 (2003), 243-269.

⁵⁴ Ellen Herman, *The Romance of American Psychology: Political Culture in the Age of Experts* (Berkeley: University of California Press, 1995); James Nolan, Jr., *The Therapeutic State: Justifying Government at Century's End* (New York: New York University Press, 1998).

Rokkan, or self-identified social psychologists like Otto Klineberg, most of the key figures in the internationalization of social science shared the common mid-century enthusiasm for the theories and practices of social psychology. In fact, the SSD's early program reflected the agenda of the U.S. Society for the Psychological Study of Social Issues more than the SSRC. But social psychology was a cannibalistic discipline best understood broadly. Culture and personality research; survey research, community studies and opinion polling; psychiatry; the avant-garde of political science and public administration—all of these fields interacted to produce social psychology.⁵⁵

The notion of a “therapeutic state” can carry antidemocratic connotations, and by the mid-1950s, the sort of interdisciplinary social psychology promoted by Unesco was likely to be classified under the behavioral sciences or incorporated into modernization theory, fields that have earned invidious reputations as quintessential Cold War social sciences. But as the historian David Engerman has observed, experts also deployed these forms of social knowledge in attempts to soften America's overwhelming military and economic power.⁵⁶ Although featuring many of the same characters, this story of American social scientists' attempts to intervene in the development of the international community is very different from the standard narrative that describes them as servants of

⁵⁵ In this sense, disciplinary histories of social psychology are misleading. The Society for the Psychological Study of Social Issues, however, was comprised of social psychologists. On the SPSSI, see Benjamin Harris and Ian Nicholson, eds., “Experts in the Service of Social Reform: SPSSI, Psychology, and Society, 1936-1996” *Journal of Social Issues* 54: 1 (Spring 1998); Gardner Murphy ed., *Human Nature and Enduring Peace, Third Yearbook of the SPSSI* (Boston: Houghton Mifflin Co., 1945). Beyond histories of psychology, see Jamie Cohen-Cole, “The Creative American: Cold War Salons, Social Science, and the Cure for Modern Society,” *Isis* 100: 2 (June 2009), 219-262; Jean M. Converse, *Survey Research in the United States: Roots and Emergence* (Berkeley: University of California Press, 1987); George Stocking Jr. ed., *Malinowski, Rivers, Benedict and Others: Essays on Culture and Personality* (Madison: University of Wisconsin Press, 1986).

⁵⁶ David C. Engerman, “Bernath Lecture: American Knowledge and Global Power,” *Diplomatic History* 31: 4 (Sep. 2007), 599-622.

American power. The project to construct a view from everywhere may not have appealed to U.S. foreign policy elites as much as the reductive universalism of the “mandarins of the future,” but it certainly engaged the imaginations of many of the generation’s best and brightest.⁵⁷ U.S. social scientists who participated in Unesco’s program in the late 1940s and early 1950s often intended to remake the world in an American image; but they were convinced, like their overseas colleagues, that a healthy world community also depended on reforming American culture.

For the architects of the postwar international bureaucracy, European empires provided a similarly ambiguous model. As Mark Mazower has shown, leading internationalist intellectuals such as Jan Smuts and Alfred Zimmern not only drew moral inspiration from the ideals of British imperialism, but also viewed first the League of Nations and then the UN as a vital complement to colonial order and the commonwealth.⁵⁸ Elites from countries that had experienced colonial rule and liberal American internationalists, however, tended to define the new international system in contradistinction to empire. At its founding, the UN System appeared designed to preserve the imperial *status quo*, yet surprisingly quickly it became a catalyst of decolonization. In an important sense, however, decolonization only deepened the relevance of the imperial model; under the guise of development, the UN specialized

⁵⁷ Nils Gilman, *Mandarins of the Future: Modernization Theory in Cold War America* (Baltimore: Johns Hopkins University Press, 2003); Rebecca M. Lemov, *World as Laboratory: Experiments with Mice, Mazes, and Men* (New York: Hill and Wang, 2005); Ron Robin, *The Making of the Cold War Enemy: Culture and Politics in the Military-Intellectual Complex* (Princeton: Princeton University Press, 2001).

⁵⁸ Mark Mazower, *No Enchanted Palace: The End of Empire and the Ideological Origins of the United Nations* (Princeton: Princeton University Press, 2009); Peder Anker, *Imperial Ecology: Environmental Order in the British Empire, 1895-1945* (Cambridge, Mass.: Harvard University Press, 2001); Neil Smith, *American Empire: Roosevelt’s Geographer and the Prelude to Globalization* (Berkeley: University of California Press, 2003).

agencies took over the colonial civilizing mission. The shift from European reconstruction and reconciliation to developing the new nations of what would become the Third World fit awkwardly with Unesco's mission to build the defenses of peace in the minds of men. But the change in geographic focus also added urgency to the pursuit of the view from everywhere; the liberal democratic ideology of international institutions required incorporating the perspectives of non-Western nations. For the SSD, producing unity out of this diversity provided a daunting but potentially productive challenge to the universality of science itself.

Unesco had the dubious reputation of being the most idealistic organization in the UN System. In the sixty-odd years since it was founded, the world has failed to conform to the organization's ideals, but the pursuit of these ideals shaped the international scientific community. This paper begins by describing the creation of a network of international associations designed to reform European social science and integrate the North Atlantic intellectual community. Next, it explores the shift to internationalization as a component of technical assistance to underdeveloped nations and the tensions this generated between the twin commitments to unity and diversity. Finally, it analyzes the practice of action-research to reveal the cultural values and personality traits international organizations were supposed to cultivate. For the experts and civil servants who engaged in Unesco's program in the postwar period, overcoming the world crises of the twentieth century required a new way of knowing grounded in new institutions. Their attempt to discipline diversity in order to provide the objective knowledge necessary for an

integrated world community illuminates tensions inherent in the mobilization of science for social and political reform.

Institutionalizing North Atlantic Social Science

When the United Nations was founded, the inequitable international distribution of power was the most obvious obstacle to democratic world government. The postwar cohort of internationalists believed that the anarchic disorganization of the young world society led to war. In the final analysis, peaceful progress only could be achieved through a world state. In the short term, however, the potential of a world state was a threat more than a goal. The Soviet Union's explicit objective was world communism, but for many internationalists, including Americans, the combination of U.S. military and economic strength, ignorance of foreign cultures, and immaturity in international affairs constituted a more realistic threat than international communism.⁵⁹ The fight of the "free world" against fascism helped legitimate the American federal system of liberal democracy as a model for a future world polity. Yet because the United States was the only major power to emerge materially stronger from World War II, it threatened to fill a global power vacuum. The concentration of political and economic power in the United States was paralleled in the intellectual sphere, where the influx of European refugee intellectuals,

⁵⁹ The U.S.S.R. did not join Unesco until after Stalin's death. Poland, Czechoslovakia, and Hungary were members of Unesco, but during the period of this study they were boycotting the organization. While Cold War anxieties energized their work, the absence of the East Bloc meant that social scientists' negotiations over the institutions and norms of international social science revealed tensions that were in important respects independent of the Cold War. In the last several years, the need to look beyond the Cold War to develop a more complete explanation of postwar international relations has been widely recognized. For an early statement, see Matthew Connelly, "Taking Off the Cold War Lens: Visions of North-South Conflict During the Algerian War for Independence," *American Historical Review* 105: 3 (2000), 739-770. For the distinction between two postwar settlements manifested in liberal international institutions and the policy of containment, see G. John Ikenberry, *After Victory: Institutions, Strategic Restraint, and the Rebuilding of Order after Major Wars* (Princeton: Princeton University Press, 2001). The best general political study of Unesco is James P. Sewell, *Unesco and World Politics: Engaging in International Relations* (Princeton: Princeton University Press, 1975).

the sheer scale of the university system, and unmatched financial resources threatened to turn scientific internationalization into Americanization. The United States thus presented internationalists with a paradox: it was at once a model for the international community and a threat to it. The view from everywhere was, in part, a result of social scientists' confrontation with this paradox.

Despite the risk of Americanization, and in order to mitigate it, the hard work of a relatively small number of elite American and European social scientists both inside and allied with the SSD produced a system of international associations that institutionalized the United State's disciplinary structure on an international scale. Given the practical obstacles they encountered, this was quite an accomplishment. Budgets were always tight. States and publics were reluctant to waste money on intercontinental travel to conferences on, as Graham Greene parodied them, "The Intellectual and the Hydrogen Bomb."⁶⁰ Moreover, social scientists started from a much weaker institutional base than natural scientists—there were few international unions to reconstitute. Most importantly, there was no international social science to organize. National traditions, where they existed, rarely conformed to disciplinary norms across national boundaries. Social science as a collection of discrete yet interdependent disciplines was an American invention, although one that Europeans had profoundly influenced. Outside the United States, the number of professionally employed social scientists in a given field usually could be counted without resorting to one's toes. For internationalist social scientists, these impediments only reinforced the need for international institutions; social science's provinciality, its lag behind natural science and technological development, prevented

⁶⁰ Graham Greene, *Our Man in Havana* (London: Vintage Books, [1958] 2001), 97.

experts from guiding the adjustment of cultural values and social structures to the new realities of a global industrial society.

Social scientists were typical of the era in their enthusiasm for creating international organizations. In the first few postwar years, a bewildering number of specialized agencies affiliated with the UN through formal agreements both with the Economic and Social Council (ECOSOC) and with each other: the International Labor Organization (ILO), Food and Agriculture Organization (FAO), World Health Organization (WHO), Unesco, Economic Commissions for Europe, Asia and the Far East, and Latin America (ECE, ECAFE, ECLA), International Civil Aviation Organization (ICAO), International Telecommunication Union (ITU), World Meteorological Organization (WMO), International Refugee Organization (IRO), and Universal Postal Union (UPU). Many of these agencies had precedents (e.g. for Unesco, the International Institute for Intellectual Cooperation) or were survivors (e.g. the ILO) from the interwar period or even earlier (e.g. the ITU). In addition, an assortment of reconstruction and regional IGOs and a bumper crop of INGOs joined the expanding international sphere.⁶¹ Internationalists hoped this new system would prove to be the embryo of an effective international government; internationalist social scientists believed this international government would require internationally produced social knowledge.

⁶¹ Akira Iriye cites the number of IGOs increasing between 1940 and 1950 from 38 to 81, and INGOs from 477 to 795, although he points out that the numbers vary depending on who is counting. *Global Community: the Role of International Organizations in the Making of the Modern World* (Berkeley: University of California Press, 2002), 55. The International Bank for Reconstruction and Development and the International Monetary Fund were also considered specialized agencies of the U.N., although in practice they participated in the U.N. System quite differently.

Unfortunately, the proliferation of new international organizations threatened to turn the international community into an illegible alphabet soup of acronyms, thus making a mockery of the dream of transforming the anarchic wilderness of states into an efficient world community. In 1947, American political scientist Walter Sharp expressed the anxiety of many experts over the “perfect ‘rash’ of meetings” (3,000 annually for the strictly U.N. organizations alone) that swamped international civil servants and experts. “What has been happening, from the institutional point-of-view,” Sharp wrote, “is a largely unsystematic sprouting of machinery, multi-level and highly complicated as to structure. While this may be taken as an indication of vigorous initiative in an effort to re-organize the shattered war-torn world on some sort of cooperative basis, the loose and decentralized character of the emerging ‘system’ inevitably produces ‘wheels within wheels.’” Many experts, including U.N. Secretary-General Trygve Lie, called for a moratorium on new international agencies.⁶²

Unesco was the most energetic catalyst of new international organizations. Public administration expert Charles Ascher quoted a member of the Arts and Letters staff: “We looked over the international field in the arts and saw that there was a gap—no international organization in the theatre; so we decided that there ought to be one.”⁶³ In 1947, Unesco had already granted consultative status to sixty-nine INGOs and thirty organizations performed contract work. By 1954, 125 organizations had consultative status with Unesco, fifty-eight contracts were signed, and Unesco was represented at 130

⁶² Walter R. Sharp, “The Specialized Agencies and the United Nations: Progress Report I,” *International Organization* 1: 3 (Sep., 1947), 460-474, 472.

⁶³ Charles Ascher, *Program-making in Unesco, 1946-1951* (Chicago: Public Admin. Clearing House, 1951), 18.

meetings convened by INGOs. In 1950, the Secretariat bragged that not even the Economic and Social Council, let alone other specialized agencies, had as many INGO affiliates.⁶⁴ The logic worked like this: Unesco would set up INGOs in the areas of education, science, and culture that would then provide Unesco expert advice and to which the Organization would contract out much of its program. Outsourcing research to INGOs was particularly important to the SSD because it was difficult for an IGO to assert anything significant about society without alienating some member state.

In addition, the new INGOs intrinsically accomplished one of Unesco's chief missions, creating transnational communities. In the words of Director-General Jaime Torres Bodet, "The development of this world network of institutions and associations specializing in the various branches of intellectual co-operation is, for Unesco, both an end and a means."⁶⁵ For the intellectuals engaged in the transnational associations, the institutional development of Unesco also was both an end and a means. Experts moved between IGOs, INGOs, universities, foundations, state bureaucracies, and semi-governmental organizations. The boundaries between institutional types in the international sphere were porous.⁶⁶ Indeed, a sort of osmotic theory of reform was one

⁶⁴ *Report of the Director General on the Activities of the Organization from October 1949 to March 1950* (Paris: Unesco, 1950), 18. The number of INGO affiliates is gleaned from a survey of the Director-General's annual reports.

⁶⁵ *Report of the Director General on the Activities of the Organization from October 1949 to March 1950*, 17. On the importance of NGOs for many of the architects of American cultural relations, see Frank A. Ninkovich, *The Diplomacy of Ideas: U.S. Foreign Policy and Cultural Relations, 1938-1950* (Cambridge: Cambridge University Press, 1981).

⁶⁶ Cf. Matthew Connelly, "Seeing Beyond the State: The Population Control Movement and the Problem of Sovereignty," *Past and Present* 193 (Nov. 2006), 197-233; Michael Goldman, "How 'Water for All!' became Hegemonic: The Power of the World Bank and Its Transnational Policy Networks," *Geoforum* 38: 5 (Sep. 2007), 768-800. These authors emphasize the coercive, unaccountable power of networks of transnational policy elites. For more positive analyses of the potential of transnational inter-organizational collaboration, see Keck and Skikkink, *Activists Beyond Borders*; Sanjeev Khagram, *Dams and*

way international organizations promised to spread norms appropriate for a world community.

At Unesco, the natural sciences provided the organizational model for international cooperation. For the first Director of the Natural Science Department, the British Biochemist Joseph Needham, renewing and expanding the network of international scientific unions disrupted by the war was certainly an end in itself. Needham had spent the war years directing the Sino-British Science Co-operation Office in Chongqing, and joined Unesco in large part to help strengthen science in “the periphery.” During his brief tenure, Unesco became the sole patron of the reconstituted International Council of Scientific Unions (ICSU—pronounced ick-sue), which set a precedent by taking offices at Unesco House on Avenue Kléber in Paris. ICSU, founded in 1919 as the International Research Council, was a federation of international scientific unions, which were in turn a federation of national associations.⁶⁷ Needham not only advocated Unesco sponsorship of the ICSU, he also coordinated the formation of new unions. In a typical move, he advised scientists organizing an International Society for Cell Biology to affiliate through the ICSU’s International Union of Biological Sciences, which it ultimately did since “U.N.E.S.C.O. [had] undertaken to provide certain financial and other facilities...to those international societies which are affiliated to [ICSU].”⁶⁸ In

Development: Transnational Struggles for Water and Power (Ithaca: Cornell University Press, 2004); also see note 37 below on epistemic communities.

⁶⁷ Frank Greenway, *Science International: A History of the International Council of Scientific Unions* (Cambridge: Cambridge University Press, 1996). On Needham’s organizational work, see Patick Petijean, “Blazing the Trail: Needham and UNESCO: Perspectives and Realizations,” in Jake Lamar ed., *Sixty Year of Science at UNESCO, 1945-2005* (Paris: Unesco Publishing, 2006), 43-47.

⁶⁸ Memo from Honor Fell, “The Relationship of the Society for Cell Biology to International Scientific Organizations,” 1947, 576.3 A 01 ISCB “International Society for Cell Biology (Formerly: International

the ideal model, in return for its subventions, Unesco would request research from ICSU, which would farm out the work through the proper disciplinary unions, which in turn would draw on their national member associations. The metaphor that guided the reconstitution of ICSU was the gear works of a clock, not Sharp's "wheels within wheels."

Both the Cultural Activities Department and the SSD followed the Natural Sciences' lead. In 1947, the General Conference resolved to "encourage" setting up an International Council for Philosophy and Humanistic Studies "similar to the International Council of Scientific Unions," and the ICPHS was incorporated in Brussels in 1949 as a federation of six international scholarly organizations.⁶⁹ Social scientists, ever conscious of insidious lags, were eager to catch up to both the natural sciences and humanities in international organization. They did not even have disciplinary association to federate.⁷⁰ The SSD itself suffered from disorganization due to lack of steady leadership until 1950 when the dynamic Swede Alva Myrdal (Gunnar's wife) moved from the UN's Economic and Social Council in New York to Paris to take over the department. Still, with its

Society for Experimental Cytology)," Correspondence files, Unesco Archive, Paris, France [hereafter, Unesco].

⁶⁹ *Resolutions Adopted by the General Conference during Its Second Session, Mexico, Nov.-Dec. 1947* (Paris: Unesco, April 1948), 23; Robert Fawtier, "Is a World Council of Philosophy Really Necessary," *Unesco Courier* 2: 2 (March 1949), 2.

⁷⁰ A Unesco study of 17 international organizations in the social sciences identified eight that had been formed before 1945 (three in the nineteenth century and five between the wars), but these were narrower and more applied than the disciplinary associations (e.g. criminology, administrative sciences, and econometrics) or more explicitly reform oriented (e.g. the International Law Association, which lobbied for the codification of international law). The International Studies Conference (not included in the survey) was a preexisting international association founded through the International Institute for Intellectual Cooperation between the wars, but social scientists disagreed over whether it corresponded to a discipline. Psychologists were better internationally organized, but not yet as social psychologists. Unesco, *International Organizations in the Social Sciences: A Summary Description of the Structure and Activities of Non-Governmental Organizations in Consultative Relationship with Unesco and Specialized in the Social Sciences* (Reports and Papers in the Social Sciences #5, Unesco, 1956.)

administration handled by a rotating series of American academics on leave, the SSD set about “stimulating” the creation of the missing international associations. By the end of 1949, the IEA (International Economic Association), ISA (Sociology), IPSA (Political Science), and ICLA (Comparative Law) had joined the alphabet soup under Unesco auspices, and each was provided a \$3,000 annual subvention.⁷¹ In October 1952, the International Union of Scientific Psychology joined these four associations to convene the Provisional International Social Science Council (ISSC), which ideally would collaborate closely with the Humanities Council “since it is impossible to draw a strict borderline between the Social and Humanistic Sciences.”⁷² Like the International Council of Scientific Unions, the ISSC was given an office in Unesco House. This new institutional structure was the framework on which the view from everywhere would be constructed.

It was a fragile framework. The first issue of Unesco’s *International Social Science Bulletin* identified the major weakness (one the associations and the journal itself were meant to ameliorate): “It rapidly became evident that the very expression ‘social science’ meant widely different things in different countries or, if [social science disciplines] did exist, had significance and content totally different from that attributed to

⁷¹ Both the IPSA and ISA have commissioned useful histories. John Coakley and John Trent, *History of the International Political Science Association, 1949-1999* (Dublin: IPSA, 2000); Jennifer Platt, *A Brief History of the ISA, 1948-1997* (Montreal: ISA, 1998).

⁷² *Report of the Secretary General [of the ISSC] for the Year 1952-53 to the General Assembly* (Paris: Unesco, 1954). Exemplifying the ambiguity between the humanities and social sciences, the International Union of Anthropological and Ethnological Sciences already had been formed in order to join the Humanities Council. A somewhat awkward proposal to join the ISSC had to be extended to this previously engaged Union, which was ironic given that Claude Lévi-Strauss was named Secretary-General of the ISSC.

them elsewhere.”⁷³ For many European intellectuals, the “social sciences” belonged with the humanities, and social knowledge should not be arbitrarily divided between, for example, politics and economics. Furthermore, Americans’ obsession with empirical validity merely resulted in the pointless accumulation of data.⁷⁴ Nevertheless, Unesco institutionalized the social sciences as a separate department following an American vision of social science that looked to the natural sciences as an epistemological and institutional model.

The frenetic founding of international associations also institutionalized the disciplinary structure of U.S. social science in the international community. The International Comparative Law Association acknowledged the Latin emphasis on juristic studies rather than the American notion of political science, but the ISSC was modeled on the American Social Science Research Council (SSRC). In the SSRC social knowledge was differentiated into specialties that corresponded to university departments, but then the disciplines were integrated through interdisciplinary research projects. The goal was to produce empirically validated useful knowledge that enhanced methodological and theoretical sophistication. The influence of American social scientists is nicely symbolized by the first presidents of the ISA, IPSA, and IEA: friends and colleagues at the University of Chicago Louis Wirth (sociology) and Quincy Wright (political science), and Gottfried Haberler of Harvard (economics). That Wirth was born in Germany and Haberler a native Austrian is equally illustrative. One reason American social science was acceptable as a transatlantic standard was that its development had been decisively

⁷³ Anonymous, “Unesco and the Social Sciences,” *International Social Science Bulletin* 1: 1/2 (1949), 9-10.

⁷⁴ For a useful discussion of these points focusing on political science, see Unesco, *Contemporary Political Science: A Survey of Methods, Research and Teaching* (Paris: Unesco, 1950).

shaped by Europeans, particularly Germans whose continental influence before Nazism also had been profound.

Indeed, some European social scientists enthusiastically endorsed American social scientific norms. A memo speculating on the possibility of an international conference on the “role of scientists in world affairs” expressed a commonplace of the SSD: “In Europe the social scientists have a tradition very different from the one in the [United] States. More than is generally realized, they have to be convinced of the possibility of really using the social sciences as a tool.”⁷⁵ This was written by a Dutch sociologist. After spending much of the 1930s and the war in the States, many European scholars embraced an American social science that they had helped create.⁷⁶ Max Horkheimer, back in Germany after having relocated the Frankfurt Institute in New York and California during Nazi rule, hoped the SSD could “dispel part of the emotional clouds, which in Europe usually surround social and political problems,” and asserted that the “keen insight into the life-processes of modern society” necessary for democracy “can be fomented only, if sociology becomes in Europe, what it has become in America for a long time: the substantial part of every curriculum of higher learning, particularly at the universities.” Social scientists tended to agree on the differences between American and European social science, but nationality did not determine which style one preferred.

⁷⁵ Memo from den Hollander, 3 Oct. 1950, 327.6 3 A 06 Meeting of Social Scientists on “‘The Role of Social Scientists in World Affairs’ (never took place),” Unesco.

⁷⁶ Claus-Dieter Krohn, *Intellectuals in Exile: Refugee Scholars and the New School for Social Research* (Amherst: University of Massachusetts Press, 1993); Lewis Coser, *Refugee Scholars in America: Their Impact and Their Experiences* (New Haven: Yale University Press, 1984).

Adopting an American institutional model for social science appealed to an influential subset of European intellectuals.⁷⁷

For the most part, however, it was not Europeans who initiated the formation of the international associations—it was Americans with their ardent faith in voluntary groups. A letter from sociologist Robert C. Angell, on leave from the University of Michigan to head the SSD's Tensions Project, to the President of the SSRC, Pendleton Herring, sheds light on the dilemma this posed. The SSRC was the official liaison to the SSD; it was charged with referring American experts to Unesco, coordinating SSD activities in the U.S., and providing advice to the SSD. Angell wrote to "Pen" about his Unesco colleague Otto Klineberg's efforts to stimulate an international association for social psychology—a key postwar objective of the U.S. Society for the Psychological Study of Social Issues, of which Klineberg was a past-president:

There are already three organizations that are pretty close to this one in their interests... Furthermore, social psychologists are very heavily concentrated in the United States to the point that an international organization would be made up of, perhaps, three-fourths Americans. Finally, the pattern of Unesco-sponsored international groups is a federal one, and to date international organizations [sic.— must mean national organizations] in the field of social psychology are almost non-existent. Otto has agreed to talk this matter over further with social psychologists at home, but I thought you might like to consider it in a broader perspective.⁷⁸

Already in 1949, concern was shifting from an absence of international associations to redundancy, U.S. dominance, and an international sphere in danger of collapsing due to a void at the national level. That Angell appealed to Herring at the SSRC to mediate this

⁷⁷Horkheimer to Angell, 24 March 1950, 327.6 3 A 06 Meeting of Social Scientists on "The Role of Social Scientists in World Affairs" (never took place)," Unesco.

⁷⁸ Angell to Herring, 17 Nov. 1949, 327.5: 301 A 53, "Tensions affecting international understanding – community studies Part II from 1/XI/49," Unesco. In the end, an International Social Psychology Society did join the ISSC. Klineberg's efforts were part of a campaign mounted by the Society for the Psychological Study of Social Issues that predated the SSD. (On SPSSI, see note 64 below.)

dilemma underscores the problem; in the ideal organizational chart of the international bureaucracy, the SSRC ranked below the SSD. But in reality, the SSRC was far better established and connected—to universities, foundations, and the U.S. government.⁷⁹

What most dramatically differentiated American social science was not its constantly invoked empiricism (which was also seen as a British characteristic) or its instrumentality, but its institutional success. An International Sociological Association evaluation described Unesco's role as accelerating the institutionalization of the social sciences, a process most advanced in the United States with the "greater nations" of Europe lagging behind and essentially non-existent elsewhere.⁸⁰ The structure of American social science was less a product of the rational organization of knowledge than a result of the startling expansion of American higher education. In 1950, the United States was home to 1,800 colleges and universities with 2.6 million students. Despite its own postwar student boom, Great Britain had 85,000 students in 18 universities. The combined number of teaching posts in sociology, social psychology, and social anthropology in Egypt, France, Great Britain, India, Mexico, Poland, and Sweden was 141. In the United States, a survey of the American Sociological Association revealed that "74 percent of the 2,148 [members] whose occupation was known were teaching in 'colleges' or universities." As Unesco's survey commented, the teaching of social sciences in the U.S. had "reached a scale beyond all comparison with that found in other

⁷⁹ For example, during this period a CIA representative attended SSRC meetings and the council was responsible for channeling foundation money into the social sciences. Kenton W. Worcester, *Social Science Research Council, 1923-1998* (New York: Social Science Research Council, 2001).

⁸⁰ ISA, "Notes Toward a Tentative Evaluation of Current Research in the Field of Sociology," Paris, 31 July 1953, UNESCO/Enq/R.C./Eval/Sociol, Unesco. On the dramatic postwar switch from the perception that U.S. social knowledge lagged behind to the perception that it led, see Daniel Rodgers, *Atlantic Crossings: Social Politics in a Progressive Age* (Cambridge, Mass.: Harvard University Press, 1998).

countries.”⁸¹ The continuing expansion of the U.S. university system, in which undergraduate education underwrote research careers, encouraged a degree of specialization unmatched elsewhere.⁸² More than epistemological disputes, these differences of structure and scale obstructed the internationalization of social science.

While the American academic system quantitatively out-produced the European system, the Continental university structure effectively established intellectual stars and academic barons.⁸³ In a working paper for the first meeting of international associations called to plan a survey of social science in higher education, the SSD singled out France and Italy as falling below the “Anglo-Saxon and Scandinavian” pedagogic standard. But after pointed comments from the meeting’s chairman, French Secretary of the International Political Science Association Jean Meynaud, this comment was expunged from the published report. The well established scholars representing these countries showed little inclination to copy “Anglo-Saxon” blueprints for remodeling the structures in which they were quite comfortable.⁸⁴

⁸¹ Unesco, *The Teaching of the Social Sciences in the United States* (Paris: Unesco, 1954), 15-16; Unesco, *The Teaching of the Social Sciences in United Kingdom* (Paris: Unesco, 1953), 12; Pierre de Bie, Claude Lévi-Strauss, Joseph Nuttin and Eugene Jacobson, *The Teaching of the Social Sciences: Sociology, Social Psychology and Anthropology* (Unesco: Paris, 1954), 32-33.

⁸² Robert E. Kohler, “The Ph.D. Machine: Building on the Collegiate Base,” *Isis* 81: 4 (Dec. 1990), 638-662.

⁸³ On the impact of the structure of the French university on knowledge production, see Terry Nichols Clark, *Prophets and Patrons: The French University and the Emergence of the Social Sciences* (Cambridge, Mass.: Harvard University Press, 1973). On intellectual stars, see Tony Judt, *Past Imperfect: French Intellectuals, 1944-1956* (Berkeley: University of California Press, 1992).

⁸⁴ “Meeting of the Secretaries of the International Social Science Associations,” Unesco House, 15 Nov. 1950, “Liaison Committee for I.A.S.S.,” SS/SAI/Conf. 2, Unesco; Anonymous, “The Meeting of the Secretaries of International Social Science Associations,” *International Social Science Bulletin* 3: 1 (1951), 116-118. Europeans did use the surveys to evaluate their standing in the social sciences and argue for particular reforms. For example, the Howard League for Penal Reform used a Unesco survey on criminology that showed Britain lagging behind the continent to pressure the Home Secretary for government support to establish an institute of criminology. *London Times* (July 1, 1957), summarized in *Weekly Press Review*, (July 12, 1957), Unesco.

Behind-the-scenes maneuvers over the nomination of delegates to the ISSC Executive Council illuminate how social scientists tried to limit yet capitalize on American power. The Secretary of the International Sociological Association, Norwegian Stein Rokkan, wrote to Morris Ginsberg (London School of Economics) and George Davy (University of Paris), the vice presidents of the ISA charged with selecting delegates to the Council, urging them to select an American: “There can be very little doubt that the future of the proposed International Social Science Council will depend very much on the close co-operation with the American SSRC, the Foundations and the active research centers and organizations in the United States.” He endorsed Arvid Broderson who was strategically placed in New York at the New School for Social Research and, as a former director of the SSD, already familiar with the machinery of international social science. To make the nomination palatable, he pointed out that Broderson, a Norwegian, could be seen as representing Scandinavia. He copied the letters to Alva Myrdal, the Director of the SSD, noting the “embarrassing position” this lobbying put him in and hoped she could apply more direct pressure.⁸⁵ American resources were both needed and resented by many of those participating in a putatively “world” organization.⁸⁶

Precisely because U.S. scientists already had access to a strong national organizational apparatus tied to the big American philanthropies and universities, the

⁸⁵ Rokkan to Ginsberg, 16 July 1952; Rokkan to Myrdal, 16 July 1952, in 3 A 198/III ISR, “Rokkan,” Unesco. In the end, Donald Young, Director of the Russell Sage Foundation, was elected ISSC president to fill the liaison role. Young as President and Lévi-Strauss as Secretary General perfectly illustrate the roles of Americans and Europeans in the international associations; an analogous situation existed in the ICSU.

⁸⁶ On the history of American-European intellectual relations, see Richard Pells, *Not Like Us: How Europeans Have Loved, Hated, and Transformed American Culture Since World War II* (New York: Basic Books, 1997); Giles Scott-Smith and Hans Krabbendam, *The Cultural Cold War in Western Europe, 1945-1960* (London: F. Cass, 2003).

international organizations were more important to Europeans.⁸⁷ While Americans were presidents of international associations, this was largely a ceremonial office; the more operationally important position of secretary went to Europeans. That close to eighty percent of participants in the International Sociological Association's four World Congresses in the 1950s, all held in Western Europe, were European may understate American influence (consistently around fifteen percent of attendees) but does reflect the general geographic bias of the international associations.⁸⁸

In the late-1940s, the internationalization of social science was predominantly a North Atlantic enterprise aimed at harmonizing American and European intellectual traditions. As John Krige has argued in the context of postwar natural sciences, Americans “tried to *reconfigure* the European scientific landscape,” but they succeeded in enrolling “an enfeebled Europe...in a hegemonic postwar American project” because it was “coproduced hegemony.”⁸⁹ Europeans selected and adapted components of the American social science model, a model that itself was a product of transatlantic exchange. When the project to internationalize the social sciences followed UN technical assistance missions outside the West, the greater cultural diversity strained the discipline necessary to sustain the view from everywhere.

Diversity and Discipline

⁸⁷ The time and expense of transatlantic travel (meetings usually were held at Unesco House) also limited American participation—especially when any work affiliated with an IGO required a notoriously inefficient background check to certify one's loyalty and integrity. As the case of the IPSA above suggests, the logistics of travel were even more limiting to Australians, South Americans, and Indians.

⁸⁸ Platt, *A Brief History of the ISA*, 63.

⁸⁹ John Krige, *American Hegemony and the Postwar Reconstruction of Science in Europe* (Cambridge, Mass.: MIT Press, 2006), 3, 2, 9.

In addition to the potential of American imperialism, there were the actual European empires. Many internationalists defined the democratic political order of the UN through opposition to empires. With the first wave of decolonization in Asia, the advent of the UN's Expanded Program of Technical Assistance, and the intensification of the Cold War (which undermined hopes of ideological reconciliation and added urgency to development programs), Unesco's locus of reform shifted from Europe to the "underdeveloped" nations of what soon would be labeled the Third World. The incorporation of non-Western nations into the international social science community posed critical but potentially enriching challenges to the viability of the view from everywhere.

Newly independent states joined UN Organizations with alacrity because membership signified formal political equality; the idea of the UN as the antithesis of empire became reality. Yet while political structures underwent this radical change, the developmental mission through which imperial powers had increasingly sought to legitimate colonial rule became the *raison d' être* of the UN specialized agencies.⁹⁰ Since economic development programs were experiments in planned social change that inevitably confronted political, cultural and social factors, social scientists claimed that planning depended on comprehensive social knowledge. The advance of the social sciences in underdeveloped nations, therefore, was a prerequisite for democratic development; without experts, how could underdeveloped countries participate in rational

⁹⁰ For the intellectual history of the U.N. and development, see Richard Jolly, Louis Emmerij, Dharam Ghai, and Frederic Lapeyre, *U.N. Contributions to Development Thinking and Practice* (Bloomington: Indiana University Press, 2004); Gilbert Rist, *The History of Development: from Western Origins to Global Faith* (London & New York: Zed Books, 1997).

planning? To distinguish their work from imperialism, the specialized agencies devised institutional structures that foregrounded inclusive democratic decision making. The democratization of science was an attempt to use knowledge to share power.

The problem of assuring balanced national representation was acute. Even most European countries did not have disciplinary organizations in the social sciences, and so national associations and social science councils around the world “spontaneously” formed to participate in the new system.⁹¹ Since they were intended to internationalize knowledge production, the legitimacy of the international associations rested on their national diversity. Organizers went to great lengths to assure balanced “geographic distribution.” Myrdal insisted on keeping an Indian on the International Political Science Association Executive Council despite his inability to attend meetings.⁹² As in the UN, the legitimacy of the international associations rested on apparent equality of representation even when power clearly was not equally distributed.

The main activities of the international associations were holding world congresses, performing contract research for the SSD, developing dictionaries to define technical terminology, and managing clearinghouse services such as compiling bibliographies, abstracts, and international directories of experts.⁹³ The SSD’s program in

⁹¹ The British Sociological Association was only the most prominent example of a widespread phenomenon. Jennifer Platt, *The British Sociological Association: A Sociological History* (Durham: Sociologypress, 2003). The SSD played an active role in these “spontaneous” formations; for example, see “Meeting of Representatives of National Social Science Councils and Similar Bodies—Paris, 14-17 Dec. 1954,” 28 March 1955, UNESCO/SS/14, Unesco.

⁹² President of IPSA Robson to Myrdal, 24 Nov. 1952; Myrdal to Robson 10 Dec. 1952, in 3 A 01 ISSC “—66,” “International Social Science Council Part I (D) from 1/IX/52 up to 30/IX/53,” Unesco.

⁹³ “Meeting of Experts on Social Science Terminology,” 22-24 May 1956, UNESCO/SS/15, Unesco; Anon., “The Co-ordinating Committee for Social Science Documentation,” *International Social Science Bulletin* 3: 1 (1951), 118-121; Anon., “The Work of the International Economic Association,” *International Social Science Bulletin* 3: 4 (1951), 851-855.

the internationalization of science worked closely with analogous programs in the other departments and was broadly representative of similar activities in other specialized agencies and major foundations. A SSD proposal to prepare “International Manuals in the Social Sciences” described the ultimate goal of this work: “Their principal value would be that, if widely used in universities..., they would provide future representatives and negotiators from different countries with a common basis of facts and vocabulary, thereby immensely facilitating international understanding and agreement.”⁹⁴

International negotiation required diplomats with a common vocabulary and mutually accepted facts and figures. For professional experts, however, the bar was far higher. The view from everywhere required the transnational practice of a common discipline, which depended on vibrant professional communities at the national level.

The first major research project of the international associations targeted the structural basis of social scientific inequality: a coordinated survey of university social science teaching in regionally representative or influential countries. These surveys provided the data necessary to guide educational reform in social scientifically underdeveloped countries into the “proper curricula” of the “Anglo-Saxon and Scandinavian” countries.⁹⁵ After the reports came in, twenty social scientists from eleven countries met at Unesco to formulate “proposals for the development and improvement of

⁹⁴ “Proposal for International Manuals in the Social Sciences,” 3 A 313, “International Manuals in the Social Sciences,” Unesco. This can be interpreted as a purposeful attempt to create what political scientists three decades later would describe as “epistemic communities.” “Epistemic communities” denotes transnational groups of experts with share epistemologies, values, and goals. Political scientists have deployed the concept of epistemic communities to explain the role experts have played in framing issues and achieving international policy coordination. For an introduction to epistemic communities, see Haas, 1992.

⁹⁵ “Meeting of the Secretaries of the International Social Science Associations,” Unesco House, 15 Nov. 1950, “Liaison Committee for I.A.S.S.,” SS/SAI/Conf. 2, Unesco.

social science teaching.” These included the “the creation of social science faculties composed of departments each covering a distinct branch of the sciences”; the inclusion of the social sciences in general education as part of training for citizenship; recommendations on qualifications for professorships and diplomas; and “in view of the importance of value judgments in the field of social sciences[,]... ‘a systematic study of value judgments and of the relations between questions of fact and questions of value should be included in the teaching of the social sciences.’”⁹⁶ The project was an ideal type of SSD activity: the SSD coordinated the work of the international associations which used national members to produce comprehensive, comparable surveys that led to recommendations for a standard set of reforms. In typical social science fashion, the reforms called for more social science. More important than the recommendations was the act of performing the surveys. For example, by cataloging the absence of teaching posts in social psychology in several countries, surveys reinforced the categories of a certain form of social science—for the first time, some states now lacked social psychologists.⁹⁷

At its inception, the project was primarily concerned with European standards, but the focus quickly shifted to the South and East. Instead of remodeling French and Italian departmental structures, the project held a series of regional roundtables—each chaired

⁹⁶ Anon. “The Enquiry into the Teaching of the Social Sciences: General Report submitted to Unesco’s General Conference, 1952,” *International Social Science Bulletin* 5: 1 (1953), 151-157, 153-155.

⁹⁷ On the importance of surveys for spreading categories, see Martha Finnemore, “International Organizations as Teachers of Norms: The United Nations Educational, Scientific, and Cultural Organization and Science Policy,” *International Organization* 47: 4 (1993), 565-597. On IOs’ role in the spread of categories more generally, see Michael Barnett and Martha Finnemore, *Rules for the World: International Organizations in Global Politics* (Ithaca: Cornell University Press, 2004); John Boli and George Thomas, eds., *Constructing World Culture: International Nongovernmental Organizations since 1875* (Stanford: Stanford University Press, 1999).

by a European—in South Asia, the Middle East, and Latin America. National representatives compared their inadequate systems to the models described in the surveys of Europe and America in order to devise recommendations to submit to their own governments. Twenty “underdeveloped” states submitted requests for technical assistance to modernize their teaching.⁹⁸ For a department that struggled to find a vocation in the regime of economic development, this was a welcome opportunity. The gaze of the SSD was now fixed on the periphery; a program begun as an effort to harmonize North Atlantic traditions and modernize Europe would be remembered twenty years later as “implanting the social sciences” in the Third World.⁹⁹

Yet, as Meynaud later reflected, the change in focus came at a cost: “The need for ensuring a ‘balanced’ geographical representation—a need arising chiefly from the structure and policy of the institution responsible for financing the organizations concerned [i.e. Unesco]—has led many International Associations to admit to membership certain national bodies as to whose scientific qualifications they can cherish no illusions.” Because the international associations paid “less attention to problems directly concerning the most advanced associations...[the advanced associations] have not always perceived what practical advantage could accrue to them from the establishment of an International Association.”¹⁰⁰ When internationalization was scaled

⁹⁸ “Development of Social Science Teaching: Progress Report and Analysis of Regional Round Tables,” 20 Nov. 1954, UNESCO/SS/11, Unesco. Unesco could only finance three missions in the first year.

⁹⁹ Marie-Anne de Franz, “Implanting the social sciences—a review of Unesco’s endeavours,” *International Social Science Bulletin: Social Sciences in the Third World* 21: 3 (1969), 406-420.

¹⁰⁰ J. Meynaud, “International Co-operation in the Field of Social Science: An Attempt at a Balance-Sheet,” in *International Organizations in the Social Sciences*, 7-16, 9. Meynaud may sound like he resented the focus on the development of social sciences in poor countries, but while he clearly regretted the limitation this imposed on supporting European social science, he went on to argue for the long-term benefits of a

up from a transatlantic project to include Latin America, the Middle East and Asia, the differences between North Atlantic nations became blurred; they were now identifiable as “advanced.”

In the newly independent nations, Unesco was clearly filling the vacuum left by the dissolution of colonial administrations, and it often drew on the same expertise. For instance, the SSD sent Dutch sociologist A.N.J. den Hollander to Indonesia in 1950 during the violent consolidation of independence. His mission was to survey the state of the social sciences, assess the potential for technical assistance, and inquire into extending the international associations to the new nation. Not surprisingly, den Hollander reported a mixture of vague enthusiasm, disorganization, overwhelming material shortages (e.g. books), and pointed suspicion of a Dutch emissary.¹⁰¹ On top of these practical challenges, it remained to be seen whether non-Western intellectuals could be incorporated into a view from everywhere while maintaining the particular points-of-view that, in aggregate, promised a legitimately international perspective.

Efforts to internationalize disciplines were in constant tension with one of the core values of the view from everywhere: diversity. This often was not subtle. After participating in a seminar to train young social scientists from France, Sweden, Australia, and India to perform comparable community studies in their native countries, social

global intellectual community. Still, his language implies that the scientifically unqualified national bodies were not genuine members of the International Associations.

¹⁰¹ “Report on the Social Sciences in Indonesia,” 1950, 3 (910) A 157, “Report on the Social Sciences in Indonesia,” Unesco. The overlap in colonial and U.N. development experts was less evident in the social sciences than other fields, which is not surprising given the relative disinterest of colonial authorities in academic social science. See also, Claude Lévi-Strauss, “Social Science in Pakistan,” *International Social Science Bulletin: Documents on South Asia* 3: 4 (1951), 825-831. The Pakistan program, which helped develop a university sociology department, turned into one of the SSD’s longest running and most successful technical assistance projects.

psychologist Adam Curle wrote to Klineberg that although the Indians “seemed to understand the scientific points [he] was trying to make, they were in a peculiar way twisting them out of context to fit into a mode of thought which basically derived from an alien culture rather than from a shared scientific training.”¹⁰²

From the Asian perspective, the problem could be that social science itself was a Western idiom. In a working paper on the use of textbooks at the Delhi Roundtable on the Teaching of Social Science, Itrat Husain Zuberi, Vice-Chancellor of Rajshahi University in East Pakistan, wrote, “The main difficulty in translation of textbooks is that the Social Structure of countries in Asia is so different in many cases that the assumptions of Sociologists which are based on their observation of societies in Europe and America are not valid here.” He continued, “Concepts in Western textbooks like ‘City’, ‘Family’ etc. do not assume the same significance for Eastern students as they would for a Social Scientist in the West.” He concluded that there was an “urgent” need for “textbooks which are not a translation or adaptation of Western textbooks but are conceived and written by men belonging to Asiatic socio-economic and cultural life.”¹⁰³ A severe critique of the universality of social science, this argument also could support the rationale of the view from everywhere.

The Indian delegate to a 1948 SSD meeting on Techniques for Changing Mental Attitudes made this point explicitly. Ashfaque Hussain expressed “dissatisfaction with Unesco” because it was, “unfortunately for itself and for the world, too much of a

¹⁰² Curle to Klineberg, 17 May 1949, 327.5: 301.18 A 53 “Tensions affecting Int. Understanding—Community Studies Part I up to 31-10-49,” Unesco.

¹⁰³ Itrat Husain Zuberi, “Translation and Adaptation of Textbooks in the Social Sciences,” 3-4, ESCO 41-1005, “Round Table Conference Re- Social Science Teaching in Universities and Secondary Schools, Delhi 15-20 Feb. 1954,” ILO Archive, Geneva, Switzerland.

Western organization.” “The Unesco secretariat,” he continued, “consisting as it does overwhelmingly, if not almost entirely, of Western people, is unable to take any but a Western view of things.” But Hussain also took exception to Klineberg’s “apologetic and disapproving reference to ‘Unesco imperialism’.” He said, “My own personal feeling is [Unesco is] not sufficiently ‘imperialistic’; the more there was of Unesco ‘imperialism’ [the less] there would be of other imperialisms.”¹⁰⁴ Hussain’s blunt assessment makes clear why balanced geographic distribution became a moral and epistemological imperative in the international community. The scientific method did not give scientists a privileged view from nowhere; Western experts could not but express a Western perspective.

In fact, social scientists hoped internationalization would rescue social science just as much as internationalized social science would rescue the international community. International social science was vital to producing valid knowledge because it was expected to make genuine comparison possible. One of many calls for the formation of an International Institute of the Social Sciences declared, “The comparative method may well do for the social sciences what controlled experiment has done for the natural sciences.” This optimism regarding the potential of comparative studies to reveal human nature and the laws of social behavior was tempered by warnings such as Wirth’s to the First World Congress of Sociology that the comparative methods themselves did “violence to the [social] phenomena” by tearing them from “their peculiar historical,

¹⁰⁴ “Report by Mr. Ashfaque Hussain (India),” 327.5 A 064 (44) “48.10” Tensions affecting Int. Understanding Expert Meeting – October 1948 – Paris.

geographical, and situational contexts.”¹⁰⁵ Despite Curle’s exasperation, he encouraged the Indians to use their knowledge of Bengal as Bengalis to adapt psychological tests and the categories of social surveys to fit the local cultural milieu. By cultivating an international class of experts that could study phenomena in their native habitat and in their own terms, social science would develop a richer repertoire of more authentic cases, and perhaps from these develop a truly comparative method.

In the logic of the view from everywhere, an expert’s capacity to legitimately represent a community was based in part on his or her membership in that community. For programs coordinated by an agency that represented member states, this community was, on first cut, defined by the nation. The UN’s federal model of international organization coincided with and was predicated on the spread and strengthening of nation states.¹⁰⁶ But the degree to which states truly represented nations in the UN varied tremendously; in important respects, IGOs may be profoundly undemocratic institutions. Similarly, social scientists could never truly represent their national cultures. When the concept of cultural patterns had been elaborated in the interwar period, it was

¹⁰⁵ Anon. “Draft Proposals for the Establishment of an International Institute of the Social Sciences,” *International Social Science Bulletin* 1:1/2 (1949), 68-71, 69; Louis Wirth, “The Significance of Sociology: opening adres [sic.] of the World Congress of Sociology,” *International Social Science Bulletin* 3: 2 (Summer 1951), 197-202, 200.

¹⁰⁶ On the postwar transformation from an imperial to an *international* world order, see Fredrick Cooper, *Colonialism in Question: Theory, Knowledge, History* (Berkeley: University of California Press, 2005); Robert Jackson, *Quasi-States, Sovereignty, International Relations and the Third World* (Cambridge, UK: Cambridge University Press, 1990); Charles Tilly, *Coercion, Capital, and European States, AD 990-1992* (Cambridge, Mass.: Blackwell, 1992). I follow Tilly’s practice of not hyphenating “nation state” in order not to conflate nations and states. The spread and strengthening of nation states must be understood separately because so many of the new states proved to be so weak that they only possessed a sort of “quasi” sovereignty—one based on international recognition rather than effective power—while the postwar sovereign authority and control of governments in developed nations certainly was unprecedented. For a compelling refutation of the myth of the decline of the nation state, see David Smith, Dorothy Salinger and Steven Topik, eds., *States and Sovereignty in the Global Economy* (London and New York: Routledge, 1999).

conventional practice to note that multi-class societies (i.e., industrial nations) could not be identified by a single cultural pattern. Indeed, access to an integrated, coherent cultural pattern was a justification for ethnographic studies of “primitive” societies. Before the war, these cautions were often ignored in practice, and the need for national unity in a conflict between nations further eroded the qualifications.¹⁰⁷ But the warnings against the reification of national culture were on point. Did the Indians Curle trained (Bengali elites) speak more authentically for their research subjects (low caste squatter refugees from post-partition violence in East Pakistan) than Swedish (or, for that matter, Gujarati) researchers could?

The pursuit of the view from everywhere outside the North Atlantic exposed the tension between spreading a disciplined way of knowing and representing the diversity of worldviews. Yet this very tension was what might make possible the cultivation of experts who could represent the international community.

The Ideal of Two-Way Traffic

Ultimately, an objective view of social phenomena could be obtained only by synthesizing the perspectives of observers molded by diverse national cultures. An International Political Science Association statement justifying its own existence explained that “students of politics combine fact-finding with value judgment” and “every scholar takes his problems and guiding concepts from his own environment.” It

¹⁰⁷ Ruth Benedict stressed this point in her popular and extremely influential *Patterns of Culture*, but also, like other scholars, easily slipped into descriptions of the American cultural pattern: Babbit as the archetypical man, Middletown as the archetypical community. Ruth Benedict, *Patterns of Culture* (Boston: Houghton Mifflin Co., 1959 [1934]); Robert S. and Helen Merrell Lynd, *Middletown: A Study in American Culture* (New York: Harcourt, Brace and Company, 1929). On the problems with social scientific descriptions of a national identity, see Sarah Igo, *The Averaged American: Surveys, Citizens, and the Making of a Mass Public* (Cambridge: Harvard University Press, 2007).

continued, “Frequent contacts between political scientists of different countries would stimulate awareness of these factors,” thus allowing scholars to “distinguish between the analysis of verifiable facts and the formulation of value judgments.”¹⁰⁸ Yet another proposal for an international institute described how the process of international collaborative research was a means of “transcending [the] disparity of cultural perspectives.”¹⁰⁹ An International Sociological Association report emphasized the “the unique opportunity implied in [Unesco’s] supra-national position” to “contribute in a decisive way...to the promotion of attitudes of international loyalty among social scientists.”¹¹⁰ Whereas national patrons cultivated social scientists’ patriotic loyalties, an international organization could develop a cadre of experts whose international loyalties produced an intercultural perspective. This was the ideal of the view from everywhere that the SSD strived to coordinate.

Some sense of social scientists’ commitment to the value of international patronage can be seen in the energetic lobbying of Myrdal. On a junket in the U.S. to gain support for the Institute, she wrote to the Director-General that she deliberately ignored suggestions to seek foundation support. This was because of her “very strong conviction—a kind of ‘Unesco pride’— that only if and when we are assured of government support for the centre would the time be opportune to seek outside financial

¹⁰⁸ William Ebenstein, “Toward International Collaboration in Political Science: A Report on the Unesco Project, “Methods in Political Science,” *The American Political Science Review* 42: 6 (Dec. 1948), 1181-1189, 1186.

¹⁰⁹ Society for the Psychological Study of Social Issues, “Proposal for the Establishment of a United Nations Institute for the Human Sciences,” in Economic and Social Council, “Report of the Committee of Scientific Experts on International Research Laboratories,” E/1694/Add.1, 29 May 1950, Unesco, 78-104, 81.

¹¹⁰ ISA, “Notes Toward a Tentative Evaluation of Current Research in the Field of Sociology,” (31 July 1953) UNESCO/Inc/R.C./Eval/Sociol, Unesco.

aid.” She reported that Margaret Mead had advised her that “inter-personal and inter-group relations” as they related to “war and peace” were the “Leitmotif of the Ford Foundation” and support for the international institute might be possible under its new initiative in the “behavioural sciences.” But “a gift from this Foundation... would make the centre theirs rather than Unesco’s, and American rather than international.”¹¹¹

Ironically, while the Central Intelligence Agency secretly supported the purportedly nongovernmental Congress for Cultural Freedom and laundered funds for psychological research through foundations, for an IGO money from the U.S. government (which contributed over a third of the Unesco’s budget) was actually less tainted by its American origins.¹¹² Although Unesco’s program in the internationalization of social science could seem like Americanization, for Myrdal and her colleagues, it was more a way of internationalizing American resources.¹¹³

For Myrdal, the essential contrast between the American and Unesco approach was the spirit of cooperation. In a mission report on a 1953 trip to India to “consult governmental authorities and scientific experts” on plans to establish a research institute on “the human and social implications of technological change,” Myrdal confronted the problem of the overwhelming scale of U.S. initiatives. She reported that the U.S.

¹¹¹ Myrdal to Director-General, “Mission to New York and Washington 22 Sep. – 4 Oct., 1952. International Social Science Research Centre,” 8 Oct. 1951, 3 A 01 ISSC “—66,” “International Social Science Council, Part I (d) from 1 IX/52 up to 30/IX/53,” Unesco.

¹¹² On the Ford Foundation and the behavioral sciences, see Lemov, *World as Laboratory*. On the Congress for Cultural Freedom and a strong view of covert government funding as intrinsically corrupting, see Frances Stonor Saunders, *Who Paid the Piper? The CIA and the Cultural Cold War* (London: Granta Books, 1999).

¹¹³ Unfortunately, spurning the big American foundations was not financially feasible. Without a wealthy patron identified with the international community—an identity whose existence was doubtful—the institute became the International Social Science Council, yet another impoverished coordinating body, its offices in Unesco House physical testimony to its status as a wheel within a wheel.

government was investing \$50 million and the Ford Foundation \$6 million in community development schemes, while Unesco's entire budget for 1953 was \$9 million and the SSD's \$540,642—the American expert the SSD hired to test the waters for the new institute worked with an \$8,000 budget. This only made the proposed institute more vital because “an international institute, providing for systematic comparisons and also for stimulating co-operation of an international staff, would be very different from the one-way traffic of cultural influence, which remains typical of the Ford enterprise.”¹¹⁴ For the SSD, technical assistance should broaden the perspective of the international community—alter the very terms in which development was measured and influence the attitudes of international experts—as much as provide the technological base for economic take off.

The norm of reciprocity was promoted in Unesco's bureaucratic culture all the way down to the recruitment of experts for technical assistance missions. Guidelines for selecting experts emphasized that “objective measurements can never replace personal valuation based on observation” because “even an impressive paper record of degrees and experience gives little data about the personal attitudes which often have as much to do with an expert's success as professional competence.” The ideal expert should “have humility, patience and adaptability unrelated to specialized abilities,” and be “willing to learn as well as teach.”¹¹⁵ Such considerations appear obvious, but the emphasis on

¹¹⁴ Myrdal to Director-General, “Report on Mission to India and Egypt,” 4 Feb. 1953, X07.83, “Myrdal,” Unesco. On the American sponsored Indian community development schemes, see Nicole Sackley, “Passage to Modernity: American Social Scientists, India, and the Pursuit of Development, 1945-1961” (Ph.D. Diss.: Princeton University, 2004).

¹¹⁵ “Informational Meeting on Recruitment of Technical Assistance Specialists,” 20 Nov. 1952, X07.2 TA/A 131 “Technical Assistance Recruitment Policy,” Unesco.

character over expertise is far from the image of the interchangeable technical expert who was just “expected to follow rules.”¹¹⁶

The SSD sought to help technical assistance experts embrace this open-minded approach to their experience in strange lands. One of the department’s first attempts to spread awareness of “human and social factors” affecting development was the production of a manual, contracted to the World Federation for Mental Health, “designed to interpret the ‘non-mechanised’ peoples to those applying the new technologies in their midst.”¹¹⁷ *Cultural Patterns and Technical Change*, edited by Margaret Mead and one of the SSD’s best selling publications, explained to inexperienced international experts how “changed agricultural or industrial practices, new public health procedures, new methods of child and maternal health care, and fundamental education, can be introduced so that the culture will be disrupted as little as possible.” To mitigate damage to individuals’ mental health, preserve the integrity of local cultures, and increase the likelihood that new technologies would be adopted successfully, it was “desirable to strip these technical practices of as many extraneous cultural accretions (from the lands of origin) as possible.” Not only should the local population participate in the planning and implementation of projects, but every technical assistance mission ought to “consist of members of more than two cultures” (i.e. more than the cultures of the TA experts and the TA recipients). Representatives of a third culture could “maintain a certain objectivity” and mediate conflicts “between, for example, Indonesian and American, or

¹¹⁶ Theodore Porter, *Trust in Numbers: The Pursuit of Objectivity in Science and Public Life* (Princeton: Princeton University Press, 1995), 195.

¹¹⁷ “Modern Technology and Social Tensions,” 338.924:370:18 A 064(44) “50”, Expert Meeting on Educational Systems and Modern Technology, Paris 1950, Unesco.

Burmese and Dutch, value systems—[which] may become frozen.”¹¹⁸ Technical assistance here was imagined as a sort of cross-cultural therapy. It was a delicate art, with the potential to degrade diversity but also to readjust both modern and traditional parochial cultures to the reality of a multicultural environment.

This faith in cross-cultural collaboration was the leitmotif of Unesco. In an article titled “Technical Assistance: A Two-Way Traffic,” in the agency’s popular journal the *Unesco Courier*, American author and public intellectual Pearl S. Buck wrote, “In the contact that is now inevitable between the peoples of Occident and Orient the greatest change will come in the Occident. It will not be so visible, at first, as the change in the Orient. A refrigerator is a monstrously visible thing, but the change in a man’s attitude toward life is far more important and powerful.”¹¹⁹ In a report to the Director-General, Angell expressed his hope that U.S. engagement in Unesco’s development program would adjust American values: “If the American people could be led to see their responsibility to the world as similar to the responsibility which certain American states have taken toward the rest, this might produce a more constructive attitude toward the U.S. role in the world.”¹²⁰ Despite the anti-nationalist spirit of international scientific institutions, for the American social scientists who participated in the SSD’s programs—among the trend setters in their fields, including the quintessentially Cold War behavioral sciences—loyalty to the United States and to the international community were

¹¹⁸ World Federation of Mental Health, *Cultural Patterns and Technical Change: A Manual* edited by Margaret Mead (Paris: Unesco, 1953), 12, 309, 308

¹¹⁹ Pearl S. Buck, “Technical Assistance: A Two-Way Traffic,” *Unesco Courier* (Apr. 1950), 5. This article could be a species type of mid-twentieth century benevolent Orientalism.

¹²⁰ Angell to Director-General, “The U.S. National Commission Resolution and its Implementation,” 24 April 1950, 327.6 : 3 A 06, Meeting of Social Scientists on “The Role of Social Scientists in World Affairs” (never took place), Unesco.

complementary, not contradictory. Indeed, the long-standing cosmopolitan metaphor of expanding circles of loyalty beginning with the family and, as an individual matured, enlarging to include ever larger communities (school, neighborhood, town, state, nation and finally, in a better future, the world community) was fundamental to internationalist social scientists. Virtuous loyalty, therefore, demanded tempering American power with international understanding.¹²¹

Unesco did not have a monopoly on the ideal of the two-way street. In fact, as Nicole Sackley has shown, the experts advising the American-sponsored Indian community development schemes that Myrdal dismissed as mere “one-way cultural traffic” echoed many of the values she and Buck articulated. The SSD advised University of Chicago anthropologist Milton Singer on his and Robert Redfield’s “Comparative Civilizations” project, which had objectives and methods that closely resembled much of the department’s own early program.¹²² And when John D. Rockefeller III visited Japan in 1951 to advise the U.S. Department of State on cultural relations policy, he made the “concept of the two-way street” the centerpiece of the report. He warned against cultural “imperialism,” which “would in the long run be as unfortunate for ourselves as Japan.”¹²³

¹²¹ Engerman, “Bernath Lecture: American Knowledge and Global Power”; David Hollinger, “How Wide the Circle of the ‘We’? American Intellectuals and the Problem of the Ethnos since World War II,” *The American Historical Review* 98: 2 (Apr. 1993), 317-337. For one of countless contemporary statements on the circles of loyalty, see Harold D. Laswell, “World Loyalty,” in Quincy Wright, ed. *The World Community* (Chicago: University of Chicago Press, 1948). On the Greek roots of the image, see Steven Vertovec and Robin Cohen, “Introduction: Conceiving Cosmopolitanism,” in *Conceiving Cosmopolitanism: Theory, Context, and Practice* (Oxford: Oxford University Press, 2002). For an exemplary study of scientists’ ability to balance national and international commitments, see Allan Needell, *Science, Cold War and the American State: Lloyd V. Berkner and the Balance of Professional Ideals* (Amsterdam: Harwood Academic Publishers, 2000).

¹²² Sackley, “Passage to Modernity”; Martin to Singer, 12 December 1951, 327.5: 301.18 A 53, Tensions Affecting International Understanding—Community Studies, Part II, from 1/XI/49, Unesco.

¹²³ Takeshi Matsuda, *Soft Power and Its Perils: U.S. Cultural Policy in Early Postwar Japan and Permanent Dependency* (Stanford: Stanford University Press, 2007), 104.

Indeed, as Engerman has argued, from elementary school pen pals to graduate school area studies programs, a “cosmopolitan agenda . . . would guide American postwar thought”.¹²⁴ While more than “Unesco pride” justified Myrdal’s claim that traffic flow was more balanced in the UN agency’s programs, what is significant here is that the ideal was part of mainstream thinking.

The Technology of International Conferences

The Technical Assistance Department guidelines doubted that character could be taught, but the SSD did engage in bureaucratic therapy in its International Collaboration Project. Directed by College of the City of New York professor of government Walter Sharp (whose alarming “Progress Report” on the specialized agencies fretted over “wheels within wheels”), the project’s objective was to “encourage and assist the study by social scientists in all Member States of the problems arising within their respective scientific fields in relation to the contemporary development of positive international collaboration.”¹²⁵ Sharp was a veteran of FAO, WHO and UNRRA, so he knew well the challenge he was taking on.¹²⁶

The most important element of this project was a rather bland sounding study of the “technique of international conferences.” In fact, it was seen as breaking ground in a “pioneer field” that promised methodological innovation, theoretical insight, and practical application. It required an interdisciplinary research team led by a political scientist and social psychologist in consultation with cultural anthropologists,

¹²⁴ Engerman, “Bernath Lecture,” 610.

¹²⁵ Unesco, *Records of the General Conference of the United Nations Educational Scientific and Cultural Organization: Second Session, Mexico 1947, v. 1 Proceedings* (Paris: Unesco, April 1948), 453.

¹²⁶ Typically, while in the SSD he also served as Chairman of the Preparatory Committee of the IPSA.

psychiatrists, jurists, and international officials to probe the “group dynamics” of “this involved area of human relations.”¹²⁷ To coordinate this ambitious study of the factors that determined a conference’s success, Sharp tapped the resources of the emerging international social science community. He toured Scandinavia, visited the WHO and U.N. offices in Geneva, and stopped off in Brussels before heading to London. There, a conversation with Dr. Elliot Jaques of the Tavistock Institute of Human Relations was particularly productive.¹²⁸ Jaques suggested holding a “conference on conference method” that “with the advice of a team of social psychologists, undertake to study itself—as a ‘guinea pig’ situation.”¹²⁹

Solipsistic as this proposal might seem, it was not an anomaly. In 1950, psychiatrist John Rickman suggested Unesco sponsor “a conference of what happens in the conference itself,” even at the risk that this would “wreck” the conference—and perhaps the organization.¹³⁰ The introspective stance of these proposals reflected the conference study’s therapeutic approach to transforming the dynamics of human relations. The study was based on the assumption that conferences represented micro-cultures that patterned human behavior. Transforming their environments could cultivate more open-minded, rational personalities capable of constructive inter-personal relations. In this theory of social reform, it was those with power who most required therapy; they

¹²⁷ Unesco, *The Technique of International Conferences: A Progress Report on Research Problems and Methods* (Paris: Unesco, 1951), vi.

¹²⁸ The Tavistock Institute, founded with Rockefeller money, was an institutional cousin of Kurt Lewin’s Group Dynamics Center at MIT and the U.K. distributor of the Society for the Psychological Study of Social Issues’ *Journal of Social Issues*.

¹²⁹ “Report on Visit to London 8 – 11 Sep. 1948” (100) A 81/6, “Social Sciences – International Collaboration Project,” Unesco.

¹³⁰ Rickman to Angell, 15 May 1950, 327.6: 3 A 06, “Meeting of Social Scientists on ‘The Role of Social Scientists in World Affairs’ (never took place),” Unesco.

determined whose point-of-view was represented. The action of social research was intended to change the attitudes of both experimenters and subjects.

After these meetings with European social scientists and similar meetings in the United States, conferences of experts in Paris and New York developed a “systematic plan” of research. Small teams of experts would perform “action-research” in the field to observe “in depth” the “pathology” of conferences. “Participant-observers” would “participate freely” in the planning of conferences in order to understand each meeting within its peculiar “life history.” They would “feed back” their findings to the conference both to improve the chances for its success and, by changing the experimental situation, evaluate hypotheses. At a basic science level, such studies were grounded in and could contribute to the psychological theory of group dynamics. Pilot studies were made at meetings of the UN Human Rights Commission, the Economic Commission for Europe, and at the WHO General Conference.¹³¹

The research program for improving international collaboration resembled group therapy, but for Sharp, a political scientist, this was not a *retreat* to psychology, but rather an embrace of it. In a “Memorandum of instructions” to his assistant early in the project, Sharp wrote, “In my opinion, the psychological aspect of the problem should receive major emphasis in the proposed study.”¹³² Rensis Likert, Director of the University of Michigan Institute for Social Research, traveled to Paris with plans for an intensive social

¹³¹ Walter R. Sharp, “The Scientific Study of International Conferences,” *International Social Science Bulletin*, 2:1 (Spring 1950), 104-116; Unesco, “The Technique of International Conferences: A Progress Report on Research Problems and Methods.” For contemporary accounts on the practices represented in this study, see two issues of *The Journal of Social Issues*: “The Psychological Problems of Bureaucracy,” 4 (1945); “Action and Research: A Challenge,” 2 (1947). The research also tackled mundane problems such as the best practices for translation and when and how much documentation to distribute.

¹³² Sharp to Godshot, “Memorandum of Instructions No. 2,” 30 Oct. 1948, (100) A 81/6 “Social Sciences – International Collaboration Project,” Unesco. Emphasis in original.

survey of Unesco in order to improve morale and efficiency.¹³³ Political scientist Charles Ascher, who acted as a “participant-observer” while Executive Officer for Program, ended his study of program making in the organization—which included descriptions of the office layout of the Majestic, biographies of key leaders, analysis of changes in organizational structure, and blow-by-blow summaries of Board meetings—with a plea that only by developing the quality of “selflessness” in the agency’s leadership could it devise a work plan that would evoke “loyalty not only within the Secretariat but throughout the world.”¹³⁴

Although particularly pronounced at Unesco, with its mandate to intervene in “the minds of men,” the conviction that social psychology could rationalize the international bureaucracy was widespread. Brock Chisholm, the psychiatrist Director-General of the WHO, speculated that if the International Collaboration Project’s pilot studies of conferences were developed into a long term research program, they “might well be recognized by future generations as the most important research begun in this century.” For Chisholm, the studies “demonstrated that social science participation through an action-research approach can strengthen the more mature world-minded attitudes.”¹³⁵ Representatives of the Carnegie Endowment, Ford Foundation, Rockefeller Foundation, and the Centre National de la Recherche Scientifique were interested enough to participate in a three day meeting to evaluate the International Collaboration Project’s

¹³³ Angell to Herring, 17 Nov. 1949, 327.5 : 301.18 A 53, “Tensions affecting international understanding – community studies Part II form 1/11/49,” Unesco. Likert’s meddling apparently was not appreciated by Unesco’s staff.

¹³⁴ Ascher, *Program-making in Unesco, 1946-1951*, 84.

¹³⁵ Brock Chisholm, “Preface,” *International Social Science Bulletin: The Technique of International Conferences* 5: 2 (1953), 233-237, 235, 236.

findings.¹³⁶ In fact, the SSD contributed to but did not initiate or organize the ultimate incarnation of this mode of research/reform: a 1948 International Congress on Mental Health in London.

The International Committee for Mental Hygiene billed the congress as the third in a series and the occasion for the official founding of its successor organization, the World Federation for Mental Health. The first International Conference on Mental Hygiene had been held in Washington, D.C. in 1930 and the second in Paris in 1937, but, like nearly all international professional associations, the International Committee for Mental Hygiene had essentially dissolved during World War Two. The collective insanity of the war added urgency to the Mental Hygiene Committee's mission, however. The third international congress counted Clement Attlee and Anthony Eden its patrons, as well as the director-generals of the WHO, Unesco, and FAO (the inimitable Sir John Boyd Orr). Participants constantly evoked the world historical importance of this "experiment in the mutual understanding of human problems."¹³⁷

The intellectual mobilization for the war also provided a model for the organization of the International Congress. To explain the most innovative aspect of the congress, psychiatrist and member of the Tavistock Institute Jack Rees, who served as chairman of the congress, described the "the experience some of us had had in the Armed

¹³⁶ Unesco, "Meeting of Experts on the Technique of International Conferences, 22-24 Oct. 1951," 26 March 1952, UNESCO/SS/5, Unesco. In particular, the Carnegie Endowment for International Peace supported many analogous programs. In addition to studies of conferences, the Endowment produced the *National Studies of International Organization* series, which mirrors on a much larger scale another International Collaboration Project endeavor. Howard E. Wilson, the Endowment's assistant director for education, was deputy director of the Unesco Preparatory Commission and the Endowment seconded him to Unesco to direct the first major seminar for educators in its Education for International Understanding program.

¹³⁷ Pamphlet for International Congress on Mental Health, n.d., 613.86 A 06(41-4) "48", International Congress on Mental Health, London August 1948, Unesco

Forces during the war, where the effectiveness of discussion in small groups was convincingly demonstrated.”¹³⁸ Interdisciplinary “discussion groups,” consisting of, for example, psychiatrists, psychologists, social workers, teachers, pediatricians, and clergy, met in the year preceding the international meeting to study particular aspects of the congress’ overarching theme, “mental health and world citizenship.” The discussion groups sent reports of their work to the organizers and participants were kept apprised of each other’s work through nearly monthly installments of a conference *Bulletin*. An interdisciplinary International Preparatory Commission comprised of leading intellectuals (and supported by a Unesco contract) synthesized the 351 reports from discussion groups (representing the participation of some 5,000 individuals), and this statement became the basis for presentations at the International Congress. “Thus in the Congress,” Rees wrote in the Preparatory Commission’s first *Bulletin*, “... every speaker will as far as possible be presenting, not merely personal opinion, but the result of careful group discussion from multiple disciplines and from many nations.”¹³⁹ The elaborate organization of the congress was designed to produce the view from everywhere.¹⁴⁰

And, of course, the experience of participation in the discussion groups and the congress was understood as more important than the content of the reports. A discussion

¹³⁸ J. R. Rees, “Origins and Aims of the Congress,” in J. L. Flugel, ed. *International Congress on Mental Health, London 1948, v. 1 History, Development, and Organisation* (New York: Columbia University Press, 1948), 33-37, 34.

¹³⁹ J. R. Rees, “Introductory Note,” *Preparatory Commission Bulletin* 1 (1 July 1947), 613.86 A 06(41-4) “48”, International Congress on Mental Health, London August 1948, Unesco.

¹⁴⁰ U.S. organizers found inspiration for their organizational scheme in Harry Stack Sullivan, “Remobilization for Enduring Peace and Social Progress,” *Psychiatry* 10 (Aug. 1947), 239-52. Sullivan served on the International Preparatory Committee. For a report on the International Congress itself, see John Cohen, “International Congress on Mental Health,” *Nature* 162 (18 Sep. 1948), 441. The Preparatory Commission was quite concerned with coverage in the popular press and employed a press officer to assure extensive newspaper coverage.

group convener affiliated with the New York City Veterans' Service Center reported that his "'test tube' group" seemed to reflect the basic problems of people and nations.¹⁴¹ Indeed, some "groups found their subject matter in the analysis of their own group dynamics and relationships, using the Commission as a research laboratory."¹⁴² In line with this discovery, one volume of the congress' proceedings was dedicated to the presentations, and one volume to the meetings "history, development and organisation." The International Preparatory Commission provided a foreword to its synthetic statement that described the challenges and rewards of working across disciplinary and national boundaries: "[International and interdisciplinary] tensions may possibly have been more severe than in other groups, because they were engendered by strong personalities of considerable standing in their own profession and country holding clearly differentiated views which they were able to defend with unusual verbal facility. When once a group of this kind arrives at a common basis upon which to work, this represents an achievement of considerable significance."¹⁴³ The value of the labor was in direct proportion to the intensity of the tensions worked through.

Predictably then, the International Preparatory Commission regretted that non-Western perspectives were virtually unrepresented at the Congress, which, in fact, was demographically dominated by British and especially American participants—1,110 and 333 attendees respectively out of a total of 2,062. Americans were even more prominent

¹⁴¹ "Congress Correspondence," *Preparatory Commissions Bulletin* 6 (Feb. 1948), 2, 613.86 A 06(41-4) "48", International Congress on Mental Health, London August 1948, Unesco.

¹⁴² E. M. Goldberg, "Group Work before and during the Congress," 51-63, 58.

¹⁴³ "Mental Health and World Citizenship: A Statement Prepared for the International Congress on Mental Health, London 1948," 4, 613.86 A 06(41-4) "48", International Congress on Mental Health, London August 1948, Unesco.

in the working groups leading up to the conference, with 205 out of 351 groups (Great Britain counted 67.)¹⁴⁴ One summary report ended by going on “record that genuine regret was felt that our Russian friends had not come to this family meeting, at which so many political problems were dealt with scientifically and not, as so often happens, scientific problems dealt with politically.”¹⁴⁵ The process of the elite social scientists in the International Preparatory Commission was held up as a model for the other participants, and the international cooperation manifested in the congress was celebrated as an example for the world.

The quotations that graced the opening page of the program suggested the ultimate objective of the International Congress on Mental Health. These were excerpts from the constitution of the WHO, which proclaimed health “a state of complete physical, mental and social well-being” that was “fundamental to the attainment of peace and security and...dependent upon the fullest co-operation of individuals and states,” as well as the oft-cited lines that the poet Archibald MacLeish had inscribed in Unesco’s preamble, “Since wars begin in the minds of men, it is in the minds of men that the defences of peace must be constructed.” Indeed, the World Federation for Mental Health, which the Congress inaugurated, was established with the explicit goal of facilitating the

¹⁴⁴ The disproportionate number of U.S. working groups is hardly surprising given that their organization really got going during the winter of 1947, a brutal season in Europe. From his position in the SSD, the U.S. psychologist Hadley Cantril wrote the president of the Society for the Psychological Study of Social Issues to inquire how many members were planning on attending the International Congress. Far from recruiting participants, Cantril was concerned to pass on that in his experience in Paris it was “not very effective strategy for any one organization in any one nation to take too much initiative on this question of internationalizing. As you can easily imagine, motives are often suspect, and with the United States in the commanding position it now is in the the social sciences, initiative from the United States is very apt to be misinterpreted.” Cantril to Hartley, March 1948, 613.86 A 06(41-4) “48”, International Congress on Mental Health, London August 1948, Unesco.

¹⁴⁵ Richard Hauser, “Our Supreme Headache,” *Preparatory Commission Bulletin* 11 (Oct. 1948), 3-5, 5, London 1948,” 4, 613.86 A 06(41-4) “48”, International Congress on Mental Health, London August 1948, Unesco.

work of the WHO and Unesco. The International Preparatory Commission's statement described the urgent need to "face the problems of better education for life with another" in order to "avert the calamity of a third world war." Predictably, it determined that "the security of each rests on a two-fold allegiance, to his country and to the community of the world."¹⁴⁶ The goal was to produce world citizens.

But if the fundamental assumption of the congress was that peace depended on cultivating world citizens, it did not follow that wars *began* in the minds of men. In fact, the experts criticized mental health professionals' traditional obsession with the "problems of individual maladjusted persons" and overemphasis on the role of parents.¹⁴⁷ Instead, as anthropologists' studies of diverse cultures had proven, the "political, social, economic, legal and religious organisation of the community and specific institutions such as the family, the school and the factory" patterned the human personality. On the other hand, the social scientist could learn from psychiatrists that even when dealing with "large scale social-economic political and legal problems, he is concerned with human beings, personalities with all their hopes and fears, their urgencies and aspirations." In his closing remarks to the congress, the psychiatrist and chairman of the International Preparatory Commission Lawrence Frank described this ambition as the cross-fertilization of the "clinical and the statistical."¹⁴⁸ The point of rehearsing the rather abstract, perhaps even banal, social theory that undergirded the conference (and with

¹⁴⁶ Mental Health and World Citizenship: A Statement Prepared for the International Congress on Mental Health, London 1948," 4, 613.86 A 06(41-4) "48", International Congress on Mental Health, London August 1948, Unesco.

¹⁴⁷ E. M. Goldberg, "Group Work before and during the Congress," 55.

¹⁴⁸ "Remarks by Lawrence K. Frank," 21 Aug. 1948, , 613.86 A 06(41-4) "48", International Congress on Mental Health, London August 1948, Unesco.

which social constructivist readers should feel quite comfortable) is to avoid the common mistake of dismissing these activist intellectuals as bourgeois psychological determinists. “Intrapsychic” determinism was precisely what the congress was organized to refute. In fact, since the minds of men were patterned by cultural traditions and socio-economic structures, building the defenses of peace in them required targeting specific social institutions for reform.

In one of many breathless pronouncements at the International Congress on Mental Health, Frank compared the “new dynamic theory of man-society” to the revolutionary development of quantum mechanics in physics, and warned that its potential power was “no less significant or difficult to use wisely than nuclear energy.”¹⁴⁹ Instead of radioactive atoms, however, the reaction that would produce a world community called for a critical mass of world citizens. Reaching this critical mass, another member of the International Preparatory Commission reported, depended on the ability of cosmopolitan intellectuals—the avant-garde of world community—to arouse “a new sense of responsibility for mental health considerations on the part of many others, e.g. architects, policemen, plumbers, income-tax officials.”¹⁵⁰ This was the promise of action-research: to turn civilians into citizen-scientists; to inspire everyone to pursue the view from everywhere.

¹⁴⁹ “Remarks by Lawrence K. Frank,” 21 Aug. 1948, 613.86 A 06(41-4) “48”, International Congress on Mental Health, London August 1948, Unesco.

¹⁵⁰ J. C. Flugel, 21 Aug. 1948, 613.86 A 06(41-4) “48”, International Congress on Mental Health, London August 1948, Unesco.

Conclusion

If the UN Organizations were the institutional embryo of a liberal democratic world polity, there was little doubt that the gestation would be measured in human generations. The task of international experts was to build the circulatory system that would enable the threatened UN embryo to grow: power and knowledge would flow through arteries and veins that connected UN Organizations to capillary networks within nations to nurture the world community, the only environment in which an international government could thrive. The impossibility of the metaphor—an embryo feeding its womb—is apt. But this is the central problem of institutionally based social reform: to create an institution that functions in a world it is meant to transform.

INGOs were both a means and an end because they were a way to provide the world community with an international perspective from which to determine goals and evaluate policy options. At the same time, they fostered cosmopolitan intellectuals whose identification with a transnational group superimposed loyalty to the international community on national loyalties. The federal model of the international associations mimicked and emerged out of the liberal democratic political structures of the UN. It was justified by the conviction that representative government required representative knowledge production.

With the rise of development as the overriding mission of the specialized agencies, the SSD's program in international collaboration morphed from a project aimed at harmonizing North Atlantic cultural relations to developing the social sciences in the Third World. Because the normative ethos of technical assistance was tutoring

underdeveloped countries in order to accelerate their evolution into industrialized nations—the one-way traffic Myrdal complained of—it is easy to miss the essential point of how much of the flurry of postwar international organizing was designed to manage the problem of power, particularly American hegemony, in a democratic world order. American resources and initiative fueled the institutionalization of the social sciences, but Europeans guided its progress. And almost as soon as they were formed, transnational associations followed the economic development missions of the specialized agencies into the Third World. The rationale was to share the power of knowledge production in order to avoid a prejudiced imperial perspective.

According to this epistemological imperative, truth emerged from the process of international collaboration. Unesco's function was to coordinate the perspectives of intellectuals who represented national cultures in order to construct a synoptic view of the world community, and thus provide the knowledge necessary to integrate diversity in an interdependent world. Coordinating the view from everywhere was a demanding practice, especially since representatives of the international community were also products of their own national cultures. Social scientists were keenly aware of this dilemma. They believed the success of institutions depended on the personalities who carried out their functions. Unesco policy emphasized the character of international experts, and the SSD performed action-research to enhance their inter-subjective faculties. Only diplomats who negotiated in good faith and civil servants who worked with integrity could collaborate productively. Only experts capable of intercultural collaboration were in a position to provide the knowledge on which a world community depended.

In this mode of research, the boundary between participant and observer was intentionally blurred, and the experiment was group therapy as a form of social reform. Researchers hoped to cultivate new values appropriate for a world community through the experience of international collaboration. In the absence of a mature world community, no individual could see the view from everywhere; it emerged only out of cooperative interpersonal relations. This vision may appear quaintly myopic given the power of factors external to IGOs to determine an organization's success. But the work was performed by experts who believed in the potential of international cooperation; to assume the experiment's inefficacy was to assume the failure of the United Nations. Objectivity is always a matter of degrees. Just because it, like world peace, was an impossible ideal, does not mean it was not worth pursuing. The pursuit was half the point.

Chapter Two
Behind the Burlap Curtain
The Social Psychological Treatment of International Tensions

“It would seem that common sense and reason ought to find a way to reach agreement in every conflict of honest interests. I myself think it our bounden duty to believe in such international rationality as possible.” William James, *The Moral Equivalent of War*

A decade into the global economic depression and on the brink of the century’s second total war, the bulletin of the Society for the Psychological Study of Social Issues published the findings of a critical experiment into the fundamental causes of violence and social cohesion. In “Patterns of Aggressive Behavior in Experimentally Created ‘Social Climates,’” the German Jewish émigré psychologist Kurt Lewin and two American colleagues organized “clubs” of ten year-old boys that engaged in crafting activities under three different “philosophies of leadership:” authoritarian, democratic and *laissez-faire*. Under authoritarianism, the adult club leader determined all matters of policy, dictated each step of an activity one at a time so that the “future always remained uncertain,” and personalized all praise or criticism. In contrast, the democratic club decided all policy—including a “group goal” and teammates—through discussion and together sketched the steps necessary to achieve their objective. The democratic adult leader participated as “a regular group member in spirit” and tried to be “‘objective’ or ‘fact-minded’” in praise and criticism. Finally, the *laissez-faire* social climate was essentially leaderless; the boys were simply given crafting supplies and left to their own devices. To extract data from the experimental situation, the scientists set up field posts

“behind a low burlap wall in a darkly shaded area” where they “seemed ‘not to exist at all’ as far as the children and leaders were concerned.”¹⁵¹

From behind the burlap curtain, the scientists observed the “total behavior of the group.” Their findings reflected the fact that the experiment was performed at a moment of crisis for both socialism and liberalism, which had been discredited by Stalin’s atrocities and the collapse of free market capitalism. The social psychologists, therefore, defined democracy in opposition to the threat of totalitarianism, but also to the bankrupt ideology of *laissez-faire*. Four out of five authoritarian clubs experienced extremely low incidence of aggression with the fifth quite high, while four democratic clubs scored at a mid-range between two wildly aggressive *laissez-faire* clubs and the “apathetic” autocracies. The researchers succeeded in provoking two “wars” (mostly paper ball artillery battles) between clubs. Their interpretation showed that autocracies were bimodal, either hyper-aggressive or apathetic; *laissez-faire* groups were chaotic and unproductive; and democracies experienced a healthy level of aggression, which prevented the repression that led to violence or apathy in autocracy, and the fullest creative productivity. Crouching behind the burlap curtain, the experimenters occupied a position that was both detached from and a part of the social field they sought to understand and adjust.¹⁵²

¹⁵¹ Kurt Lewin, Ronald Lippitt, and Ralph K. White, “Patterns of Aggressive Behavior in Experimentally Created ‘Social Climates,’” *The Journal of Social Psychology, S.P.S.S.I Bulletin* 10 (1939), 271-299, 273, 276. Here I describe one in a series of experiments. For an analysis of these and experiments in the context of Lewin’s immigration, see Mitchell G. Ash, “Cultural Contexts and Scientific Change in Psychology,” *American Psychologist* 47: 2 (February 1992), 198-207; for the German roots of Gestalt theory, Mitchell G. Ash, *Gestalt Psychology in German Culture, 1890-1967: Holism and the Quest for Objectivity* (Cambridge: Cambridge University Press, 1995).

¹⁵² On the dual crisis, see Howard Brick, *Daniel Bell and the Decline of Intellectual Radicalism: Social Theory and Political Reconciliation in the 1940s* (Madison: University of Wisconsin Press, 1986). On the

The implications of the experiment were profound. The determinate factors that patterned aggressive behavior were: tension, restricted space of free movement, rigidity of group structure, and style of living (culture). While the authors cautioned, “one must be careful of making too hasty generalization, perhaps especially in the field of political science,” “it would be wrong to minimize the possibility of generalization” because “what happens depends by and large upon [the situational] pattern and is largely although not completely independent of the absolute size of the field.”¹⁵³

The problems with conflating paper ball fights between ten year old boys and total wars between nations are manifold, of course.¹⁵⁴ Indeed, one of the major objectives of this chapter is to show how interactions and disjunctures between metropolitan, national, and international scales changed the means and ends of international cooperation. The chapter begins by analyzing aspects of the Unesco Social Sciences Department’s Tensions Affecting International Understanding project and the Education Department’s Education for International Understanding program in order to reveal the theory and practice—or, more precisely, the theory of practice—that guided “education for world citizenship” in the international community. Then it surveys the enthusiastic

intellectual response to totalitarianism, see David Ciepley, *Liberalism in the Shadow of Totalitarianism: The Problem of Authority and Values since World War Two* (Cambridge, Mass.: Harvard University Press, 2006); David A. Hollinger, “Science as a Weapon in *Kulturkampfe* in the United States during and after World War II,” *Isis*, 86 (1995), 440-454. For Lewin’s statement on what democracy is, including its representation in a triangular graphic in which the points are democracy, authoritarianism and *laissez-faire*, see Lewin’s contribution to “The Practicality of Democracy,” in Gardner Murphy ed., *Human Nature and Enduring Peace, Third Yearbook of the SPSSI* (Boston: Houghton Mifflin Co., 1945), 295- 347, 302-306.
¹⁵³ Lewin et. al., 299, 297. The “field” refers to Lewin’s Field Theory, which, inspired by analogies from physics, was a way of perceiving social situations as the specific constellation of persons interacting in and with an environment.

¹⁵⁴ It is worth noting that the International Social Science Council determined that its first research priority would be the “influence of the change of scale on the properties of social groups and on the nature of social problems.” Provisional International Social Science Council, “Report of the Secretary-General for the Year 1952-1953 to the General Assembly,” Paris, Oct. 1953.

participation in and vitriolic reaction against Unesco in the United States. Finally, it focuses on a particularly significant controversy over a “Unesco program” in the Los Angeles School District. Lewin’s “determinate factors” only become meaningful with concrete historical analysis of conflicts at well defined scales.

But whatever its success in revealing the determinants of intergroup violence and productive solidarity, “Patterns of Aggressive Behavior” does illuminate the theory and practice of the reformist social scientists affiliated with Unesco. For one thing, it would be wrong to diagnose Lewin et al. as suffering from a severe case of naiveté. Lewin left Germany in 1933 at his first opportunity despite a veteran’s exemption from the anti-Semitic Law to Restore the Professional Civil Service, warning a colleague that the “deprivation of Jews’ rights...[would] doubtless be carried through to the end in the schematically thorough manner of the Germans.”¹⁵⁵ Similarly, postwar internationalists were not ignorant of modern civilization’s potential for evil. As much as an expression of technocratic confidence inflated by social scientists’ contributions to winning the war, the social reformers’ designs for a world community united by its diversity responded to the traumas of fire bombs and food shortages, racial genocide and the possibility of atomic holocaust.

Instead of naiveté, Lewin’s experiment and postwar theories of world community should be read as what they clearly were: passionate arguments in defense of democracy. As the University of Chicago political scientist Quincy Wright wrote in another seminal study of the causes of violence, the 1942 tome *A Study of War*, “Fictions, while necessary in the natural sciences, are the essence of the social sciences. The social scientist must

¹⁵⁵ Quoted in Ash, “Cultural Contexts,” 201.

create a structure of assumptions and use a language which is at the same time symbolic and emotive. Unless he can establish his assumptions by successful propaganda, it is hardly worthwhile to make hypotheses or to investigate their validity.”¹⁵⁶ Early in the Cold War, self-consciously hard realists routinely accused soft idealists of “wishful thinking.” Wright’s frank observation implies that this condescending dismissal was as much a rhetorical device designed to establish assumptions about the power-maximizing behavior of nations as were internationalists’ appeals to recognize the reality of One World. Still, a conviction that “the basic defect in the structure of the world before World War II was the lack of consciousness in the minds of individuals that they were related to the world-community,” as Wright put it, could make social scientists’ primary objective persuading the public to believe in the fiction of a world community.¹⁵⁷

“Patterns of Aggressive Behavior” also suggests the importance of education in the campaign to build a democratic world community.¹⁵⁸ As a microcosm of society, the classroom was a training ground for the democratic way of life. It was the critical place social institutions could intervene in the development of human personalities in order to produce mature, world-minded citizens. A democratic education was not a matter of indoctrinating students in a particular ideology; in fact, it mattered little what students

¹⁵⁶ Quincy Wright, *A Study of War* (Chicago: University of Chicago Press, 1942), 683.

¹⁵⁷ In the science studies literature, Donna Haraway has written most compellingly about “science fictions.” Cf. Donna Haraway, “A Cyborg Manifesto: Science, Technology and Socialist Feminism in the Late Twentieth Century,” in *The Cyberculture Reader*, ed. David Bell and Barbara M. Kennedy (New York: Routledge, 2000) 291-323; Donna Haraway, *Primate Visions: Gender, Race, and Nature in the World of Modern Science* (New York: Routledge, 1989).

¹⁵⁸ Education for international understanding was a major theme in American postwar intellectual history, not a peculiar interest of Unesco. Cf. James B. Conant, *Education in a Divided World: The Function of the Public Schools in Our Unique Society* (Cambridge, Mass.: Harvard University Press, 1948); Howard Lee Nostrand and Francis J. Brown, eds, *The Role of Colleges and Universities in International Understanding* (Washington, 1949).

were taught. Lewin's clubs produced democratic societies—and, therefore, citizens—while making masks and paper airplanes. What was important was the democratic process through which the clubs decided on a “group goal” and accomplished it. Indeed, the group was the goal.¹⁵⁹

Underlying this faith in education was a conviction that human nature was plastic; that is, that environment determined personality. This presented reasons for optimism against the fatalism that humans were naturally aggressive and selfish creatures, as assumed by realist political scientists and liberal economists respectively. But it demanded vigorous action since impressionable youth easily could be stamped with authoritarian personalities.¹⁶⁰

¹⁵⁹ Yaron Ezrahi usefully constructs a three-part typology of the political resources science and technology provide in a liberal-democratic polity where freedom is a core value. First, the classical liberal model of freedom itself as the principle of order: science demonstrates the self-organizing quality of nature and society, thus legitimating individual self-interest as the basis of the common good. Second, the notion of enlightened cooperation between citizens who have learned to behave rationally: science provides the rules which guide the actions of informed individuals in the interest of the common good. Third, an enlightened, centralized power maintains the freedom of the masses: an expert few use the truths derived from scientific inquiry to assure that society maximizes the common good. The postwar social scientists who sought to observe and adjust society from behind the burlap curtain can best be characterized as rejecting classical liberalism and nervously straddling the second and third categories. Yaron Ezrahi, *The Descent of Icarus: Science and the Transformation of Contemporary Democracy* (Cambridge: Harvard University Press, 1990), 19-21.

¹⁶⁰ For a comprehensive intellectual history of American social science's engagement with this problematic in a Cold War context, see Jamie Cohen-Cole, “The Creative American: Cold War Salons, Social Science, and the Cure for Modern Society,” *Isis* 100 (June 2009), 219-262. On psychology in U.S. political culture more generally, see Ellen Herman, *The Romance of American Psychology* (Berkeley: University of California Press, 1995). For the interwar period, Dorothy Ross, *The Origins of American Social Science* (Cambridge: Cambridge University Press, 1991), Mark C. Smith, *Science in the Crucible: The American Debate Over Objectivity and Purpose, 1918-1941* (Durham: Duke University Press, 1994). On the effect of the war, see especially, James H. Capshew, *Psychologists on the March: Science, Practice, and Professional Identity in America, 1929-1969* (Cambridge: Cambridge University Press, 1999). Postwar studies of authoritarianism were particularly significant. Cf. T. W. Adorno, Else Frenkel-Brunswick, Daniel J. Levinson, and R. Nevitt Sanford, *The Authoritarian Personality* (New York: Harper & Brothers, 1950). Richard Christie and Marie Jahoda, eds., *Studies in the Scope and Method of “The Authoritarian Personality* (Glencoe, Ill: Free Press, 1954); Gabriel A. Almond, *The Appeals of Communism* (Princeton: Princeton University Press, 1954); Fillmore H. Sanford, *Authoritarianism and Leadership: A Study of the Follower's Orientation to Authority* (Philadelphia: Stephenson-Brothers, 1950); Harold W. Metz and Charles A. Thomson, *Authoritarianism and the Individual* (Washington D.C: Brookings Institution, 1950);

For this cohort of internationalists, a functioning world community required not just world-minded international civil servants, but a world-minded public loyal to the institutions and symbols of a world government. Indeed, Unesco billed itself as the people's UN agency. In a message to the first World Congresses of Sociology and Political Science, Director-General Torres Bodet declared, "We are the bridge between learning and the peoples of the world."¹⁶¹ The knowledge that crossed this bridge was intended to construct and shape world public opinion, to adjust the values and expand the group identity of individuals to encompass an emerging world community; in short, to create world citizens. Just as loyalty to a nation state was built upon prior loyalties—first to the family, then to the school and local community, ethnic and religious groups—so loyalty to the world community would be founded upon loyalty to the nation. The cosmopolitan citizens of a world community had to see even local issues from a global perspective. Creating a world community required extending the view from everywhere from an epistemological strategy for elite experts to a popular sensibility.

Pursuing this mission revealed a fundamental tension between Unesco's organizational structure and its mission. It was an international governmental organization that represented nation states, yet was devoted to transcending nationalism. In McCarthy era debates over U.S. participation in Unesco's program, this tension was expressed in terms of the Cold War, but fundamentally was about conflicts over the proper role of the U.S. government and over what it meant to be an American. These

Samuel A. Stouffer, *Communism, Conformity and Civil Liberties: A Cross-Section of the Nation Speaks its Mind* (Garden City, N.Y.: Doubleday, 1955).

¹⁶¹ Jaime Torres Bodet, "Message from Mr. Jaime Torres Bodet Director-General of Unesco to the Congress of Sociology and Political Science, Zurich," *International Social Science Bulletin* 3: 2 (1953), 191-194, 194.

domestic battles had a profound impact on Unesco. It ceased to be an organization that sought to turn Americans into world citizens; it became an institution the United States acted through but that did not act upon the United States. This transition corresponded to a change in what it meant to be an engaged social scientist. The bridge between learning and the people was pulled up as experts focused more on communicating within elite intellectual and political circles than on engaging with popular commonsense. The ideal of the two-way street, a key component of the view from everywhere, was badly damaged.¹⁶²

Analyzing Tensions Affecting International Understanding

In 1950, the Social Science Research Council published Bulletins 62 and 63. Each of these Bulletins described an interdisciplinary research paradigm that promised to contribute to social theory and engage with the critical international issues of the day. Bulletin 62, *Tensions Affecting International Understanding: A Survey of Research* by Otto Klineberg, was supported by the Carnegie Endowment for World Peace and prepared under the auspices of the Social Science Research Council's Committee on Social Relations Aspects of International Tensions, the liaison Committee for Unesco's Tensions Project. Bulletin 63, *Area Research: Theory and Practice* by anthropologist Julian H. Steward, was a product of the Committee on World Area Research.¹⁶³ Although

¹⁶² David Paul Haney, *The Americanization of Social Science: Intellectuals and Public Responsibility in the Postwar United States* (Philadelphia: Temple University Press, 2008); Theodore M. Porter, "How Science Became Technical," *Isis* 100: 2 (June 2009), 292-309.

¹⁶³ Otto Klineberg, *Tensions Affecting International Understanding: A Survey of Research* (New York: Social Science Research Council, 1950); Julian H. Steward, *Area Research: Theory and Practice* (New York: Social Science Research Council, 1950). The Social Relations Aspects of International Tensions Committee was chaired by Donald Young of the Russell Sage Foundation (and soon to be president of the International Social Science Council) and members included Fredrick S. Dunn, John W. Gardner, Robert K. Merton, and Morris Opler.

the tensions frame stressed trans-border connections and contradictions where area studies trained attention on socio-cultural wholes, the same works filled the footnotes of both texts and both foregrounded the problem of personality structures in dynamic relationship with cultural patterns. The correspondence between Bulletins 62 and 63 was a product of a historical moment in which Clyde Kluckhohn, an anthropologist known for his studies of Navajo witchcraft could become the director of Harvard's Russian Research Center. Although "significant not for their accuracy, but for their suggestiveness," "psycho-cultural hypotheses about political acts" were the state-of-the-art in American international studies.¹⁶⁴

The differences between the Area Studies and Tensions programs were less in regard to theory and method than purpose and institutional support. Steward wrote, "Whether the ultimate motivation of such research is to guide policies of the United States or of the United Nations or whether it is to further scholarship as such is probably an academic distinction."¹⁶⁵ This may have appeared a reasonable conclusion in the year the United Nations went to war in Korea. Yet it mattered a great deal that Klineberg's Tensions Project was performed in the service of a UN specialized agency with the goal of enhancing international understanding to promote world peace, whereas Steward's

¹⁶⁴ Gabriel A. Almond, "Review: Anthropology, Political Behavior, and International Relations," *World Politics* 2: 2 (Jan. 1950), 277-284, 283; Nathan Leites, "Psycho-Cultural Hypotheses about Political Acts," *World Politics* 1: 1 (Oct. 1948), 102-119; Geoffrey Gorer and John Rickman, *The People of Great Russia: A Psychological Study* (London: Cresset Press, 1949); Frederick S. Dunn, *War in the Minds of Men* (New York: Harper for the Council of Foreign Relations, 1950); Tom H. Pear, *Psychological Factors of Peace and War* (London: Hutchinson, 1950). Four influential interwar works that provide a sort of conceptual frame for the postwar research discussed in this section are Ruth Benedict, *Patterns of Culture* (Boston: Houghton Mifflin Co., 1959 [1934]); John Dollard et. al, *Frustration and Aggression* (New Haven: Yale University Press, 1939); Robert S. and Helen Merrell Lynd, *Middletown: A Study in American Culture* (New York: Harcourt, Brace and Company, 1929); Harold D. Lasswell, *Psychopathology and Politics* (New York: Viking Press, 1960 [1930]).

¹⁶⁵ Steward, *Area Research*, 86-87.

area research was primarily a university-based enterprise, funded in large part by American foundations and, although less explicitly normative, more directly responsive to United State's foreign policy needs. Bulletin 63, a founding text of the SSRC's longest running Research Committee, introduced a major chapter in twentieth century American social science.¹⁶⁶ The project described in Bulletin 62 represents a forgotten chapter. Here I describe the origins of the Tensions Project before uncovering the assumptions that guided its socio-cultural approach to international politics.

The resolution authorizing the Tensions Project at the 1947 General Conference in Mexico City was introduced by Louise Wright, delegate of the United States and Director of the Chicago Council on Foreign Relations. The project she proposed reflected the discussions of a January 1947 World Community symposium held at the University of Chicago, which included the leading American social scientists and was organized by her husband Quincy.¹⁶⁷ One of the six working papers presented at the conference was by a future director of the Tensions Project, Robert Cooley Angell, a University of Michigan sociologist who was both the protégé and nephew of Charles Horton Cooley, one of

¹⁶⁶ Ken W. Worcester, *Social Science Research Council, 1923-1998* (New York: Social Science Research Council, 2001) 32 (note 52). See also Vicente L. Rafael, "The Cultures of Area Studies in the United States," *Social Text* 41 (Winter, 1994), 91-111.

¹⁶⁷ At the symposium, participants discussed papers by Louis Wirth (who got the conference off to a confusing start by defining "community" in terms of an ecological community that formed the base for a "society" of shared values—the opposite terminological relationship virtually every other participant assumed), Margaret Mead (who claimed that "unity in diversity" was a means *not* an end), the economist Kenneth Boulding (who professed feeling like economics was impotent in the face of the contemporary crisis and craving a deeper knowledge of psychology), Robert C. Angell (on the role of international communication in a world society), the political scientist Harold D. Lasswell (on measuring and managing world loyalty), and Professor of International Law Pitman B. Potter (who, in the course of describing the role of world institutions needed for a world community noted the "dangerous—even absurd—ellipses that wars begin in the minds of men"). Other participants included Talcott Parsons, Charles Merriam, Pendleton Herring, Hans Morgenthau, Adlai Stevenson, Karl Polyani, and Ruth Benedict. Quincy Wright, ed. *The World Community* (Chicago: The University of Chicago Press, 1948), 262, 315.

social psychology's founding fathers. The resolution instructed the Director-General "to promote enquiries into:

1) the distinctive character of the various national cultures, ideals, and legal systems; 2) the ideas which the people of one nation entertain of their own and of other nations; 3) modern methods developed in education, political science, philosophy and psychology for changing mental attitudes and for the social and political circumstances that favour the employment of particular techniques; 4) the influences which make for international understanding or for aggressive nationalism; 5) population problems affecting international understanding, including the cultural assimilation of immigrants; 6) the influence of modern technology upon the attitudes and mutual relationships of people.¹⁶⁸

This was a research agenda designed to help Unesco discover the means to correct what Quincy Wright had diagnosed as "the basic defect in the structure of the world"—that is, "the lack of consciousness in the minds of individuals that they were related to the world-community." But from the perspective of *social* psychology, changing minds required changing society. A Social Sciences Department (SSD) report to the Unesco Executive Board put it bluntly: "What is in the minds of men is largely a product of the objective conditions... The problem of resolving tensions is obviously one that goes far beyond education, scientific psychology, or cultural activities reaching as it does into economic, political, technological, population and other considerations."¹⁶⁹

¹⁶⁸ This is actually the slightly revised 1948 version of the resolution that better reflects the actual work of the project. Racial tensions were added to the evolving list. For contemporary descriptions of the objectives, methods and organization of the Tensions Project, see Robert C. Angell, "Unesco and Social Science Research," *American Sociological Review* 15: 2 (Apr. 1950), 282-287; Hadley Cantril, "The Human Sciences and World Peace: A Report on the Unesco Project: 'Tensions Affecting International Understanding,'" *The Public Opinion Quarterly* 12: 2 (Summer 1948), 236-242; Otto Klineberg, "The Unesco Project on International Tensions: A Challenge to the Sciences of Man," *International Social Science Bulletin* 1: 1/2 (1949), 11-21; Quincy Wright, "The Importance of the Study of International Tensions," *International Social Science Bulletin* 2: 1 (Spring 1950), 90-103. For a broader context, see Ralph Linton, ed., *The Science of Man in the World Crisis* (New York: Columbia University Press, 1945); Daniel Lerner and Harold D. Lasswell, eds, *The Policy Sciences: Recent Developments in Scope and Methodology* (Stanford: Stanford University Press, 1951).

¹⁶⁹ Executive Board, Eighth Session, "Outline of Plans for the Execution of the Project "Tensions Affecting International Understanding" and Report of Progress to 15 May 1948, Paris, 31 May 1948.

The Tensions Project was an American initiative, but even at Wright's symposium scholars objected to the fiction of a world community. Most significantly, Wright's colleague at the University of Chicago Hans Morgenthau, the leading postwar realist political theorist, was clearly disturbed by the discussion. In his foundational textbook *Politics among Nations*, published in 1948, he agreed with the internationalists' contention that "[t]here can be no permanent peace without a world state" and that "a world community must antedate a world state." But he argued that the necessary conditions for a viable world community—an effective world public opinion that expressed common political and moral values—were so remote as to render the idea positively dangerous. Precisely because politics reduced to psychology, the notion that Americans should pledge their loyalty to a world rather than a national authority was not only silly (for what services did this authority provide?) and in practice imperialistic (for what were international values except a claim for the universalism of a particular national culture?) but potentially treasonous. In the context of the nascent Cold War, such a psychological defection could destabilize the balance of power between the United States and the Soviet Union. Indeed, in *Politics among Nations* Morgenthau explicitly described realism as a reaction against the naïve idealists promoting world community at Unesco and advocated a return to the lost art of secret diplomacy.¹⁷⁰

¹⁷⁰ Hans J. Morgenthau, *Politics among Nations: The Struggle for Power and Peace* (New York: Alfred A. Knopf, 1948), 445, 407, 14. It is important to note that Quincy Wright is also sometimes credited as a founding figure of realism, and, in fact, the sections on balance of power in *A Study of War* remain the most compelling. On realism and the culture concept, see Julie Reeves, "The Nationalization of Culture," in *Culture and International Relations: Narratives, Natives, and Tourists* (London: Routledge, 2004), 153-194.

The most powerful impetus for the Tensions Project came from an organization of intellectuals that found Morgenthau's coldly calculated assessment of the behavior of nations an unappealing fiction, the Society for the Psychological Study of Social Issues (SPSSI). The SPSSI was founded in 1936 by "socially minded psychologists" to "help get scientific knowledge into the bloodstream of applied social action by building as many bridges as possible between theory and practice in group, community, national, and international living."¹⁷¹ In September 1945, the SPSSI sent a questionnaire to social scientists in forty-eight countries to solicit their interest in forming an international version of the Society. A SPSSI committee grouped suggestions for potential programs into seven categories, which, with the exception of basic methodological research, were isomorphic with the Tensions Project's.¹⁷² Also in 1945, the SPSSI published *Human Nature and Enduring Peace*, which offers a comprehensive guide to the assumptions underlying the Tensions Project. By far the Society's most successful yearbook, it was written in a question and answer format in which an interdisciplinary all star team of more than fifty specialists described the social psychological causes of war and peace for

¹⁷¹ SPSSI has produced three special anniversary issues of *Journal of Social Issues* chronicling the Society's history: "50 Years of Psychology and Social Issues," *Journal of Social Issues* 42: 1 (1986); "Historical Accounts and Selected Appraisals" 42: 4 (1986); "Experts in the Service of Social Reform: SPSSI, Psychology, and Society, 1936-1996" 54: 1; see also, L. J. Finison, "The Early History of the Society for the Psychological Study of Social Issues: Psychologists and Labor," *Journal of the History of the Behavioral Sciences* 15 (1979), 29-37. On the history of social psychology, see Gordon Allport, "The Historical Background of Modern Social Psychology," in Gardner Lindzey and Elliot Aronson eds., *The Handbook of Social Psychology* 2nd ed. (Reading Mass: Addison-Wesley Publishing Co., 1968 [1954]), 1-80. Robert M. Farr, *The Roots of Modern Social Psychology, 1872-1924* (Cambridge: Blackwell Publishers Inc., 1996) and William H. Sewell, "Some Reflections on the Golden Age of Social Psychology" *Annual Review of Sociology* 15: 1 (1989): 1-16.

¹⁷² Jerome Bruner, "International Research on Social Issues: A World Survey," *Journal of Social Issues: Toward a Common Ground—International Social Science* 3: 1 (Winter 1947), 38-54. The General Conference did not approve, "world-wide studies of opinion with particular reference to international-mindedness," one of the suggestions, but the Department performed the study under the Tensions rubric anyway.

a popular audience.¹⁷³ The first director of Unesco's Tensions Project, the Princeton psychology professor and public relations guru Handley Cantril, was president of the SPSSI during 1947-1948. The second director was Otto Klineberg, a Columbia University social psychologist who was a past president of the SPSSI. The point is not that the SPSSI determined the program of the SSD, but simply that the Tensions Project reflected the interests of a very particular set of American intellectuals. It should be understood as part of a struggle to define the values and methods of social science, both in the international community and within the United States.

The Tension Project's early initiatives exemplified the view from everywhere. In July 1948, Cantril convened a meeting of eight "wise-men" at Unesco House to issue an authoritative "common statement" on the "influences throughout life which make for attitudes" of national aggression.¹⁷⁴ The consensus statement stressed the plasticity of human nature, arguing that the treatment of international tensions should target the institutions that patterned personalities. Peace, the wise men declared, depended on social and economic justice, an end to colonial exploitation and minority oppression, and

¹⁷³ The yearbook also reprinted "The Psychologists' Manifesto," a ten point declaration of psychological principles that ought to guide planning for peace that 2,000 psychologists signed. Gardner Murphy ed., *Human Nature and Enduring Peace*, (Boston: Houghton Mifflin Co., 1945). The success of the yearbook was asserted in the SPSSI's *Journal of Social Issues* (Winter 1947) 3: 1, 66.). For a quantitative demonstration of psychologists endorsement of the one world movement, see Ross Stagner, "Opinions of Psychologists on Peace Planning," *Journal of Psychology* 19 (1945), 3-16, 7.

¹⁷⁴ The eight were: Gordon Allport, Professor of Social Relations, Harvard University; Gilberto Freyre, Professor of Sociology, University of Bahia and Univeristy of Buenos Aires; Georges Gurvitch, Professor of Sociology, University of Sorbonne; Max Horkheimer, Director of the Institute of Social Research, New York City; Arne Naess, Professor of Philosophy, University of Oslo; John Rickman, M.D., Editor of the British Journal of Medical Psychology; Harry Stack Sullivan, M.D., Chairman, Council of Fellows, Washington School of Psychiatry; Alexander Szalai, Professor of Sociology, University of Budapest. Cantril chaired the meeting and Klineberg also attended. Because Cantril had not been granted permission to invite a German, Horkheimer was a sort of undercover German representative. Cantril to Allport, 25 March 1948, 327.5 A 064 (44) "48.07" Tensions affecting Int. Understanding Expert Meeting—July 1948—Paris.

support for international social science institutes. More interesting than the content of the statement, however, was the process through which consensus was achieved. The impressive roster of wise men represented disciplinary and national perspectives. The meeting began with a three hour session in which each participant shared his life history, emphasizing the “influences he thought had determined his point of view and his interests” and ended two weeks later with a two hour debriefing in which the experts “bluntly and frankly” discussed “the tensions [they] had felt during [their] two weeks together.”¹⁷⁵ While the perceived psychodynamic demands of international, interdisciplinary research turned collaborative social science into introspective group therapy, it is just as significant that the final statement was issued in a press release. Expert knowledge was intended to shape public opinion by addressing the public directly.

The “wise man” John Rickman, a British psychiatrist, acknowledged the risks of popular engagement, warning that if the method were perfected, the experts “should be prepared when they have formed conclusions to have them laughed at, attacked, and ignored for a generation, for it is most unlikely that their group findings would not uncover unwelcome truths.”¹⁷⁶ Reaction to the Common Statement proved him right. The British Press was particularly critical, with the Manchester Guardian titling its editorial “A Holiday in Paris” and describing the “twelve remorseless paragraphs” as platitudinous

¹⁷⁵ Hadley Cantril, *Tensions That Cause War: Common Statement and individual papers by a group of social scientists brought together by UNESCO* (Urbana: University of Illinois Press, 1950), 10-11. In a technique that Unesco would continue to use, the authors commented on each other’s papers in (often biting) footnotes.

¹⁷⁶ John Rickman, “Psychodynamic Notes” in *Tensions that Cause Wars*, 167-208, 204.

pointlessness.¹⁷⁷ The problem, as Louis Wirth explained in his opening address to the first World Congress of Sociology, was intrinsic to social knowledge:

With social phenomena it is difficult to demonstrate the validity of the expert's judgment, as distinguished from common-sense judgements [sic]...Unlike the generalizations of physical or biological science, [ideas in the social sciences] are thus more in the realm of the sacred than the secularly, and a critique of these sacred beliefs not infrequently is regarded as 'dangerous thought.'¹⁷⁸

As the experience of the SSD's experts repeatedly demonstrated, direct engagement with popular commonsense exposed social scientists' lack of cultural authority. According to social psychological theory and experience, a didactic approach to changing attitudes and opinions would have limited efficacy.

The Tensions Projects most ambitious early research program deployed the view from everywhere to illuminate the social, political, economic, and cultural factors that did pattern a community's "basic character structure." The Community Studies project coordinated standardized, interdisciplinary studies of a rural and an urban community in Australia, France, India, and Sweden. The choice of both a rural and an urban community responded to a suggestion by Louis Wirth in his influential article "Urbanism as a Way of Life," that such comparisons were "an indispensable prerequisite for the comprehension and possible mastery of some of the most crucial contemporary problems of social life

¹⁷⁷ Unesco's Head of Public Relations answered that the mere fact that Harvard Professor Gordon Allport and Hungarian Professor (and "prominent member of the present régime") Alexander Szalai had agreed on a single statement was momentous since "there are some frontiers across which it is not so easy for men of intellectual integrity to arrive at agreement." This was the last major contribution by an East Bloc intellectual to the SSD until the Soviet Union joined Unesco six years later, however. In a postscript to his essay, Szalai bitterly described the consensus and collegiality of the conference as a "pleasant illusion" conjured through the "diplomatic skill" (perhaps "therapeutic technique" would have been more accurate) of the "esteemed chairman." Kaplan to Manchester Guardian, 18 August 1948, 327.5 A 064 (44) "48.07" Tensions affecting Int. Understanding Expert Meeting—July 1948—Paris. Cantril, *Tensions that Cause War*, 38, 36.

¹⁷⁸ Louis Wirth, "The Significance of Sociology: opening adres [sic] of the World Congress of Sociology," *International Social Science Bulletin* 3: 2 (Summer 1951), 197-202, 200.

since it is likely to furnish one of the most revealing perspectives for the understanding of the ongoing changes in human nature and the social order.”¹⁷⁹ Adding intercultural comparisons to the urban-rural comparison promised to reveal the common tensions caused by modernization.

Intended to be a more psychologically attuned version of the *Middletown* and *Yankee City* studies, the project engaged some of the era’s most esteemed social scientists in an advisory role.¹⁸⁰ These experts developed a handbook for training field workers in an interdisciplinary set of techniques: interviews to collect life histories; administration and analysis of questionnaires; use of personal (e.g. diaries) and public documents (e.g. newspapers, censuses, tax reports); Rorschach and Thematic Apperception Tests; creation of genealogies; and indexes of social distance.¹⁸¹ As much as specific techniques, however, the training schemes emphasized the need for “sensitiveness in meaningful observation” and “the paramount necessity of good rapport and human consideration.” In fact, the psychologists described the tests as merely “auxiliary in providing some sort of quasi-objective support for the interpretations of behaviour and human relations.”¹⁸² Epitomizing the therapeutic ethos of action-research, the handbook

¹⁷⁹ Louis Wirth, “Urbanism as a Way of Life,” *The American Journal of Sociology* 44: 1 (1938), 1-24, 3. Wirth participated in the 1948 Tensions Project planning meeting described above.

¹⁸⁰ Participants included: from the United States, Edward Shils, Clyde Kluckhohn, and Eric Fromm; from Britain, Henry Dicks, Adam Curle, Max Gluckman, Daryll Forde and Ronald Hargreaves (representing the WHO); from France, Claude Lévi-Strauss, Lucien Febvre, Paul Rivet; from Sweden, Torgny Segerstedt. “Draft, Community Studies—Suggested Topics for Investigation,” 327.5: 301.18 A 53 Tensions affecting Int. Understanding—Community Studies Part I up to 31-10-49.

¹⁸¹ On the survey research tradition, see Martin Bulmer, Kevin Bales and Kathryn Kish Sklar, *The Social Survey in Historical Perspective, 1880-1940* (Cambridge: Cambridge University Press, 1991); Jean M. Converse, *Survey Research in the United States: Roots and Emergence* (Berkeley: University of California Press, 1987); Sarah Igo, *The Averaged American: Surveys, Citizens, and the Making of a Mass Public* (Cambridge: Harvard University Press, 2007).

¹⁸² “Scheme of Training in Psychological Techniques for Field Workers: Community Studies,” 327.5: 301.18 A 53 Tensions affecting Int. Understanding—Community Studies Part I up to 31-10-49.

instructed the field workers that interviews should be brought to a “non-traumatic or, better still, a therapeutic close” since “one of the main features of group discussion—whether its primary purpose be therapeutic or research—is an interpretation which will help the group to deal with its own problems.” The investigator-therapist was required “to tread the razor edge between essential detachment and inevitable and equally essential involvement.”¹⁸³

Establishing the rapport necessary to walk this razor’s edge between detachment and engagement proved quite tricky, however. The Australian team reported dissimulating to gain the trust of their research subjects/patients:

It was considered inadvisable to present the aim as being that of studying the community as a whole for the purpose of understanding the tensions leading to war. Stated so broadly, the aim would appear so unusual in the context of the normal world and life goals of the community as to create the suspicion that the actual aims of the research workers must be more mundane, and they were disguised in this curious phraseology because they were against the interests of the community, e.g. to assist the taxation authorities.¹⁸⁴

The researchers’ assumed commonsense would not comprehend their psycho-cultural hypotheses about international tensions. But rather than opprobrium for trespassing on sacred turf, as Wirth had warned, they worried about raising suspicions for the most mundane of reasons—taxes. In fact, the Indian team reported that their study was delayed by communist groups spreading a rumor that they were government agents sent to procure the rice harvest.¹⁸⁵ The field workers were not disguised tax collectors, but there

¹⁸³ Adam Curle, “Some Notes on Social Method and Theory in relation to Community Studies;” “Scheme for Training in Psychological Techniques for Field Workers: Community Studies,” 327.5: 301.18 A 53 Tensions affecting Int. Understanding—Community Studies Part I up to 31-10-49, Unesco.

¹⁸⁴ O. A. Oeser, *Social Structure and Personality in a Rural Community* (New York: Macmillan, 1954), 234.

¹⁸⁵ Guha to Angell, 28 Jan. 1949, 327.5 : 301.18 A 53 Tensions affecting international understanding – community studies Part II form 1/11/49.

was a manipulative quality to the ethos of action-research. Who wouldn't be leery of the figures crouching behind the burlap curtain?

The Community Studies project focused on in depth analysis of a small sample of the world community. In contrast, another component of the Tensions Project sought to reveal and help control international tensions by correlating thousands of superficial data points. During the summer of 1948, the SSD contracted the newly formed World Association of Public Opinion Research to coordinate standardized public opinion polls in eight countries.¹⁸⁶ For the advocates of world community, developing the capacity to gauge world public opinion was essential because the very idea of a *democratic* international authority depended upon the force of world public opinion. As Morgenthau pointed out, without a world public opinion there was no world community to govern. A government of the people had to be responsible to the will of the people; indeed, reliable public opinion polls could only be performed in the Free World. Just as importantly, public opinion would become an object of UN action. The ideal of a dialogic relationship

¹⁸⁶ The eight countries were: Australia, Britain, France, Germany, Italy, The Netherlands, Norway, Mexico and the United States. This was described as the largest international survey to date. By 1946, national opinion institutes had been propagated by Gallup's American Institute of Public Opinion in nine other countries through a sort of franchise system, while Elmo Roper's Public Opinion Research operated in nine Latin American countries. Stuart Dodd, "Toward World Surveying," *The Public Opinion Quarterly* 10: 4 (Winter, 1946-1947), 470-483, 475. A 1953 special issue of *International Social Science Bulletin* on the twentieth anniversary of public opinion polling included a list of fifty-three institutes engaged in opinion research, including twenty-seven in Western Europe, six in Latin America, but none in colonial territories or in communist states. "A List of Opinion Research Institutes," *International Social Science Bulletin*, 5: 3 (1953), 270-276. The list is incomplete as even a Tokyo National Public Opinion Research Institute described in the issue was not included in the list. See also, Ernst Kris, "Public Opinion and World Order, International Organization of Communications and Opinion Research," in Murphy ed., *Human Nature and Enduring Peace*, 369-408, 406; P. W. Martin, "Unesco and Psychology," *Journal of Social Issues: Toward a Common Ground—International Social Science* 3: 1 (Winter 1947), 10-20. For the elite academic analysis, see also, Paul F. Lazarsfeld and Genevieve Knupper, "Communications Research and International Cooperation," in Linton ed., *The Science of Man in the World Crisis*, 465-495. On the development of comparative opinion surveys as a methodology, see Pippa Norris, "The Globalization of Comparative Public Opinion Research," in *Sage Handbook of Comparative Politics*, Todd Landman and Neil Robinson, eds. (Los Angeles: Sage, 2009).

between public opinion and state authority was reified in the “barometer.” After initial polls established a baseline of opinion, repetition of the same questions created an instrument that tracked changes. An objective of the Tensions Project’s international surveys was to devise a “barometer of international tensions” that would become both an influence on and an object of state policy.¹⁸⁷ To assure enduring peace, pollsters argued that the UN should devise, evaluate, and adjust mass communications campaigns as well as social, economic and political policies in response to nation’s opinions of each other, sense of security, and loyalty to international institutions. The international polls were as much about creating as understanding world public opinion.

With the help of Cantril and his Office of Public Opinion Research at Princeton, American social psychologist William Buchanan finally published a synthesis of the results of the twenty-one question survey (which allowed for roughly 16,000 correlations) in 1953. Buchanan presented *How Nations See Each Other: A Study in Public Opinion* as both a methodological experiment into the extraordinarily tricky task of standardizing opinion polls across linguistic, cultural, and political borders and also as a contribution to understanding the role stereotypes played in international tensions. Buchanan drew on Walter Lippmann’s definition of stereotypes as “pictures in our heads” and developed the visual analogy to describe the purpose of the opinion surveys as discovering the “map” of the world people carried inside their heads.¹⁸⁸

¹⁸⁷ Dodd, “Toward World Surveying,” 473. Reflecting survey research’s commercial origins, the first barometer was a thermometer, developed in the 1920s to measure the popularity of consumer products for market research Converse, *Survey Research*, 120-121.

¹⁸⁸ William Buchanan and Hadley Cantril, *How Nations See Each Other: A Study in Public Opinion* (Urbana: University of Illinois Press, 1953), 5. See also, *International Social Science Bulletin* 3: 3. This issue of *ISSB* was devoted to reports of stereotype research carried out in affiliation with Unesco. Articles include a summary of the international opinion polls by Buchanan; analysis of the attitudes of British

How Nations See Each Other reproduced international maps inside people's heads that resembled something out of the Middle Ages, with most of the planet white space of little interest but occasionally occupied by mythical monsters: "The survey accentuated a phenomenon that has frequently been remarked—the narrow limits of the individual's horizon." The corollary to the fact that the pictures inside the public's heads were mostly empty canvases was that "national stereotypes are flexible over a period of years," and thus "*stereotypes should not be thought of as causative, but as symptomatic.*"¹⁸⁹ In fact, one of the key correlations the international survey attempted to draw was between personal security—e.g. job satisfaction, social status—and positive identification with national and international groups. Treating the causes (attitudes) instead of the symptoms (opinions) of international tensions required targeting the social and cultural institutions that patterned a nation's basic personality structure, beginning with the family and continuing through school and into industry at ever wider circles, finally extending to international institutions.

While the social scientists who participated in Unesco's program often played on the lyrical appeal of the constitution's preamble, the notion that anything *began* in the mind smacked of the fatalistic belief in a fixed, aggressive human nature as opposed to the optimistic faith in a pliable, perfectible human nature. Cultivating optimists loyal to a world community required intervening in the intimate forces that shaped individuals' deep values and attitudes. Social scientists did try to adjust attitudes through action-

elementary school students towards foreigners before and after two African teachers taught their class; a study of the development of "the idea of the homeland" and capacity for multiple-loyalties by Jean Piaget; and an innovative open-ended questionnaire study on British attitudes towards Americans.

¹⁸⁹ Buchanan, 92, 57.

research, but the basic personality structures of adults were notoriously resistant. Children, on the other hand, were susceptible to enlightenment through education, and so the social psychological methods for treating international tensions that the SSD's Tensions Affecting International Understanding project researched were applied in the Education Department's Education for International Understanding Program.

The Education for International Understanding Program essentially consisted of a series of seminars that exemplified the epistemological-pedagogical strategy of the view from everywhere. The Education Department hosted the first seminar in the summer of 1947 in Sèvres just outside Paris. Unesco contracted the organization of the seminar to the Associate Director of the Division of Education of the Carnegie Endowment for International Peace, Howard E. Wilson. A staff of sixteen and fifty-one visiting lecturers—psychiatrists, psychologists, sociologists, anthropologists, educators—guided eighty-one participants from thirty-one countries through what Wilson described as a “pioneering experience, intended to explore the possibilities and limitations and problems of the Seminar technique.” Instead of a traditional series of lecture courses, which would not “reveal and utilise the rich variety of backgrounds and interests” of the participants and would be too “authoritarian in tone” for a Unesco undertaking, the six week seminar used the study-group method to create a collaborative “laboratory atmosphere.” The seminar was an experiment.¹⁹⁰

The purpose of the seminar, like all those that followed, was three-fold: 1) “the creation of bonds of friendly understanding and co-operation among members; 2)

¹⁹⁰ Howard E. Wilson, “Unesco’s First Summer Seminar,” 22 Dec. 1947, 327.6 : 37 A 074 (44) “47”, Educ. For Int. Understanding – Seminar – Sevres 1947, Part IV, reports, foreword, Working Papers etc., Unesco.

instruction in techniques of education for international understanding; and 3) the production of reports to help educators around the world enhance international understanding.¹⁹¹ These reports were published in the *Towards World Understanding* series, all of which contained the proviso that the value of the seminar could not be judged by the quality of the reports: “The final test of a seminar is its effect on the participants of living and working in an international community, and through them, the effect on educational practice in the countries from which they come.”¹⁹² The seminar manifested the ideal of the world community in microcosm. The emphasis of the seminars was on adjusting the character of the participants, on creating transnational communities, and on widening teachers’ circles of loyalty.

The next summer’s experiment in living in a world community—held in Podebrady Czechoslovakia just months before the three East Bloc member states stopped participating in Unesco’s program—emphasized the conviction that education for international understanding was a process that began at birth and extended through all facets of a citizen’s life. The seminar focused on the education of children between the ages of three and thirteen and was addressed by two of social science’s stars: Columbia University Teacher’s College anthropologist Ruth Benedict and future SSD director Alva Myrdal. Myrdal, who was a leading intellectual of the Social Democratic Party in Sweden, presented on “Social Obstacles to Education,” which included everything from poverty (which, she emphasized, children experienced as a relative quality), cramped

¹⁹¹ Howard E. Wilson, “Unesco’s First Summer Seminar,” 22 Dec. 1947, 327.6 : 37 A 074 (44) “47”, Educ. For Int. Understanding – Seminar – Sevres 1947, Part IV, reports, foreword, Working Papers etc., Unesco.

¹⁹² *In the Classroom with Children under Thirteen Years of Age: Towards World Understanding V* (Paris: Unesco, 1952), 4.

urban housing, single parents, and working mothers. Overcoming the obstacles required interventions like financial assistance to families, town planning, and marriage counseling.¹⁹³ Benedict, in one of the last public appearances before her death, warned against taking the American experience of assimilating European immigrants as a model for the world community. Educators had to learn to respect cultural diversity. Polygamy, monogamy, and polyandry were simply “alternative solutions” to the problem of providing a stable home, and each custom was subject to abuses that could stifle the full development of personalities. National cultural patterns were deeply embedded in the individual through practices that began at birth, and so educators of world citizens had to become students of comparative cultures who, like the anthropologist, exhibited “objectivity and tolerance” in the face of difference.¹⁹⁴

The broad conception of education for international understanding went beyond interwar initiatives sponsored by Unesco’s predecessor, the International Institute for Intellectual Cooperation, which focused on reforming curriculum and textbooks.¹⁹⁵ While

¹⁹³ Alva Myrdal, “Social Obstacle to Education,” in *The Influence of Home and Community on Children under Thirteen Years of Age: Towards World Understanding VI* (Paris: Unesco, 1952), 37-50.

¹⁹⁴ Ruth Benedict, “The Study of Cultural Continuities,” in *The Influence of Home and Community on Children under Thirteen Years of Age: Towards World Understanding VI* (Paris: Unesco, 1952), 5-15, 7. To illustrate her point, Benedict described how the swaddling practices of different nations embedded that nation’s cultural pattern in the developing infant. With the publication of Gorer and Rickman’s, *The People of Great Russia* the following year, “the swaddling hypotheses”—that Russian’s developed authoritarian personalities because they were wrapped tightly as infants— would become the favorite foil for social psychology’s critics. Contemporary theories of human development, particularly coming out of psychiatry, stressed the importance of early childhood on personality formation. Unesco partnered with the WHO on training nursery school teachers in mental hygiene and staff members organized an international experimental nursery school for their children in Paris. Geoffrey Gorer and John Rickman, *The People of Great Russia: A Psychological Study* (London: Cresset Press, 1949). 613.86 A 06 WHO/Unesco”51,” Meeting on the Mental Hygiene org. by WHO/UNESCO (Training of Nursery School Teachers) Paris 1951. On the nursery school, see the Staff Association magazine, “UN Nursery School in Paris,” *Opinion* 1 (July 1955), 9. On culture and personality research, see George Stocking Jr. ed., *Malinowski, Rivers, Benedict and Others: Essays on Culture and Personality* (Madison: University of Wisconsin Press, 1986).

¹⁹⁵ Textbook revision was a major and long-running concern of Unesco’s education department, too. Cf. *History Textbooks and International Understanding: Towards World Understanding XI* (Paris: Unesco,

European experts endorsed the inclusive approach and British and European internationalists had a strong interwar tradition of education for international understanding, the most intense pressure to maintain it came from the United States.¹⁹⁶ The U.S. delegation consistently pushed for more emphasis on Education for International Understanding as a part of Unesco's total program, arguing that it should be an inter-departmental priority that touched on all aspects of citizens' lives, even targeting adults.¹⁹⁷

Seminar participants, however, tended to be educators who understood the school as a strategic point through which experts could intervene in human development. The report *In the Classroom with Children under Thirteen*, was most explicit on this point: "Not only can [kindergarten] correct many of the errors of home training, but it can also prepare the child for membership, at about the age of seven, in a group of his own age and habits—the first of many such social identifications that he must achieve on his way to membership in the world society." "The narrow family spirit of the parents" prevented children from integrating with their class group and, the report warned, it was "in the family that the children are infected with nationalism." In school children could be trained to develop a "critical sense," defined as an "objective attitude." Indeed, the

1953); James Quillen, *Textbook Improvement and International Understanding: Prepared for the Committee on International Education and Cultural Relations of the American Council on Education, and the United States National Commission for Unesco* (Washington D.C.: American Council on Education, 1948). In Scandinavian countries, often described as a model, beginning in the 1930s history textbooks were required to be approved by neighboring nations.

¹⁹⁶ For British and European precedents, see Derek Heater, *Peace through Education: The Contribution of the Council for Education in World Citizenship* (London: Falmer Press, 1984).

¹⁹⁷ Foreign Service Despatch, "Notes from UNESCO House – Thirty-sixth Session of the Executive Board," 18 Dec. 1953, 398.43-Unesco/7-3153, RG 59, National Archives Records Administration, College Park, Maryland [hereafter NARA]. U.S. State Department Unesco Relations Staff to Education Department, 19 Oct. 1954, 327.6 A 022, Expert Cttee. For Int. Understanding, Part III from 1/VII/54, Unesco.

essential psychological unity of mankind was demonstrated by the “universality of certain intellectual behaviour-patterns, precisely, those that constitute the scientific method.”¹⁹⁸ Scientific rationality provided the cultural common ground on which a world culture could be built.

Yet as *A Handbook for Suggestions on the Teaching of Geography*, noted, international understanding required “attitudes of sympathy, tolerance, co-operation and respect,” and so the “emotions as well as the intellect are involved.”¹⁹⁹ Geography education, in fact, served a critical function in the production of world citizens; it demonstrated the interdependence of nations and helped students develop a “world perspective.” One recommendation even encouraged teachers of young children to reverse the normal sequence of lessons that began with the classroom, the school building, and town and widened to include the nation, continent, and finally the globe. Beginning with the whole planet would help students “get into the habit of regarding the earth as his habitat, and his country as part of it, instead of considering the rest of the world as an annex to his own country.”²⁰⁰ Although this suggestion rather recklessly inverted the social psychological theory of how children actually developed group loyalties, it shows the intent to cultivate citizens who respected the view from everywhere.

¹⁹⁸ *In the Classroom with Children under Thirteen Years of Age: Towards World Understanding V* (Paris: Unesco, 1952), 9, 53, 45.

¹⁹⁹ *A Handbook on the Teaching of Geography: Towards World Understanding X* (Paris: Unesco, 1952), 7. See also, *Some Suggestions on the Teaching of Geography: VII* (Paris: Unesco, 1949). History was also a privileged subject in the program; see, *Suggestions on the Teaching of History, by C. P. Hill: Towards World Understanding IX* (Paris: Unesco, 1953).

²⁰⁰ *In the Classroom with Children under Thirteen*, 12.

The goal of the Education for International Understanding program was clear: developing world citizens. But without a world community represented by a world government, the meaning of world citizenship itself was problematic. This problem was analyzed in the pamphlet *The United Nations and World Citizenship*, the product of another 1948 summer seminar that met at Adelphi College (and, for at least one afternoon, Eleanor Roosevelt's estate) in New York. The atomic bomb and bacterial warfare meant that "one world or none [was] the choice given us by military reality." The report was typical in asserting that world government was no longer "merely a dream, a desire of idealists; it is a practical problem that we must solve if we are to live." Demonstrating their "realistic approach" to international organization, the authors emphasized the weaknesses of the UN System. In particular, it distinguished between the current reality of "international" cooperation and the necessary goal of "transnational" cooperation. Whereas international cooperation implied a forum in which states negotiated programs based on their national interests (which, the authors noted, often were not actually in the interests of the majority of their citizens), transnational cooperation meant working together for the common good of the world community. The report identified the kernel of "functional world government based on transnational rather than international co-operation" in the more narrowly focused, expert administered programs of the specialized agencies. In an effective transnational government, the recommendations of the Food and Agriculture Organization's experts would have the power to bind governments.²⁰¹ And yet the pamphlet's "realism" emphasized the fact that

²⁰¹ "A Group Report on the United Nations and World Citizenship," in *The United Nations and World Citizenship: Towards World Understanding IV* (Paris: Unesco, 1949), 5, 14.

the conditions in which a transnational government could function did not exist. In the absence of world government, world citizenship referred to a psychological condition, but the ultimate goal was to make it a political reality.²⁰²

In this sense, *The United Nations and World Citizenship* highlighted the dilemma that education for international understanding was education for a fictional future world. The question, then, was whether the internationalists could transform their fiction into commonsense.

The United States and Unesco

This question is not exactly whether internationalist social scientists successfully popularized their conclusions. Rather, it is whether these cosmopolitan intellectuals articulated with a public that had a chance of forming a viable state?²⁰³ Did they help citizens make sense of their world? Did they interpret social experiences in terms the public found worth appropriating? Did they express a purpose around which a movement could congeal? For the intellectuals who envisioned a democratic world community, the relevant public was first and foremost the United States. American social scientists were the most prominent authors of this particular fiction, they engaged with the most

²⁰² In *The Authoritarian Personality* Adorno pointed out the unmarketability of educating children for an imagined future rather than the world that was, as well as criticizing American's "education complex" that rationalized inequality as a failure of personal "maturity" and ignorance instead of demanding social change or thinking through complex political choices. Adorno, "Education Instead of Social Change," in *The Authoritarian Personality*, 700-702.

²⁰³ Antonio Gramsci, "Hegemony, Relations of Force, Historical Bloc," "The Art and Science of Politics," and "Intellectuals and Education," in David Forgacs, *The Antonio Gramsci Reader: Selected Writings 1916-1935* (New York: NYU Press, 2000), 189-245, 300-322. See also, Steven Feierman, *Peasant Intellectuals: Anthropology and History in Tanzania* (Madison: University of Wisconsin Press, 1990). On movements and meaning, Manuel Castells, *The City and the Grassroots: A Cross-Cultural Theory of Social Movements* (Berkeley: University of California Press, 1983); Sidney Tarrow, *Power in Movement: Social Movements and Contentious Politics*, 2d ed. (New York: Cambridge University Press, 1998).

enthusiastic audience, and the United States was the hegemonic leader of the Free World—the prospects for any world community, however distant, depended on America.

Sixty-five years after its founding, it is hard to remember contemporary American enthusiasm for the founding of the United Nations without blushing (or smirking).²⁰⁴

Contemporary social scientists quantified the surprising breadth of American's support of the UN to demonstrate that a strong international authority was a realistic proposition.

The SPSSI's *Human Nature and Enduring Peace*, for example, provided a detailed analysis of public opinion on international collaboration, reporting that 71 percent of Americans favored participation in a Union of Nations in 1944, compared to the 33 percent who supported joining the League of Nations in 1937. And the better educated, informed and paid, the more likely one was to support a strong international organization: according to a 1944 *Fortune* survey, 77.7 percent of well informed respondents thought the United States should actively participate in “a world organization with court and police strong enough to enforce its decisions,” compared to 61.4 percent of poorly informed and 33.3 percent of uninformed respondents.²⁰⁵ Another Gallup poll in 1947 reported that 56% of Americans believed the UN should be “strengthened to make it a world government with power to control the armed forces of all nations including the United States.” In fact, the State Department kept tabs on the World Government movement. A 1947 internal memo reported that the world government movement was “under able and aggressive leadership,” supported by organizations outside the movement itself, including churches, the American Veterans Committee, and even the

²⁰⁴ For a reminiscence on this enthusiasm, see Stanley Meisler, *United Nations: The First Fifty Years* (New York: Atlantic Monthly, 1995).

²⁰⁵ Murphy, ed. *Human Nature and Enduring Peace*, 387, 391.

Executive Committee of the American Legion, which proposed establishing a world army, eliminating the veto in the Security Council, and arms control.²⁰⁶ Thirty state legislatures passed resolutions supporting an international organization that would pool U.S. sovereignty with other countries, and as late as 1949, 111 members of the House of Representatives (including John F. Kennedy, Gerald Ford, and Henry Cabot Lodge) sponsored a resolution to make it “a fundamental objective of the foreign policy of the United States to support and strengthen the United Nations and to seek its development into a world federation.”²⁰⁷

American support for Unesco was especially pronounced. In 1945, a State Department analysis of the press and opinion leaders reported nearly unanimous approval for plans to found an international educational organization.²⁰⁸ Once the Organization began work, grassroots support quickly grew. In fact, the scholars at the 1947 World Community conference in Chicago were both heartened and disturbed by Unesco’s mass appeal. Attempting to appraise the results of the conference, the final commentator, Herbert Emmerich of the Chicago Public Administration Clearing House, ended on a cautionary note that could not contain his enthusiasm: “It is very easy to feel that UNESCO is the whole show.” While it was not,

²⁰⁶ “National Trend of Opinion on World Government, 1946-1953” and “The Movement for World Government in the United States,” in *World Government 1946-1951*, Office of Public Opinion Studies 1943-1965, Public Opinion on Function and Organization of the United Nations, 1946-1959, Box 23, RG 59, NARA.

²⁰⁷ Thomas G. Weiss, “What Happened to the Idea of World Government,” *International Studies Quarterly* 53 (2009), 253-271, 259. For the long history of world federalism, see Joseph Barrata, *The Politics of World Federation* 2 vols. (Westport: Praeger Publishers, 2004).

²⁰⁸ “Attitude of American Public Opinion Toward Unesco,” Oct. 1 – Dec. 31, 1945, in Unesco (Misc.) 1947-1952, Office of Public Opinion Studies 1943-1965, Public Opinion on Function and Organization of the United Nations, 1946-1959, Box 23, RG 59, NARA.

“[it] has demonstrated a very particular strength. I have seen it operating in this country, where practically hundreds, if not thousands, of American voluntary groups come together because they want to hear about UNESCO....it is a mass concept of culture—democratic, ‘grass-roots’ culture—it goes to every schoolteacher and every school child in the country. It has a vast political potential if we know how to harness it correctly. The fact that the Elks, the Knights of Columbus, and the Rotary clubs show up, as well as women’s clubs, at UNESCO meetings is something we cannot afford to sneer at. It evidences an enormous appetite for a new kind of citizenship in a new world community and world society.”²⁰⁹

Elite internationalists found the public’s enormous appetite exciting, but worried about how to harness the explosion of energy ignited by Unesco’s claim to be “the people’s UN agency.”

The architects of Unesco’s constitution had designed structures for including non-state actors and for organizing public participation. The Executive Board, which oversaw the design and execution of the program, consisted of members elected in their individual capacities (i.e. not government representatives). This idea, which European elites, particularly the French, held dear, was that Board members would be chosen for their intellectual eminence and would represent the transnational world of learning, not the narrow interests of national governments. In practice, seats on the Board were reserved for representatives of the big three (the United States, Britain, and France) and many governments briefed their (non)representatives. A more innovative feature was a system of National Commissions. Unesco encouraged each member state to form a National Commission made up of nongovernmental organizations and notable individuals that would advise national governments and coordinate with the Secretariat to carry out the

²⁰⁹ Herber Emmerich, “Appraisals of the Conference,” in Wright ed., *World Community*, 315. These comments were not anomalous but reflected the conference’s general interest in Unesco. Ruth Benedict offered one of the other appraisals.

Organization's mission.²¹⁰ In practice, the Ministries of Education often organized the National Commissions, which ranged from a few notable officials or citizens to complex layers of committees, sub-commissions, and executive councils.

The U.S. National Commission was by far the most active, and billed itself as the bridge between Unesco and the people. It was the most organizationally complex, too. The State Department supplied a small Unesco Relations Staff to aid the National Commission's one-hundred members, forty appointed by the State Department and the others representatives of major voluntary associations ranging from the unions and professional associations to service clubs and activist groups. Members served as delegates to the General Conference. The semi-governmental National Commission fit neatly within the U.S. tradition of government supported yet still proudly nongovernmental cultural relations programs.²¹¹

Beginning in June, 1947, the State Department published the monthly *National Commission NEWS* to help publicize Unesco, particularly the Commission's domestic activities. It also published an assortment of brochures, such as *Unesco and You*, intended to help individuals participate in Unesco's mission. *Unesco and You* presented a "six-point program" that stressed "any activity that teaches racial tolerance, attacks ignorance of other peoples, and promotes the conditions of a world peace can be termed a

²¹⁰ The best analyses of the initial bureaucratic structure of Unesco are, Charles Ascher, *Program-Making in Unesco, 1946-1951* (Chicago: Public Administration Clear House, 1951); James P. Sewell, *Unesco and World Politics: Engaging in International Relations* (Princeton: Princeton University Press, 1975), 71-137.

²¹¹ For a detailed description of the structure and work of the U.S. National Commission during its early years, see John Leo Cefkin, *A Study of the United State National Commission for UNESCO* (New York: PhD Dissertation, Columbia University, 1954). On the bias for nongovernmental cultural relations, see Frank A. Ninkovich, *The Diplomacy of Ideas: U.S. Foreign Policy and Cultural Relations, 1938-1950* (Cambridge: Cambridge University Press, 1981).

‘UNESCO’ activity, or said to embody the ‘UNESCO approach.’”²¹² As ineffectual as such a milk-toast call to arms might appear, the response quickly overwhelmed the Commission’s abilities to manage the movement. At a 1947 meeting of the National Commission in Chicago, the Chairman of the Commission, Milton S. Eisenhower (President of Kansas State University and brother of the general), stated, “The tide of popular interest is rising so rapidly that I am sometimes frightened by it.”²¹³

One of the early indicators of Unesco’s popularity was the Commission’s first national meeting in Philadelphia during March, 1947 at which 1,000 delegates representing 500 organizations gathered to discuss its domestic program and to publicize the new organization. The second national meeting in 1949 in Cleveland drew “a capacity audience of 9,000” to hear Eleanor Roosevelt and Director-General Torres Bodet. In between two regional conferences in Denver and San Francisco spread the Unesco message in the West: nearly 2,000 delegates representing 576 organizations attended the Denver meeting, figures which grew to 2,184 and 948 respectively in San Francisco.

Social scientific theory and methods were an integral component of this activity. For example, at the Mountain-Plains Regional Conference on Unesco in Denver, the National Opinion Research Center of the University of Denver distributed a 41 page report titled, “Where UNESCO Begins: The Climate of Opinion in the United States and Other Countries” that summarized and analyzed survey research on attitudes towards

²¹² Secretariat of the United States National Commission for UNESCO Department of State, *UNESCO and You: Questions and Answers on the How, What, and Why of Your Share in UNESCO—Together with a Six-Point Program for Individual Action*, (Washington, D.C.: GPO, Dep. of State publication 2904, Sep., 1947), 17.

²¹³ Anne O’Hare McCormick, “Abroad: Where the United Nations Touches the Grass Roots,” *New York Times* (Sep. 13, 1947), 10.

international cooperation, minority groups within the United States, immigration, and aid to war devastated countries.²¹⁴ Wallace Stegner contributed “A Delegate’s View of the Conference” for the National Commission’s report on The Pacific Regional Conference. The Conference, he wrote, “was built around one idea: to carry the ideas and principles of UNESCO from the level of international planning, international organization, and abstract philosophical statement, to the grass-roots local level, to communities and to individuals.” To accomplish this, the Conference was broken into discussion groups, which used the “group dynamics” techniques that Lewin had developed at MIT. Initially skeptical of the elaborate technique (which would be hard to distinguish from highly structured small group work in today’s high schools), Stegner left impressed with the quality of the meetings and the “inclination to be [as] critical of local or American attitudes as to be suspicious of foreign ones.” The Human and Social Relations section was the most popular, with 36 percent of delegates making it their first choice compared to 29 percent for Education and just six percent for Natural Sciences. It focused on relieving “local tensions springing from prejudice and ignorance” as an example to the world—a task that could begin with legislation based on President Truman’s Civil Rights Report. In the Natural Sciences section, scientists “made it plain that they felt the future of the world depended on bridging the gap between natural and social sciences” and passed a resolution recommending study of legislation transforming the UN into a “Federal World Government with power to enact, interpret, and enforce world law on

²¹⁴ NORC, “Where UNESCO Begins: The Climate of Opinion In the United States and Other Countries: A Summary of Information and Attitudes Bearing on the Work of UNESCO,” May, 1947, Office of Public Opinion Studies 1943-1965, Public Opinion on Function and Organization of the United Nations, 1946-1959, Box 23, RG 59, NARA.

individuals to prevent war.” The real accomplishment of the Conference, Stegner concluded, was that it had “mobilized...a nucleus of hitherto ineffective, scattered, or bewildered workers for peace and has given them a firm direction and a sense of solidarity.”²¹⁵ The intellectuals who imagined a world community did represent a public.

A flurry of organizing at the town, county and state level grew out of these conferences.²¹⁶ The *Unesco National Commission News* promoted Kansas as a model of local Unesco engagement. “Despite icy roads” that suppressed attendance, a meeting of the Kansas State Unesco Commission in December 1947, attracted 802 delegates representing sixty-four of the state’s 105 counties and 170 state-wide organizations. 528 observers joined the delegates to discuss how Kansans could contribute to world peace through developing mutual understanding. Actions included setting up “editorial councils” of knowledgeable citizens to send letters to the editor in support of international causes like the European Recovery Program. A Committee on Elementary and Secondary Education “began a critical study of textbooks used in Kansas schools to determine wherein they feed prejudices, wherein they are inaccurate, and, in general, wherein they contribute or fail to contribute to international understanding.” A Commission sponsored clippings service determined that in one month alone 1,100 stories ran in Kansas newspapers that referenced Unesco producing 260,000 words of copy and bankrupting the Commission’s clippings budget. Unesco inspired towns,

²¹⁵ Wallace Stegner, “A Delegate’s View of the Conference,” in *Report on Pacific Regional Conference on UNESCO, INTERNATIONAL RELATIONS*, 1948 United Nations: UNESCO, National Commission: Regional Conference, Pacific: San Francisco, National Research Council Collections, National Academies Archives, Washington, D.C., 7-17, 7, 10, 17, 47.

²¹⁶ Benjamin Fine, “U.S. to Broadcast to Greece, Turkey: Benton Discloses Plan After His Address Before American Commission for UNESCO,” *New York Times* (March 25, 1947), 13; John Leo Cefkin, “A Study of the United State National Commission for UNESCO,” PhD Dissertation, Columbia University, 1954, 134-138.

universities and public schools “adopted” their kind in countries like Germany, the Netherlands, Ethiopia and China.²¹⁷

This type of initiative undertaken by a “State Commission” that had no formal relationship with the government, however, worried both National Commission members and the State Department, which requested that all state organizations drop the official-sounding “commission” title. Similarly, despite the success of the regional meetings in fostering grassroots participation, the National Commission stopped sponsoring them after the San Francisco meeting, in part because it struggled even to keep up with coordinating the activities of its own 100 member board and numerous committees.²¹⁸ But the commissions renamed themselves councils and the grassroots continued to grow.

Yet if fears of atomic annihilation and repugnance of racial prejudice inspired an incipient Unesco movement, countervailing forces were just as strong. In the early Cold War, even the pursuit of peace became a suspect goal. In 1946 the Soviet Union formed the Communist Information Bureau to launch its own cultural campaign. The Cominform generally operated through “captured” front organizations such as the World Peace Council and the World Federation of Democratic Youth, and directed the policy of Communist Parties in Western Europe. A series of ostensibly open conferences like the 1947 East Berlin Writers’ Congress, the World Congress of Intellectuals in Wroclaw, Poland and the 1949 World Congress of Peace in Paris evolved into a massive “peace offensive.” The peace offensive reached its apex in the Stockholm Appeal, a petition

²¹⁷ U.S. National Commission for UNESCO, “The Kansas Story on UNESCO: How a State Council Was Organized and Is Contributing to International Understanding and Peace,” (Washing, D.C.: GPO, Dep. of State, publication 3378, 1949), 21, 30, 31, 33, 34.

²¹⁸ Cefkin, *A Study of the United State National Commission for UNESCO*, 138.

against Atomic weapons that its supporters claimed garnered a half-billion signatures around the world. The All-American Conference to Combat Communism (claiming a membership of eighty-million immediately upon forming) denounced the Appeal as “an important weapon” in “pernicious psychological warfare.” An American iteration of the European peace conferences held at the Waldorf-Astoria Hotel in New York City in 1949 degraded into an ugly confrontation between ex-communist intellectuals turned cold warriors and the last hangers-on to a lost popular front consensus. A few meek Soviet intellectuals were caught in-between their KGB handlers and their CIA sponsored assailants. The “minds of men” was a battlefield in a war between cultures.²¹⁹

The United States government decided that the high stakes of the cultural Cold War could not be trusted to an unpredictable intergovernmental organization. Instead of funneling resources into Unesco’s program, precious American dollars went to ostensibly private enterprises like the Congress of Cultural Freedom or Free Radio Europe that in reality CIA were fronts.²²⁰ Tellingly, these ventures were coordinated by the Agency’s International Organizations Division. In 1946, the US National Commission for Unesco had unanimously endorsed spending \$250 million on “the worldwide communications system required by the United Nations” to reach “all the major areas of the world” via radio. By 1950, the Voice of America had, as Time Magazine enthused, “the richest

²¹⁹ Bernard S. Morris, “Communist International Front Organizations: Their Nature and Function,” *World Politics* 9: 1 (Oct. 1956), 76-87; Tony Judt, *Postwar: A History of Europe Since 1945* (New York: The Penguin Press, 2005), 197-225; Caroline Kennedy-Pipe, *Stalin's Cold War: Soviet Strategies in Europe, 1943 to 1956* (Manchester: Manchester University Press, 1995); “Stockholm Peace Declared ‘Phony:’ 13 National Group Leaders Brand Plea a Soviet Scheme for ‘Paralyzing’ America,” *New York Times* (July 16, 1950), 24.

²²⁰ The CIA funded the Congress of Cultural Freedom out of what amounted to a slush fund of \$200 million per year of Marshall Plan money; by the early 1950s Radio Free Europe had a budget of \$10 million. Frances Stonor Saunders *Who Paid the Piper? The CIA and the Cultural Cold War* (London: Granta Books, 1999), 105-106, 132.

sponsor of them all, and sells the world's most priceless product. The sponsor is Uncle Sam and the product freedom."²²¹ In 1947 congressional debates over the Informational and Educational Exchange Act (the Smith-Mundt Bill), the State Department described the Act as "an aggressive program in support of our foreign policy."²²² Clearly, this version of cultural relations was not about transcending national interests.

The difficulty of using Unesco as an agent in the cultural Cold War meant that the State Department developed an attitude toward the organization that resembled damage control more than nurturance. After the United States and UN Secretary-General Trygve Lie pressured Unesco to deploy an "informational" campaign to support the UN intervention in Korea, any hope that Unesco might bridge the ideological divide between the East and West appeared lost. Indeed, political scientist Walter Sharp, whose work directing Unesco's International Collaboration Project was described in the previous chapter, wrote, "By contributing in the short run to clearer understanding of what Soviet

²²¹ While the US poured tens-of-millions of dollars into psychological warfare compared to a few million for Unesco, it still provided approximately 40% of all the specialized agencies' budgets. Contemporary (and more recent) critics of U.S. stinginess during this first decade often failed to acknowledge the real dilemma that more American dollars threatened to swamp the already foundering notion that Unesco represented the interests of equal states; that is, unless other nations also increased their contributions, which in the lean postwar years was effectively impossible. "Report of the U.S. National Commission for UNESCO: With Letter of Transmittal from Assistant Secretary Benton to the Secretary of State," Sep. 27, 1946, (Washington: GPO, Dep. of State Publication 2635), 2; "The Voice of America: What It Tells the World," *Time Magazine* (May 1, 1950). Alan L. Heil, *Voice of America: A History* (New York: Columbia University Press, 2003). The cultural Cold War has been a popular field during the last decade. For a good introduction, see Giles Scott-Smith & Hans Krabbendam, *The Cultural Cold War in Western Europe, 1945-1960* (London: F. Cass, 2003). On changing conceptions of Unesco's role in American foreign policy, Frank A. Ninkovich, *The Diplomacy of Ideas*; S.E. Graham, "The (Real)politik of Culture: U.S. Cultural Diplomacy in Unesco, 1946-1954," *Diplomatic History* 30: 2 (April 2006), 231-251.

²²² Ninkovich, *The Diplomacy of Ideas*, 134-5.

totalitarianism means, UNESCO's action may in fact tend to increase rather than to alleviate existing bipolar political tensions."²²³

Even as the Secretariat half-heartedly implemented its information campaign in Korea, Cold War tensions threatened Unesco's integrity as an international organization. The attack came from within the United States. In the fall of 1949, the State Department's survey of media and opinion leaders found that Unesco continued to receive favorable coverage, but that "very sharp" criticism was on the rise. By January 1952, it was keeping tabs on a "small number of right wing organizations," such as the America First Party, that advocated U.S. withdrawal from the UN. The study warned that the radical fringe might infect more mainstream groups like the American Legion.²²⁴ By then, however, the attack against the UN System was already an integral component of McCarthyism, and just as Unesco inspired unparalleled enthusiasm, so it attracted unequalled hostility. In June, Senator Pat McCarran succeeded in attaching a rider to an appropriations bill that banned funding any international organization that "directly or indirectly promoted 'one-world government or world citizenship.'" The explicit target was Unesco. As an Anne O'Hare McCormick headline in the *New York Times* stated, "The Charge Against Unesco Is 'Internationalism.'"²²⁵

²²³ Walter R. Sharp, "The Role of Unesco: A Critical Evaluation," *Proceedings of the Academy of Political Science* 24: 2 Special Issue: "The Defense of the Free World" (Jan. 1951), 101-114.

²²⁴ "Attacks on the United Nations," 15 Jan. 1952, Office of Public Opinion Studies 1943-1965, Public Opinion on Function and Organization of the United Nations, 1946-1959, Box 23, RG 59, NARA.

²²⁵ McCormick was a member of the U.S. Unesco National Commission. "Committee to Investigate UNESCO Study Named," *Los Angeles Times* (Sep. 5, 1952), 4; John D. Morris, "Senate Unit Kill Vatican Envoy Ban: House Bill Is Reversed: Funds for 4 Departments Voted: UNESCO Donations Barred," *New York Times*, (Jun. 25, 1952) 18; Anne O'Hare McCormick, "Abroad: The Charge Against UNESCO is 'Internationalism,'" *New York Times* (Jun. 30, 1952), 18. On McCarthyism and intellectuals, see Ellen Schrecker, *No Ivory Tower: McCarthyism and the Universities* (New York: Oxford University Press,

McCormick was right, but the charge was cloaked in the threat of communist subversion. When McCarran's Senate Internal Security Subcommittee, under the leadership of Mississippi Senator James O. Eastland, began investigating the loyalty of U.S. nationals working for UN Organizations, Unesco was the first specialized agency it targeted. After Truman signed Executive Order 10422 on January 9, 1953, all U.S. citizens working for a UN agency were required to pass the FBI administered loyalty check that Executive Branch employees had been subjected to since 1947. The Order applied even to academics who were simply attending a UN sponsored conference, and the loyalty screening had to be repeated for each new contract, no matter how many times a citizen had been cleared before. Loyalty Boards even asked for the finger prints of American heads of UN agencies who had been elected by member states to represent the international community. Like all the others, Unesco's new Director General Luther B. Evans complied, although his loyalty to the United States hardly could be questioned since he regularly passed confidential information on to the State Department. Facilitating background checks became a major responsibility of the State Department's Unesco Relations Staff. The FBI routinely took months to submit its reports to the International Organizations Loyalty Board, which often rendered clearance a moot point. The Unesco Relations Staff, however, thought of the Order as a sort of prophylactic against charges of subversion, even proactively deciding that all new members of the National Commission should be screened.²²⁶

1986); Donald K. Price, *Threatening Anthropology: McCarthyism and the FBI's Surveillance of Activist Anthropologists* (Durham: Duke University Press, 2004).

²²⁶ This analysis is based on a review of the Unesco Relations files at the National Archives and Records Administration. Cf. Memorandum of Conversation, "Unesco Problems," 15 Aug. 1953; Foreign service

The effects of Executive Order 10422 on Unesco were significant. Predictably, it led to a decrease in the number of Americans employed by the Secretariat and contracted as experts, thus actually undermining U.S. influence. Compounding this effect was the loss of international prestige inflicted by the hypocrisy of the leader of the Free World violating its citizens' civil rights and the pure foolishness of a witch hunt that undermined the international institutions the country underwrote. The loyalty investigations quashed lingering hopes that UN Organizations could evolve into agents of truly transnational cooperation. Commenting on the McCarran amendment banning appropriations for any international organization advocating world government, the *Manchester Guardian* took a condescending pleasure in the multiple layers of irony: "The Russians, from precisely the same narrow nationalist standpoint, also denounce those who advocate 'world government'! But what of all the American idealists who, following Wendell Willkie, talk so much and so earnestly of 'One World'? They must be having a thin time against the Stalin-McCarran ideological combination."²²⁷

Ironically, however, the loyalty checks also intensified the international identity of Unesco's Secretariat in Paris. The Loyalty Board identified eight Americans in the Secretariat with subversive ties and requested that their contracts be terminated. By demanding that U.S. members of the Secretariat put loyalty to the United States ahead of loyalty to the international organization and impugning the "integrity" of citizens who

Despatch, "Application of reference Executive Order, 18 Aug. 1953; Henderson to Fairbank, 15 Dec. 1953; MuCullough to McIlvaine, "Clearance of National Commission Members," 31 Dec. 1953, all in Office of Public Opinion Studies 1943-1965, Public Opinion on Function and Organization of the United Nations, 1946-1959, Box 23, RG 59, NARA. On McCarthyism and the UN, see Shirley Hazzard, *Defeat of an Ideal: A Study of the Self-Destruction of the United Nations* (Boston: Little, Brown & Co., 1973).

²²⁷ *Manchester Guardian* (30 June 1952), quoted in *Unesco Weekly Press Review*, Unesco Archives, Paris.

rejected nationalism, Executive Order 10422 attacked the ideological foundations of internationalism. Unesco's Staff Association rallied to the defense of the accused. The Staff Association typically had trouble recruiting representatives and focused on issues of pay, stocking the staff bar, and inter-agency soccer matches. In defense of the eight, however, its passionate legal and moral argument centered on the duty of a member of the international civil service to maintain loyalty to the international community, a loyalty that did not contradict but rather was superimposed on loyalty to his country. An international civil servant's integrity depended on rejecting the narrow perspective of national interest. An international identity was a vaguely felt, lightly worn affiliation until it came under attack.²²⁸

And despite the vehemence of the anticommunist attack on the UN and Unesco, it is far from clear that their status declined in American public opinion. In fact, State Department analysis in mid-1952 showed that despite "some adverse results in local communities and private organizations," the attacks had resulted in "no diminution in the broad allegiance of the general public to the UN. Indeed, grass-roots support appears to be increasing." Along with the hard numbers, the National Opinion Research Center (which had participated in the Denver Regional Conference on Unesco) supplied the State Department with interpretive comments that called the results of the poll "encouraging to those of us who are trying to correct current misinformation about the

²²⁸ "Loyalty Board Visits Paris," *Unesco Staff Association Bulletin* 11 (12 July 1954), 6-8; "Tous pour Sept, Sept pour Tous," *Opinion* 2: 8 (1955), 3-4. The Staff Association magazine provides a nearly monthly summary of the events. The loyalty hearings helped galvanize a federation of international organization staff associations. For a moving firsthand account of the experience of a Unesco employee called before the Loyalty Board, see Julian Behrstock, *The Eighth Case: Troubled Times at the United Nations* (Lanham, MD: University Press of America, Inc., 1987);

United Nations and Unesco,” and concluded that the survey demonstrated that Americans felt the UN was “not strong enough—rather than that it is too strong.”²²⁹ In 1955, the polls reported American public opinion of the UN at its highest level in five years, with 88 percent supporting continued U.S. membership and only one percent expressing an unfavorable opinion of Unesco. Of course, the polls also consistently revealed that only one in fifteen Americans could accurately identify Unesco.²³⁰

The National Opinion Research Center’s reports to the State Department demonstrate the pollsters’ attempt to make government policy respond to public opinion. But they also reveal one of the obvious weaknesses of this strategy as a tool of democracy; the appropriate policy response depended entirely on whether an expert already supported the UN and Unesco or did not. If public opinion had supported U.S. withdrawal from the UN, this would have indicated the need to “correct misinformation.” More fundamentally, the fact that so few people apparently knew much about the issues on which they expressed an opinion suggested that the polls were not measuring a significant social factor. As contemporary social scientists complained, citizens were unlikely to act on such superficial whims—causality disappeared into the abyss between opinion and behavior.

Many Americans, however, were passionate about the UN and Unesco, and their passions had significant effects. The Cold War inflected conflicts within American

²²⁹ Division of Public Studies, “Popular Attitudes toward the United Nations,” 20 June 1952; “Interpretive Comments about the Recent NORC Polling Results on the United Nations,” 14 July 1952, folder World Government 1946-1951, Office of Public Opinion Studies 1943-1965, Public Opinion on Function and Organization of the United Nations, 1946-1959, Box 23, RG 59, NARA.

²³⁰ “Current Attitudes toward the United Nations and Unesco,” 26 Aug. 1955; “Popular Attitudes Toward Unesco,” 12 May 1953, folder UN Misc. 1953, Office of Public Opinion Studies 1943-1965, Public Opinion on Function and Organization of the United Nations, 1946-1959, Box 24, RG 59, NARA.

society over the meaning of the international community, but the tensions these confrontations exposed were largely a product of individuals' experiences of changes in their local community. Making sense of the American public's contradictory response to the idea of a world community, reified in Unesco, requires adopting an approach similar to the Tension Project's community studies. Tensions at the scale of the neighborhood or city did affect international relations, especially when the city was the biggest boomtown in the world's most powerful country.

Los Angeles' Tensions Affecting International Understanding

“The best place to view Los Angeles of the next millennium is from the ruins of its alternative future,” Mike Davis' wrote at the end of the last millennium.²³¹ The particular ruins evoked in the opening sentence of *The City of Quartz* were the remnants of Llano del Rio, a utopian community founded on the eve of the First World War ninety miles from Downtown. Although the colonists had abandoned their dream of a model socialist community in the desert by the end of the Great War, alternative futures remained part of the fabric of a city that was built on dreams. At the end of the Second World War, many Angelenos imagined their city could become a multicultural microcosm of the world community.

Los Angeles would seem an unlikely place to look for a popular instantiation of the fictional world community. In the interwar years, Los Angeles' boosters promoted the city as the “white spot” of the American West. The economy burned hot on oil and real estate speculation and the savings of well-off immigrants from the American Midwest attracted by the fabled endless summer. During the Depression, the dust bowl blew in a

²³¹ Mike Davis, *City of Quartz* (New York: Vintage, 1990), 3.

second wave of white migrants who the urban middle class often despised, but who also shared elements of their social conservatism. The internal migrations assured that unlike contemporary demographic shifts on the East Coast, population growth strengthened the conservative WASP base of a tight-knit economic and political establishment. Restrictive housing covenants, *de facto* and *de jure* segregation of schools, and exclusive clubs helped keep property values high and assured white residents could enjoy the American dream undisturbed by the contradiction at its core. Indeed, despite rampant corruption in government and business, the hard-edged conservatism came wrapped in Christian moral probity. The economic and political elite promoted the city's open-shop ordinances to attract Eastern capital investment and wielded the police force's notorious "Red Squad" as a sort of private militia against union organizers, out-of-place minorities, and other "goody-goodies, sissies, and long-hairs." In addition to the state's coercive forces, the head of the establishment, Harry Chandler, controlled the city's leading newspaper, the *Los Angeles Times*—and the Hearst Empire's *Los Angeles Examiner* was hardly a radical alternative. It is not surprising, then, that the taproot of the postwar New American Right can be traced back to Southern California.²³²

And yet even before the great changes wrought by the economic, social, and cultural upheavals of the Second World War, alternative visions of the city survived. In 1938, for example, a strange coalition of anti-vice moral reformers, good government civic reformers, and an assortment of left-of-center activists ranging from communists to

²³² Davis, *City of Quartz*, 114-120; Daniel Hurewitz, *Bohemian Los Angeles and the Making of Modern Politics* (Berkeley: University of California Press, 2007), 135; James N. Gregory, *American Exodus: The Dust Bowl Migration and Okie Culture in California* (New York: Oxford University Press, 1989); Lisa McGirr, *Suburban Warriors: The Origins of the New American Right*, (Princeton: Princeton University Press, 2001).

labor leaders to liberal Republicans succeeded in recalling the city's mayor and replacing him with Judge Fletcher Bowron, a self-identified New Deal Republican who promised competent municipal governance in the progressive tradition. And more radical possibilities existed in the city's sprawling neighborhoods. The historian Daniel Hurewitz has portrayed a thriving bohemian enclave in Edendale, where artists and communists challenged the conservative WASP culture from personal and political perspectives. During the popular front years and through the Second World War, Communists fought racial injustice, leading the especially active local chapter of the Civil Rights Congress. In 1942, Angeleno leftists organized the Sleepy Lagoon Defense Committee to advocate for seventeen Mexican-American youths wrongly convicted of murder in a case that they understood as a Californian equivalent of the Scottsboro Boys trial. Hollywood celebrities joined the defense, too, showing that the conservative establishment could not dictate all the headlines.²³³

In fact, the War intensified simmering racial tensions. Despite its unusually homogenous white majority, Los Angeles was home to the largest populations of Mexican Americans and Japanese in the country. On the one hand, the fight against fascism helped make racism explicitly un-American. This was especially true when the victims were identified with a nation that was an American ally, as in the Zoot Suit riots in which white servicemen attacked Mexican youths. On the other hand, a vanishingly small number of white Angelenos protested the evacuation of nearly the entire Japanese

²³³ Tom Sitton, *Los Angeles Transformed: Fletcher Bowron's Urban Revival, 1938-1953* (Albuquerque: University of New Mexico Press, 2005), 1-24; Hurewitz, *Bohemian Los Angeles*, 151-188; Gerald Horne, *Communist Front? The Civil Rights Congress, 1946-1956* (Madison: Fairleigh Dickinson University Press, 1988).

population of 40,000 to internment camps for the duration of the War. But the eviction of the Japanese did not whiten Los Angeles; Little Tokyo was renamed Bronzeville. The wartime industrial boom attracted African Americans at a rate of more than 10,000 a month by 1943; during the 1940s, the number of African Americans in Watts alone increased from less than 9,000 to more than 92,000. Indeed, nearly exponential population growth combined with racial discrimination in the real estate market (and the return of Japanese) to create an acute housing shortage. And African and Mexican Americans' contribution to the country's total war reinforced their resolve to win the rights of full citizenship. Realizing the promise of victory required reimagining the identity of the city.²³⁴

The United Nations figured significantly in postwar visions of Los Angeles' future. Attorneys arguing cases against restrictive covenants cited not only the state and national constitutions, but the UN Charter. More dramatically, in 1950 the California Supreme Court struck down the Alien Land Law, which barred Japanese from owning land, on the grounds that it violated the terms of the UN Charter as elaborated in the UN Declaration of Human Rights. "The position of this country in the family of nations," the Court declared in *Fujii v. The State*, "forbids trafficking in innocuous generalities, but demands that every State in the Union accept and act upon the Charter according to its plain language and its unmistakable purpose and intent...the Charter is the supreme law

²³⁴ Kevin Allen Leonard, *The Battle for Los Angeles: Racial Ideology and World War II* (Albuquerque: University of New Mexico Press, 2006); John H. M. Laslett, "Historical Perspectives: Immigration and the Rise of a Distinctive Urban Region, 1900-1970," in *Ethnic Los Angeles*, Roger Waldinger and Mehdi Bozorgmehr, eds. (New York: Russell Sage Foundation, 1996), 39-75, 58; George Sanchez, *Becoming Mexican American: Ethnicity, Culture and Identity in Chicano Los Angeles, 1900-1945* (New York: Oxford University Press, 1993).

of the land.”²³⁵ According to the Court, leadership of the Free World conferred a responsibility to uphold the liberal principles on which it was founded.

But the Court had speeded ahead of commonsense. The State Department concluded that *Fujii* provided a major impetus for the Bricker Amendment, which would have crippled the Executive Branch’s treaty-making powers.²³⁶ Already in 1946 the successful opponents of California’s Proposition 11, which would have made employment discrimination based on race illegal, had argued that the measure itself violated the rights of employers and would actually increase racial tensions by attempting to “legislate brotherly love.” Instead of laws, the *Los Angeles Times* editorialized, “Persuasion, education [were] suitable means for overcoming prejudice.” As the historian Kevin Leonard shows in his study of the wartime evolution of the race concept *The Battle for Los Angeles*, before the War racist Angelenos had openly advocated white supremacy—forming, for example, the “Anti-African Housing Association”—but now even proponents of racial discrimination had to profess their enlightened contempt for racism.²³⁷

In fact, political and intellectual elites took education for intergroup understanding seriously, and the UN was a critical symbolic resource. On the Fourth of

²³⁵ *Sei Fujii v. The State* (1950), quoted in Quincy Wright, “National Courts and Human Rights—The Fujii Case,” *The American Journal of International Law* 45: 1 (Jan., 1951), 62-82. On human rights, race, and the UN, see Carol Anderson, *Eyes Off the Prize: The United Nations and the African American Struggle for Human Rights, 1944-1955* (Cambridge, U.K.: Cambridge University Press, 2003); Mary Dudziak, *Cold War Civil Rights: Race and the Image of American Democracy* (Princeton: Princeton University Press, 2000); Azza Salama Layton, *International Politics and Civil Rights Policies in the United States, 1941-1960* (Cambridge, U.K.: Cambridge University Press, 2000).

²³⁶ “Public Opinion on the Bricker Amendment, February, 1952-May, 1953,” 29 May 1953, folder UN Misc. 1953, Office of Public Opinion Studies, 1943-1953, Public Opinion on Functions and Organization of the United Nations, 1960-1963, Box 24, RG 59, NARA.

²³⁷ Leonard, *The Battle for Los Angeles*, 289; Davis, *City of Quartz*, 162.

July, 1945, Mayor Bowron addressed 15,000 Angelenos gathered at the Hollywood Bowl for a “Declaration of Interdependence” celebration. “Our country,” he proclaimed, “is, in a sense, composed of minorities; it is the United Nations on a continent.” To explain the new meaning of American citizenship to the rally, Supreme Court Justice Frank Murphy evoked a favorite metaphor of the world community: “The melting-pot philosophy, with its implications of reduction to a grey uniformity has given way to a new emphasis. American civilization encourages and embodies the contributions of the various cooperating national and cultural groups in the United States in the way that a symphony orchestra creates a rich and complex harmony...In this way we achieve cultural variety within the larger unity provided by our common language, economy, and political institutions.”²³⁸

Los Angeles’ advocates of the symphonic image of the American community embraced the “Unesco philosophy.” In preparation for the Pacific Regional Conference, the Southern California Unesco Council—which included the President of Pepperdine College, the Provost of UCLA, the state’s Assistant Superintendent of Public Instruction and other notable citizens—met in Mayor Bowron’s office. On a nearly weekly basis, women’s clubs such as the Federation of Women’s Clubs, the League of Women’s Voters, and the Business and Professional Women’s Club heard presentations from Council members. The President of the local Rotary Club congratulated his peers on their work with Unesco, declaring, “It is to our everlasting credit that we in Rotary can be

²³⁸ Quoted in Hurewitz, *Bohemian Los Angeles*, 213, 214.

numbered in the growing army of world citizens who are making a practical contribution to the realization of a world community.”²³⁹

The Los Angeles School District jumped on board the Unesco bandwagon. School programs that included reciting a UN pledge of allegiance along with the American pledge, forming model UN assemblies and participating in Unesco essay contests were not unusual in the late 1940s and early 1950s, but under Superintendent (and member of the National Commission) Alexander J. Stoddard’s leadership, the entire Los Angeles Schools District devoted the 1948-49 school year to the Unesco inspired theme “Who Is My Neighbor?” The *National Commission NEWS* reported, “Proud mothers and fathers watched their Johnny or Nancy while the young people continued to alternate the reading of the preamble of the United States Constitution with the preamble to the United Nations Charter. This was the climax of the PTA pageant culminating United Nations Week at one of Los Angeles’ larger junior high schools. For the past seven days the teen-agers had been eating, sleeping, and talking United Nations.”²⁴⁰ The Unesco program grew out of a previously established program in “education for international understanding” begun in 1944, before Unesco had even existed. Its purpose was to assure that “each person may grow in his understanding of world culture and problems so that he may cooperate intelligently in a world community.” It was intended to produce students who were knowledgeable and interested in world affairs, recognized and helped solve “world

²³⁹ “UNESCO Group Organizes Here,” *Los Angeles Times* (Apr. 9, 1948), 15; “Rotary’s Leader Coins Word: ‘Worldmanship,’” *Los Angeles Times* (Jan. 7, 1950), A1.

²⁴⁰ Royal Purcell, “It’s an All-Year Unesco Program in Los Angeles,” *National Commission NEWS* 3: 1 (July, 1949), 2. For an impressionistic survey of American educational programs for the UN, see several articles, including one by the U.S. Commissioner of Education, reporting on the National Commissions National Conference in New York in 1952 in Unesco’s *Courier* (April, 1952) 5: 4.

problems according to the practices of democracy,” understood the “economic and cultural factors which make the world an interdependent community of nations,” and combined “love of his own country with a broad social consciousness towards the problems of the world as a whole.”²⁴¹

Superintendent Stoddard appointed a Central Advisory Committee on Unesco to organize the program and wrote the introduction to a teacher’s guide called “The ‘E’ in Unesco,” which the District adopted in 1950. Components of the program included a monthly Unesco Bulletin; in-service workshops with guest speakers, including Undersecretary of State Dean Rusk; an assortment of special days and weeks, such as UN Week, Brotherhood Week, World Trade Week, Pan-American Week, and Negro History Week; All City Youth Conferences dedicated to the “furthering of good intergroup relations in the local communities”; community service; and a locally produced radio program for junior high students. The Unesco program embraced the doctrines of progressive education in stressing process over product; for example, students learned to live in a world community by taking turns and listening “courteously to points of view different from their own.”²⁴² The curriculum appeared to be precisely the sort of educational program the opponents of anti-discriminatory legislation had argued should be used to persuade citizens to abandon prejudices.

²⁴¹ “The Objectives of Our Unesco-United Nations Program,” *Basic Information Bulletin* 4 (18 Apr. 1949), quoted in Glenn Warren Adams, “The UNESCO Controversy in Los Angeles, 1951-1953: A Case Study of the Influence of Right-Wing Groups in Urban Affairs,” PhD Diss., History, USC (1970). Adams dissertation provides a detailed history of the Los Angeles School District’s Unesco experiment.

²⁴² Adams, “The UNESCO Study Program in the Los Angeles City Schools,” in “The UNESCO Controversy in Los Angeles,” 28-46, 40.

Despite its focus on character and courtesy, however, the Unesco program could not escape a reactionary backlash. The attack could hardly have come as a surprise. In 1950, a group of conservative citizens just up the highway in Pasadena had succeeded in ousting the progressive superintendent (and President of the American Association of School Administrators), Willard Goslin. The Pasadena fight combined resentment over proposed increases in property taxes to cover the costs of rising enrollment and racially charged anxiety that a rezoning scheme would decrease property values with general hostility to the “‘superprogressive’ educational methods based on the John Dewey system of use of practical psychology in teaching children.” The offensive was neatly summarized by the rally cry of the President of the Pasadena School Development Council, a consortium of parents, real estate interests and right-wing Republicans that led the offensive: “Progressive Education Means Progressive Taxation.”²⁴³

While an insinuation of socialism had tinged the argument against progressive education from the start, it was not until the summer of 1950 that the question was raised of whether Pasadena’s curriculum was “part of a campaign to ‘sell’ our children on the collapse of our way of life and substitution of collectivism?” In the fall, a new president of the School Development Council made the charge of subversion against Superintendent Goslin concrete before an investigative meeting of the California Senate Education Committee, chaired by Republican red-hunter (and author of the act that mandated teacher loyalty oaths) Nelson Dilworth. One key piece of evidence: Goslin was

²⁴³ “Progressive Education Tossed Out: Pasadena Schools to Abandon Policy after Years of Trial,” *Los Angeles Times* (Nov. 12, 1950), 1; David Hulburd, *This Happened in Pasadena* (New York: The Macmillan Co., 1951), 95. Hulburd’s book is a detailed journalistic account and a passionate warning about the reactionary events that so damaged the school system. Macmillan included a publisher’s introduction stating they felt “obligated to publish” the exposé “as a form of public service” (vii).

a member of the Unesco National Commission. Months after Goslin left Pasadena, one Board Member speculated on the depth of the socialistic plot he had helped foil; firing the superintendent “may have ‘upset a timetable’ for nationalization of the public schools.” Foreshadowing the Los Angeles drama, Goslin received the telegram from the Board of Education requesting his resignation while attending a Unesco meeting in New York. Despite a belated groundswell of support from community leaders and parents, Goslin agreed to resign without a fight (but with a large check), justifying his decision on the democratic grounds that the Board Members were the duly elected representatives of the people.²⁴⁴

Similar structural forces and distrust of government were at work in Los Angeles. In 1949, like mayors of most major American cities, Bowron attempted to ease the critical postwar housing shortage by contracting the federal government to construct 10,000 units—which, importantly, would be free from racial quotas. Again following a national trend, the initially uncontroversial housing project quickly came under attack from real estate developers and business leaders who formed the Committee Against Socialist Housing. The controversy led to an investigation of the Housing Authority of the City of Los Angeles by the California Un-American Activities Committee and to the successful recall of Mayor Bowron in 1953.²⁴⁵ And the story in the schools was much the

²⁴⁴ “School Subversive Rumors to Be Aired: State Senate Committee Will Hold Hearings Here and in Pasadena,” *Los Angeles Times* (Nov. 11, 1950), 2; Hulburd, *This Happened in Pasadena*, 106; “School Plot Upset Seen in Goslin Firing: Nationalizing Scheme May Be Blueprinted, Pasadenan Says,” *Los Angeles Times* (June 15, 1951), A1.

²⁴⁵ Opponents pilloried public housing as socialistic, but contemporary commentators pointed out the hypocrisy of these avid capitalists happily accepting federally backed mortgages, loans from the federal government, and subsidized land grants for private redevelopment schemes. As usual in Los Angeles, the battle lines were actually quite complex. Minority home owners whose property was scheduled to be cleared also opposed the public housing plans. Sitton, *Los Angeles Transformed*, 165-190. For

same. Rising enrollments and inflation led to a budgetary shortfall, which in 1951 Superintendent Stoddard declared would require a nearly \$200,000,000 bond issue to construct sixty-seven new schools as well as increased property taxes.²⁴⁶ Stoddard also was an early and vocal advocate for extending federal funding to public education. But instead of property taxes, efficient administration, or even “nationalization” of public education, the L.A. school battle centered on the Unesco program.

Florence Fowler Lyons delivered the first broadside against the “Stoddard Unesco program” in the fall of 1951. She charged “open advocacy of one-world government in these books.” “Our children are being trained not as citizens of America,” she continued, “but as faceless citizens of the world.” The *Los Angeles Times* gave the story two columns and included a photograph of Lyons holding a copy of “The ‘E’ in UNESCO” and pointing at a school blackboard with the words “Our Ancestors Were” above columns of student names headed “English, American, Negro, German, Russian, and Greek.” The caption read: “RED RUSES DESCRIBED—Florence Lyons, writer, demonstrates to Southern California Republican Women how Communism may be injected into teaching in the schoolrooms.”²⁴⁷ The Communist subversion Lyons exposed, however, was the idea Mayor Bowron and Justice Murphy had celebrated when they turned the Fourth of July into National Interdependence Day. It was the idea that the United States, the City of Los Angeles, the classroom were—or rather ought to be—

comparisons, see Arnold Hirsch, *Making the Second Ghetto: Race and Housing in Chicago, 1940-1960* (Cambridge: Cambridge University Press, 1983); Robert Self, *American Babylon: Race and the Struggle for Postwar Oakland* (Princeton: Princeton University Press, 2003).

²⁴⁶ Ray Zeman, “L.A. Schools Must Get More Millions, Stoddard Declares: Higher Taxes and Bond Issue Essential, He Says,” *Los Angeles Times* (Nov. 14, 1951), A1.

²⁴⁷ “Stoddard Case,” *Los Angeles Times* (26 Oct. 1951), 2.

microcosms of the world community. Instead of learning to integrate their diverse perspectives to produce a view from everywhere, Lyons insisted that students should be schooled from a 100 percent American perspective.

The Unesco controversy dominated debates about the proper role of public education in Los Angeles for the next few years. Conservative organizations like the Liberty Bells (which advocated repeal of the Sixteenth Amendment that allowed the federal government to levy an income tax), Grand Parlor Americanism Committee, Native Sons of the Golden West and other conservative clubs joined the Women's Republican Study Club in an all out campaign to ban Unesco from the schools. Most importantly, the California American Legion joined the cause, making the fight against Unesco a priority mission of its Americanism Committee.²⁴⁸ The Unesco Relations Office in Washington was swamped in angry letters from Southern California demanding copies of *In the Classroom with Children under Thirteen* so patriotic citizens could read the shocking sentences for themselves: "As long as the child breathes the poisoned air of Nationalism, education in world-mindedness can produce only precarious results. It is frequently the family that infects the child with extreme nationalism. The school should therefore combat family attitudes that favor jingoism."²⁴⁹ The demand for the fourth pamphlet in the *Towards World Understanding* series quickly outpaced the supply.

Stoddard's response to the personalized attacks from the right was to beat a hasty retreat. Already in May 1951, Stoddard confessed to the California Congress of Parents

²⁴⁸ On the Legion's patriotism, see Rodney G. Minott, *Peerless Patriots* (Washington: Public Affairs Press, 1962).

²⁴⁹ It is worth noting that if public opinion were gauged by citizens letters to the State Department, the failure of the organization to promote Esperanto would be the number one issue. Examples can be found in the Unesco Relations Files in NARA.

and Teachers: “In our desire to be fair to other nations of the world, we have bent backward to teach their isms. As a result, we have been underteaching our own America.” By the middle of 1953, he was appearing before the California American Legion, praising the group for “giving its wholehearted support to the public school system” and urging it to help “put teeth into Senate Bill 1367” (requiring loyalty oaths) to assure that “a year from now we may be able to say that not one disloyal teacher remains in the Los Angeles School system.” On the Unesco program, he had “no comment.”²⁵⁰

But advocates for internationalism were as passionate as the super-patriots and would not let the Unesco issue go away. An impressive list of individuals and organizations aligned to support the Unesco program: the Parents and Teachers Association, Unions, YWCA, League of Women Voters, the Urban League and the Southern California Society for Mental Hygiene, as well as prominent clergy and professors. The nasty standoff dominated national news stories about Unesco for much of 1952 and 1953 and earned often bemused coverage in the international press.²⁵¹

The fight reached a climax in a series of boisterous School Board meetings in the summer of 1952. At what was billed as the conclusive meeting on the issue, an audience of 500 heard fifty-five speakers lecture the Board. The Unesco faction was led by Ford

²⁵⁰ Schools Under Stress U.S.: Stoddard Says: CCPT Convention Told Students Must Learn What Freedom Entails,” *Los Angeles Times* (May 5, 1951), 14; “State Legion Convenes: Hears Defense Plea: Scientists Called U.S. Defense Key,” *Los Angeles Times* (Jul. 31, 1953).

²⁵¹ A typical comment from the Ontario *Timmins Press* editorialized, “Canadians might rub their eyes to read that there is anything ‘subversive’ about the educational, scientific or cultural programme of the U.S. But according to the super-patriots, jingoists, demagogues, and plain screwballs who successfully ganged up to have the Unesco course tossed out of the schools, it teaches ‘dangerous one-worldism’.” Unesco was subject subjected to withering criticism outside the United States, but these attacks tended to focus on its vague program, impractical intellectualism and idealism, and cost—on its ineffectiveness rather than its dangerous power. (These criticisms were also made in the United States, of course.) See Unesco’s “Weekly Press Review,” (26 Sep. 1952) Unesco Archives Paris.

Foundation director Paul G. Hoffman,²⁵² the nationalists by Milton G. Robertson, co-chair of an Americanism Committee of the Veterans of Foreign Wars. Perhaps not surprisingly, the passion of the meeting resulted in the appointment of yet another investigative committee. When in January 1953 the Committee endorsed the Unesco program, finding no evidence that it advocated world government, the Board had run out of delay tactics and had to make a decision. Despite its own Committee's recommendation, it abolished the (already suspended) program, with one Board member condemning Unesco as the propaganda organ of "loose thinkers" who supported world government. Instead of banning any teaching on Unesco, however, schools were instructed to provide purely "objective" information.²⁵³

The logic of the objectivity solution, which had been percolating for at least six months, was explained by a Board member: "We must teach our children about UNESCO and the U.N. as a part of current history. I don't rank it with Communism, but it must be taught in the manner our students are taught Communism,—factually and with no advocacy thereof."²⁵⁴ On the value of objectivity, at least, the advocates of world community and of 100 percent Americanism agreed. A letter to the editor expressed the

²⁵² Under the directorship of Robert M. Hutchins the Ford Foundation made a grant of over \$300,000 to the L.A. Schools to support extra-teachers, but the Board turned down the money in what was widely interpreted as an act of self-destructive vengeance for Hoffman's support a year earlier of Unesco. Hutchins bitterly sarcastic speech upbraiding the School Board was entertaining enough to be printed in full in the *LA Times*. The paper, incidentally, applauded the Board's "common-sense" decision to endorse "objective" instruction of Unesco. "L.A. School Board Flayed by Hutchins: Town Hall Hears Educator's Blast at Ford Fund Ban," *Los Angeles Times* (Jul. 22, 1953), A1; "The UNESCO School Decision," *Los Angeles Times* (Jan. 22, 1953), A4.

²⁵³ "Unesco Friends, Foes Clash at Board Meeting: Cheers and Jeers Force Recess of School Session Before Audience of Nearly 500," *Los Angeles Times*, (Aug. 26, 1952), 2; "Committee to Investigate UNESCO Named," *Los Angeles Times* (Sep. 5, 1952), 4; "Schools' UNESCO Program Abolished: Agency May Be Studied but Only as Part of Regular Classroom Work," *Los Angeles Times* (Jan. 20, 1953), 1.

²⁵⁴ "Board Bans UNESCO Schoolbook: Resolution Passage Opens Way to Resume Program," *Los Angeles Times* (Aug. 29, 1952), 1.

essence of the disagreement—and within the conceptual framework of internationalist social science. Dissenting to a *Los Angeles Times* editorial that endorsed the School Board’s assertion that “there are no ‘higher and more proper things for Americans than American sovereignty,’” the letter explained, “Just as community and State loyalties and sovereignties are rather petty considerations compared to national ones, so should national loyalties and sovereignties be considered petty and unimportant compared to world ones.”²⁵⁵ Agreeing on an objective perspective on society depended on agreeing on what society should be.

This story fits easily within McCarthy-era narratives of the “paranoid style in American politics.” After all, this was a period in which no communist nations were participating in Unesco and the Organization was supposed to be acting as a propaganda wing of the UN Force in Korea. Indeed, in the introduction to the most compelling contemporary analysis of McCarthyism, *The New American Right*, Daniel Bell explained that the phenomenon could not be understood “in conventional political terms.” Instead, the authors had independently selected “recent concepts of sociology and social psychology” to diagnosis the neurotic state of American politics.²⁵⁶ This analysis was of a piece with the style of social science promoted by Unesco’s Tensions Project. Ralph

²⁵⁵ Franklin E. Kameny, “Patriotic Vice,” *Los Angeles Times* (Mar. 10, 1954), A4.

²⁵⁶ As Hofstadter explained it, “strange coalition” of anti-Communists (e.g. the new rich, Irish and other Catholics, blacks, labor leaders, ex-communist intellectuals) who joined in the “pseudo-conservative revolt” were an unfortunate consequence of the fact that in the United States “a person’s status—that is his relative place in the prestige hierarchy of his community—and his rudimentary sense of belonging to the community—that is, what we call his ‘Americanism’—have been intimately joined.” The rise into the middleclass by previously marginal groups led them to claim enhanced social status by competing to assert their Americanism, and solidified a reactionary coalition with WASPs who defended their threatened status in the social hierarchy with the same strategy. This thesis is generally congenial to my argument, except that it elides the racist dynamics of McCarthyism. Daniel Bell, “Interpretation of American Politics,” 3-33, 15, 16; Richard Hofstadter, “The Pseudo-Conservative Revolt,” 33-55, 42; in Daniel Bell, ed. *The New American Right* (New York: Criterion Books, 1955).

Bunche provided a more Machiavellian explanation. He traveled to Southern California to denounce the charges of Communist subversion against Unesco as “irresponsible, unfounded in fact and ridiculous”—an example of “the ‘big lie’ technique.”²⁵⁷

But in the context of Los Angeles, the conflation of internationalism and Communism was neither irrational nor dishonest. Communists in Los Angeles, as in the rest of the country, had been the most vocal, committed, uncompromising advocates of racial justice for the past two decades.²⁵⁸ And conservative WASPs had so stretched the term through decades of overuse that any effort to use government to balance the playing field between labor and capital, tenants and landlords, or minorities and WASPs was classified as “Communism, Socialism, New Dealism, and other isms,” as Florence Lyons labeled the Unesco program. Indeed, Lyons’ inclusion of “New Dealism” in her accusation implies that a conviction about the proper role and scope of government was at the core of the controversy. The accelerating nuclear arms race, the Korean War, and the ravings of McCarthy certainly raised the stakes, but the Unesco controversy in the Los Angeles Schools was another front in the ongoing “battle for Los Angeles.”²⁵⁹ The battle was over what victory in the War against fascism meant for peace on the home front.

²⁵⁷ “Attacks on U.N. Upset Dr. Bunche: Southland Opposition Strongest in Country, Diplomat Declares,” *Los Angeles Times* (May 13, 1952); Richard Hofstadter, *The Paranoid Style in American Politics, and other Essays* (New York: Knopf, 1965).

²⁵⁸ Schrecker’s description of the activities of communist front groups in the United States during the popular front years is essentially the same as the Unesco movements: “international solidarity, political defense, culture, education, and professional or ethnic concerns.” Ellen Schrecker, *Many Are the Crimes: McCarthyism in America* (Boston: Little, Brown & Co., 1998), 37.

²⁵⁹ Leonard, *The Battle for Los Angeles: Racial Ideology and World War II*.

Beneath the “pseudo-conservatives” inflamed rhetoric was more than a kernel of truth. At first glance, a letter to the editor demanding the schools ban anything with a Unesco “slant” seems to embody the hysterical irrationalism of McCarthyism:

Children are fed a lethal dose of propaganda, a little at a time, so that the pinpointing of any one phase of it can be made to look ridiculous, while the eventual, over-all effect is accomplished cumulatively. It is one thing to teach objectively about the United Nations; it is another to slowly, year by year and grade by grade, build false, one-way concepts, in order to create future citizens favoring a Socialistic world government subordinating our own to the level of a vassal state... This is far more insidious and difficult to combat than open warfare with rabid Communists, for these people are not Communists—they are either Socialistic planners or befuddled Americans.²⁶⁰

Unesco’s Education for International Understanding program did advocate for world citizenship and world government, denounce nationalism and target impressionable children with subtle methods designed to develop a supranational loyalty to the symbols of the UN.

Along with internationalism, the charges against Unesco were meddling and manipulation. This accusation expressed deeply felt anxiety about the power of experts. Another letter to the editor proclaimed, “Too long has it been said, ‘Leave education to the experts.’ Now we want our schools returned to the people.”²⁶¹ Outside the controlled setting of the laboratory school, the experimental subjects/citizens could be deeply suspicious of the experts crouching behind the burlap curtain.

But while the nationalists did not hesitate to speak for “the people,” Angelenos were far from united. Despite common charges of alien subversion and international interference, pulling back the burlap curtain reveals local teachers, parents and

²⁶⁰ Richard Hofstadter, *The Paranoid Style in American Politics*; Margaret Fry, Covina “Warning on Indoctrination,” *Los Angeles Times* (Aug. 21, 1952), B4.

²⁶¹ F. P. B. Pasadena, “Parent’s Stake,” *Los Angeles Times* (Jun 11, 1951), A4.

administrators. Far from sneaky subversives, their outstanding characteristic was unguarded earnestness. Despite a *Wall Street Journal* editorial that gloated that the School Board's ban on Unesco "has served on UN a timely and badly needed warning that there is a province of our domestic affairs that UN must keep out of—the public school system of the country," the Unesco Secretariat in Paris merely followed the controversy in press clippings.²⁶² In fact, as shown above, Unesco's Education for International Understanding program was itself predominantly a U.S. enthusiasm.

Nevertheless, the national and local conflicts had tremendous repercussions on the international organization. Unesco's supporters sought to clear the Organization of charges by explaining how it served the U.S. national interest. For example, at the Fourth National Conference of the U.S. National Commission for Unesco in the fall of 1953, the Chairman of the Commission and former Deputy Director General Walter Laves dedicated his speech to explaining how continued U.S. participation in the Organization was "a necessary part of our declared foreign policy to achieve peace and is clearly in the national interest." Also in 1953, the Southern Californian Judge and Chairman of the U.S. Delegation to the Unesco General Conference Irving Salomon investigated the charges against Unesco. His report cleared Unesco of Communist subversion and helped President Eisenhower publicly grant the Organization a clean bill of health. But the Salomon Report also cleared Unesco of the charge that it advocated "political world government" and sought to undermine loyalty to the U.S. government by creating world citizens in any political sense. The report emphasized that "in the most nationalistic sense, it is in the United States interest to be engaged in this kind of international

²⁶² Weekly Press Review, 20 Feb. 1952, Unesco Archives, Paris.

cooperation.”²⁶³ This strategy succeeded in staunching the wild charges of subversion—even the national leadership of the American Legion eventually issued its own report clearing Unesco and finding that its own Americanism Committee had employed “hate-mongering” tactics.²⁶⁴ But in grounding their defense of Unesco in strategic national interest, Unesco’s defenders denied the real subversive, anti-nationalist values of the world community, however farfetched that fiction was. The logic of national interest only made sense when the United States acted through Unesco, not when Unesco acted upon the United States. Advocates of world citizenship and paranoid super-patriots were exiled to the kooky fringe together.

And as a direct result of the Los Angeles controversy, Unesco did cease advocating world citizenship. During the height of the controversy in 1952, the Education Department was planning another summer seminar, this one under the typically catchy title, “Education for World Citizenship with Special Reference to the Principles of the Universal Declaration of Human Rights.” Beginning in February, State Department officials, Unesco staff in New York, and American educators—including an official of the National Education Association, which also had a program in Education for International Understanding—began urging the Secretariat to change the seminar’s name and forwarding letters from Southern California denouncing the organization for supporting world government. For months the Education Department resisted, ironically

²⁶³ Walter Laves, “Unesco in United States Foreign Policy,” 14 Nov. 1953; “An Appraisal of the United Nations Educational, Scientific and Cultural Organization,” July, 1953, 398.43-Unesco/7-3153, RG 59, NARA.

²⁶⁴ The Americanism Committee succeeded in persuading the membership to vote to suppress the report, which only served to further discredit the Legion in the mainstream national media. “UNESCO Not Red, Legion Group Says; Special Report Clears U.N. Affiliate of Charges,” *Los Angeles Times* (Sep 11, 1955), A1; “Legion Group's Report Clearing UNESCO Hit,” *Los Angeles Times* (Sep 13, 1955), 32.

basing its case in national sovereignty; it lacked the authority to change the title of a seminar mandated by member states at the General Conference. Finally, in July—a month after the McCarran rider had banned funding organizations that advocated world government—the Department relented and agreed to change the name to “Education for Living in a World Community,” a title Eleanor Roosevelt had urged.²⁶⁵ Director General Torres Bodet opened the conference with a speech explaining the change in title. “It has never been the purpose of Unesco to turn citizens from their national loyalties,” he said. “An education which aims at teaching people to live as citizens of a world community must be, in every country, a national education.”²⁶⁶ It was true that the social theory from which the fiction of a world community emerged held that national loyalties and world loyalties were compatible, and the name change was semantic. But the abandonment of the ideal of world citizenship and the emphasis on strengthening national identifications did signal a real shift in the character and mission of the Organization.

Unesco was no longer “the people’s UN agency,” but rather an organization of national governments. After Stalin died, the Soviet Union finally joined the Organization in 1954. Although the East Bloc added a volatile element to the biannual meetings of the General Conference, it also added stability by introducing a more familiar balance of power. In 1954, too, the status of Executive Board members finally changed from individuals selected for their intellectual eminence and personal integrity to

²⁶⁵ Arnaldo to Irvine, 4 Feb. 1952; Reid to Abraham, 31 March 1952; Irvine to Reid, 30 Apr 1952; Schaffner to Schneider 14 July 1952; Schneider to Carnes, 22 July 1952, 327.6 A 074 (492)”53”, Seminar on Education for Living in a World Community—Netherlands 1952—General, Part 1 up to 31/VIII/52. Committee on International Relations, *Education for International Understanding* (Washington D.C.: National Education Association of the United States, 1948).

²⁶⁶ “A Report on the Unesco Seminar on Active Methods of Education for Living in a World Community,” 327.6 074 (492) “52” 17, Semnar on Education for Living in a World Community, Netherlands 1952, Documents & Reports, Part II from 1/VII/52, Unesco.

representatives of governments. The controversy that had swirled around Unesco since its inception dissipated over the course of the decade and the budget gradually grew as the Organization concentrated on providing technical assistance to underdeveloped countries. But the popular excitement Unesco had inspired in the United States also dissipated, and the Social Sciences Department lost prestige as it struggled to articulate a new purpose. The refutation of a challenging conception of world citizenship and world government drained the fiction of a world community of any truly subversive threat to the international order based on national sovereignty. And while the view from everywhere was institutionalized in the organizational structure of UN agencies, the notion that participation in Unesco's program could adjust American attitudes and values was abandoned.

Many observers celebrated the new more "realistic" approach. In the 1954 second edition of *Politics among Nations*, Morgenthau explained his more nuanced, positive treatment of international cooperation: "[The first edition] had to be as radical on the side of its philosophy as had been the errors on the other side. With that battle largely won, the polemic purpose can give way to the consolidation of a position that no longer needs to be attained, but only to be defended and adapted to new experiences." With the ongoing "colonial revolution," it was necessary to "recognize the struggle for the minds of men as a new dimension of international politics to be added to the traditional dimensions of diplomacy and war." In the dynamics of the Cold War, the UN agencies, he argued, could serve the U.S. national interest on this new ideological battle field.²⁶⁷

²⁶⁷ Hans J. Morgenthau, *Politics among Nations: The Struggle for Power and Peace*, 2nd ed. (New York: Alfred A. Knopf, 1954), vii.

Conclusion

The Tensions Project's last major initiative resulted in the publication of *The Nature of Conflict: Studies on the Sociological Aspects of International Tensions*, a collection of essays and comprehensive annotated bibliography that was intended as a final synthesis.²⁶⁸ University of Pennsylvania sociologist Jessie Bernard's review of the field provided a scathing critique of the "basic assumptions" of the "so-called 'tension' approach." She warned against the near cultish enthusiasm for manipulative "action research" associated with the late Lewin's Group Dynamics Center, dismissed the semantic theory that postulated conflict derived from misunderstandings instead of the incompatibility of goals and values, and mocked Freudian "plumbing" theory, which blamed aggression on clogged outlets for the release of memories and emotions. In place of the tensions approach, she endorsed "the theory of games of strategy as a basis for the sociology of conflict." Ironically, given her distaste for manipulative social science, game theory relied largely on esoteric mathematical models that effectively excluded lay participation in making policy.²⁶⁹ In this model of social science, the scientist was invisible behind a one-way mirror, not peering over a burlap curtain.

Raymond Aron, a regular Unesco contributor, was nearly as dismissive of the results of the Tensions Project. In "Conflict and War from the Viewpoint of Historical Sociology," he brilliantly expressed the historian's frustration with both the Tensions

²⁶⁸ International Sociological Association, (Paris: Unesco, 1957).

²⁶⁹ A further irony was that the deductive models were virtually devoid of the empirical data that American social scientists had bragged differentiated their work from European's. Bernard did acknowledge a need for a social psychological approach, since game theory had nothing to contribute to how its calculating actors determined payoffs, assessed costs and developed the rules of the game. Jessie Bernard, "The Sociological Study of Conflict, in *Nature of Conflict*, 33-117.

Project's social psychology and Bernard's systems theory: the attempt to escape from history through the discovery of social laws. He used historical examples, for instance, to show that sometimes national stereotypes followed state policy and sometimes they led state policy; only careful analysis of specific instances could accurately distinguish cause and effect. Assuming the purpose of research was to provide useful policy advice, Aron asserted that the best social science could offer were analogies to similar historical moments: "Only a sociologist using the historical method could become Adviser to the Prince."²⁷⁰ In both Bernard's and Aron's model of social science, the sovereign determined the goal.

It was left to Robert Angell, now President of the International Sociological Association, to defend the Tensions Project from Bernard's and Aron's withering critiques, with their damning implication that the tensions approach was inexcusably soft and thus irrelevant to the hard realities of the Cold War. Angell described the need to evaluate UN agencies' "contribution to intersocietal normative accommodation." "One of the great hopes of the world," he wrote, "is to discover through social science how to build a more inclusive social system within which States can peacefully co-operate." It was precisely the rules of the game Angell wished to modify, and instead of advising princes, he called upon social scientists to collaborate with the "literally thousands of persons in the world who are eager to participate in the building of the larger social system." The key to this inclusive democratic order, of course, was developing a world-

²⁷⁰ Aron was a regular participant in both the Congress for Cultural Freedom and Unesco, a useful reminder of where Unesco was politically positioned in the international intellectual landscape. Raymond Aron, "Conflict and War from the Viewpoint of Historical Sociology," 177-203, 203.

minded citizenry.²⁷¹ According to the fiction of democracy, after all, the people were sovereign.

The fiction that guided the Education for International Understanding program was both conventional and radical: the Second World War had been fought for democracy, the Four Freedoms of the Atlantic Charter were real, and winning the peace meant victory against fascism at home as well as abroad. The popular passion for the “Unesco idea” in the United States suggests that the fiction was not quite pure fantasy, but its incineration in the flames of the equally passionate reactionary backlash makes even trying to recover the ashes a suspect endeavor. To write the history of the world community is to write a counterfactual history.

The controversy the Unesco program incited in the Los Angeles Schools demonstrated the interaction between international, national, and urban scales. Lewin was right that conflict at the level of classrooms and neighborhoods contributed to international tensions. But it was precisely the concrete particularities of the intersecting patterns at different scales that mattered. The interactions between these levels were complex and contingent, but not entirely unpredictable. The robust balance of power between the nuclear armed superpowers turned the Cold War into a battle for hearts and minds. The United States position as the leader of the Free World made domestic race relations an international issue and created a political opportunity for antiracist activists. But the fight against totalitarianism also created the conditions for McCarthyism, narrowing the opening for left-of-center social justice activists, and making anti-nationalism appear akin to treason. In Los Angeles, the War brought the long sought

²⁷¹ Robert C. Angell, “Discovering Paths to Peace,” 204-223, 217, 223.

industrial boom, but with it came massive demographic shifts that undermined the city's identity as a WASP haven, challenged municipal services, and even threatened residential property values. Liberal intellectuals and activists envisioned the multiracial metropolis as a model of the world community and rallied to the "Unesco philosophy." Yet while overt white supremacy was no longer tasteful, right wing groups deployed nationalism as a cudgel to beat the dreamers of a world community. Even though local activists defended the Unesco program, intellectual leaders were quick to retreat from the ideals of world citizenship and world government, which were relatively vague and distant aspirations. Because these local tensions resulted in conflict in the most powerful country, they posed an existential threat to Unesco. As an organization of nation states, Unesco was ill positioned to fight for transnational, as opposed to international, government.

The intellectuals who authored the fiction of the world community surely were not surprised by the reactionary passion it inspired. In fact, the methodology they developed focused on means over ends in order to avoid conflict. Distaste for conflict was why experts attempted to engineer unity in diversity from behind the burlap curtain. For the advocates of world community, the appeal of the UN specialized agencies was precisely that they were non-political functional agencies pursuing uncontroversial ends. But identities are relational things; they become real through opposition. And so the most controversial publication in the *Towards World Understanding* series took recourse in science fiction: "[Men] have natural enemies on which to exercise their aggressiveness," it imagined an elementary school teacher explaining, "and... they would be better

advised to declare war upon natural scourges such as famine and plague than to fight their fellow men... 'What if the inhabitants of Mars should declare war upon the whole earth?' one of his pupils may whisper. There would be no need to reply to the remark, for this child will already have had an inkling of a universal truth.²⁷²

²⁷² *In the Classroom with Children under Thirteen*, 41. Robert Wise's sci-fi UN fable, *The Day the Earth Stood Still*, brought this plot to the silver screen, in 1951.

Chapter Three
The View from Above
The Conservation of Nature and the Development of International Organizations

A Century which relies only on analysis and seems to be afraid of synthesis is not on the right way; for only both together, like breathing in and breathing out, form the essence of science.²⁷³

Although controversial from its inception, the campaign to use the tools of social psychology to build a community of world citizens clearly responded to Unesco's constitutional mandate to act on "the minds of men." Yet in an important sense, this mandate contradicted a fundamental rationale for the UN specialized agencies. In contrast to the explicitly political General Assembly and Security Council, their value was supposed to derive from their technical—that is, nonpolitical—function. Precisely by focusing attention *not* on group loyalties and cultural values but rather on seemingly obvious problems such as disease, hunger, and ignorance, the argument went, the functional agencies could bridge political divides. For internationalists who placed their hope in the specialized agencies, apolitical scientific knowledge was a critical political resource mobilized through technical battles against natural hardships.

According to this logic, as a sort of intended unintended consequence, the transnational infrastructure constructed to fulfill vital basic needs would cultivate loyalty to the international institutions that provided these services. For the contemporary political scientist David Mitrany, who successfully branded this the "functionalist"

²⁷³ Goethe quoted in E. A. Gutkind, "Our World from the Air: Conflict and Adaptation," in ed. William L. Thomas, Jr. et al., *Man's Role in Changing the Face of the Earth* (Chicago: University of Chicago Press), 1956, 1-44, 2.

approach to international organization, the end and the means were “a working peace.”²⁷⁴

Forty years earlier, William James had put it more poetically. In “A Moral Equivalent of War,” James called for “an army enlisted against *Nature*” and dedicated to eradicating injustice to replace war’s “dread hammer [as] the welder of men into cohesive states.”²⁷⁵

When the United Nations established its system of specialized agencies, this army enlisted against nature marched under the banner of scientific conservation. Whereas the social psychological approach to building a world community aimed directly at the superstructure—values and loyalties, attitudes and opinions—the conservationist strategy targeted the base—soils and waters, forests and fisheries. The causal logic flowed from prosperity to peace, but the goal remained a world community. Indeed, demonstrating the potential complementarity of these approaches, Mitrany was a member of the 1948 International Congress on Mental Health’s International Preparatory Commission, presenting its conclusions on “Problems of World Citizenship and Good Group Relations.”²⁷⁶

The model of objectivity social scientists pursued through the view from everywhere was inappropriate to the functionalist strategy for marshalling scientific

²⁷⁴ David Mitrany, *A Working Peace System* (Chicago: Quagrange Books, 1966). The title essay was originally published in 1943. Ernst B. Haas, *Beyond the Nation-State: Functionalism and International Organization* (Stanford: Stanford University Press, 1964); Craig N. Murphy, *Global Institutions, Marginalization, and Development* (London: Routledge, 2005), in particular chapters 3 “The Dialectic of Liberal Internationalism” and 4 “The Promise of Democratic Functionalism”; Paul S. Reinsch, *Public International Unions: Their Work and Organization: A Study in International Administrative Law* (Boston: Ginn and Co., 1911); Leonard Woolf, *International Government* (London: G. Allen & Unwin, Ltd., 1916). A variety of functionalisms, of course, imbued interwar social science; see Horace M. Kallen, “Functionalism,” in Edwin R. A. Seligman, *Encyclopaedia of the Social Sciences*, (New York: Macmillan, 1930-35), 523-525.

²⁷⁵ William James, “The Moral Equivalent of War,” in *The Moral Equivalent of War, and Other Essays; and Selections from Some Problems of Philosophy* (New York: Harper & Row, 1971), 13.

²⁷⁶ J. C. Flugel, *International Congress on Mental Health, London 1948: v. 4*, (London: H. K. Lewis & Co. LTD., 1948), 71-84.

authority for social and political reform. In their efforts to raise standards of living through the rational development of natural resources, natural scientists advocated a perspective best called the view from above. Where the view from everywhere focused attention on the diversity of culturally determined perspectives, the view from above concentrated on the unity of material nature. Detlev Bronk, Chairman of the U.S. National Research Council, succinctly expressed the political implications of this faith in ontological universality in his welcoming speech to the 1949 United Nations Scientific Conference on the Conservation and Utilization of Resources: “National boundaries are meaningless in the study of natural phenomena. The properties of inorganic matter and living organisms are little affected by the limits of States. Natural phenomena, observed anywhere, must be fitted into a consistent pattern of universal validity. This is the basis for the world-wide unity of science.”²⁷⁷ The natural world was one world, but on this solid base, humans had constructed a patchwork of cultural, economic, and political structures that did not conform to natural boundaries. A unified world science was necessary to develop a global view from above that revealed the natural patterns to which a stable world society must correspond. Because reserves of natural resources crossed political boundaries and were unevenly distributed between nations, their rational conservation and utilization required—and could facilitate—international cooperation.

Where the view from everywhere attempted to produce unity out of diverse cultural patterns, the view from above promised to find unity in the diverse patterns of

²⁷⁷ UNSCCUR, “Introductory and Welcoming Addresses,” *Proceedings of the United Nations Scientific Conference on the Conservation and Utilization of Resources, 17 August—6 September 1949, Lake Success, New York: Volume I, Plenary Meetings* (Lake Success, NY: United Nations Department of Economic Affairs, 1950), 3 [Hereafter *Proceedings of UNSCCUR*].

natural environments. Chapter Six examines the practices of mapping global natural resources in the international community. This chapter analyzes the institutional politics and scientific debates that created the space in which the surveys made sense.

If social psychology was the synthetic science of the view from everywhere, ecology filled this role for the view from above. At a highly abstract level, the central themes of both social psychology and ecology were interdependence and equilibrium. For internationalist conservationists, interdependence applied to national economies, economic sectors, types of resources, and scientific disciplines. Equilibrium often expressed the ideal of a complex, dynamic ecological balance. But the bewildering complexity of the equilibrium—the interdependency of everything—meant that in the final accounting, balance often simply signified world population debits against natural resources credits.²⁷⁸

The audit of nature's books revealed a world community headed deep into the red. By the late-1940s, the planet was well into a century of unprecedented anthropogenic environmental change.²⁷⁹ Food shortages put Europe on the ration and famine wasted India even as populations continued to grow. Indeed, international resources conservation

²⁷⁸ On conservation and accounting, see Henry E. Lowood, "The Calculating Forester: Quantification, Cameral Science, and the Emergence of Scientific Forestry Management in Germany," in Tore Frangsmyr, J. L. Hielbron, and Robin E. Rider, eds., *The Quantifying Spirit in the Eighteenth Century* (Berkeley: University of California Press, 1991); Sabine Hohler and Rafael Ziegler, eds., *Science as Culture: Nature's Accountability* 19:4 (2010). In the United States, the accounting perspective was reinforced by an alliance between government and corporations in the progressive era associational state; see Samuel P. Hays, *Conservation and the Gospel of Efficiency: The Progressive Conservation Movement, 1890-1920* (Cambridge, Mass.: Harvard University Press, 1959).

²⁷⁹ My focus on the co-production of environmental ideas and institutions runs the risk of distracting from the very dramatic material changes in the environment. It is often striking how the bombastic language with which conservationists made predictions of the future described trends that vastly *underestimated* change, especially population growth. There may be no such thing as a "natural balance," but there is also little doubt that in the twentieth century, nature was out of balance. J. R. McNeill, *Something New Under the Sun: An Environmental History of the Twentieth-Century World* (New York: W. W. Norton & Co., 2000).

was consistently framed as a response to the population crisis. And even as the debit side of the ledger grew, the credit side shrunk. Environmental scientists warned that exploitative agricultural practices were so depleting the world's soil fertility that the earth was in danger of losing the capacity to support civilization. Increasing the yield of the world's natural resources so that they kept pace with increasing populations and rising expectations could buy precious time in which the population bomb might be defused.²⁸⁰ With citizens understandably distracted by fears of another, possibly final war, supporters of the UN specialized agencies ratcheted up their rhetoric to win support for the army uniting against natural hardships. In 1949, when President Truman announced Point IV, the Bold New Plan for technical assistance to underdeveloped countries, international civil servants and activist experts recognized a potential "moral equivalent of war." Just as New Deal conservation had contributed to the growth of the U.S. federal government, the "conquest of nature" offered IGOs an opportunity for institutional growth.²⁸¹

²⁸⁰ Alison Bashford, "Nation, Empire, Globe: The Spaces of Population Debate in the Interwar Years," *Comparative Studies in Society and History* 49: 1 (2007), 170-201; Matthew Connelly, *Fatal Misconception: The Struggle to Control World Population* (Cambridge, Mass.: Harvard University Press, 2008); John H. Perkins, *Geopolitics and the Green Revolution: Wheat, Genes, and the Cold War* (New York: Oxford University Press, 1997); Richard Symonds and Michael Carder, *The United Nations and the Population Question, 1945-1970* (New York: McGraw-Hill, 1973); Michael S. Teitelbaum and Jay Winter, *Population and Development Review, Supplement: Population and Resources in Western Intellectual Traditions*, 14 (1988). On ecology's political agenda, David Takacs, *The Idea of Biodiversity: Philosophies of Paradise* (Baltimore: Johns Hopkins University Press, 1996).

²⁸¹ Sarah T. Phillips, *This Land, This Nation: Conservation, Rural America, and the New Deal* (Cambridge, UK: Cambridge University Press, 2007). On the conquest of nature and state formation in another context, see David Blackbourn, *The Conquest of Nature: Water, Landscape and the Making of Modern Germany* (London: Jonathan Cape, 2006). For the UN System, the conquest of nature was pursued under the rubric of development, about which there is a vast literature. Cf. James Ferguson, *The Anti-Politics Machine: 'Development,' Depoliticization, and Bureaucratic Power in Lesotho* (Cambridge, UK: Cambridge University Press, 1990); Richard Jolly, et al. *UN Contributions to Development Thinking and Practice* (Bloomington: Indiana University of Press, 2004); Gilbert Rist, *The History of Development: from Western Origins to Global Faith* (London: Zed Books, 1997). For historical overviews of international conservation-environmentalism, see Robert Boardman, *International Organization and the Conservation of Nature* (Bloomington: Indiana University Press, 1981); Lynton Keith Caldwell, *International Environmental Policy: Emergence and Dimensions*, 2nd ed. (Durham: Duke University Press, 1990).

Conservationists fretted over the ecological ignorance of citizens and politicians, but the broad definition of their field also meant that it was overcrowded with institutions that had a stake in resource management. At the national level, multiple government departments, frequently with competing ambitions, were typically charged with husbanding a country's renewable and non-renewable resources. These bureaucratic divisions were recreated at the international level, where each specialized agency articulated with its national equivalent. Mobilizing for the international conquest of nature presented these organizations with an opportunity for institutional growth, but also with threats of territorial invasion from rival agencies. Because agencies had distinct institutional cultures, expertise, and mandates, the very purpose of a natural resource—that is, how nature would be valued—was at stake in bureaucratic negotiations over which organization could claim competence over which resource.²⁸²

The significance of these bureaucratic turf battles was a consequence of embedding the view from above in the organizational structure of the UN System. Even more than an accounting perspective, the view from above offered a cartographic perspective. Its most recognizable forms were surveys of soils, flora and fauna, geology, climate, and populations—all of which could be synthesized in an ecological map. In the interwar years, this form of scientific observation literally achieved the view from above: airplanes allowed specialists to rapidly survey nature and aerial photographs facilitated

²⁸² On the ways bureaucratic pressures shape UN projects, see Michael Barnett and Martha Finnemore, *Rules for the World: International Organizations in Global Politics* (Ithaca: Cornell University Press, 2004).

mapping natural resources in remote areas.²⁸³ But seeing the world from the air did not make boundaries obvious. Determining where one soil type, climatic zone, or ecological area ended still required expert judgment—and rugged boots. Deciphering “a consistent pattern of universal validity” was hard work. And not just because of nature’s mischievous diversity. Social surveys of agriculture, education, health and employment were superimposed on natural resource surveys, and these categories corresponded to the mandates of particular UN specialized agencies. In the language of science studies, ideas and institutions were co-produced.²⁸⁴

Defining the criteria of “universal validity” and reforming institutions to harmonize with nature’s pattern demanded renegotiating society’s boundaries. Indeed, this cultural boundary work was the reason the view from above could be an instrument of social and political reform. And since the political map of the world was redrawn in the 1940s, boundaries of all sorts appeared unusually unstable. In the postwar international community, the work of producing the view from above included establishing, sustaining, enlarging, policing, breaching, and sometimes erasing (to borrow Thomas Gieryn’s list of verbs along with his method of cultural cartography) the boundaries separating science from politics, natural knowledge from social knowledge,

²⁸³ Peder Anker, *Imperial Ecology: Environmental Order in the British Empire, 1895-1945* (Cambridge, Mass.: Harvard University Press, 2001), 82-86; Alex Checkovich, “Mapping the American Way: Geographical Knowledge and the Development of the United States, 1890-1950,” PhD. Diss.: University of Pennsylvania, 2004; Peter Collier, “The Impact of Topographic Mapping of Developments in Land and Air Survey, 1900-1939,” *Cartography and Geographic Information Science* 29 (2002), 155-174.

²⁸⁴ Sheila Jasanoff, ed., *States of Knowledge: The Co-Production of Science and Social Order* (New York: Routledge, 2004). The co-production of the international meteorological observational infrastructure and the global climate is a particularly relevant example for my argument; see Paul N. Edwards, “Meteorology as Infrastructural Globalism,” in John Krige and Kai-Henrik Barth, eds., *Global Power Knowledge: Science and Technology in International Affairs: Osiris* 21 (2006), 229-250.

governmental from nongovernmental, nature from civilization.²⁸⁵ The unsettled quality of this cultural cartography in the postwar international community afforded well-positioned experts and civil servants a surprising degree of strategic creativity to redefine their organizations' functional mandates. Unesco's success in claiming a piece of the valuable natural resources turf—a field unmentioned in the Organization's constitution—by first establishing and then erasing the boundary separating utilization of natural resources from protection of nature demonstrates how these boundary maneuvers worked in practice.

From this analysis of bureaucratic politics and technical papers, I argue that the relationship between epistemology and politics—between knowledge and power—is always flexible; that is, contingent upon interactions in particular historical situations. For this argument, boundary work that targeted the line separating imperialism from internationalism is particularly important. In fact, one of the origins of the view from above was a quintessentially imperial mode of natural history in which far-flung collectors sent specimens or standardized meteorological and geographic data to “centers of calculation” (e.g. botanical gardens, museums, naval offices) in the metropole where the fungible information was organized into tables, taxonomic systems, and maps.²⁸⁶ For the UN, the challenge was to make the production of the view from above a basis of international cooperation.

²⁸⁵ Thomas Gieryn, *Cultural Boundaries of Science: Credibility on the Line* (Chicago: University of Chicago Press, 1999), xi.

²⁸⁶ Richard Drayton, *Nature's Government: Science, Imperialism, and the 'Improvement' of the World* (New Haven: Yale University Press, 2000); Steven J. Harris, “Long-Distance Corporations, Big Sciences, and the Geography of Knowledge,” *Configurations* 6: 2 (1998): 269-304; Bruno Latour, *Science in Action: How to Follow Scientists and Engineers through Society* (Cambridge, MA: Harvard University Press, 1987); Emma Spary, *Utopia's Garden: French Natural History from Old Regime to Revolution* (Chicago: University of Chicago Press, 2000).

This chapter surveys five international conservation conferences held in 1948 and 1949 to reconstruct the epistemological and institutional logic of the view from above at the historical moment development became the *raison d'être* of the specialized agencies. Conferences in the United States (for the Americas), New Zealand (for the Pacific), and France (for Europe and Africa) culminated in two concurrent conferences in Lake Success: the United Nations Scientific Conference on the Conservation and Utilization of Resources (UNSCCOUR) and the Unesco-International Union for the Protection of Nature Technical Conference on the Protection of Nature. These conferences represent a small but not arbitrary sample; a handful of well-placed experts linked the regional meetings into a series in an attempt to produce a world approach to nature conservation. The conferences reveal how the purposes and practices of nature conservation varied by nation, region, and empire, but also how the boundaries between like-minded groups crossed political borders. The conservation movement was fragmented but already transnational. Analysis of the conferences reveals the often contradictory multiplicity of conservationists' intellectual and political commitments. The big ideas that would shape the international development regime for the next twenty-five years were present at the inception. But with seemingly boundless possibilities, the conservationist's crusade was in danger of galloping off in all directions at once. The goal of the conferences was to enlist these diverse forces into a single army for the war against nature.

Before surveying the conferences, the chapter begins by investigating the unlikely route through which these five conferences were mobilized in the campaign to establish a world approach to nature conservation.

Bureaucracy, Aristocracy, and the Origins of the Nature Conservation Conferences

On his return to Paris from Unesco's General Conference in Mexico City in December 1947, Director General Julian Huxley stopped off for a meeting with leaders of the U.S. conservation establishment at the National Academy of Sciences in Washington D.C. There he reported that the General Conference had "demonstrated the lack of whole-hearted international support of the principle of worldwide wild life and National Park conservation." The General Conference had forced the Secretariat to delay a conference to establish a semi-governmental International Union for the Protection of Nature. The directors of the U.S. Fish and Wild Life Service, National Park Service and a representative of the Forest Service attended the meeting in Washington, but the key participants were three conservationists busy planning international conservation conferences of their own: William Vogt, Chief of the Conservation Service of the Pan-American Union, who was General Secretary of the Inter-American Conference on the Conservation of Renewable Resources; Harold J. Coolidge, Executive Secretary of the U.S. National Research Council's new Pacific Science Board, who was a prime-mover behind the Seventh Pacific Science Congress, particularly its Standing Committee on Nature Protection; and Arthur "Tex" Goldschmidt, who, from his position in the Department of the Interior, was the government's point-man on the U.S. sponsored United Nations Scientific Conference on the Conservation and Utilization of Resources (UNSCCUR)—a conference suffering its own repeated delays due to lack of whole-hearted international support. The four men decided to reframe each of the conferences

(plus a European and African symposium assigned to Huxley) into a coherent series to cultivate what Coolidge termed a “world approach” to nature conservation.²⁸⁷

The ease with which this plan fell into place at an informal hour-and-a-half meeting belies the years of recondite negotiations necessary to convene each of the conferences—particularly Unesco’s Nature Protection Conference and UNSCCUR. The problem was less that there was too little interest in conservation than that there was too much. The conferences exemplified the porous membrane between governmental and nongovernmental. National and international organizations of both types attempted to use or prevent the conferences to establish or defend fields of competence, strengthen international networks, and influence policy.

The origins of UNSCCUR dated back to a proposal in 1944 from the father of the American conservation movement, Gifford Pinchot, to President Roosevelt. Pinchot described conservation—“the planned and orderly use of all the earth produces for the greatest good of the greatest number for the longest time”—as “a necessary requirement for peace.” Intentionally avoiding divisive details, he envisioned an “open discussion [of] the principles upon which all Nations can agree for conserving and distributing the natural resources of the earth.” He hoped the conference would consider “an inventory of the natural resources of the earth,” and establish an International Resources Office to serve as a global data bank.²⁸⁸ Like all conservationists, Pinchot valued the view from

²⁸⁷ Internal summary of minutes of meeting at National Academy of Sciences, Washington D.C., 23 Dec. 1947, in International Union for the conservation of nature & natural resources, Part I up to 28/II/1948, 502.7 A 01 IUCNNR “—66,” Unesco.

²⁸⁸ Pinchot to Roosevelt, 29 Aug. 1944; Pinchot to Roosevelt, 28 March 1945, in Edgar B. Nixon, ed., *Franklin D. Roosevelt & Conservation 1911-1945 v. 2* (New York: General Services Administration, Nation Archives and Records Service, Franklin D. Roosevelt Library, 1957), 591-594, 636-641.

above. The idea appealed to Roosevelt, who imagined a conference in which each of the United and Affiliated Nations would send one man to a secluded spot in the United States to exchange information on their countries' resources and "begin a program to build up non-buying nations into good customers."²⁸⁹ If conservation were the basis of peace, then in this vision, it depended on an international community of elites that resembled the "community of kings" of the feudal era, not the popular world community idealistic internationalists promoted.²⁹⁰

The first obstacle to a World Conservation Conference turned out to be Roosevelt's own State Department. Edward R. Stettinius was already struggling to reconcile designs for the postwar system of international organizations. He pointed out that in addition to the International Bank for Reconstruction and Development and complex negotiations over an International Trade Organization, Article I of the UN Food and Agriculture Organization's (FAO) provisional constitution mandated that the agency "shall promote and...recommend national and international action with regard to...the conservation of natural resources." Pinchot's meeting appeared redundant. By March

²⁸⁹ Roosevelt to Hull, 24 Oct. 1944, Roosevelt to Stettinius, 22 Nov. 1944, in Nixon, ed., *Franklin D. Roosevelt & Conservation 1911-1945* v. 2, 599-600, 612-613.

²⁹⁰ The "community of kings" refers to the notion that a moral foundation for international law existed within the inbred community of European nobility but was lost with democratization. The phrase was invoked during contemporary debates by Quincy Wright and Hans Morgenthau, both of whom attributed it to Roscoe Pound. In the context of this chapter, it is worth noting that before he was Dean of the Harvard Law School, Pound co-authored with Fredric Clements a foundational text of American ecology that established the theory of a "community of plants." Roscoe Pound and Frederic Clements, *Phytogeography of Nebraska* (Lincoln, Neb.: Published by the Seminar, 1900); Quincy Wright, ed., *The World Community* (Chicago: University of Chicago Press, 1948), 112-113. The political scientist Craig Murphy has noted the role that nineteenth century European aristocrats, suffering eroding influence domestically, played in organizing the congresses out of which international organizations developed; Craig N. Murphy, *International Organization and Industrial Change: Global Governance since 1850* (Cambridge, U.K.: Polity Press, 1994), 37. On Pinchot and the politics of the elite, see Brian Balogh, "Scientific Forestry and the Roots of the Modern American State: Gifford Pinchot's Path to Progressive Reform," *Environmental History* 7: 2 (Apr., 2002), 198-225.

1945, Roosevelt was convinced that a world conservation conference would have to await the outcome of the San Francisco meeting that August where, it was hoped, the institutional architecture of the new international system would be finalized.²⁹¹

In September 1946, a month before Pinchot's death, Truman finally proposed that the UN Economic and Social Council (ECOSOC) convene UNSCCUR.²⁹² Although it emphasized the relationship between prosperity and peace, the proposal called for a different conference than Pinchot and Roosevelt had envisioned, particularly in terms of the enhanced role of science:

Warfare has taken a heavy toll of many natural resources; the rebuilding of the nations and the industrialization of underdeveloped areas will require an additional large depletion of them. Waste, destruction and uneconomic use of resources anywhere damage mankind's common estate. The real or exaggerated fear of resource shortages and declining standards of living has in the past involved nations in warfare. Every member of the United Nations is deeply interested in preventing a recurrence of that fear and of those consequences. Conservation can become a major basis of peace. Modern science has itself become a major international resource which facilitates the use of other resources. Their adequate utilization can become a major basis of world prosperity.²⁹³

This was a denationalized vision of nature in which undeveloped or wastefully exploited resources anywhere were the business of people everywhere. Instead of avoiding dissent by sticking to general principles, conflict would be avoided by focusing on technical details.

²⁹¹ Stettinus to Roosevelt, 10 Nov. 1944; Acheson to Roosevelt, "Memorandum for Governor Pinchot," 19 March 1945, in Nixon, ed., *Franklin D. Roosevelt & Conservation 1911-1945* v. 2, 606-608, 634-635. On U.S. struggles to coordinate plans, see Townsend Hoopes and Douglas Brinkley, *FDR and the Creation of the U.N.* (New Haven: Yale University Press, 1997).

²⁹² Secretary of the Interior Harold Ickes claimed that Truman consented to the conference to "keep G. P. out of his hair." Char Miller, *Gifford Pinchot and the Making of Modern Environmentalism* (Washington, D.C.: Island Press, 2001), 374.

²⁹³ ECOSOC document E/139, 14 Sep. 1946, in Conference on Protection of Nature—USA—1949, Org. jointly by UNESCO & IUCNNR, Part I up to 30/IV/48, 502.7 A 06 (73) "49," Unesco. See also Arthur E. Goldschmidt, "Resources and Resourcefulness," *Bulletin of the American Academy of Arts and Sciences* 2: 5 (Feb. 1949), 2-6.

The proposal came from the head of the U.S. government, but it called for a nongovernmental meeting. Delegates would not “represent the views of the governments of their nations,” but would be free to express their expert judgment. The meeting would be “devoted solely to the exchange of ideas and experience among engineers, resource technicians, economists and other experts in the natural and social sciences” and focus on assessing the practical value of techniques in terms of benefit-cost analyses.²⁹⁴ As the Chairman of UNSCCUR’s Preparatory Committee, Columbia University economist Carter Goodrich, observed shortly after Truman announced Point IV in January 1949, the definition of science as an international resource “fit very precisely the...specifications” of the President’s Bold New Program of technical assistance to underdeveloped countries.²⁹⁵ Indeed, Point IV energized ECOSOC (the UN Economic and Social Council), which re-branded UNSCCUR its first major technical assistance project.²⁹⁶

While important segments of the U.S. conservation community supported UNSCCUR, Europeans, FAO, and even ECOSOC were unenthusiastic. So few non-Americans attended the initial meetings of UNSCCUR’s Preparatory Committee that they had to be labeled informal. The U.S. designated two high profile Standing Committees to comment on the provisional agenda. In contrast, most Latin American countries offered no comments; the Soviet Union predictably never responded to invitations to participate; and Western Europeans were generally annoyed by the American initiative. French,

²⁹⁴ ECOSOC document E/139, 14 Sep. 1946, in Conference on Protection of Nature—USA—1949, Org. jointly by UNESCO & IUCNNR, Part I up to 30/IV/48, 502.7 A 06 (73) “49,” Unesco.

²⁹⁵ Goodrich to Assistant Secretary Thorp, 20 Feb. 1949, in U.N. Conference on the Preservation and Utilization of Resources, 1949, Box 53, Carter Goodrich Collection, Columbia University Archive.

²⁹⁶ Goldschmidt to Goodrich, 25 Feb. 1949, U.N. Conference on the Preservation and Utilization of Resources, 1949, Box 53, Carter Goodrich Collection, Columbia University Archive.

Dutch, British, and Swedish commentators were “greatly disturbed” that UNSCCUR “overlapped so much” with a half dozen European based international organizations that were already holding regular congresses on what the Americans called nonrenewable resources.²⁹⁷

Not surprisingly, FAO, which was fiercely territorial even by the standards of specialized agencies, was especially suspicious that the conference was only ECOSOC’s driving wedge into its turf. Following the logic of IGOs, the reason FAO officials did not want the conference—duplication of their functional mandate—assured that they would seek a lead role in organizing it. FAO demanded “complete responsibility for recommendations to the Preparatory Committee with respect to ‘renewable resources’.” FAO selected the topics, chairmen, and authors and edited or wrote the key papers in “close cooperation” with the USDA. (Such cooperation was the norm, especially while FAO was still located in Washington D.C.)²⁹⁸ UNSCCUR helped define FAO’s field of competence as “renewable resources,” a term FAO officers soon stopped demarking with quotation marks.

²⁹⁷ “Excerpts from Comments on the Provisional Programme,” 14, 15, 22 and 28 June, 1948; “Organization of Plenary Meetings Suggested by Edy Velander, Director Royal Swedish Academy of Engineering Science”; “Revision of Provisional Programme of UNSCCUR by Preparatory Committee,” 16 June 1948, all in U.N. Conference on the Preservation and Utilization of Resources, 1949, Box 53, Carter Goodrich Collection, Columbia University Archive. In addition to the World Power Conference (which had French origins), Europeans criticized UNSCCUR for duplicating the work of the Conference Internationale des Grands Reseaux Electriques, Union Internationale des Producteurs et Distributeurs d’Energie Electrique, Commission Internationale des Grands Barrages, the International Gas Union, the International Geological Congress, and an International Petroleum Congress.

²⁹⁸ L. E. Kirk, “Meeting of Preparatory Committee of the Social and Economic Council at Lake Success to Plan a World Conference on Conservation of Resources, September 8-10, 1947,” UN Scientific Conference on the Conservation and Utilization of Resources I, box Agriculture Division—Office of Director, Deputy Director’s Files (R. W. Phillips) 10AGO246, FAO. “Excerpts from a letter from FAO,” 5 Nov. 1947, U.N. Conference on the Preservation and Utilization of Resources, 1949, Box 53, Carter Goodrich Collection, Columbia University Archive.

Given that UNSCCUR was a “scientific” conference and the central role that the environmental sciences would play in Unesco’s program, it is surprising that the ILO and WHO participated more actively in the preparations than Unesco. The absence was not for lack of personal interest. Huxley and Joseph Needham, the Director of the Natural Sciences Department, were leading figures in the British Social Relations of Science movement, which united scientists ranging from Fabians to Communists who called for state planning of science and the scientific planning of society. As a series of conferences in 1942 on “Science and World Order,” “European Agriculture,” and “Mineral Resources and the Atlantic Charter” demonstrated, this movement was intensely concerned with resource conservation. It was in the context of these meetings that the British Communist scientist J. D. Bernal had proposed an International Resources Office “capable of taking a comprehensive view of resources [i.e. material, technical, and human resources] and their utilisation.”²⁹⁹ (Pinchot had framed his original proposal to F.D.R. as a step towards realizing Bernal’s scheme.) Unesco’s first report analyzing the Organization’s role in UNSCCUR echoed Bernal’s conclusion: “From the cultural point of view, from the point of view of the survival of the human race, what was wanted was synoptic facts of the resources of the world; balanced accounts of resources given in standardized units so that figures would be available for all countries which could be easily compared.”³⁰⁰ Unesco’s

²⁹⁹ J. D. Bernal, “Addendum on an International Resources Office,” *The Advancement of Science: The Report of the British Association for the Advancement of Science: Science and World Order, Transactions of a Conference of the Division of the Social and International Relations of Science* 2: 5 (1942), 17-19. On the Social Relations of Science, see William McGucken, *Scientists, Society, and State: The Social Relations of Science Movement in Great Britain 1931-1947* (Columbus: Ohio State University Press, 1984).

³⁰⁰ Internal Secretariat Committee for UNSCRR Summary Report of meeting held on 12 Apr. 1948, Conference on Protection of Nature – U.S.A – 1949. Org. jointly by UNESCO & IUCNNR Part I up to 30/IV/1948, 502.7 A 06 (73) “49”, Unesco.

tepid response to UNSCCUR was not due to a lack of enthusiasm for the view from above.

UNSCCUR's focus on technical knowledge in order to exclude controversies over ethical principles and cultural values did raise concerns within Unesco. In response to an analysis from the Social Sciences Department on "inter-relationships between resources and tensions" that suggested "inequalities of distribution of resources within a country may also lead to a state of mind inimical to international understanding," the Office of the Director General noted that "while this is true, it is even more explosive than the 'haves and have-nots' item [i.e. rich and poor countries], and should not be added. Moreover, UN is debarred by its Charter from interfering in domestic affairs."³⁰¹ The unequal consumption of resources at any political scale—the cause of war UNSCCUR was supposed to avert—was too controversial to discuss. If the development of international functional agencies was a contribution to peace, then this justified excluding important causes of war from open discussion. But this strategy grated against Unesco's idealistic institutional culture, which sought to make social tensions manageable by exposing them to the light of rational analysis.

The paradoxes of science as a political resource, however, do not explain Unesco's halfhearted participation in preparations for UNSCCUR. Part of the problem was simply that Unesco did not have the staff in New York to participate in the Preparatory Committee. More importantly, the Secretariat's priority was establishing competence in the field of nature protection by convening its own international

³⁰¹ C. M. Berkeley to Director-General, 27 May 1948, Conference on Protection of Nature – U.S.A.—1949. Org. jointly by UNESCO & IUCNNR Part II from 1/V/48 up to 31/I/49, Unesco.

conference. In 1947, Huxley wrote to UN Assistant Secretary-General Henri Laugier:

“The economic aspects of the Conservation of Resources are not directly within our purview; the Preservation of Nature is one of our concerns, and where the two problems merge, as they do very markedly in [the case of the two conferences], we must clearly work hand in hand.”³⁰² Unesco’s claim to a piece of the coveted natural resources turf in the UN system was based on sustaining the boundary between preservation and economic utility.

The national and institutional politics of the international preservation of nature were nearly as complex and competitive as the conservation of resources. The initial impetus for a new international organization for nature protection came from the Swiss League for the Protection of Nature, which proposed an international conference in Brunnen in 1947 to establish a semi-governmental union. The Swiss billed the new union as a reincarnation of a Consultative Commission for the Protection of Nature that had been created in Berne right before the First World War. But this proved too presumptuous. One problem was that the Consultative Commission had been “unable to carry out any work owing to the First World War, and its very existence was forgotten.”³⁰³ More significantly, the Swiss initiative angered the European conservation establishment. Phyllis Barclay-Smith, Secretary of the International Committee for Bird

³⁰² Huxley to Laugier, 17 Oct. 1947, Conference on Protection of Nature – U.S.A – 1949. Org. jointly by UNESCO & IUCNNR Part I up to 30/IV/1948, 502.7 A 06 (73) “49”, Unesco.

³⁰³ Needham to Buttikofer, 25 Nov. 1946, International Union for the conservation of nature & natural resources Part I up to 28/II/1948, 502.7 A 01 IUCNNR “—66,” Unesco. For an extremely detailed history of the formation of the IUPN and an unusually well researched and reflective insider’s institutional history, see Martin Holdgate, *The Green Web: A Union for World Conservation* (London: Earthscan Publications Ltd, 1999), 17-60. A more general account of the rise of international environmentalism from a key British participant is Max Nicholson, *The New Environmental Age* (Cambridge, UK: Cambridge University Press, 1987).

Preservation (founded in 1922 and the biggest preservationist INGO) warned Needham that “all nature preservation circles in the United Kingdom look with considerable suspicion on the Swiss attempt to secure the initiative in forming a new International body.” Not only did the Swiss lack any “historical claim” to leadership, but they had “no overseas stake in the problem, such as have Great Britain, France, Holland and Belgium.” The rightful leadership of an international organization should “come from the former centre in such matters, Belgium and Holland.” If it had been slow to reconstitute, “some allowance must be made for the difficulties under which these countries, and our own, labour at the moment.”³⁰⁴ For Barclay-Smith and other European preservationists, it was ridiculous that a tiny, non-imperial power should attempt to claim leadership of international nature protection, but the opportunism of the neutral Swiss taking advantage of the devastation wrought in defense of a free Europe was truly galling.

The most eminent of the Belgian nature protectionists, Victor Van Straelen, President of the Institut pour l’Etude Agronomique du Congo Belge and of the Administrative Council of the Parcs Nationaux du Congo Belge, agreed on the importance of imperial leadership and demonstrated that British-Belgian respect was mutual: “The only way of doing something in Africa is through European governments. The governments in Africa are not interested... The centre is the British government; everything depends on it.”³⁰⁵ Nature preservation, however, was not a priority for the

³⁰⁴ Barclay-Smith to Needham, 10 Feb. 1947 and 6 March 1947, International Union for the conservation of nature & natural resources Part I up to 28/II/1948, 502.7 A 01 IUCNNR “—66,” Unesco.

³⁰⁵ Cortesao to Malina, 14 Apr. 1948, in International Union for the conservation of nature & natural resources Part I up to 28/II/1948, 502.7 A 01 IUCNNR “—66,” Unesco; Cortesao to Huxley, 16 March 1948, International union for the conservation of nature & natural resources Part II from 1/III/48 up to 31/VIII/48, 502.7 A 01 IUCNNR “—66.”

British in the hard years following World War Two. H.M.G. wrote Needham that the Swiss conference “should be postponed or confined to an unofficial exploration of the problem.”³⁰⁶ A contemporary scheme to make the Empire self-sufficient in fats by converting millions of acres of wilderness to groundnuts in Tanganyika was conducted with military urgency, but precious financial and diplomatic resources could not be spared for nature protection.

To keep the British on board, Needham brokered a deal in which the Swiss agreed to make the 1947 Brunnen conference (where they had planned to formally constitute the new International Union) a nongovernmental meeting and any organization it established provisional. The following year Unesco would call an intergovernmental congress at which government delegates would “definitely approve the constitution of the all-inclusive semi-governmental organization.”³⁰⁷ After a bitter debate that revealed the split between the imperial and non-imperial powers at Brunnen, Needham’s compromise was adopted.

But the Swiss initiative on which Unesco piggy-backed also reflected a project designed for the old world—fittingly, its objective was to revive a forgotten Commission from 1913. The plan had been initiated independently from the UN system and neither the Swiss League nor Unesco had made much effort to engage the United States, which provided forty percent of Unesco’s budget and was a recognized leader in all aspects of nature protection. Only one American organization was represented at the Brunnen

³⁰⁶ National Parks Committee of Ministry of Town and Country Planning to Needham, 5 March 1947, International Union for the conservation of nature & natural resources Part I up to 28/II/1948, 502.7 A 01 IUCNNR “—66,” Unesco.

³⁰⁷ Needham to Huxley, 20 March 1947; Nicholson to Huxley, 25 Apr. 1947, International Union for the conservation of nature & natural resources Part I up to 28/II/1948, 502.7 A 01 IUCNNR “—66,” Unesco.

conference, the New York Zoological Society, which also acted as an “unofficial observer” for FAO. The Unesco secretariat, however, did not fully recognize the weakness in the foundation it had built for its bid to convene an international congress. It did not brief the “leading U.S. private and national organizations” on Unesco’s nature preservation project until a week before the delegates were to leave for the General Conference in Mexico City where the organization’s 1948 program would be determined.³⁰⁸ Thus, the “chequered history” of nature protection at the General Conference. The Conference placed priority on Unesco’s contribution to UNSCCUR.³⁰⁹ The British delegates at Brunnen had prevented the formation of an international organization on Huxley’s guarantee that Unesco would convene an intergovernmental congress in 1948, but the United Kingdom and the United States had forced him to postpone it.³¹⁰

This was the background to the meeting at the National Academy of Science. Huxley needed to engage the American conservation community and transform the relationship between UNSCCUR and the Nature Protection Conference from competitive to collaborative ventures. Goldschmidt hoped to tap Unesco’s connections to the European scientific community to gain international support for UNSCCUR. Yet even after Huxley and Goldschmidt agreed to partner, Unesco still did not have the staff to spare in New York to participate in UNSCCUR’s Preparatory Committee. Goldschmidt

³⁰⁸ Sam to Huxley and Needham, 21 Jan. 1948, in International Union for the conservation of nature & natural resources Part I up to 28/II/1948, 502.7 A 01 IUCNNR “—66,” Unesco.

³⁰⁹ Sam to Rothschild, 11 Feb. 1948, International Union for the conservation of nature & natural resources Part I up to 28/II/1948, 502.7 A 01 IUCNNR “—66,” Unesco.

³¹⁰ Internal summary of minutes of meeting at National Academy of Sciences, Washington D.C., 23 Dec. 1947, International Union for the conservation of nature & natural resources Part I up to 28/II/1948, 502.7 A 01 IUCNNR “—66,” Unesco.

improvised a solution in the best way possible: “without costing any money.” He wrote Huxley to suggest “your friend Fairfield Osborn” or his associates at the Conservation Foundation represent Unesco at the meetings.³¹¹ Osborn had spun the Conservation Foundation off of the N.Y. Zoological Society, of which he was also president; thus, Osborn’s NGOs represented FAO in Brunnen and Unesco in New York.

On the one hand, organizing the conservation conferences required sustained negotiations between bureaucratic interests at the level of the nation, the region, and the UN. National ministries and specialized agencies demanded control over particular fields; government representatives debated resolutions at intergovernmental conferences; and non- or semi-governmental organizations applied pressure to influence agendas. On the other hand, in an informal meeting, Huxley, Coolidge, Vogt, and Goldschmidt patched together their respective conferences into a series that linked world regions and claimed to represent a world approach to managing nature. This accomplishment was possible because the transatlantic conservation community was so small—much smaller than its national equivalents. The intimacy of this community—where Osborn’s organization represented FAO at a meeting on nature protection supported by Unesco and Unesco at a meeting on conservation led by FAO—enabled improvisation for and amplified the voices of a few well-connected individuals. But this intimacy was also a weakness. The five conferences—and the communities they represented—were linked in an *ad hoc* manner; attendees and even organizers had to be told that they were participating in

³¹¹ Goldschmidt to Huxley, 28 May 1948, Conference on Protection of Nature – U.S.A.—1949. Org. jointly by UNESCO & IUCNNR Part II from 1/V/48 up to 31/I/49, Unesco.

regional conferences building towards global UN congresses. In the terminology of mid-twentieth century social science, there was no organic world conservation community.

The Conservation Conferences

Participants in the series of five conservation conferences attached various, often contradictory objectives to them. Many attendees surely wondered whether, aside from padding one's C.V., there was any point to the congresses. Reading through the thousands of papers published in the conferences' proceedings, most too short to be anything but a single dull point, the historian can empathize with these grumpy back-rowers. Yet it can also seem like the conferences were planned for the future historian—the only reasonable justification for the expense and hassle of organizing such large gatherings of academics and civil servants being to produce a panoramic snapshot of an intellectual community. Each of the preliminary conferences was intended to represent a region, but the regions—the Americas, Africa and Europe, and the Pacific—made sense less in terms of biogeography than geopolitics. In this section, I survey these three conferences to identify prominent political, sociological, and intellectual patterns in the still fragmented international conservation community.

The Hemisphere Congress

Only in retrospect, and from a particular angle, can the first of the regional conferences be seen as preliminary to the Lake Success conferences. The Inter-American Conference on Conservation of Renewable Natural Resources, or the Hemisphere Conference, is more properly placed in the context of sixty years of American scientific congresses. It was organized pursuant to the fifty-fifth resolution of the Third Inter-

American Conference on Agriculture, held in Caracas in 1945, but it is illuminating to trace its origins through the Eighth American Scientific Congress held in Washington D.C. in 1940. At the Eighth Congress, 3,800 attendees representing 650 educational and scientific bodies and all twenty-one republics produced twelve volumes of *Proceedings*. The Agriculture and Conservation Section of the conference was chaired by Hugh Hammond Bennett, Chief of the USDA's Soil Conservation Service, whom the Hemisphere Conference would nominate for the Nobel Peace Prize. In Bennett's section, Pinchot presented his plan for "Conservation as a Foundation of Permanent Peace," of which a World Conservation Conference was to be the first step.³¹² Indeed, there were few new ideas at the Hemisphere Conference. The War transformed political, economic and social realities, but the conceptual tools for understanding the new world were inherited from the old.³¹³

But the reason for tracing the origins of the Hemisphere Conference to the Eighth American Scientific Congress is the latter's timing. It had been intended to mark the fiftieth anniversary of the Pan American Union, but convened on the day "the flaming cauldron of war in Europe was overturned upon small and relatively defenseless nations," as Secretary of State Cordell Hull put it. Hull echoed the two principal themes of the plenary speeches when he wrote that the gathering of scholars stood as a "rebuke to [the War's] mad perversion of science to destructive ends" and dedicated the *Proceedings* to

³¹² Gifford Pinchot, "Conservation as a Foundation of Permanent Peace," *Proceedings of the Eighth American Scientific Congress held in Washington May 10-18, 1940*, v. 5: *Agriculture and Conservation* (Washington D.C.: Department of State, 1941), 23-28, 27.

³¹³ For a succinct summary of pre-war Pan American conservation and preservation measures, see David Sheinin, "Wilderness and Pan American Preservation, 1910-1948," paper presented at the XXI International Congress of the Latin American Studies Association (Chicago, Sep. 1998).

“these faithful benefactors of mankind and to the great American family of nations which offers them a haven of peace, democracy, and security.”³¹⁴ The family patriarch, President Roosevelt, invoked the creative and destructive potential of science and the collective security of the American republics in his opening address—themes Truman would echo eight years later at the Hemisphere Conference. The soaring rhetoric of the Cuban Minister of National Defense, Domingo F. Ramos captures the mood: “No more is there an American meaning ‘North America,’ or a ‘Our America’ of Latin Americans; there is only one America which for each and every one of us constitutes ‘My America.’”³¹⁵ In other times and places, Latin American diplomats dismissed the Pan American Union as “the colonial division of the Department of State,” but in Denver in 1948, the historical moment in which the Monroe Doctrine appeared more like mutual security than informal imperialism had not fully passed.³¹⁶

U.S.-Latin American relations in conservation had grown closer during the war. The foundation of the Pan American Union’s Conservation Service, under the leadership of the General Secretary of the Hemisphere Conference William Vogt, was only one indication. The Conference’s President, U.S. Secretary of Agriculture Charles F. Brannan, reported that since 1942, the year the Inter-American Institute of Agricultural Sciences was founded, 140 scientists from Latin American countries had visited the U.S.

³¹⁴ *Proceedings of the Eighth American Scientific Congress*, dedication. See also Austin H. Clark, “The Eighth American Scientific Congress,” *Science* 91: 2370 (May 31, 1940), 511-514.

³¹⁵ *Proceedings of the Eighth American Scientific Congress*, 13-15, 39-40.

³¹⁶ Samuel Guy Inman, *Inter-American Conferences 1826-1954: History and Problems* (Washington D.C.: University Press, 1965), 104. For a succinct overview of American regionalism, see Louise Fawcett, “The Origins and Development of the Regional Idea in the Americas,” in Louise Fawcett and Monica Serrano, eds., *Regionalism and Governance in the Americas: Continental Drift* (New York: Palgrave Macmillan, 2005); David Sheinin, ed., *Beyond the Ideal: Pan Americanism in Inter-American Affairs* (Westport, CT: Greenwood Press, 2000).

Soil Conservation Service, including 73 trainees who had spent one to two years with the Service.³¹⁷ So many new inter-American conservation programs had been started that when the Chief of the Uruguayan Soil Classification and Conservation Service proposed an “Inter-American Organization for Conservation of Renewable Natural Resources,” the delegates dismissed the idea out of hand; it was simply redundant.³¹⁸ Latin American delegates described new constitutional laws mandating resource conservation and ambitious new programs based on the U.S. model, such as the Mexican plan to establish at least 250 conservation districts.³¹⁹ Cooperation was taken to its logical conclusion in the “servico” program of the Washington D.C. Institute of Inter-American Affairs (also established in 1942), which placed and paid the salaries of U.S. citizens in Latin American ministries of health, education, and agriculture, where they directed their own staff and reported both to the secretary of the national ministry and to the U.S. Institute—an arrangement that highlights the fragility of the boundary separating internationalism from imperialism.³²⁰

Whether the U.S. relationship with its southern neighbors represented imperial exploitation or international cooperation depended in part on who benefited from the flow of the Hemisphere’s resources. At the Eighth Congress, Secretary of Agriculture Henry

³¹⁷ Charles F. Brannan, “Teamwork of the American Republics in Conserving Resources,” in *Proceedings of the Inter-American Conference on Conservation of Renewable Natural Resources, Denver, CO Sep. 7-20, 1948* (Washington D.C.: Department of State), 169-172, 171.

³¹⁸ Carlos A. Flynn, “Inter-American Organization for Conservation of Renewable Natural Resources,” *Proceedings of the Inter-American Conference on Conservation of Renewable Natural Resources*, 181-184.

³¹⁹ Ricardo Montilla, Opening Plenary Speech, 9; Lorenzo R. Patino, “Organization of the Mexican Soil and Water Conservation Service,” both in *Proceedings of the Inter-American Conference on Conservation of Renewable Natural Resources*, 9, 759-772.

³²⁰ Dillon S. Myer, “The Role of Governmental Cooperation in Resource Conservation,” *Proceedings of the Inter-American Conference on Conservation of Renewable Natural Resources*, 184-189, 186. For a synthetic history of U.S. foreign relations that shows how often development projects have been an instrument of empire, see Michael Adas, *Dominance by Design: Technological Imperatives and America’s Civilizing Mission* (Cambridge, Mass.: Belknap Press of Harvard University Press, 2006).

Wallace envisioned an elaborate system of agricultural development in which Latin American countries produced tropical cash crops that could not grow in the United States—rubber, cinchona, kapok, cocoa, tropical hardwoods, and so on—which would “provide a sound basis for complementary trade relations” and “give practical significance to the idea of Pan-American solidarity.” Fair trade, not free trade, was the guiding ideology.³²¹ Managing the accounts of such a system required attaining the view from above. Wallace also addressed the Statistical Section of the Congress, which passed resolutions calling for an Inter-American Conservation Commission that would be “charged with the duty of preparing an inventory of world natural resources...in the interest of permanent peace.” For Wallace, the Hemisphere’s moral community was founded upon balanced trade relations between interdependent nations; to assure the solidarity of the American continent (it was conventional to refer to North and South America as a single continent) economic patterns had to align with natural patterns.

This logic implied that the primary target of conservationist’s interventions was society, not nature. According to the ecologist Paul Sears, “The basis of man’s adjustment to the soil is to be found in the form or pattern of his culture.”³²² Soil erosion was to mid-twentieth century conservation what climate change is to early-twenty-first century environmentalism, and apocalyptic scenarios inspired similar zeal. A resolution

³²¹ Henry Wallace, “The Vital Role of Agriculture in Inter-American Relations,” *Proceedings of the Eighth American Scientific Congress*, 17-21, 19. For fair trade at the Hemisphere Conference, see Amos E. Taylor, “Renewable Resources and International Competition,” *Proceedings of the Inter-American Conference on Conservation of Renewable Natural Resources*, 199-202.

³²² Paul B. Sears, “The Ecological Basis of Land Use and Management,” in *Proceedings of the Eighth American Scientific Congress*, v. 5: *Agriculture and Conservation* (Washington D.C.: Department of State, 1941), 223-233.

at the Hemisphere Conference referred to soil conservation as a “universal crusade.”³²³ Yet while soil scientists could measure a civilization’s health in the fertility its soils and sound the alarm, making the necessary adjustments required social knowledge. The Hemisphere Conference left no doubt about the value of breaking down disciplinary boundaries. Its Declaration of Principles stated: “Conservation requires the coordinated assistance of all branches of knowledge that deal with peoples and their institutions. Economics, sociology, psychology, anthropology—all these and many other disciplines must guide us in the application of what the basic sciences have shown to be desirable.”³²⁴

This multidisciplinary strategy for democratically achieving, in Sears’ words, the “readjustment of culture to soil” was most fully developed in the USDA’s agricultural extension program. When the USDA’s Director of Extension, M. L. Wilson, outlined the purposes and practices of extension work, he drew explicitly on the group dynamics literature that influenced the architects of the view from everywhere. He described it as a two-way traffic, bringing new research and knowledge to the farm and bringing the problems of rural people to the attention of science. In explaining the importance of social science to extension programs, Wilson stressed that the purpose was not just to improve farming, but also “the idea of human conservation [and] personality development.”³²⁵ More than dollars-per-acre, the measure of a conservation program’s

³²³ “Resolutions,” *Proceedings of the Inter-American Conference on Conservation of Renewable Natural Resources*, 24.

³²⁴ Declaration of Principles, *Proceedings of the Inter-American Conference on Conservation of Renewable Natural Resources*, 20-21, 21.

³²⁵ M. L. Wilson, Extension Work as a Social Force in Agricultural Progress,” *Proceedings of the Inter-American Conference on Conservation of Renewable Natural Resources*, 776-780, 779.

success was the quality of rural life. The proper organization of the soil may have determined the proper organization of society, but an ecological approach to conservation required expertise in both soil science and social psychology. Fertile fields, mental health, and world peace were dependent variables.

The ethos of the view from everywhere was even incorporated into the practice of soil surveys—an observational technology that usually typified the view from above. The Chief of the Soil Service Survey Division described how land capability was determined by “scientifically trained soil technicians” who walked the field, boring holes at regular intervals to determine soil “depth, texture, permeability, available moisture capacity, inherent fertility, organic matter content, and other characteristics.” The surveyors measured slopes, noted characteristics like rockiness, gauged soil loss through erosion, and recorded the present use of the land. All of this information was coded onto aerial photographs. These and smaller scale soil surveys had identified roughly sixty-million acres of cultivated land in the United States that was unsuitable for permanent agriculture, but also 100 million acres of forests and grasslands “potentially suited for cultivation.” Soil surveys literally manifested the view from above. But aerial photographs and other data were “joined with practical farm experience in classifying the land and in working out the right combination of practices to make full use, without waste, of the land resources.” Not only did the system emphasize interdisciplinary collaboration between “soil conservationists, soil scientists, agronomists, engineers, foresters, biologists, [and] agricultural specialists,” but also the technical experts were

expected to learn from the experience of “local farmers.”³²⁶ In its interdisciplinarity and commitment to dialogue with the citizens whose behavior it was meant to change, this method of determining the value of land resembled the view from everywhere.

The goal of ecological land management was to maintain a productive balance between systemic tensions—to emulate climax communities in which plants, animals, soil, and water existed in dynamic balance by making the most efficient use of an area’s energy resources. Accounting metaphors proliferated. The Hemisphere Conference’s Declaration of Principles stated the standard analogy:

The principal is the natural resources. The interest is the earth’s ability to maintain their yield so long as natural relationships are preserved and so long as man will govern his activities and institutions to accord with them. No generation is free to spend more than the interest yielded by rational use of the heritage. On the contrary the duty of every generation is to apply its full knowledge to protect and increase the capital sum.

In fact, population growth meant that increasing the capital sum was imperative, but many participants doubted the possibility that expanding resources was a viable solution to the crisis. The most significant development in conservation discourse between the Eighth Congress and the Hemisphere Conference was increased attention to the peril of population growth. Few people were as influential in elevating population growth to the top of the conservation agenda as the Conference’s Secretary General. Vogt’s shockingly alarmist *Road to Survival*, published the year of the Conference, quickly became the population control movement’s most successful popularization to date. *Road to Survival* provided a continent by continent survey of carrying capacity,

³²⁶ Roy D. Hockensmith, “Classification of Land According to Its Capability as a Basis for a Soil Conservation Program,” 450-465, 450, 455, 451. On soil survey, see Chapter Six; for the authoritative guide to contemporary soil survey, see Soil Survey Staff, *Soil Survey Manual U.S. Department of Agriculture Handbook No. 18* (Washington DC: Government Printing Office, 1951).

which Vogt calculated according to the equation $C = b : e$, where C was carrying capacity, b was biotic potential of the land, and e represented environmental resistance. In Vogt's world, b had a fixed limit, which was realized in the natural climax community, and human action generally worked to increase e, thus lowering carrying capacity. The agricultural revolution (a term Vogt placed within sneering quotation marks) had "not raised the earth's biotic potential," but instead had "enormously *increased*" global environmental resistances by "destroying hundreds of millions of productive acres."³²⁷ In part, this argument was just an italicized version of conventional wisdom derived from the experience of the Dust Bowl (and, ironically, glutted grain markets) that pushed for the retirement of marginal farmland before more soil blew away.³²⁸ But according to Vogt's arithmetic, people were always a negative variable. Attempting to use science to raise the planet's carrying capacity (i.e. increase production) was a certain path to extinction. The only road to survival was a radical break from the inherently exploitative capitalist system and population control.

Not surprisingly, the Hemisphere Conference reflected Vogt's passion for population control. The discussion leader for Section I, "Human Populations and Productive Capacity of the Land," was Robert C. Cook, the longtime editor of the *Journal of Heredity*. Cook was very much interested in the quality of populations, but his introduction to the papers tactfully ignored eugenic concerns. Instead, he related the parable of the Mesa Verde people, whose agricultural society had succumbed to drought,

³²⁷ William Vogt, *Road to Survival, with an introduction by Bernard M. Baruch* (New York: William Sloane Associates, Inc., 1948), 29, 42

³²⁸ Phillips, *This Land, This Nation*; Donald Worster, *Dust Bowl: The Southern Plains in the 1930s* (Oxford: Oxford University Press, 1979).

its land reverting to desert: “So intimate are the interrelationships of the nations becoming that there is a real danger that the tragedy of the Mesa Verde could be reenacted on a global basis. It might be that there would be left no hospitable valleys to the south in which the nations of the world could take refuge...the prospect of population increase or its decline elsewhere on the earth has a significance for us.”³²⁹ Instead of accelerating economic growth, development programs might transform the entire planet into a manmade desert—the very symbol and substance of underdevelopment. The goal should not be growth, but rather the dynamic yet stable equilibrium of the climax community.

Indeed, the succession from a weedy pioneer to a mature climax community was the transition from an economy of exploitation to an economy of conservation. It has become taken for granted that industrialized countries, and particularly the United States, were the model towards which development programs attempted to guide underdeveloped nations. But too much attention to the ideal of the climax community and the strength of the U.S. economy can distract from the problem of the pioneer community and the negative example of the United States. Bennett’s statement to the Eighth Congress was a typical preamble to a soil conservation sermon: “As far as can be determined from historical records, the United States has wasted its precious soil resource faster than any other nation or race that ever engaged in agriculture on an extensive scale.”³³⁰ Or, in Vogt’s characteristic language: “Unfortunately, our forefathers...were

³²⁹ “Introductory remarks by discussion leader,” *Proceedings of the Inter-American Conference on Conservation of Renewable Natural Resources*, 80.

³³⁰ Hugh Hammond Bennett, “Soil Erosion and Its Control,” *Proceedings of the Eighth American Scientific Congress held, v. 5: Agriculture and Conservation*, 331-347, 336.

some of the most destructive groups of human beings that have ever raped the earth.”³³¹

At the Hemisphere Conference, plant ecologist Walter Cottam explained the problem:

“The invasion of an unspoiled continent by an intelligent but unenlightened civilization led to a psychology of abundance that lies at the bottom of our resource woes today.”³³²

As the historian Robert Kohler has shown, this generation of American naturalists grew up exploring pockets of biologically diverse nature spared from the creative destruction of westward expansion; to them, the frontier epoch had endowed Americans with a wasteful pioneer mentality.³³³

While there was a consensus that population growth and a frontier mentality threatened civilization, Vogt’s radical solutions garnered much less support. An international conference with Catholic countries was hardly the place to push birth control—only the vaguest of allusions (“other measures that careful study renders advisable”) made it into the resolutions. On the resources side of the balance sheet, the Chief of the USDA’s Bureau of Agricultural Economics, Oris V. Wells (who would soon move on to FAO), began his paper by asking rhetorically, “Against what criteria... should the new [desired] balances be measured? What purpose or end do we seek?” He was justified in assuming “that no one will seriously argue for the extreme view that the restoration of our renewable natural resources to their original or primeval state is either

³³¹ William Vogt, *Road to Survival*, 114.

³³² William P. Cottam, “The Role of Ecology in the Conservation of Renewable Resources,” *Proceedings of the Inter-American Conference on Conservation of Renewable Natural Resources*, 396-406, 397.

³³³ Robert Kohler, *All Creatures: Naturalists, Collectors, and Biodiversity, 1850-1950* (Princeton: Princeton University Press, 2006). This frontier hypothesis is still alive and well; for example, Tim F. Flannery, *The Future Eaters: An Ecological History of the Australasian Lands and People* (Chatswoods: Australia Reed, 1995).

possible or generally desirable, even though this may be so for a few parks.”³³⁴ Charles Kellogg, the eminent and long-serving Chief of the USDA’s Division of Soil Survey, represented the consensus at UNSCCUR: “What we are seeking,” he declared, “is a cultural balance between people and resources, and that balance is often far, far above the natural balance.”³³⁵ In a world without frontiers, natural, social, cultural, political, and economic balances were interdependent, and they all required active intervention to maintain optimal equilibrium. Despite prophecies of civilization’s collapse, the general mood of the Hemisphere Conference was an optimistic faith in the power of science to guide humanity through the eye of the natural resources needle.

The optimism of the Hemisphere Conference was founded on a sense of hemispheric solidarity, but this very solidarity posed a potential obstacle to a world approach to conservation. The catastrophic eruption of violence in Europe had accelerated the institutional integration and bolstered the communal spirit of the Americas that was necessary for conservation in the broad sense. But solidarity based on enforcing the Hemisphere’s boundaries was out-of-sync with the postwar world. With the establishment of the UN System and the geographic expansion of the United States’ sphere of influence, Latin Americans worried about U.S. distraction in Europe and the Pacific. In the America’s, the boundary between international cooperation and imperial exploitation remained extremely fine, of course. U.S. technical assistance and regional economic planning could easily slip into a form of indirect rule. Nevertheless, how the

³³⁴ Oris V. Wells, “Economics of Conservation: Some Preliminary Comments on the Forces Conditioning Conservation of Renewable Natural Resources Under Conditions of Economic Progress,” *Proceedings of the Inter-American Conference on Conservation of Renewable Natural Resources*, 305-309.

³³⁵ Discussion of Colin G. Clark, “World Resources and World Population,” *Proceedings of UNSCCUR*, 28.

positive spirit of Pan Americanism could be integrated into a world community remained an open question. The nature conservationists who had met at the National Academy of Sciences, however, were happy to label the Hemisphere Conference the first regional meeting in a coherent series aimed at building a world approach to conservation.

In fact, the Conference promoted an ecological approach to resource management that exemplified the kind of program they had envisioned. The focus on the interdependence of resources, nations, and scientific disciplines assured that conservation was understood in a holistic manner. The assumption that cultural patterns must conform to natural patterns, and not the other way around, endowed natural scientists with enormous authority, essentially relegating social scientists to technicians, but also had the paradoxical effect of making social knowledge the key to conservation. In terms of Unesco's plans, the overarching theme that humans needed to live within the earth's limited carrying capacity effectively reconciled the imperative to address resource shortages with the objective of preserving nature.

Nature protection featured prominently at the Hemisphere Conference, and so Hal Coolidge's presentation on the "World Approach to Nature Protection" was incorporated seamlessly into the agenda. He laid out a history of the international movement beginning with the long-forgotten Swiss initiative of 1913 and proceeding through the regional conferences—at all of which Coolidge made a similar presentation—to the upcoming congresses in Lake Success. The Hemisphere Conference even passed a resolution recommending the Pan American Union establish a committee to work with Unesco on

developing a world convention for wildlife protection.³³⁶ Only ten days separated the Hemisphere from the European and African Conference in Fontainebleau, and so the American delegation, including Coolidge and Vogt, arrived in France energized by their success in Denver.

The European and African Technical Symposium on Nature Protection

When the plans to integrate Unesco's Protection of Nature Conference and UNSCCUR were hatched at the meeting in Washington D.C., plans for the American and Pacific regional conferences were already well developed. The European-African conference, however, was a new idea—and Huxley still had to face his European friends to whom he had promised an intergovernmental congress formally establishing a new international union in 1948. The French government, eager to bolster the Parisian IGO, bailed Unesco out. It called the conference with Unesco and the Swiss run Provisional International Union for the Protection of Nature as “joint conveners.” Unesco simply attached a European and African Technical Symposium to the intergovernmental meeting formally establishing the International Union for the Protection of Nature (IUPN). Discussion at the Technical Symposium focused on defining the new union's program. The Secretariat thus improvised a way around the veto of the United States and Britain—Unesco's two most powerful donor governments. Officially, the IUPN constitutive conference was a French initiative and the European and African meeting was a preparatory regional conference, not the world congress on nature protection that had been rejected.

³³⁶ Harold Jefferson Coolidge, “A World Approach to Nature Protection,” *Proceedings of the Inter-American Conference on Conservation of Renewable Natural Resources*, 714-724.

The precedent for the European and African Technical Symposium was the 1933 congress that had produced the International London Convention for the Protection of African Fauna and Flora. The aristocratic Society for the Preservation of the Fauna of the Empire (SPFE) had lobbied Great Britain to convene the congress to coordinate wildlife policies. The London Convention defined key terms like “national park” and “strict natural reserve” and created a list of species that would be either strictly protected (group A) or require a license to hunt or collect (group B) throughout the continent.³³⁷ The Fontainebleau agenda included reports from three terminology committees that attempted to classify protected areas with Linnaean precision and debated the feasibility of a global wildlife convention. But, as Van Straelen (the head of Belgian Congo’s national park system) complained, the whole terminology question, which devolved into a debate over whether French or Latin was a more appropriate *lingua franca*, seemed “purely academic” and “futile in view of the ground still to be covered before an actual programme of nature protection could be formulated.”³³⁸ In line with broader disillusionment over the failure of legalistic internationalism during the interwar years, epitomized by the League of Nations, delegates at Fontainebleau dismissed the London Convention as worth little more than the paper on which it was printed. The practical irrelevance of international conventions was the reason a new functional international

³³⁷ American Committee for International Wild Life Protection, *The London Convention for the Protection of African Fauna and Flora, with Map and Notes on Existing African Parks and Reserves: Special Publication of the American Committee for International Wild Life Protection* No. 6 (Cambridge, Mass: American Committee for International Wild Life Protection, 1935); John M. Mackenzie, *The Empire of Nature: Hunting, Conservation and British Imperialism* (Manchester: Manchester University Press, 1988).

³³⁸ IUPN, *Preparatory Documents to the International Technical Conference on the Protection of Nature, August 1949, U.S.A.* (Paris: Unesco, 1949), 54, 56-70.

union was necessary. Its task was to build the popular opinion and political will on which law depended.

But before the IUPN could galvanize a world movement, its founders had to agree on its mission. The odd procedure in which the French government called a conference that Unesco organized at the instigation of nongovernmental organizations was reflected in the semi-governmental Fontainebleau Conference. Take the U.S. delegation: Ira Gabrielson, former Director of the Fish and Wildlife Service and now President of the Wild Life Management Institute, headed the delegation, which, included Vogt, the omnipresent Coolidge, and George Brewer of the Conservation Foundation. Between them the four delegates represented seventeen non- or semi-governmental organizations, while Gabrielson and Coolidge also represented the U.S. government—although they were not authorized to commit it to anything. Representatives of eighteen governments, seven international organizations and 107 national organizations signed the IUPN's constitution. The Union that emerged from this constitutive conference required a new acronym to describe its legal status: a GONGO, or a governmental and nongovernmental organization.³³⁹

In the context of postwar international nature conservation, the most striking absence from Fontainebleau was FAO. If the IUPN was to influence the international community's renewable resources programs, it would have to either displace or collaborate with FAO. When he declined Unesco's invitation to the conference, FAO's Acting Director-General mentioned only one topic of interest to his organization: "the conflict which frequently arises between sportsmen's groups, who are interested in the

³³⁹ Holdgate, *The Green Web*, 33.

preservation of game, and agricultural groups, particularly producers of range livestock.”³⁴⁰ Especially in Africa, where the SPFE had begun as an elite coalition of big game hunters aligned against farmers and ranchers who saw large ungulates and cats as oversized pests, FAO’s concern made sense: nature protection seemed opposed to the development of natural resources. Opposition, however, implied engagement. FAO did not show up for the conference because officials assumed nature protection was irrelevant. At Fontainebleau, the Swiss biologist J. G. Baer (who would serve as the Union’s third president), proposed a definition of nature that makes the preservationists’ irrelevance to development clear: “Nature is an assemblage of conditions that permit biological equilibrium to be maintained without the intervention of man.”³⁴¹ If the IUPN defined the object (nature) of its program by the absence of human work, then not only was it irrelevant to FAO’s interests; it was feeble competition. Erecting an impermeable boundary between Man and Nature was the antithesis of the functionalist model of international organizing embodied in the specialized agencies. How could an “army enlisted against nature” be recruited to the preservationist cause?

But even irrelevance has its benefits. A comparison with Soviet nature protection organizations is surprisingly helpful here. Baer’s description of natural balance had been explicitly rejected at the Hemisphere Conference, but was still the principle through which Soviet scientists justified their system of *zapovdniki*—inviolable nature reserves. In theory, the *zapovdniki* were natural laboratories for fundamental research that could

³⁴⁰ Broadley to Huxley, 27 Sep. 1948, International Union for the Conservation of Nature and Natural Resources, Box Land and Water Development Division: Land and Water Use Branch, Chief Dr. R. Schickele, 10AGL566, FAO.

³⁴¹ IUPN, *Preparatory Documents*, 47.

determine ecological baselines to guide resource development projects. In practice, the historian Douglas Weiner has argued, a key benefit of excluding humans from nature was that it created a protected enclave in which scientists could preserve values and identities from a pre-Stalinist community—it was easy to ignore the threat of nerdy naturalists engaged in esoteric “pure science” and who advocated for the rights of ducks.³⁴² The stakes were incomparable, but a similar dynamic was in effect at Fontainebleau. The quaint sentimentality of “nature protection” led FAO to ignore the IUPN. The preservationist reputation of the IUPN confined it to the margins of the international community during its early years, dependent on handouts from Unesco and barely able to afford a single secretary, but also provided a sort of bureaucratic cover under which Unesco trespassed into FAO’s turf. Unesco’s patronage of the IUPN and its organization of the postwar nature protection conferences established its legitimacy as an international actor in the natural resources field—an area in which its constitutional mandate was dubious at best.

If a FAO official had attended the Fontainebleau Conference, he would have been alarmed to discover that the preamble to the IUPN’s constitution defined “the protection of nature” as “the preservation of the entire world biotic community, or man’s natural environment, which includes the earth’s renewable natural resources of which it is composed, and on which rests the foundation of human civilization.” More to the point,

³⁴² Douglas Weiner, *A Little Corner of Freedom: Russian Nature Protection from Stalin to Gorbachev* (Berkeley: University of California Press, 1999).

at Fontainebleau, the British ecologist Frank Frasier Darling explicitly compared the IUPN's "immense" responsibility to FAO's.³⁴³

The conflation of protection and conservation was at the core of the ecological approach, but it did not occur without a fight. The continental Europeans who had led the attempt to establish the IUPN in Switzerland did succeed in preventing the substitution of a "C" for the "P" in the IUPN's name (although only for the next eight years). The American delegation, which drafted the constitution's preamble, claimed responsibility for the capacious, utilitarian definition of nature protection.³⁴⁴ An undercurrent in the tension over conservation versus protection was the frustration of Europeans with the pervasiveness of U.S. influence.

But the Americans were not without allies. In the late-1940s, the key alliance was Anglo-American.³⁴⁵ Before and especially during World War II, ecologists such as Arthur Tansley "assumed leadership of the nature reserves movement," displacing the preservationist values of amateur naturalists. Ecologically oriented professional scientists advocated protecting a sample of the full diversity of biological communities in nature reserves. Indeed, in 1947 Huxley himself chaired the official British Wild Life Conservation Special Committee that labeled reserves "Sites of Special Scientific

³⁴³ IUPN, *Preparatory Documents*, 31.

³⁴⁴ Harold J. Coolidge, "The Birth of a Union: Fontainebleau, October, 1948," reprint from National Parks Association newsletter, INTERNATIONAL RELATIONS, Internatl Unions: Protection of Nature 1948, NRC; Harold J. Coolidge, "News and Notes," *Science* 108: 2815 (Dec. 10, 1948), 671-2.

³⁴⁵ Continental Europeans did have a more utilitarian tradition of nature protection, however. In France, for example, the nature protection movement can be traced back to a late nineteenth-century "concatenation of professional forestry, popular forestry, and tourism" intentionally linked together to promote awareness of soil erosion, flooding and other dangers of (supposedly) inappropriate land use. Tamara L. Whited, *Forests and Peasant Politics in Modern France* (New Haven: Yale University Press, 2000), 183; Stephanie Pincetl, "Some Origins of French Environmentalism: An Exploration," *Forest and Conservation History* (Apr. 1993), 80-85. For a comparison between the U.S. and Italy, see Marcus Hall, *Earth Repair: A Transatlantic History of Environmental Restoration* (Charlottesville: University of Virginia Press, 2005).

Interest.”³⁴⁶ The logic justifying the SSSIs was similar to the Russian rationale for *zapovedniki*, but at the Fontainebleau Conference, the botanist John Ramsbottom of the Natural History Museum stressed that the British “attached great importance to the fact that nature protection should imply the systematic action of man.” Natural communities worth protecting included “climaxes determined by man”—and not just picturesque rural landscapes but “the new London flora which had developed in bombed-out districts.”³⁴⁷ This approach did not discard preservationist values so much as add a layer of utilitarian rationale to patriotic, psychological, spiritual, and aesthetic arguments for nature protection—a strategy that intentionally complicated the meaning of utility. The progress of ecological science required natural laboratories, and civilization’s progress, perhaps even survival, depended on scientific advance. Linking nature reserves to the rational use of natural resources was in step with the American strategy, but the British emphasis on the value of protected areas *for* science was a more pronounced feature of the European movement generally.

The significance of embedding nature protection within a regime of rational use was even more strongly emphasized in the African context. At Fontainebleau, the Secretary of the SPFE, H. G. Maurice, introduced the section on “Fauna Conventions and International Legislation” by noting, somewhat grudgingly, that while attendees might be motivated by “the cultural aspects of wild life conservation” he “had no illusions about

³⁴⁶ Stephen Bocking, “Origins of the Nature Conservancy” in *Ecologists and Environmental Politics: A History of Contemporary Ecology* (New Haven: Yale University Press, 1997), 13-37, 14. W. M. Adams, “Rationalization and Conservation: Ecology and the Management of Nature in the United Kingdom,” *Transactions of the Institute of British Geographers* 22: 3 (1997), 277-291; John Sheail, “War and the Development of Nature Conservation in Britain,” *Journal of Environmental Management* 44 (1995), 267-283.

³⁴⁷ IUPN, *Preparatory Documents*, 50.

the kind of arguments that should be used to convince Governments which could only be moved by facts of an economic character.” Nature Protection, Maurice argued, was “the only way of avoiding ultimate defeat [i.e. starvation] in the battle man had deliberately started against nature.”³⁴⁸ This formulation nicely captures the manner in which the passive connotations of nature protection were reconfigured as an active campaign. Ironically, the unintended consequences of subjugating wild lands necessitated a new front in the war on nature—nature protection.

Although the imperative to frame nature protection within broader fears of resource depletion was similar in Africa and Europe, the terms of the debate were inverted. In Europe, Man threatened Nature at his own peril; in Africa, Nature threatened Man at its own peril. Nature reserves in Africa were a means of separating nature from civilization. At Fontainebleau, this dynamic was most clearly expressed in a debate over the ban on killing gorillas. During the meeting on “Big Game Protection in Africa,” the General Inspector of Game for French Africa, Colonel Bourgoïn, proposed downgrading the gorilla from the A list (strictly protected) to the B list (regulated hunting). Not only were gorillas numerous, but they were a menace, “killing off as many as thirty people a year, destroying crops and often forcing whole villages to move by destroying all the surrounding vegetation.” A total ban on hunting was, therefore, “neither practical nor desirable” (although Coolidge, whose specialty was primatology, vehemently disagreed). Instead, Bourgoïn proposed the “British method”: protecting gorillas (and other species) in “large areas properly selected.”³⁴⁹ As the historian John MacKenzie shows, the object

³⁴⁸ IUPN, *Preparatory Documents*, 56.

³⁴⁹ IUPN, *Preparatory Documents*, 38.

of both game preservation and culling in large parts of Africa was to emphasize “habitat separation” between humans and wildlife.³⁵⁰ In order to rationalize the relationship between civilization and nature in Africa, the boundary between the two had to be clarified. Protecting nature meant eliminating wildlife in settled areas.

Notoriously, it could also mean eliminating human life in wild areas. After listening to Vogt’s predictably misanthropic presentation on the scientific management of wildlife, Huxley wryly concluded, “Man was decidedly a scourge.”³⁵¹ The veteran British colonial game warden Captain Keith Caldwell, who had performed a wildlife survey for the SPFE in East Africa the previous year, acknowledged that there was “too much game in partially cultivated areas,” but he identified the main threats to wildlife as “inevitable economic development” and “native hunters”—civilization and “primitive man.”³⁵² The most disturbing challenges to African nature were the interactions between these two threats; for example, the 30,000 “natives” who hunted with guns in Tanganyika or colonial agriculture development that forced peasants to exploit marginal lands. Separating human and wildlife habitats was the principal method of nature protection in Africa, but it did not resolve the root problem: the effacement of the border separating civilization from “natives.” Renegotiating the complex triangular relationship between civilization, “primitive man,” and nature was the task of conservation.³⁵³

³⁵⁰ John M. MacKenzie, *The Empire of Nature*, 253-4; Jane Carruthers, *The Kruger National Park: A Social and Political History* (Pietermaritzburg: University of Natal Press, 1995); Roderick P. Neumann, “The Postwar Conservation Boom in British Colonial Africa,” *Environmental History* 7: 1 (Jan. 2002), 22-47.

³⁵¹ IUPN, *Preparatory Documents*, 31.

³⁵² IUPN, *Preparatory Documents*, 36-7.

³⁵³ The historiography of imperial conservation in Africa, particularly soil conservation, is extensive, especially compared to Latin America. For an introduction, see William Beinart and Lotte Hughes, *Environment and Empire* (Oxford: Oxford University Press, 2007); William Beinart and Peter Coates,

The selection of Jean-Paul Harroy as the first Secretary-General of the IUPN assured that the ambitious conservationist agenda would be more than an ostentatious opening sentence of the constitution. Harroy, a protégé of Van Straelen who had been Director of the Institute of National Parks of the Belgian Congo, ran the impoverished IUPN's new office in Brussels during the evenings while working days as the Secretary-General of the Belgian Institute for Scientific Research in Central Africa. When Harroy left the IUPN in 1955, it was to serve as Vice-Governor-General of the Belgian Congo and Governor of Ruanda-Urundi. But in 1948 he was best known for his monograph, *Afrique, Terre Qui Meurt: La Dégradation des Sols Africains sous l'Influence de la Colonisation*. Vogt essentially summarized this book in his Africa chapter in *Road to Survival*. Harroy's book in turn drew heavily on British and American work, particularly *The Rape of the Earth: A World Survey of Soil Erosion* by the British authors G.V. Jacks and R.O. Whyte. In an imperial twist on the American conservationists' frontier hypothesis, Harroy blamed desertification on capitalist exploitation and colonialism. Europeans, who had no stake in the long-term health of the land and were greedy for quick returns, had imported European land use practices to Africa, with devastating consequences. He emphasized the need for a holistic approach that broke through disciplinary barriers. Beginning with a primer on soil science and working its way up to chapters on the spiritual, material, economic, political, and social dynamics of African

Environment and History: The Taming of Nature in the USA and South Africa (London: Routledge, 2002); Diana K. Davis, "Desert Wastes of the Maghreb: Desertification Narratives in French Colonial Environmental History of North Africa," *Cultural Geographies* (2004), 359-387; James Fairhead and Melissa Leach, *Misreading the African Landscape: Society and Ecology in a Forest-Savanna Mosaic* (Cambridge, UK: Cambridge University Press, 1996); Michael Osborne, *Nature, the Exotic, and the Science of French Colonialism* (Bloomington: Indiana University Press, 1994); Kate B. Showers, *Imperial Gullies: Soil Erosion and Conservation in Lesotho* (Athens: University of Ohio Press, 2005).

societies, *Afrique, Terre Qui Meurt* showed how colonialism destroyed local customs that had evolved over centuries to preserve the natural equilibrium.

Yet despite Harroy's condemnation of colonialism, his conclusion forcefully demanded a stronger, more interventionist colonial state. "L'État, et souvent l'Etat," had the power to assure "l'acceptation de sérieux sacrifices immédiats nécessaires a la sauvegarde d'intérêts supérieurs futures."³⁵⁴ He called for conservation education, but also endorsed compulsory labor and overt coercion. Similarly, Jacks and Whyte had concluded that racial characteristics combined with the "intrinsic nature of the soil" in Africa meant that a sustainable civilization required "a feudal type of society in which the native cultivators would to some extent be tied to the lands of their European overlords."³⁵⁵ It was up to imperial governments to enforce a sustainable reconciliation between civilization, "primitive man," and nature. The IUPN was established under the auspices of Unesco, but on an institutional map of the international sphere, it would have occupied territory between international and imperial organizations.

There was very little technical discussion at the African and European Technical Symposium. Instead delegates debated the very meaning of nature protection. Was it to preserve pristine bits of wilderness or to effect a broader harmonization between nature and civilization? Before the war, international nature protection had focused on international conventions and exotic mammals and birds. The postwar nature conservationists certainly had a weakness for rare animals, but they framed their

³⁵⁴ Jean-Paul Harroy, *Afrique, Terre Qui Meurt: La Dégradation des Sols Africains sous l'Influence de la Colonisation* (Bruxelles: Office International de Librairie, 1944), 548.

³⁵⁵ G.V. Jack and R.O. Whyte, *The Rape of the Earth: A World Survey of Soil Erosion* (London: Faber and Faber Ltd., 1939), 262. Jacks chaired the Social Relations of Science "European Agriculture" conference in 1942 and Whyte went on to a long career at FAO.

arguments in broad ecological terms and raised the stakes to the survival of the human species. The disagreement between preservationists and conservationists revealed a fractured movement, but the fault lines were more complex than merely separating an Anglo-American block from a continental block. European colonial representatives sided squarely with the holistic interventionist approach. Indeed, more starkly than the Hemisphere Conference, the Fontainebleau meeting revealed the potential for cooperation in international conservation to cross the boundary into coercive imperialism. More subtly, the debate was also about the meaning of internationalism. The conservationists recognized that effective participation in the postwar international community depended on developing a compelling functional program—to grow, the new International Union for the Protection of Nature had to *do* something.

Roger Heim, the French botanist who chaired the meeting and would be the IUPN's second president, concluded the conference by mixing two of the conservationists' dominant metaphors: "We are running a race with mankind as a whole and, if we are slow in taking vital decisions, we may finally lose the battle." Yet it remained unclear whether those who gathered in Denver and Fontainebleau were running in the same battle.

The Seventh Pacific Science Congress

Plans for the last of the regional conferences actually predated the War, and just months after fighting in the Pacific ended, scientists were already reviving plans for the Seventh Pacific Science Congress. They hoped it would furnish reassuring "evidence of a

return to peace in that troubled region.”³⁵⁶ The goals of the Pacific Science Association—an organization of thirty-seven National Research Councils and Academies that was responsible for convening the Congress—were to “initiate and promote co-operation” in scientific research aimed at “affecting the prosperity and well-being of Pacific peoples” and “to strengthen the bonds of peace among Pacific peoples by promoting a feeling of brotherhood among the scientists of all Pacific countries.”³⁵⁷ But for all the rhetoric linking science to peace, the organization of the conference was a testament to the enduring impact of the World War on international science.

The Seventh Congress was supposed to have met in Manila in 1943, but Filipino scientists reported that rebuilding the devastated city’s scientific infrastructure made merely participating in the congress a challenge.³⁵⁸ Changing the location was cumbersome because the Pacific Science Association, which gradually evolved out of Pacific Science Congresses following the First World War, had no operating budget and no permanent base. After each Congress, the Secretariat transferred to the host nation of the next Congress.³⁵⁹ In many respects a great boon to science, the Second World War had so disrupted non-martial international scientific communication that no one even knew who the active members of the Association were. Following a discussion between Coolidge and the President of the Canterbury Branch of the Royal Society, the U.S. NRC

³⁵⁶ Cook (Officer-in-Charge Canadian NRC) to Harrison (Chairman U.S. NRC), 7 March 1946, FOREIGN Relations 1946, Internatl Congresses: Pacific Science Seventh: 1949, NRC.

³⁵⁷ Bishop to Bodet, 26 Apr. 1949, 7th Pacific Science Congress New Zealand 1949, Unesco.

³⁵⁸ Bronk (Chairman of U.S. NRC) to Elkin (Dept. of Anthropology, University of Sydney), 17 Feb. 1947, INTERNATIOANL Relations 1947, Internatl Congresses: Pacific Sc Congress Seventh, NRC.

³⁵⁹ Philip F. Rehbock, “Organizing Pacific Science: Local and International Origins of the Pacific Science Association,” in Roy MacLeod and Philip F. Rehbock, eds. *Nature in Its Greatest Extent* (Honolulu: University of Hawaii Press, 1985); Peter A. Elkin, *Pacific Science Association: Its History and Role in International Cooperation* (Honolulu: Bishop Museum Press, 1961).

handled the delicate international diplomacy that granted New Zealand the right to convene the Seventh Congress. The inefficiency of the process underscored how obsolete the Congress' institutional structure had become, especially in the context of the postwar boom of functional international organizations.

The American scientific community was anxious to reestablish an active international research program in the Pacific because of the expansion of U.S. power in the area, including trusteeship of Micronesia. When the anthropologist George Murdoch returned from the Pacific Theater, he informed the NRC that he thought he “could receive a lot [of] material support” for research through “his contacts in the Navy” (he was right), and the NRC quickly jumped on board.³⁶⁰ In June 1946, the NRC organized a Pacific Science Conference in Washington, D.C. to assess the contribution science could make to the administration of the United States' new Pacific possessions. This Conference recommended the creation of the Pacific War Memorial with a ten million dollar endowment to fund scientific research in honor of fallen soldiers and the establishment of a Pacific Science Board under the auspices of the NRC to coordinate projects.³⁶¹ The Navy endorsed conferences on Micronesian conservation, writing Coolidge (who basically was the new Pacific Science Board) that “it would be of much benefit to the government of the Trust Territory if...the problems of conservation in the Trust Territory

³⁶⁰ Harrison to Gregory, 1 March 1946, “Foreign Relations 1946, Internatl Congresses: Pacific Science Seventh: 1949, NRC. Murdoch's research program turned out to be the Coordinated Investigation of Micronesian Anthropology, one of the largest anthropological projects ever undertaken. See, Rebecca M. Lemov, *World as Laboratory: Experiments with Mice, Mazes, and Men* (New York: Hill and Wang, 2005).

³⁶¹ Harold J. Coolidge, “The Pacific Science Conference,” *Far Eastern Survey* 15: 25 (Dec. 18, 1946), 378-381.

could be explored.”³⁶² Advocates of Pan Pacific cooperation had long taken the Pan American Union as their model, and the Navy’s patronage and Coolidge’s energy opened the possibility that intensified international cooperation could turn the Pacific Science Board into the equivalent of Vogt’s Pan American Conservation Service.

At conferences in Honolulu and Washington D.C., scientists stressed the importance of research in the Pacific Islands; the islands were “laboratories for the study of evolution.”³⁶³ The characteristics that made them so valuable for scientific investigation— isolation, uniqueness, and smallness—also meant that their natural balance was peculiarly delicate. But this peculiarity furnished a “microcosm experiment illustrating conservation needs and problems of the world in miniature,” since “a similar equilibrium must be established between the human race and its more and more limited world-environment, a problem the failure to solve which will have consequences that may not be mitigated by any outside assistance.”³⁶⁴ The recommendations for conservation in Micronesia began by recommending that “all policies be direct toward limiting the population” to sustain a balance with limited resources.³⁶⁵ The implementation of this principle in the Trust Territories would be not just sound conservation policy; it would be a real world experiment with relevance to the little island

³⁶² Harold J. Coolidge, ed., “Conservation in Micronesia: A Report on Two Conferences held under the Auspices of the Pacific Science Board in Honolulu, T. H., and Washington, D.C., in April and May 1948,” (Washington D.C.: National Research Council, 1948), 2, found in EXECUTIVE Board 1948: Pacific Science Board: Conferences on Conservation in Micronesia: Honolulu and Washington: Report, NRC.

³⁶³ F. R. Fosberg, “Island Floras,” and Ernst Mayr, “Pacific Conservation Problems with Special Reference to Island Faunas,” in Harold J. Coolidge, ed., “Conservation in Micronesia,” 18-21, 18, 49-50. Robert Kohler, “Geographical Speciation,” in *Landscapes and Labscapes: Exploring the Lab-Field Border in Biology* (Chicago: University of Chicago Press, 2002), 257-265.

³⁶⁴ F. R. Fosberg, “A Conservation Programme for Micronesia,” in Pacific Science Congress, *Proceedings of the Seventh Pacific Science Congress of the Pacific Science Association: Vol. 4 Zoology* (Auckland: Whitcombe & Tombs Ltd, 1953), 670-673.

³⁶⁵ Harold J. Coolidge, ed., “Conservation in Micronesia,” 62.

called earth. Blurring the line between action and experiment would turn out to be a durable trait of international development—at times it appeared like all projects were pilot projects. However small projects might be, they were also experiments, each one with potentially worldwide implications.³⁶⁶

The Navy's assistance was also vital to the success of U.S. participation in the Seventh Congress in a more direct sense: it flew most of the official American delegation of twenty-five scientists to the Congress. This was no mere perk. There were no passenger boats traveling from North America to New Zealand in the two months prior to the Congress and at \$1,178 for a round-trip ticket, commercial air fare was prohibitively expensive.³⁶⁷ Despite claims to the contrary, old-fashioned geography still mattered. Usually the “tyranny of distance” affected travel in the opposite direction; for example, only three of the fourteen Australian experts who prepared papers for UNSCCUR were able to participate in the meeting.³⁶⁸ (Coolidge was listed as one of two official Australian representatives at the Unesco-IUPN Lake Success conference.) In contrast, seventy-four Americans made it to New Zealand. Geography mattered, but unlike everyone else, Americans had the resources to overcome it.

The New Zealand organizers were especially concerned about attendance of experts from poor territories and war devastated countries. Instead of the armed services,

³⁶⁶ The ecological sociologist Matthias Gross writes optimistically on the potential of real world experiments; see for example, Matthias Gross and Wolfgang Kron, “Society as Experiment: Sociological Foundations for a Self-Experimental Society,” *History of the Human Sciences* 18: 63 (2005), 63-86.

³⁶⁷ Coolidge to Admiral Denfeld, 15 July 1948; Coolidge to Bronk, 21 Sep. 1948, “Official delegation to the Seventh Pacific Science Congress, INTERNATIONAL Relations 1948, Internatl Congresses: Pacific Sc Congress Seventh, NRC. List of attendees, 12 Jan. 1949, INTERNATIONAL Relations 1949, Internatl Congresses: Pacific Sc Congress Seventh, NRC.

³⁶⁸ Geoffrey Blainey, *The Tyranny of Distance: How Distance Shaped Australia's History* (Melbourne: Sun Books, 1966).

they wrote to Unesco, which approved an unusually large grant of \$20,000, the estimated cost for the transportation of just ten scientists.³⁶⁹ When Needham advised Huxley that Unesco participate in the Seventh Congress, he justified the expense by pointing out that it provided an opportunity to meet scientists from “many scientifically undeveloped countries” and extend international cooperation beyond the “countries in Europe and North America.”³⁷⁰ But of the nearly two hundred foreign participants at the Seventh Congress, only two were from Latin America. The legacy of World War, civil war, and geopolitics dictated that Japan, China and the U.S.S.R. were unrepresented. Although Unesco’s grant was supposed to aid scientists from underrepresented Pacific nations and territories, five of the eight scientists it supported were from Western Europe.³⁷¹ Of the thirty-nine participants from trust territories and colonies (not including Hawaii), all but three or four were white colonials. The administration of “natives” was a major theme of the Congress, but, like the Fontainebleau Conference, it was not a promising venue in which to encounter a non-Western perspective.

The Symposium on the Protection of Nature was part of the Zoology Division of the Congress, which tied it to the more contained birds-and-mammals nature protection movement rather than the ecological approach. Coolidge suggested adopting the IUPN’s broad definition of nature protection and, unlike at Fontainebleau, he succeeded in changing the name of the Standing Committee on Nature Protection to the Standing

³⁶⁹ This arrangement was emblematic of funding in postwar international science. On the patronage of international science by the navy versus Unesco, see Jacob Darwin Hamblin, *Oceanographers and the Cold War: Disciples of Marine Science* (Seattle: University of Washington Press, 2005).

³⁷⁰ Needham to Director-General, 18 March 1948, 26 Apr. 1949, Pacific Science Congress New Zealand 1949, Unesco.

³⁷¹ Archey to Bodet, Unesco grant: alternative use of unexpended portion, 26 Apr. 1949, Pacific Science Congress New Zealand 1949, Unesco.

Committee on Pacific Conservation.³⁷² But if nature protection meant protecting all of “man’s natural environment,” then the whole Congress was part of the conservation movement.

Soil conservation was well represented at the Congress, but was separated from nature protection in its own Division of Soil Resources, Agriculture, and Forestry, which formed a Standing Committee on Soil and Land Classification for Production and Conservation. The Committee’s mission was to standardize classification systems and calculate the total productive potential of Pacific soils.³⁷³ The intent of this work was best exemplified in a report by F. A. van Baren of the University of Indonesia on an effort to create a comprehensive series of soil maps at scales ranging from 1:50,000 to 1:200,000 for Java and the large outer islands. The soil surveys were designed to serve as the basis for planning large-scale agricultural development projects and direct “the migration of indigenous people from the over-populated island of Java to other parts of the Archipelago, should soils of sufficient agricultural value occur.”³⁷⁴ The view from above would allow the scientific coordination of resource use and population movement.

Even as van Baren described the surveys, the Indonesian independence movement was thrusting a bayonet into the colonial state’s dream of a God’s-eye perspective. (The Netherlands, however, would become the leading center for training experts in soil science and aerial surveys for the UN agencies.) Nevertheless, the Standing Committee

³⁷² Harold J. Coolidge, “The Protection of Nature in the Pacific with Relation to the New Development of a World Approach to International Conservation,” *Proceedings of the Seventh Pacific Science Congress: Vol. 4*, 727.

³⁷³ *Proceedings of the Seventh Pacific Science Congress: Vol. 1*, 83-84.

³⁷⁴ F. A. van Baren, “Soil Systematics in Indonesia,” *Proceedings of the Seventh Pacific Science Congress: Vol. 6*, 103-108, 103.

on Soil and Land Classification's program was designed to extend this vision of scientific planning throughout the Pacific region. This ambitious project was just part of a grand vision for a coordinated scientific program for the Pacific. In all, the Seventh Congress approved seventeen Standing Committees, and passed over one hundred recommendations to guide Pacific research. Yet the Committees were essentially the hobbies of professional scientists. Passing resolutions was easy when they carried no force.

Gilbert Archey, Secretary-General of the Seventh Congress, acknowledged to Unesco that all the Standing Committees had "suffered from lack of continuity of effort." Similarly, "At each Congress resolutions which we believe to be of importance, and which, if given effect to, would have been of practical value, have been carried; but each Congress has, as it were, died." The Pacific Science Association had to be modernized. The solution was to create a permanent secretariat, located at the Bishop Museum in Hawaii, to "maintain activity and drive in implementing the resolutions."³⁷⁵ This decision represented a rejection of interwar scientific internationalism based on informal, personal relations and individual initiative.

The President of the First Pan Pacific Science Congress, Yale geologist Herbert E. Gregory, dissented. In his Introductory Address to the Seventh Congress, Gregory recalled with pride the early "more or less informal but highly successful work" and the Constitution's purposeful lack of "the usual definitions of responsibilities and authorities of officers and committees." Each Congress' organizing committee was free to invite

³⁷⁵ Archey to Director-General, 26 Apr. 1949, 5 (9) A06 (931) "49," Seventh Pacific Science Congress 1949, Unesco.

“only those with red hair,” and participants “only in a vague sense...represent[ed] nations, institutions, or professional societies.”³⁷⁶ Although few paused to notice, this alternative vision of scientific internationalism was swept aside for a new model—a model that resembled the collaborative, project-based war work so many of these scientists had spent the last decade performing.

The Pacific Science Council thus joined the alphabet soup of postwar organizations. Its first task was to formalize relations with the new intergovernmental agencies, particularly the South Pacific Commission, Unesco, and FAO. Unfortunately, like the IUPN, the PSC enjoyed more moral support than financial, of which it had none. Fortunately, and also like the IUPN, Coolidge came through. He tapped his connections to raise \$13,000 (\$12,000 from the Rockefeller Foundation and \$1,000 from the Coolidge Foundation), enough to get the new organization off the ground.³⁷⁷ Scientific internationalism may have been bureaucratized, but knowing the right people still mattered. The PSC did not have the capacity for major action, but its creation was justified as yet another “information and liaison centre”—and even small projects could be important experiments.

The Pacific region was not bound together by political, economic, and cultural institutions like the Americas or Europe and Africa. Indeed, it was not clear “the Pacific” really corresponded to a region in any meaningful sense—an ambiguity that was compounded by uncertain colonial situations and the lingering disruptions of the War.

³⁷⁶ Herbert E. Gregory, “Introductory Address,” *Proceedings of the Seventh Pacific Science Congress: v. 1*, 43.

³⁷⁷ Archey to Wang, 23 Jan. 1949, 5 (9) A06 (931) “49,” Seventh Pacific Science Congress 1949, Unesco. Coolidge was a Boston Brahmin and not only his surname indicated presidential relations—he was also the great grandson of Thomas Jefferson.

But the War also increased American commitments across the region, which vastly expanded opportunities for scientific research. And the military organization of science served as an unheralded model for the vision of the new, more bureaucratic organization of international science in the Pacific. In this light, the Pacific Science Council was an attempt to integrate international science in the Pacific into the emerging international functional system, even if it was not clear that the Council represented a functioning community. The gap between ambition and ability was especially glaring because of the scope of the ambition: nothing less than to coordinate a comprehensive scientific program that would produce a synoptic view from above of the entire Pacific's natural resources. Yet the absence of a working community also could be an argument for forming a functional organization. This was a paradox intrinsic to the logic of functional international organizations; their capacity for effective action depended on the power of the community they were supposed to create.

Beyond Nature's Boundaries: The Lake Success Conferences

The venue of the Unesco-IUPN International Technical Conference on the Protection of Nature physically expressed the strategy of embedding nature protection within conservation. It met during the middle week of the three-week UNSCCUR and took advantage of the facilities of the larger meeting. 706 participants from fifty-two countries attended UNSCCUR and, with substantial overlap, 138 participants from thirty-three countries attended the Unesco-IUPN Conference. The Protection of Nature Conference took human ecology and conservation education as its main themes, pointedly downgrading the importance of formal legislation and taking a comprehensive

view of nature protection. It passed twenty-three resolutions, ranging from a request that Unesco facilitate the duty-free exchange of conservation education materials and encourage the formation of nature protection youth movements to an endorsement of an IUPN plan to perform ecological surveys for large-scale development projects and a proposal that WHO, FAO and Unesco establish an oversight commission to regulate the use of insecticides. UNSCCUR, in contrast, was not empowered to issue recommendations, and it added several new layers of issues and interests to the already bursting conservation agenda. Still, at the inception of the UN's technical assistance program, the purposes and practices of development were debated within the rubric of resource conservation, which included nature protection.

The Conservation Foundation's Fairfield Osborn opened the first plenary sessions of both conferences. In both presentations, Osborn called for "the acceptance of a clear concept regarding man's relationship to his environment."³⁷⁸ Sounding a theme that would echo for the next three weeks, he asserted that resource depletion was caused not by a lack of scientific knowledge and appropriate technology, but by the failure to apply it effectively; thus, "conservation becomes a political and administrative, an educational, even a social, cultural and ethical problem." As such, conservation "offers a point of synthesis for international co-operation for which the world is waiting."³⁷⁹ The intellectual platform that supported Osborn's credibility to summarize "the world resources situation" rested on the success of his 1948 book *Our Plundered Planet*, a

³⁷⁸ Fairfield Osborn, "The World Resources Situation," in U.N., *Proceedings of UNSCCUR, volume I*, 12-15, 15; IUPN, *Proceedings and Papers of the International Technical Conference on the Protection of Nature* (Paris: Unesco, 1950), 17.

³⁷⁹ Fairfield Osborn, "The World Resources Situation," 15.

harrowing survey of worldwide soil erosion and population growth that was more-or-less interchangeable with Vogt's *Road to Survival*.³⁸⁰ His presentations at Lake Success well represented the philosophical basis of the “world approach to nature protection.”

UNSCCUR, however, included a perspective that had been virtually absent from the regional meetings: the view of the newly independent nations, most prominently India. 70 Asians and thirty-three Middle Easterners participated (as authors and/or attendees) in UNSCCUR, including thirty-one Indians (fourteen of whom attended). Adding Latin America, the number of participants (only half of whom actually attended) from what would become the Third World was 186. In comparison, 431 U.S. and seventy-three French citizens participated. Delegates from new nations contributed few “new” ideas—which is hardly surprising since most had been educated or worked in colonial, European or U.S. institutions, and conservation itself was largely a colonial invention. But they emphasized a different sort of boundary work: shoring up the boundary between imperialism and internationalism.³⁸¹

Delegates from India, Egypt, the Philippines, and Latin America emphasized the need for “balanced development,” but the balance tended to tip towards industrialization.

A. M. El Banna, an economist at the National Bank of Egypt, insisted that rapid industrialization, not agricultural production, was “the only hope then to tackle the

³⁸⁰ Fairfield Osborn, *Our Plundered Planet* (Boston: Little, Brown and Co., 1948).

³⁸¹ Michael Lewis, *Inventing Global Ecology* (Hyderabad: Orient Longman, 2003); Tom Griffiths and Libby Robin, *Ecology and Empire: Environmental History of Settler Societies* (Edinburgh: Keele University Press, 1997); Richard Grove, *Green Imperialism: Colonial Expansion, Tropical Island Edens and the Origins of Environmentalism, 1600-1860* (Cambridge, UK: Cambridge University Press, 1995); Richard Grove, Vinita Damodaran, Satpal Sangwan, *Nature and the Orient: The Environmental History of South and Southeast Asia* (Delhi: Oxford University Press, 1998); Gyan Prakash, *Another Reason: Science and the Imagination of Modern India* (Princeton: Princeton University Press, 1999); Vasant K. Saberwal, “Science and the Desiccationist Discourse of the 20th Century,” *Environment and History* 4: 3 (1998), 309-343.

population problem...so that a rise in the standard of living can throttle any increase in population.”³⁸² What the self-identified underdeveloped countries required from the developed countries, and what they hoped to get out of UNSCCUR, was capital and co-operation. At the plenary meetings, only representatives from developing countries presented detailed inventories of their national resource endowments, which read like investors’ guides.³⁸³ Yet while they proposed using natural resources to underwrite industrialization, few put their faith in the free market. A paper by the geologist and Mineral Adviser to the Indian government D. N. Wadia argued that “the under-developed countries of the world have been exploited for their metals and ores by the industrially developed countries,” but this unbalanced relationship would end “in the coming era of self-determination for each nation.”³⁸⁴ Imperialism caused underdevelopment.

Wadia called for a new era of international conservation “in place of the *laissez faire* attitude of the past.” His plan resonated with Wallace’s vision of the Pan American Union, Bernal’s proposal for an International Resources Office, and Roosevelt’s original agenda for a World Conservation Conference. “To foster...interdependence of countries on the world’s material resources and thus attempt to establish an equilibrium between these two sets of countries,” Wadia asserted, “should be the goal of the United Nations

³⁸² *Proceedings of UNSCCUR*, 243, 244.

³⁸³ A geologist from Venezuela went so far as to describe his country as “a true paradise for investments,” since “taxation [was] at a very, very low rate” and “money can go into the country and can leave the country at the choice of its owners.” Pedro Aguerrevere, *Proceedings of UNSCCUR*, 414; see also Filemon C. Rodriguez, “Special Problems in Assessing Philippine Resources in Relation to Its Industrialization Plans,” *Proceedings of UNSCCUR*, 240-242, 242.

³⁸⁴ . N. Wadia, “Metals in Relation to Living Standards (In Industrially Under-developed Countries),” *Proceedings of UNSCCUR*, 113-117, 113,

Economic and Social Council.”³⁸⁵ The functions of imperial and international resource conservation might be the same, but the purposes were incompatible.

The “era of self-determination for each nation,” of course, had not yet arrived. During a symposium on “Resource Techniques for Less-Developed Countries,” S. S. Bhatnagar, Director of the Indian Department of Scientific Research, praised Truman’s “great wisdom” in speaking of “‘less-developed regions’ or ‘areas’ rather than ‘less-developed countries,’” since “even in the most developed countries there can be regions which are comparatively less developed.”³⁸⁶ American and European scientists frequently made the same point, but in the postwar international community the formulation “underdeveloped areas” also finessed the hypocrisy of imperial participation in an international system that was based on sovereign nation states.

Defining underdeveloped areas according to nonpolitical criteria was much more than a semantic tactic; it was a core principle of scientific conservation. As the Chairman of the Board of the Tennessee Valley Authority, Gordon Clapp, reminded UNSCCUR: “Natural resources do not conform to man-made boundaries.”³⁸⁷ The significance of the TVA was manifested in the structure of UNSCCUR’s agenda: mornings were spent in six specialized sections covering mineral, fuel and energy, water, forest, land, and wildlife and fish resources; afternoons were devoted to plenary meetings demonstrating the interdependence of these resources and of the specialists themselves; and the fifteen plenary meetings culminated in “The Experience of the Tennessee Valley Authority” and

³⁸⁵ D. N. Wadia, “Metals in Relation to Living Standards (In Industrially Under-developed Countries),” 115.

³⁸⁶ S. S. Bhatnagar, *Proceedings of UNSCCUR*, 310.

³⁸⁷ Gordon R. Clapp, “The Experience of the Tennessee Valley Authority in the Comprehensive Development of a River Basin,” *Proceedings of UNSCCUR*, 369-375, 374.

“The Integrated Development of River Basins.” All of the lessons of the conference could be channeled through the TVA. In the 40,000 square mile watershed, twenty-seven multi-purpose dams were “integrated into a single system” to assure a maximum of flood control, navigability, and electric power; soil conservation and reforestation were complemented by small-scale industrial development that processed the region’s raw materials; wildlife conservation attracted hunters and tourists. All of these uses were interdependent: full power production could undermine flood control; habitat for waterfowl could harbor malarial mosquitoes; productive soils required phosphate synthesized with hydroelectric power. Therefore, “balanced development of the resources of the area, through a unified approach, [was] both a philosophy and a technique.” Scientific conservation required specialist analysis of each resource, but then the synthesis of this knowledge within “limits...fixed by the boundaries of nature.”³⁸⁸

The irrelevance of political boundaries to natural resources provided an opportunity for political reform. The justification for the TVA was not that the watershed occupied 40,000 square miles, but that it spanned seven states. By focusing on the technical problems of integrated river basin development, the TVA had grown into a powerful regional planning agency that increased interstate cooperation; catalyzed the creation of dozens of local planning commissions, conservation departments and cooperatives; and empowered local institutions such as libraries, public health departments, and universities. According to the rural sociologist William Cole,

³⁸⁸ William E. Cole, “The Impact of TVA upon the Tennessee Valley Region,” *Proceedings of UNSCCUR*, 379-383, 380; David E. Lilienthal, *TVA: Democracy on the March* (New York: Harper & Brothers, 1944), 153, quoted in Cole, “Impact of TVA,” 380.

The sense of belonging to the region, of being affected by it, of having a part in its development has been a major factor in the strength of the TVA. This strength has not been confined to any single political party, or to political leadership, but is strongly embedded in the citizenship of the region... [I]t is important to regional resource development that the people have a collective consciousness.”³⁸⁹

This was why the TVA was David Mitrany’s favorite example of functionalism as an organizing strategy. It had the intended unintended consequence of unifying the region’s social and political institutions and cultivating a responsible citizenry. A representative of the U.S.-Canadian International Joint Commission for boundary waters claimed his experience showed that international watersheds could create “the true machinery of peace” and transform borders into “imaginary line[s]” that “joined rather than divided nations.”³⁹⁰ But whereas Mitrany’s functionalism called for downplaying political ideology, for most commentators, the TVA’s primary virtue was that it showed “Democracy on the March.”³⁹¹

The symposium also revealed the limits of boundaries fixed by nature, however. The Indian engineer Kanwar Sain questioned the wisdom of planning based on the watershed as a unified whole. Invoking Pinchot, he argued, “The guiding principle in river basin developments should be the greatest good for the greatest number, irrespective of territorial boundaries within the same country *or the watershed limits.*” “Following water where it flows to assess its potential assets,” as Clapp advocated, had “serious

³⁸⁹ Cole, “Impact of TVA, 382.

³⁹⁰ “The Integrated Development of River Basins: A Symposium on Public Policy,” 387-403, 399. On the TVA and international development, see David Ekbladh, ““Mr. TVA”: Grass-Roots Development, David Lilienthal, and the Rise and Fall of the Tennessee Valley Authority as a Symbol for U.S. Overseas Development, 1933-1973,” *Diplomatic History* 26: 3 (Summer 2002), 335-375.

³⁹¹ David E. Lilienthal, *TVA: Democracy on the March*. William Chandler, *The Myth of TVA: Conservation and Development in the Tennessee Valley, 1933-1983* (Cambridge, Mass.: Ballinger Pub. Co., 1984); Walter L. Creese, *TVA’s Public Planning: The Vision, The Reality* (Knoxville: University of Tennessee Press, 1990).

drawbacks” since “Mother Nature’s distribution of water [did] not always coincide with her children’s requirements.” Sain pointed out that projects on the Colorado, Missouri, and Gunnison rivers were designed to benefit areas in distant states—even on the other-side of the continental divide.³⁹² At the very least, river basin development ought to be assessed according to the benefit of the entire nation, and “ultimately” by “the food and energy requirements of the whole world.”³⁹³ As the postwar history of large dams in India and elsewhere demonstrates, in the name of national or international progress, this seemingly benign rationale could recapitulate the imbalanced colonial relationship that Wadia had criticized. Resources in one area were exploited for the benefit of people in another area.³⁹⁴ Yet Sain’s criticism was difficult to refute: a central tenet of the world approach to nature conservation was that an underdeveloped region anywhere harmed people everywhere.

The debate over where to draw regional boundaries was intense, but it occurred within a conservation discourse. In whichever space experts managed natural resources, their task was to draw “unity from conflict,” as Clapp put it, by reconciling competing resource values “in the most efficient and prudent manner”; that is, to maintain balance within a bounded system. But UNSCCUR also revealed a vision of scientific progress that had been veiled at the three regional conservation meetings: growth without limits.

In his welcoming address, Secretary-General Lie reminded the conference that the United Nations had “achieved miracles of production in the heat of the last war.” If the

³⁹² “The Experience of the TVA,” 384; “Integrated Development of River Basins,” 402.

³⁹³ “Integrated Development of River Basins,” 395 (emphasis added).

³⁹⁴ Sanjeev Khagram, *Dams and Development: Transnational Struggles for Water and Power* (Ithaca: Cornell University Press, 2004). In fact, the regional frame of the TVA was supposed to help end the Valley’s (and the South’s) colonial relationship with the industrialized North of the United States.

UN now supported science and technology with that same commitment in peace, “no one could predict the world population which our resources could support, or the rise in the average standard of living that would be possible.”³⁹⁵ U.S. Secretary of the Interior Julius Krug contrasted the old, “essentially negative” conservation with a “new era” in which “scientists and engineers [could] find and develop food, fuels and materials to meet the demands of the world’s increasing population, with a greatly improved standard of living.”³⁹⁶ The British economist Colin Clark, who was paired with Osborn in the opening plenary session, argued that an agricultural labor shortage was the cause of the contemporary food crisis; the cure was *more* farmers on the land (not, as some put it, fewer “parasites”—Clark attributed advocacy of population control to racism). Clark, who was already famous for pioneering work calculating national incomes, was not afraid of sketchy data. He made a “crude ascertainment” of the world’s available arable land based solely on climate, counting as “double the high rainfall tropical soils which are capable of growing two crops a year and allow[ing] various deductions for the poorer climates.” His fanciful view from above revealed that Latin America had 17.5 million and Africa 15 million square kilometers of “standard farm land”; in comparison, the United States, Canada, Australia, and Russia together had only 9.25 million square kilometers. His proposal and “the world’s future well-being,” however, depended on a technical fix: the solution to the “scientific problem of the tropical soils,” which were

³⁹⁵ Trygve Lie, “Introductory and Welcoming Addresses,” *Proceedings of UNSCCUR*, 2. This vision matched the emerging postwar political economy of “more.” Robert M. Collins, *More: The Politics of Economic Growth in Postwar America* (New York: Oxford University Press, 2000).

³⁹⁶ Julius Krug, “Introductory and Welcoming Addresses,” *Proceedings of UNSCCUR*, 7.

infamously infertile.³⁹⁷ Instead of managing scarcity efficiently and fairly, experts would design more efficient techniques that assured abundance. Instead of natural limits that required transforming society, this vision foresaw human resources transforming nature.

In this vision, there were still untapped natural resources, such as at least a billion acres of crop land in the tropics, the virtually virgin fisheries of the Southern Oceans, and untold reserves of shale oil. But these were merely the last remnants of the geographic frontier; science made accessible “the limitless frontiers of knowledge.”³⁹⁸ Indeed, there was “little point in conserving fuels to repose underground for use centuries later when in the interim science might open up vast new resources of energy.”³⁹⁹ “There were virtues in living extravagantly,” as the Vice-President of the U.S. Gulf Research and Development Company put it; Americans’ extravagance supported industrial research laboratories that found substitutions for depleted resources, from which the whole world benefited.⁴⁰⁰ Scientific optimism reached its apogee in the plenary meeting on Creatable Resources. Scientists reported cutting edge techniques for producing new sources of fat from micro-organisms, proteins from yeast and algae, sugars from wood, potash from seaweed, and vegetables from soil-less culture. Modern-day alchemy promised a way of overcoming the “almost...physical impossibility” of simultaneously raising standards of living and feeding a growing population.⁴⁰¹

³⁹⁷ Colin Clark, “World Resources and World Population,” 27.

³⁹⁸ Detlev Bronk, “Introductory and Welcoming Addresses,” *Proceedings of UNSCCUR*, 3.

³⁹⁹ “Report on the Conference by the Secretary-General,” *Proceedings of UNSCCUR*, xvii.

⁴⁰⁰ “Mineral Supplies and Their Measurement: Summary of Discussion,” *Proceedings UNSCCUR, Vol. II, Mineral Resources*, 39.

⁴⁰¹ “Creatable Resources: The Development of New Resources by Applied Technology,” 127-165, 161.

Development through exploitation of the endless frontier excluded nature protection from conservation. Progress in this technologically oriented version of development was measured by increased consumption—waste was an unexploited natural resource. There were advantages to managing wildlife as if it were a crop, but in his opening address to the Unesco-IUPN Conference, Osborn warned against being “tricked into believing that we are ‘the masters of the universe’.” The only grave danger to the human race was that man would “consider himself exempt...from natural laws.” Perhaps creatable resources could diminish civilization’s toll on nature, but the world approach to nature protection pursued the higher calling of “re-awakening in the minds of people...the inestimable values [of] nature.”⁴⁰² The nature protectionists had successfully framed the resource crisis as an overpopulation issue, but instead of reforming maladapted frontier values, fears of the population bomb spurred efforts to extend and intensify the exploitation of nature—and ultimately to escape from nature.

Privileging growth over balance also revealed a conflict between the values of development and conservation—or more precisely, a conflict between those versions of conservation that placed high value on nature protection or social equity and those that valued growth. In Sarah Phillips’ compelling history of New Deal conservation, Director of Agricultural Extension M. L. Wilson, whose paper fittingly concluded the *Proceedings* of the Hemisphere Conference, serves as the representative of the *losing* side of the struggle between equity—the quality of rural life—and efficiency—increased

⁴⁰² IUPN, *Technical Conference on the Protection of Nature*, 17.

production—that was inherent in New Deal conservationism.⁴⁰³ In the context of a U.S.-sponsored UN conference dedicated to raising standards of living, this domestic tension was reproduced at a global scale, but inequity between the United States and the rest, not within the country, was at issue.

After establishing that there were no current “critical mineral shortages,” the Canadian Deputy Minister of Mines H. L. Keenleyside noted that if other nations’ demand for metals was even half that of the United States, it “*would be greatly beyond the capacity of any known or probable supply.*”⁴⁰⁴ A French commercial counselor (quite diplomatically) noted the indisputable fact that “America develops its remarkable civilization by contributing, far more than the rest of the world, to the impoverishment of the globe in the most important metals.”⁴⁰⁵ A balanced world economy implied greater equality between the United States and the rest of the world, but even the optimistic non-renewable resource experts could not quite bring themselves to imagine the world’s resources supporting an “American standard of living.” If the planet could not support an American standard of living and the United States would not redistribute a portion of its wealth, how could a conservation program perform the “miracles of production” necessary to fulfill the rising expectations of people in underdeveloped areas?

⁴⁰³ Phillips, *This Land, This Nation: Conservation*, especially Ch. 4; Clayton R. Koppes, “Efficiency/Equity/Esthetics: Towards a Reinterpretation of American Conservation,” *Environmental Review* 11: 2 (Summer, 1987), 127-146. Contemporary conservationists recognized this failing, and the limits of New Deal reforms were not confined to conservation, of course. See for example, Mark H. Leff, *The Limits of Symbolic Reform: The New Deal and Taxation, 1933-1939* (Cambridge, UK: Cambridge University Press, 1984).

⁴⁰⁴ H. L. Keenleyside, “Critical Mineral Resources,” 38-46, 40.

⁴⁰⁵ Raymond Dreux, “Metals and Minerals,” 125. Dreux suggested increasing the price of metals so that U.S. consumption provided capital for the underdeveloped countries in which they were mined, but a U.S. expert pointed out that Americans (or the British) actually owned most of these resources, so the solution would only further exacerbate the problem since the poor nations wouldn’t be able to afford “their” own resources.

The miracle was technical assistance. Carter Goodrich (the Chairman of the Preparatory Committee) described UNSCCUR itself as no mere meeting: “What we have been doing *is* technical assistance,” Goodrich insisted.⁴⁰⁶ This rather wishful path to development had important implications for science in the UN system. By placing the transfer of science and technical know-how at the center of development, technical assistance transformed international conferences from a forum for academic exchange into an act of development. Technical assistance blurred the boundary between discourse and action. Participants in and critics of IGOs’ programs (and Unesco’s in particular) might complain that all they seemed to do was host conferences, but, according to the logic of technical assistance, it was *doing* something.

For the many activists and experts who understood conservation to be a social reform movement, UNSCCUR’s focus on techniques obscured the social justice issues that should have been at the heart of its agenda. Zuckerman wondered if it were “technically feasible to produce all the fat and all the protein we wanted from algae,” whether it “would be distributed better than the protein which at present exists in surplus grain.”⁴⁰⁷ This critique reached its dramatic climax when Cornelia Pinchot, Gifford’s widow, took the floor during a symposium on “Resource Techniques for Less-Developed Countries” to explain why “so many conservationists regard this particular Conference less as a dream come to fruition than as a noble opportunity side-stepped.” UNSCCUR, Pinchot lamented, “might have been used as an unparalleled opportunity for a thrashing

⁴⁰⁶ Carter Goodrich, “Review of the Conference,” *Proceedings of UNSCCUR*, 406. See also Carl N. Gibboney, “The United Nations Scientific Conference for the Conservation and Utilization of Resources,” *Science* 110 (Dec. 23, 1949), 275-678.

⁴⁰⁷ “Creatable Resources,” 160.

out of the social issues upon which civilization, perhaps the future of the world itself, depends.” By treating conservation “purely in terms of materials, matter and technical processes,” instead of stressing “‘wise conservation for the use of the People’ (with a capital P),” UNSCCUR represented “a long step backward.” What most angered Pinchot was the “upside-down, Humpty Dumpty nonsense” that the scientists had been forbidden from making policies and passing resolutions, which implied a “lack of faith in the creative mechanisms of democracy.” The task of “social scientists and conservationists,” was to protect freedom from “the degradation of slavery and totalitarianism whether coming from the Right or the Left.” Freedom could not be synthesized in a fermentation tank.⁴⁰⁸

In this way, far from avoiding controversy, UNSCCUR’s technical focus became the subject of heated debate. ECOSOC’s defenders rose to Pinchot’s rhetorical heights. The Chilean Chairman of the session in which Pinchot erupted replied that ECOSOC “had in mind the question of peace with a capital ‘P’” when it convened UNSCCUR.⁴⁰⁹ The Danish Chairman of the final plenary session lectured the scientists on the frustrations of formal diplomacy: “For to be the representative of a government means, first of all, to be no longer a free man.” Instead of squandering half the conference debating adjectives and attempting to “advance knowledge by voting,” as Goodrich put it, ECOSOC had placed its faith in the “value of the exchange of ideas.” The delegates were not mere government officials but “scientific missionaries.”⁴¹⁰ Bhanthnagar described

⁴⁰⁸ “Resource Techniques for Less-Developed Countries,” *Proceedings of UNSCCUR*, 318-321.

⁴⁰⁹ Hernán Santa Cruz, *Proceedings of UNSCCUR*, 323.

⁴¹⁰ “Review of the Conference—Symposium on Future Lines of Study and Directions for Progress,” *Proceedings of UNSCCUR*, 406, 421, 422.

UNSCCUR as “a congregational worship.” “Recorded resolutions,” he noted, “are often relegated to the wastepaper baskets and to cold storage in many a government and private organization; but the resolves that we take as a result of personal contacts and convictions based upon knowledge are remembered, go deeper home and bear good fruits in time.”⁴¹¹ As for Pinchot, the importance of UNSCCUR came down to a question of freedom, but instead of assuring freedom by subjecting politics to scientific deliberation, intellectual freedom was preserved by decisively separating science from politics.

UNSCCUR, of course, was inherently political. And the little “p” politics of bureaucracy was of more immediate significance than heady questions over the meaning of democracy. What prevented the conference from formulating resolutions, for example, was not that scientists were “so dangerous that they [could] not be trusted with the little power implied in the making of a recommendation,” as Pinchot sarcastically suggested, but bureaucratic turf battles. After the conference, the ECOSOC officials and U.S. advisers who had spent a couple of years organizing the meeting proposed studying the *Proceedings* and polling participants to extract important recommendations for the UN’s resources program. Given the ubiquitous complaint that resolutions passed by international conferences were ignored, the usefulness of gleaning *post facto* recommendations was dubious. The response to the proposal was not a dismissive raised eyebrow, however, but rather righteous indignation.

When he found out about the proposal, FAO’s Director-General Norris Dodd issued a policy statement reminding ECOSOC that the resolution authorizing UNSCCUR

⁴¹¹ “Review of the Conference—Symposium on Future Lines of Study and Directions for Progress,” *Proceedings of UNSCCUR*, 408.

approved a meeting “devoted solely to the exchange of ideas and experience” among experts and explicitly prohibited recommendations. In characteristic language, Dodd concluded, “We must insist...that we are not hindered in the execution of our program by any duplication of our efforts on the part of other United Nations Agencies.”⁴¹² The 550 papers collected in eight volumes of *Proceedings* were UNSCCUR’s contribution. After a contentious meeting in which FAO representatives demanded that ECOSOC relinquish any claims to even advise on renewable resources, ILO officials reported mild annoyance with FAO’s predictably confrontational approach. But they went on record supporting its jurisdictional claims.⁴¹³

In the functional organization of the UN System, the efficient use of resources depended on coordinating the specialized agencies’ activities into an integrated and balanced program; just as resources were interdependent, so were the agencies mandated to manage them. But in a system in which everything was connected and resources were scarce, each agency’s field of competence was vulnerable to invasion from any direction. Under the pressures of bureaucratic interests, the unified approach to natural resource development intensified defense of the boundaries separating categories of resources.

Despite FAO’s objections, ECOSOC did derive two “proposals for United Nations Action” on the conservation and utilization of resources from UNSCCUR. One proposal was for a series of international conferences organized around a particular resource or region, which could be taken for a tacit acknowledgement that UNSCCUR’s

⁴¹² “Policy and Views of the Director-General of FAO,” 13 Feb. 1950, UN Scientific Conference on the Conservation and Utilization of Resources, Box Agriculture Division – Office of Director, Deputy Director’s Files (R. W. Phillips) 10AGO246, FAO.

⁴¹³ Métal to Jenks, “Follow-up to UNSCCUR,” 26 June 1950, United Nations Economic and Social Council U.N. Scientific Conference on Resource Conservation and Utilization, ESC 1009-100 (Jacket II), ILO.

many doubters had been right that a comprehensive world resources conference was premature. The other proposal called for a program “to promote the systematic survey and inventory of non-agricultural resources.” Excluding agricultural resources was, of course, in deference to FAO, which was already busy coordinating the first global agricultural census (taken in 1950). Similar to FAO’s census, the ECOSOC proposal envisioned the UN developing international “standard concepts, terminology, methods and procedures,” compiling the published data of national governments, and providing technical assistance in “organizing, planning, and training” for surveys. Resource surveys were the business of national governments, but “the assembly of national data into world inventories could [provide] insight into the potential role of specific national resources both in national development and in international trade.”⁴¹⁴ (And, of course, it was cheap.)

Participants’ *only* significant point of consensus at the Lake Success Conferences was the need for a better view from above. Whether the topic was metals and minerals, fuels, water, soils and crops, forests, wildlife, or fisheries, rational management required better inventories and maps. Whether the greatest good was assured by a resource regime based in free trade or fair trade, decentralized democratic planning or centralized planning, strong colonial administrations or independent nations, expert judgment or popular mobilization, industrialization or agricultural production, dominance over nature or harmony with nature, efficiency depended on accurate surveys. Agreeing on the map, however, could not compel agreement on the best route, let alone the destination. But the

⁴¹⁴ ECOSOC, Report by the Secretary-General Under Council Resolution 271 (X) on the Conservation and Utilization of Resources,” 19 Jan. 1951, E/1906, 302.7 A 06 (73) “49,” Conference on Protection of Nature – U.S.A. – 1949. Org. jointly by UNESCO & IUCNNR, Part VI from 1/VIII/49, Unesco.

power of the least common denominator should not be underestimated. With so many of the boundaries in the cultural cartography of international conservation contested, looking for a “consistent pattern of universal validity” in literal maps of soils, forests, and waters was a good bet. And in pursuit of the view from above, international organizations did grow.

Conclusion: Do Epistemologies Have Politics?

Organizing a productive world approach to conservation required establishing some stable boundaries, but the postwar conservation conferences also revealed a strategy of social and political reform that depended on the permeability of boundaries—what I call the osmotic theory of reform. In this strategy, any boundary could be permeable, from literal political borders and the rough edges of ecological zones to the metaphorical boundaries separating science from politics and nature from civilization. For *laissez faire* internationalists, freedom and efficiency in economic policies automatically spread into freedom and efficiency in the political sector; for prophets of planning, wise conservation of one natural resource required the conservation of all resources in a process that ineluctably extended planning functionally and geographically.

As the organizational structure of the UN System congealed in the second-half of the 1940s, the membranes separating national government, intergovernmental, and nongovernmental organizations were particularly porous. Experts and civil servants moved back and forth between the institutional types; IGOs spawned NGOs; governments funded NGOs; NGOs’ primary objective was to influence governments and IGOs. Prototypically, when Margaret Sanger wrote to secure U.S. NRC participation in

an International Congress on Population and World Resources in Relation to the Family in 1948, she described its purpose as presenting “factual data to arouse the statesmen’s interest”—specifically, to help create an international environment in which Unesco could make population issues a major aspect of its program. The idea for such a conference, she reported, had come from a conversation with Huxley.⁴¹⁵ The boundary work at these international conferences was about defining the meaning of international organizations—about establishing what they were for. Programs and budgets were not negotiated at the conferences described in this chapter, but the leaders of international organizations attempted to redraw cultural cartographies through them—which is why they are revealing sites for identifying the institutional and intellectual spaces that politicians, civil servants, and experts crafted programs to fit.

Negotiating institutional and intellectual boundaries in order to stake out valuable territory in the international bureaucracy was a risky business. Take the IUPN. After Fontainebleau, Harroy was stuck with the task of finding something for the new organization to do: a project that would provide focus, demonstrate competence, and get some revenue flowing. By the spring of 1949, he thought he had found just the thing: the IUPN would contract a small team of ecologists to the British Overseas Food Corporation to monitor and advise its Groundnut Scheme in Tanganyika. The Groundnut Scheme was a response to the postwar food crisis (specifically the shortage of oils), an agricultural development project on an unprecedented scale that fit the IUPN’s conservationist charter and Harroy’s prescription of ambitious planning by a strong colonial state. But it was also

⁴¹⁵ Sanger to Week, 13 March 1948, INTERNATIONAL Relations 1848, Internatl Congresses: Population & World Resources in Relation to the Family, NRC.

an anathema to any version of nature protection. Already in 1949, the Groundnut Scheme was a sort of anti-TVA—the staple example of how *not* to develop natural resources—yet Harroy reported to Unesco that on his plan to contract ecological expertise to the Scheme, “dépendre l’avenir de notre Union.”⁴¹⁶ The Groundnut Scheme’s rapacious campaign to extract fat from the land combined in one ill-conceived enterprise an amazing range of the practices Harroy had condemned in *Afrique Terre Qui Meurt*, yet he tied the survival of his fledging Union to its fate. Building coalitions between diverse interests was fundamental to the functionalist strategy for international political development. But in forging the alliances and securing the funding to raise an army for the war against nature, it was easy for reformers to end up fighting to preserve territory that they had set out to transform.⁴¹⁷ As the IUPN’s flirtation with the semi-governmental colonial Overseas Food Corporation exemplifies, the new international organizations were frequently in danger in slipping into an imperial mode.

As an instrument of state power, the view from above has received a lot of bad academic press in recent years. It is the perspective of hubristic, bungling, and oppressive high modernism in James Scott’s *Seeing Like a State*; it is an insidious tool of American hegemony through economic liberalism (finally manifested in the UN System) in

⁴¹⁶ Harroy to Director-General, 25 May 1949, 502.7 A 01 IUCNNR, International union for the conservation of nature & natural resources, Part III from 1/IX/1948 up to 31/XII/1949, Unesco. Jan S. Hogendorn and K.M. Scott, “Very Large-Scale Agricultural Projects: The Lessons of the East African Groundnut Scheme,” in Robert I. Rotbeg, *Imperialism, Colonialism, and Hunger: East and Central Africa* (Lexington, Mass.: Lexington Books, 1983) 167-198. On the TVA vs. the Groundnut Scheme, see John Phillips, “Note on the Stimulation of Ecological Research in Various Fields of the Natural Sciences in Relation to Planned Enterprises and Natural Equilibrium, with Special Reference to Africa,” *Proceedings of Technical Conference on the Protection of Nature*, 336-345, 339].

⁴¹⁷ Harroy assured the Groundnut Scheme’s administrators that the IUPN did “not wish to adopt an attitude of ineffectual criticism”: the purpose of the ecologists’ report would be only to supply data useful to the scheme, the IUPN would employ only approved British ecologists, Harroy to OFC in 502.7 A 01 IUCNNR, International union for the conservation of nature & natural resources, Part III from 1/IX/1948 up to 31/XII/1949, Unesco.

American Empire, Neil Smith's biography of the geographer Isaiah Bowman; and in Peder Anker's *Imperial Ecology*, ecologists deployed "the master perspective from above" to "empower the social order of their patrons in various colonial agencies or commercial companies," as well as the apartheid South African state, Unesco and the UN.⁴¹⁸ The synoptic perspective has become paired with imperialism and the authoritarian state in Foucault's knowledge/power complex.

But, in the terms of Langdon Winner's classic essay on the political implications of technologies, do epistemologies have politics?⁴¹⁹ Was the centralization of power intrinsic to the view from above?

All modern governments rely on surveys, inventories and maps. Internationalists, imperialists, and nationalists; socialists, free market liberals, and mercantilist conservatives; mining interests, farmers, and nature preservationists—all of them argued that the view from above showed their vision of the social order matched nature's pattern. Certainly, the political implications of the view from above were different when it was pursued through a UN specialized agency than, for example, Soviet institutions in the 1930s. Indeed, all modern governments rely on surveys, inventories and maps. The view from everywhere clearly had political consequences, but those consequences were determined by people acting in what mid-century social scientists would have called the total situational context. In the terms Langdon Winner employed for technologies,

⁴¹⁸ James Scott, *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed* (New Haven: Yale University Press, 1998); Neil Smith, *American Empire: Roosevelt's Geographer and the Prelude to Globalization* (Berkeley: University of California Press, 2003); Peder Anker, *Imperial Ecology*.

⁴¹⁹ Langdon Winner, "Do Artifacts Have Politics?" *Daedalus* 109: 1, (Winter 1980), 121-136.

epistemologies have flexible politics, never intrinsic politics.⁴²⁰ Science is always related to politics, but in order to understand the relationship, it is first necessary to pry them apart. Foucault's slash should not be taken as binding knowledge to power, but as a necessary first cut. When you start pulling, the tangled connective tissue this analytical surgery exposes is the stuff of history. The following chapter, therefore, follows Unesco's environmental sciences program into the field to explore the making of the view from above in practice.

⁴²⁰ For a polemic against scholarship that takes "high modernity" as a determinative force—especially Scott's *Seeing Like a State*—see Fredrick Cooper, *Colonialism in Question: Theory, Knowledge, History* (Berkeley: University of California Press, 2005); see also, Matthew Connelly, "Seeing Beyond the State: The Population Control Movement and the Problem of Sovereignty," *Past and Present* 193 (Nov. 2006), 197-233.

Chapter Four
Men against the Desert
The Bureaucracy, Mythology, and Experience of International Development Science

“Thou shalt inherit the holy earth as a faithful steward conserving its resources and productivity from generation to generation. Thou shalt safeguard thy fields from soil erosion, thy living waters from drying up, thy forests from desolation, and protect thy hills from overgrazing by the herds, that thy descendants may have abundance forever. If any shall fail in this stewardship of the land, thy fruitful fields shall become sterile stony ground or wasting gullies, and thy descendants shall decrease and live in poverty or perish from off the face of the earth.”

Walter Clay Lowdermilk, The Eleventh Commandment⁴²¹

According to the logic of functionalism, the UN specialized agencies should focus on solving urgent problems like hunger, disease, and illiteracy. By attacking natural hardships, the functional agencies could earn the loyalty of governments and publics, which would enable them to develop into strong intergovernmental organizations (IGOs)—perhaps eventually the executive agencies of a legitimate world government. Functionalism carried a sort of wizened realist cachet, especially compared to the earnest naiveté of the internationalists who hoped to build the defences of peace in the minds of men. But eliminating world hunger and illiteracy and stopping the spread of infectious disease were hardly modest goals. Indeed, considering the specialized agencies’ paltry budgets and the political obstacles to international cooperation, these practical goals could appear incredibly naïve.

For historians in particular, this mismatch between ends and means has made the UN System significant more as a symbol than as an actor on the world stage. Whether it represents the high ideals of a liberal democratic world community or the insidious

⁴²¹ Lowdermilk first broadcast his new commandment over the radio in Jerusalem in 1939. It is reprinted in Lowdermilk, *Palestine, Land of Promise* (New York and London: Harper and Bros., 1944).

character of American imperialism, the effect is to focus attention on the UN's dramatic founding and render incidental its decades of evolution and growth. Yet the specialized agencies expanded and multiplied in the decades after their creation. More tellingly, their activities spread into areas that overflowed the functional boundaries of their constitutional mandates. And they had important effects. Their programs cultivated epistemic communities—transnational networks of experts who shared values, norms, and causal frameworks.⁴²² They performed standardized surveys that made the global economy, society, and environment visible.⁴²³ IGOs played a key role in shaping how governments and citizens perceived the world and measured progress. Ironically, by producing an ever more compelling global view from above, the specialized agencies' most impressive accomplishments highlighted their own failure to improve the world. But, then, assuring the continuing patronage of states and mobilizing world public opinion required conveying a sense of global crisis.

This chapter analyzes the Natural Sciences Department's (NSD) Arid Zone Program to show how Unesco succeeded in earning an international reputation as an authority on natural resources. From exceedingly humble beginnings in 1949, the Arid Zone Program grew into the Arid Lands Major Project in 1956. The Major Project officially ran for six years before evolving into the International Hydrological Decade,

⁴²² Emanuel Adler and Peter M. Haas, eds., *Knowledge, Power, and International Policy Coordination: International Organization* 46: 1 (1992).

⁴²³ Paul N. Edwards, "Meteorology as Infrastructural Globalism," in John Krige and Kai-Henrik Barth, eds., *Global Power Knowledge: Science and Technology in International Affairs: Osiris* 21 (2006), 229-250; Martha Finnemore, "International Organizations as Teachers of Norms: The United Nations Educational, Scientific, and Cultural Organization and Science Policy," *International Organization* 47: 4 (1993), 565-597; Martin Hewson, "Did Global governance Create Informational Globalism?" in *Approaches to Global governance Theory*, ed. Martin Hewson and Timothy Sinclair (Albany, N.Y., 1999), 97-13.

which became the permanent International Hydrological Program when the decade was up. Moreover, as the Major Project wound down, the Project's Coordinator, Michel Batisse, became Director of the new Division of Studies and Research Related to Natural Resources. In 1968, this Division organized the intergovernmental Conference on the Rational Use and Conservation of the Resources of the Biosphere, which led to Unesco's Man and the Biosphere Program. By 1972's landmark United Nations Conference on the Human Environment in Stockholm, often identified as the birth of sustainable development, Unesco could point to two decades of experience investigating the challenges of developing resources without degrading the environment.⁴²⁴ Batisse began his history of Unesco's journey "from desert to water," by almost gloating that natural resources were "not mentioned in Unesco's constitution and...not even referred to during the working sessions leading to Unesco's creation."⁴²⁵ The Arid Zone Program established the NSD's competence in, and thus jurisdiction over, the science of natural resources.

The pursuit of a view from above of local and global natural resources was key to the NSD's success, but does not explain the particular success of a desert research program. Just as the Tensions Project and the Education for World Citizenship Program depended on the fiction of the world community, the Arid Zone Program was animated by a powerful moral narrative. This was desertification—a declensionist ecological

⁴²⁴ For synthetic histories of sustainable development and the importance of the Stockholm Conference, see W. M. Adams, *Green Development: Environment and Sustainability in a Developing World* (London: Routledge, 2009); Robert Boardman, *International Organization and the Conservation of Nature* (Bloomington: Indiana University Press, 1981); Lynton Keith Caldwell, *International Environmental Policy: Emergence and Dimensions, 2nd ed.* (Durham: Duke University Press, 1990).

⁴²⁵ Michel Batisse, *The Unesco Water Adventure: From Desert to Water...* (Paris: Unesco, 2005), 17.

narrative that resonated with the deepest anxieties of development.⁴²⁶ The power of this ecological fiction derived from its contradictions and ambiguity. Deserts were portrayed as both the cause and effect of underdevelopment. But development was diagnosed as both the cause of and the solution to the problem of deserts. However cause and effect were parsed, whether deserts were natural or manmade or even spreading at all, reclaiming the land required basic scientific research and the intervention of states. The desertification narrative, therefore, provided a compelling argument for Unesco's move into natural resources that appealed to governments and influential members of the scientific community.

Unesco promoted the Arid Zone Program as an urgent battle that pitted "man against the desert." Forty years after the Major Project ended, however, Batisse conceded that "in the end, ...the Unesco programme had neither shrunk the deserts nor stopped erosion, which then more than ever before threatened the world." Instead, the program's accomplishments were intellectual and social. "It had opened the way," Batisse wrote, "towards an interdisciplinary approach to developing lands. It had served as the loom for weaving a lasting worldwide network of human contacts and dependable interchanges."⁴²⁷ The program had failed "to make deserts bloom again," but, Batisse claimed, it had succeeded in cultivating an international community of experts that transcended both disciplinary and political boundaries. Unesco's officials took special pride in overcoming the most obstinate barriers, whether between the natural sciences

⁴²⁶ William Cronon, "A Place for Stories: Nature, History, and Narrative," *The Journal of American History* 78: 4 (March 1992), 1347-1376.

⁴²⁷ Batisse, *The Unesco Water Adventure*, 77.

and social sciences or the United States and the Soviet Union. In essence, Batisse claimed that the Arid Lands Project had provided a successful moral equivalent of war.

This chapter evaluates the success of the Arid Zone Program in these terms; not by calculating the increased yields of arid lands, but by investigating how effectively the NSD used science to forge a measure of bureaucratic autonomy and produce an international community that integrated disciplines, institutions, and nations. It begins by showing how the institutional ecology of the UN System produced an environment in which a basic research program on deserts made sense as a response to a global food crisis. The heart of the paper then analyzes the many permutations of the scientific “myth of desertification” to illuminate the contradictory assumptions and values that united the international army waging a war against nature. Finally, it focuses on a few exemplary projects and controversies to reveal how the functionalist strategy that guided the Arid Zone Program played out on the ground.

The Uses of Uselessness

The political scientists Michael Barnett and Martha Finnemore note that scholars’ of intergovernmental organizations emphasis on the act of creation reflects an *a priori* assumption that IGOs are merely the agents of states; the question thus reduces to why national governments created them in the first place.⁴²⁸ This emphasis on origins obscures the creative strategies that civil servants used to win a measure of bureaucratic autonomy. In this respect, the bureaucratic character of the specialized agencies was more significant than their international status. In *The Forging of Bureaucratic Autonomy*,

⁴²⁸ Michael Barnett and Martha Finnemore, *Rules for the World: International Organizations in Global Politics* (Ithaca: Cornell University Press, 2004).

Daniel Carpenter shows that by earning a reputation for competence and building influential coalitions, the U.S. Postal Service and Department of Agriculture achieved a degree of authority that was both more independent and broader than the politicians who established them had ever intended. Instead of focusing on the evanescent political appointees at the top of the bureaucratic hierarchy, this analysis identifies “the structural power of the mezzo level”—career bureaucrats who learned how to successfully innovate programs and acquired the discretionary authority to do so.⁴²⁹ Carpenter’s argument is particularly intriguing because it so closely resembles the mid-century functionalism that informed the architects of the specialized agencies.⁴³⁰ Acknowledging the importance of the mezzo level and accepting that officials were committed to forging bureaucratic autonomy (whether or not they were successful) directs attention to the daily work of international secretariats and away from the General Conferences at which states negotiated programs and budgets.

Indeed, as the first three chapters have emphasized, the characterization of the UN specialized agencies, especially Unesco, as *intergovernmental* organizations is somewhat misleading. Thomas Weiss, Tatiana Carayannis, and Richard Jolly have suggested adding a “third UN” to the traditional concept of two UNs—that is, the member states and secretariats.⁴³¹ This third UN is composed of NGOs, academics, expert consultants,

⁴²⁹ Daniel P. Carpenter, *The Forging of Bureaucratic Autonomy: Reputation, Networks, and Policy Innovations in Executing Agencies, 1862-1928* (Princeton: Princeton University Press, 2001); Max Weber, “Bureaucracy,” in *From Max Weber: Essays in Sociology*, H. H. Gerth and C. Wright Mills, eds. (New York: Oxford University Press, 1958), 196-244.

⁴³⁰ David Mitrany, *A Working Peace System* (Chicago, Quadrangle Books, 1966); Ernst Haas, *Beyond the Nation-State: Functionalism and International Organization* (Stanford: Stanford University Press, 1964); Craig Murphy, *Global Institutions, Marginalization, and Development* (London: Routledge, 2005).

⁴³¹ Thomas Weiss, Tatiana Carayannis, and Richard Jolly, “The ‘Third’ United Nations,” *Global Governance* 15 (2009), 123-142. This concept builds on Inis Claude Jr.’s distinction between two UNs,

independent commissions and other influential actors. The third UN was the key constituency to which the secretariat demonstrated its competence and where it built coalitions. In practice, of course, the boundaries between these three UNs were extremely porous. Individuals, for example, routinely served simultaneously on advisory panels and in national government agencies or moved between academic, government, and secretariat appointments. In fact, the third UN often determined the position of member governments at the General Conference.

The origins of the Arid Zone Program demonstrate the imbrications of the three UNs. The program began as a proposal from the International Union of Theoretical and Applied Mechanics for an Arid Zone Research Laboratory for Fluid and Soil Mechanics, just one of a host of proposals for UN international laboratories. Although visionary plans for a network of international laboratories foundered, Unesco's 1948 General Conference in Beirut approved an Indian resolution instructing the Director General to convene a committee of experts to investigate the possibilities of establishing an International Institute of the Arid Zone. Unesco took advantage of the United Nations Scientific Conference on the Conservation and Utilization of Resources (UNSCCUR) to convene an informal study group on the question, and an official committee met at Unesco House a few months later. Instead of an international institute, however, the committees of experts recommended establishing a committee of experts. The resulting Advisory Committee on Arid Zone Research was composed of scientists appointed by the Director-General from the nominations of member governments. The Advisory Committee

essentially determined the program that the NSD executed, but NSD officials set the agenda for the Committee's meetings and advised the Director-General on the appointment of experts who were nominated by states. The whole scheme, of course, was subject to the approval of member states at the General Conference.

Although experts on the Advisory Committee served in their individual capacity as representatives of the scientific community, the secretariat employed a complex if predictable political geography to determine the ten appointees. The United States, France, and Great Britain had permanent seats; Middle Eastern countries ostensibly rotated, but an Israeli had to be balanced by an Egyptian; India, Pakistan and Australia were usually represented; and one position was reserved for a Latin American scientist.⁴³² Since one of the reasons for defining the program geographically was that it enabled a comprehensive (i.e. interdisciplinary) approach to the problem of deserts, disciplinary diversity was as important as geographic balance. Notable members of the Advisory Committee included the Chief Hydrologist of the U.S. Geological Survey Luna B. Leopold (son of the famous wildlife ecologist); B. T. Dickson, the retired Chief of the Division of Plant Industry in the Australian Commonwealth Scientific and Industrial Research Organization; the engineer and energy expert M. S. Thacker, Director of the Indian Institute of Science; H. G. Thornton, Head of the Department of Soil Microbiology at the Rothamsted Experimental Station in England; G. Aubert, Chief of the Soils Service at l'Office de la Recherche Scientifique et Technique Outre-Mer in

⁴³² On the political calculations of appointing experts, see correspondence on planning first ten meetings of the Advisory Committee in 551.45 A 022/06 Advisory Committee on Arid Zone Research, Unesco.

Paris; and S. N. Naqvi, Director of Pakistan’s Meteorological Service.⁴³³ As this list reveals, members of the Advisory Committee worked in national or colonial agencies or were professors with strong government ties. In fact, the experts tended to occupy exactly that mezzo layer of the bureaucratic strata—chiefs of departments—that Carpenter argues was critical for forging bureaucratic autonomy. As shown below, membership on the Advisory Committee could be a way for bureaucrats to advance their own careers and institutions.

But it would be a mistake to discount these experts’ commitments to the ideals of internationalism. Perhaps the most influential expert to serve on the Advisory Committee, Gilbert White, personifies this commitment. A University of Chicago geographer and President of Haverford College, White was a veteran of New Deal conservation programs.⁴³⁴ Not only did White chair the climatic UNSCCUR plenary meeting on “The Integrated Development of River Basins,” but he also convened a study group of the Haverford American Friends Service Committee for the World Mental Health Conference described in Chapter One. The study group reported on the need to provide children with experiences that encouraged the “transference of self into the realm of other people, thus erasing the false images that impede understanding.”⁴³⁵ Even for those who were not Quakers dabbling in psychoanalysis, service on the Advisory Committee committed experts to the norms of the view from everywhere as much as the view from

⁴³³ The minutes of Advisory Committee meetings are available on Unesco’s archive website <http://unesdoc.unesco.org>.

⁴³⁴ Robert E. Hinshaw, *Living with Nature’s Extremes: The Life of Gilbert Fowler White* (Boulder: Johnson Books, 2006); Charles F. Hutchinson and Stefanie M. Herrmann, *The Future of Arid Lands—Revisited: A Review of 50 Years of Drylands Research* (Paris: Unesco, 2008), 184-5.

⁴³⁵ “Problems of World Citizenship and Good Group Relations,” *Preparatory Commissions Bulletin: International Congress on Mental Health* 8 (1 Apr. 1948), 2, in 613.86 A 06(41-4)”48”, International Congress on Mental Health. London August 1948, Unesco.

above. The primary objective of the program was to produce an international community of arid zone researchers.

Instead of a popular community of world citizens, however, the war against nature focused on creating a cadre of international experts. According to UN practice, the title of expert was reserved for non-staff members. But the secretariats of the specialized agencies developed enduring relationships with the experts they contracted, and these experts became loosely affiliated with particular organizations. For example, both FAO and Unesco hired plant ecologists, but Louis Emberger, who held the chair of botany at the University of Montpellier, was a Unesco expert—he hosted Unesco conferences, attended Advisory Committee meetings, and led multiple Arid Zone regional training seminars on plant ecology. As Sir Ben Lockspeiser put it in his closing address to an international conference on arid lands research in Israel, the campaign against the desert called not only for “generals”—that is, elite scientists—but also “trained troops”—“technologists, engineers, and technicians.”⁴³⁶ Much of Unesco’s Arid Zone Program was indeed devoted to training the troops, but it was generals who comprised a functioning international community.

Lofty notions of transference were not obvious in the Arid Zone Program’s purposefully prosaic initiatives, however. From its first session, the Advisory Committee decided “to concentrate on...rather concrete approaches to the Middle Eastern problem.”⁴³⁷ One of the program’s first activities was to compile a directory of

⁴³⁶ Sir Ben Lockspeiser, “Closing Address to the International Symposium on Desert Research,” 551.45:551.453 A 54/06(569.4) “52”, Arid Zone-Symposium on Desert Research ISRAEL 1952, Unesco.

⁴³⁷ Boke to Malina, 3 Jan. 1950, 551.45A 022/06 – I Advisory Committee on Arid Zone Research, 1st Session Algiers, Unesco.

institutions performing arid zone research, which included contact information and brief descriptions of 90 institutions.⁴³⁸ Each year the Advisory Committee agreed on a broad research area focus, and the secretariat partnered with a member state to host an international conference on the theme. For example, in 1952, hydrology and underground water in Ankara; in 1954, energy sources, especially solar and wind power, in New Delhi; and in 1956, climatology and microclimatology in Canberra. Unesco published the proceedings of these symposia as state-of-the-art reviews in its *Arid Zone Research Series*, which eventually ran to thirty volumes. To produce periodic interdisciplinary syntheses of the field and identify critical research questions, the NSD co-hosted general symposia in Israel in 1952, Tuscan in 1955, and Paris in 1960. The program gradually diversified as it expanded. By the late 1950s, routine activities included: organizing regional training courses on topics like soil classification and mapping, microclimatology, and plant ecology; granting study abroad fellowships to young scientists who committed to return to their home institutions (just a few per year initially and reaching fifteen to twenty per year by 1960); and providing expert consultants, equipment, and even dollars to select desert research institutes in underdeveloped countries to support the integrated, interdisciplinary organization of research. The 1956 meeting of the General Conference in New Delhi elevated the program to the status of Major Project on Scientific Research on Arid Lands with a geographic focus on the arid region extending from Morocco to India. By becoming one of just three major projects,

⁴³⁸ Arid Zone Programme, *Directory of Institutions Engaged in Arid Zone Research* (Paris: Unesco, 1953).

the Arid Zone Program had clearly demonstrated that it was the NSD's most successful initiative.⁴³⁹

The geographic definition of the program was a critical aspect of its bureaucratic success. Since the Secretariat's main function was coordination, *any* research relevant to deserts was potentially part of the program. As part of the Major Project, the NSD began publishing the *Arid Zone Newsletter*, and the introductory editorial explained that the Major Project included arid zone research on a "local, national, regional or world level, on a bilateral, multilateral or international, or a governmental or non-governmental basis [—] its scope is universal."⁴⁴⁰ In other words, even arid zone research not sponsored by Unesco was part of the program. To help give this claim substance, the secretariat encouraged the formation of national cooperating committees. The committees' job was to coordinate research and tie national efforts into the international program. (Like most such endeavors, the results were more impressive on paper than on the ground.)

The Major Project's geographic focus was also a strategic advantage because, as the historian Mathew Connelly has emphasized, the Middle East was where the Third World was born, and the Third World was where postwar international development

⁴³⁹ In addition to Batisse, *The Unesco Water Adventure*, summaries of the Arid Zone Program's activities are available in the annual *Report of the Director General* (Paris: Unesco), and the Unesco archives holds a complete collection of the printed documents the secretariat supplied to the Advisory Committee. Particularly helpful is a report on the program to date written in preparation for the 1960 General Symposium on Arid Zone Problems; "Report on the Activities of Unesco in Arid Zone Research," Paris Symposium Paper No 28, 26 Apr. 1960, UNESCO/NS/AZ/537.

⁴⁴⁰ *Arid Zone Newsletter: News about Unesco's Major Project on Scientific Research on Arid Lands* 1: 1 (1958), 2.

programs thrived—or at least survived.⁴⁴¹ In the institutional ecology of the UN System, the only factor limiting the program’s growth appeared to be available resources.

Initially, these were quite limited. In 1952, the year the program became operational, its budget was just \$40,000. In 1957, the first year of the Major Project, the budget nearly doubled from its 1956 level to \$223,633 and it peaked in 1960 when costs exceeded \$450,000.⁴⁴² The pressure of a tight budget was further eased by grants from the UN Expanded Program of Technical Assistance (EPTA) and the UN Special Fund (established in 1958), which some years exceeded allocations to the Arid Zone Program from Unesco’s regular budget. In fact, by 1963, Unesco’s entire two-year regular budget of \$39 million was more than doubled by funding from the two UN programs.⁴⁴³ Budget growth could not relieve a sense of scarcity, however, because the Unesco’s mandate was so broad. Member states (especially the major donors), friendly and hostile observers in the media, expert consultants, and secretariat officials constantly called for greater concentration in Unesco’s programs. But the organization’s strengths—its broad mandate, the near universal membership of nation states, and especially the participation of dozens of INGOs—created a centrifugal force that program planners could not resist. All of these factors affected the Arid Zone Program.

When the NSD circulated a questionnaire asking scientists what activities the Arid Lands Project should support, it reminded them to “please bear in mind that the

⁴⁴¹ On the “birth of the Third World,” a term coined by French demographer Alfred Sauvy, see Mathew Connelly, *Fatal Misconception*, 153-154.

⁴⁴² “Report on the Activities of Unesco in Arid Zone Research,” Paris Symposium Paper No. 28; Unesco, *Report of the Director General on the Activities of the Organization in 1960* (Paris: Unesco, 1961), 102.

⁴⁴³ United Nations Economic and Social Council, *Yearbook of the United Nations* (New York: United Nations, 1963), 610.

programme, though it is planned and proposed by the Secretariat, has to be approved by the General Conference which consists of delegates of 80 Member States. This implies that the programme must in some measure achieve an equitable geographical distribution of the activities and satisfy the varying needs of the countries.”⁴⁴⁴ Accepting these constraints, the scientists generally accepted the diffuse program.

But in truth, the scientists themselves were difficult to herd. In response to the questionnaire on project priorities, “a limnologist suggested that the limnology of arid zone lakes was not receiving sufficient attention,” a zoologist recommended more emphasis on zoology, and so on.⁴⁴⁵ The opinions of scientists could not be ignored. “When one of the science advisory committees decides that UNESCO ought to take particular actions in science,” wrote former Director-General Luther Evans, “the Director-General usually takes the recommendation seriously, because he knows that the scientists concerned are likely to have enough delegate votes in the next General Conference to defeat him if he opposes the recommendation.”⁴⁴⁶ The NSD valued a holistic, ecological approach, but these bureaucratic imperatives were just as important in inspiring the secretariat’s commitment to a “balanced,” not a targeted, program.

This centrifugal pressure was built into the functional organization of the UN specialized agencies, too. Indeed, it was inherent in the synoptic perspective of the view from above. The imperative for integrated planning meant projects were constantly in

⁴⁴⁴ “Suggestions and Comments of the Panels of Consultants Concerning the Major Project,” 5 Sep. 1958, Unesco/NS/AZ/358; “Report on the Activities of Unesco in Arid Zone Research,” Paris Symposium Paper No. 28.

⁴⁴⁵ “Suggestions and Comments of the Panels of Consultants Concerning the Major Project,” 5 Sep. 1958, Unesco/NS/AZ/358; “Report on the Activities of Unesco in Arid Zone Research,” Paris Symposium Paper No. 28.

⁴⁴⁶ Luther Evans, “Some Management Problems of UNESCO,” *International Organization* 17: 1 (1963), 76-90, 85.

danger of disintegrating; or, more precisely, overflowing bureaucratic boundaries. A

FAO/World Bank official put the problem to song (sung to the tune of “Phil the Fluter’s Ball”):

Twas on a Monday morning that the DG said to me
 Will you write a letter to the Fund telling them that we
 Are preparing our new project for a Member government
 So I took a piece of paper out and this how it went:

Estimate the project cost and see what I can do
 If I add a million dollars then I multiply by two
 Count up all the experts multiply by three
 The more the experts in the field the bigger job for me

(CHORUS): Copy to the in-tray, copy to the file
 One to the pending—bottom of the pile
 Circulate it round the house to another ten
 Post upon the table and I’m off to sleep again

Twas on a Tuesday morning—imagine my elation
 When they asked me if the project needed any irrigation
 So I flood the project area quickly proving that they oughter
 Make the operating agency entirely Land and Water

CHORUS

Twas on a Wednesday morning that a letter came to me
 Asking if the project needed any forestry
 So I quickly got to work and using my imagination
 Made the object of the project one of reafforestation

CHORUS

Twas on a Thursday morning that I nearly did a dance
 When they asked if the project was of interest to Plants
 So leaping on the project like a bureaucratic vulture
 I quickly turned the project into one of horticulture

CHORUS

Twas on a Friday morning that they asked for my decision
 Was the project of significance to Animal Division
 So ignoring everybody else I took another sheet
 And wrote a brand new project with the emphasis on meat⁴⁴⁷

⁴⁴⁷ John Spears, “The UNDP Project,” *Opinion* 1 (1970), 9.

As the verses so eloquently suggest, a key measure of an international civil servant's career was the size of the projects he or she coordinated, both in terms of material resources and functional area. Part of a program officer's job was making vivid causal connections between environmental, social and economic factors.

In fact, the Arid Zone Program's paradigmatic project, the integrated survey, was designed to make these interactions visible. The program adopted the methodology for integrated surveys developed by the Division of Land Research and Regional Survey of the Commonwealth Scientific and Industrial Research Organization (CSIRO) of Australia.⁴⁴⁸ The CSIRO approach emphasized classifying landscapes based on the concept of the "land system, defined as an area, or group of areas, throughout which there is a recurring pattern of land forms, soils, and vegetation.... which expresses the integration of elements in the land complex." The historically determined interactions between environmental factors—not the separate characteristics of soils, climate, slope, and vegetation—were what integrated surveys attempted to map. Integrated surveys of land systems began with the intensive study of aerial photograph mosaics to identify "recurring patterns," which represented preliminary "land units." Next, an interdisciplinary team consisting of, for example, a geologist, geomorphologist, soil scientist, and plant ecologist, traversed the landscape to sample its characteristics and

⁴⁴⁸ Australian experts, usually affiliated with CISRO, were particularly influential participants in the Arid Zone Program. They not only served on the Advisory Committee and edited key volumes of the *Arid Zone Research Series*, but also consulted on the interdisciplinary organization of Desert Research Institutes. Cf. The arid zone research "handbook," B. T. Dickson, *Guide Book to Research Data for Arid Zone Development* (Paris: Unesco, 1957); C. S. Christian, "Report on Organization of a Central Arid Zone Research Institute, Rahasthan (India)," (New Delhi: South Asia Science Co-operation Office, 1959), Unesco; E. S. Hills, "Report on the Egyptian Desert Institute, Heliopolis," 1953, in United Arab Republic, Hills E. S. Sept.-Dec. 1953, Arid Zone research – Hydrogeologist, Box Egypt (United Arab Rep.) CPX/REP.3/162, Unesco.

confirm the boundaries of land units. Finally, the interpretation of aerial photographs and field data were combined to produce a map of the land system and accompanying report. The integrated nature of the survey meant that similar land units had similar development potentials. Unesco experts promoted the methodology as particularly well-suited to desert development because it could cheaply and quickly classify extensive areas.⁴⁴⁹

But since social and economic factors obviously affected a landscape's potential, Unesco encouraged the incorporation of social scientists into the integrated survey team. By 1964, when the NSD organized a major international conference on Principles and Methods of Integrating Aerial Survey Studies of Natural Resources for Potential Development, a Division of Applied Social Sciences had been grafted on to the department. Its chief reported that "social scientists should participate in the preparation of surveys and so be 'integrated' in the same way as their various colleagues of the natural sciences."⁴⁵⁰ Although this principle often remained lauded in theory but latent in practice, it captured the comprehensive ethos of the view from above that guided the NSD's pursuit of the view from above.

Coordinating integrated surveys was also an effective means of expanding the NSD's fields of competence and strengthening its international network. For proponents of integrated surveys, the method was as important as the product. Experts from various government departments (e.g. the forest department, soil conservation program, and

⁴⁴⁹ R. L. Wright, "Land system survey of the Nagarparkar peninsula, Pakistan," *Arid Zone Newsletter* 25 (Sep. 1964), 5-13, 5; S. N. Naqvi, "The Integrated Survey of Isplingi Valley, Pakistan," 7 (March 1960), 6-8, 6; C. S. Christian, "The Concept of Land Units and Land Systems," *Proceedings of Ninth Pacific Science Congress* 20 (1958), 74-81.

⁴⁵⁰ Chief, Applied Social Sciences Division [Versulys] to Kraues, 13 Oct. 1964, 620.91 A 06(4) "64" – 1964 Conference on Natural Resources – France, Unesco.

geological survey) typically had to collaborate to produce an integrated survey, and so they were a technology for facilitating functional integration across bureaucratic boundaries. They got rival departments working together—and connected Unesco to each participating institution.⁴⁵¹

But in the UN System, long-term success also required guarding against the danger of mission creep, which not only could make a project impractical, but could undermine a program officer's authority. The project might outgrow the office or incite conflict by trespassing on another department's or agency's field of competence. Thus, when FAO officers got word of a integrated survey Unesco was planning in Syria, they vigorously objected that the plant ecologist, soil scientist, geo-hydrologist and agriculturalist represented “four fields [that fall] completely within the competence of FAO and that the type of work proposed, leading up to scientific settlement of the area” was FAO's jurisdiction. To save the project and ease tensions, officials agreed to make the survey a joint venture, with FAO providing the natural scientists and Unesco social scientists, who would integrate “the cultural values of the Bedouin” into the survey. In this case, institutional rivalries directly increased the interdisciplinary ambition of the project. As a Unesco official noted, however, a national political crisis “solved” the bureaucratic “problem” by temporarily suspending UN work in what became the United Arab Republic.⁴⁵² Indeed, international civil servants were often more attuned to bureaucratic politics within the second UN than the international politics animating the

⁴⁵¹ See, for example, the discussion of agency coordination in R. L. Wright, “Pakistan: Geomorphology Survey and Training,” (Paris: Unesco, Oct. 1964) UNESCO/EPTA/PAKIS/27, 10-11.

⁴⁵² Wahlen to Watson, 25 Sep. 1956; “UNESCO/FAO Discussions on Projects in the Field of Natural Science, 19 Sep. 1956; Tereasio to Orbaneja, 15 Jan. 1957, all in UNESCO/FAO Relations & Cooperation in the Field of Natural Sciences, 1956-1964, UN 18/ Nat. Sciences, FAO.

first UN. The competitive-cooperative relationships between the secretariats were a key determinant of the specialized agencies' programs.

For officials in the NSD, the stakes in the jurisdictional competition with FAO were high. Establishing a credible presence in natural resources was particularly important for attracting TA and Special Fund monies. Between 1955 and 1964 the Expanded Program for Technical Assistance awarded 22% of its money to agricultural development projects (i.e. FAO's turf), compared to just 12% for education (i.e. Unesco's turf). The Special Fund explicitly targeted surveys and research on natural resources as a way to encourage investment in underdeveloped countries. In its first six-years, the Fund distributed nearly 40% of its resources to FAO, double the amount assigned to Unesco, and FAO jealously guarded its turf.⁴⁵³ It required subtle boundary work for Unesco to make inroads. This was the game Michel Batisse played with aplomb. His skills at managing bureaucratic relationships—at transforming competition into cooperation—enabled him to leverage a doctorate in solid state physics and an isolated post as science liaison officer in Cairo into an authoritative reputation on international environmental issues and, eventually, an Assistant Director-Generalship in Unesco.

A key advantage of deserts was that their limited agricultural potential provided Unesco an inconspicuous toehold in natural resources. As the FAO representative at Unesco's first study group on international arid zone research remarked, "If it were possible for this group to confine its attention to purely desert conditions...[t]here would

⁴⁵³ Olav Stoke, *The UN and Development: From Aid to Cooperation* (Bloomington: Indiana University Press, 2009), 77, 106, 112.

be less danger of overlapping.”⁴⁵⁴ Jurisdiction over useless land hardly seemed worth fighting for.

But, as the following section shows, deserts were profoundly important symbolically. And since Unesco’s climatologic definition of arid zones covered more than a third of the planet, FAO and, to a lesser extent, the World Meteorological Organization (WMO), were far from willing to cede the territory. The NSD employed two key strategies to make its claim legitimate.

The first was simply to co-opt the other agencies. From the beginning, both the WMO (which created a Panel of Experts on Arid Zone Research in 1952) and FAO were invited to Advisory Committee meetings, and Unesco often described the Arid Zone Project as an interagency program for which it provided the Secretariat. Batisse was particularly conscientious about inviting FAO to nominate experts to lead training courses or contribute papers to the *Arid Zone Research Series*. At times this strategy was quite successful, but more often FAO officials inveighed against Unesco’s “tendency...to override projects of interest to, and directly affecting FAO.” This quite typical memo, from the chief of FAO’s International Agency Liaison Branch, continued, “FAO is forced to ‘tag along’ on many projects initiated by UNESCO, for which, naturally, UNESCO gets the credit.” Seven years later, the Liaison Branch warned that FAO was in danger of being “submerged by Unesco with little help from the UN.”⁴⁵⁵ Instead of easing the competition for scarce resources, FAO officers warned that “with the attraction of Special

⁴⁵⁴ “International Institute of the Arid Zone Informal Arid Zone Study Group,” 31 Aug. 1949, UNESCO/NS/IIAZ/4/VR 1 (prov.), Unesco.

⁴⁵⁵ Obraneja to Director of Program and Budget, 20 Sep. 1956, ;Orbaneja, “Briefing for Sen’s July Meeting with Maheu, 14 June 1963, UNESCO/FAO Relations and Co-operation in the field of Natural Sciences, Jan. 1965 to March 1968, UN 18/7, Food and Agricultural Archives, Rome [hereafter FAO].

Fund monies [Unesco had] given up the pretence of concentrating only on scientific research.”⁴⁵⁶ Still, the idealization of integrated, interdisciplinary projects and, therefore, coordinated interagency programs (“concerted action” in UN development lingo) made cooperation a norm that was difficult to resist.

Unesco officers’ second strategy was establishing and then blurring the boundary separating fundamental science (also called pure or basic science in Unesco) from applied science. Justifying the need for cooperation in the first place required defining each agency’s discrete area of competence. Unesco claimed competence in fundamental research—that is, research defined by the fact that it was of no immediate use—and granted the other specialized agencies’ jurisdictions over the relevant applied sciences. To win the patronage of member states, however, officials emphasized the long-term practical benefits of basic research. And, as FAO officials constantly complained and Unesco officials occasionally celebrated, there was an enormous “grey area” where it was difficult to determine the difference between basic and applied research. Nevertheless, FAO accepted the division and devoted its efforts to reinforcing the boundary in order to maintain “the natural relations which should exist between two such organizations, the one concerned with fundamental and the other with applied science.”⁴⁵⁷ FAO possessed the coveted turf, but the battle was fought on Unesco’s terms.

⁴⁵⁶ Memo to DG on Inter-Agency meeting convened by Hoffman, 23 Apr. 1963, Cooperation with Unesco (General), 1962-1969 UN 18/17 General; see also, correspondence in UNESCO/FAO Cooperation on Special Fund Projects, Jan. 61 to Sep. 67, UN 18/11, FAO.

⁴⁵⁷ Programs and Policy Board, “FAO’s Relations with Unesco,” 14 Apr. 1955, United Nations Unesco Relations & Cooperation General, Program and Budgetary Service, 1954 to 1962, UN 18/7 General, FAO.

This bureaucratic boundary work explains why Unesco found useless knowledge of useless land extremely useful.⁴⁵⁸

In fact, Unesco devoted considerable energy to differentiating basic and applied science. According to the Organization's influential *Current Trends in Scientific Research*, known as the Auger report after its author, the former director the NSD, "Development work" depended on "applied research," which derived from "oriented fundamental research" (a.k.a. the grey area), with the whole structure founded upon "free fundamental research or pure research."⁴⁵⁹ In this linear model of development, some sciences were necessarily more fundamental than others. Ultimately, according to Auger, "we are forced to the conclusion that the whole universe, including life, is governed by laws which are themselves no more than derivatives of these laws of physics and chemistry. In that case, the notion that laws of another type, other general principles, can influence the happenings of our daily life must be absolutely rejected."⁴⁶⁰ By rendering "pure research" distinct from yet fundamental to applied research, the linear model

⁴⁵⁸ Paul Forman has emphasized the veritable impossibility of challenging the primacy of basic science in the modern era. Forman draws most of his examples from physics, however. It seems to me that basic science was on much shakier ground in the life sciences, especially agricultural sciences. Nevertheless, although it was common to assert that it was nearly impossible to separate basic from applied science in practice, the real primacy of basic science was virtually unchallenged in the UN System, even by Soviet scientists for whom the distinction was not supposed to exist. Cf. B. G. Rozanov, "United Arab Republic: Pedology," (August 1968), FR/TA/EGYS/37, Unesco. Paul Forman, "The Primacy of Science in Modernity, of Technology in Postmodernity, and of Ideology in the History of Technology," *History and Technology* 23: 1&2 (March 2007), 1-152; Charles Rosenberg, *No Other Gods: On Science and American Social Thought* (Baltimore: Johns Hopkins University Press, 1997). For a detailed discussion of the historical nuances of pure, basic, and fundamental research, see Sabine Clarke, "Pure Science with a Practical Aim: The Meanings of Fundamental Research in Britain, circa 1916-1950," *Isis* 101:2 (June 2010), 285-311.

⁴⁵⁹ The category oriented fundamental research turned out to be problematic since the majority of scientists tended to self-identify their research as such. Pierre Auger, *Current Trends in Scientific Research: Survey of the Main Trends of Inquiry in the Field of the Natural Sciences, the Dissemination of Scientific Knowledge, and the Application of Such Knowledge for Peaceful Ends* (New York and Paris: United Nations and Unesco, 1961).

⁴⁶⁰ Pierre Auger, "The Scientific Attitude: A Possible Misunderstanding," *Impact* 10: 1 (1960), 45-52, 45.

justified the NSD's specialized role in development work. Ironically, for all the talk of an interdisciplinary, integrated approach, the NSD's holism depended on an absurdly reductionistic philosophy of science.

The Arid Zone Program began as just one of many proposals for programs in the natural sciences. Like the much hyped International Institute for the Hylean Amazon, most of these projects fizzled out. But the Arid Zone Program evolved into the NSD's Major Project and became a model for other programs; for example, the NSD established an International Advisory Committee on Scientific Research in 1953, an Advisory Committee on the Marine Sciences in 1956, and another for a Humid Tropics Program explicitly designed to complement the Arid Zone Major Project in 1957. This organizational model thrived because it allowed the program to adapt to the pressures of the three UNs. But structural fitness only partially explains how the program succeeded in establishing the NSD's competency in natural resources. To unite the three UNs in the battle against the desert, participants also had to articulate a compelling narrative.

The Myth of Desertification Revisited

In December 1949, as Assistant Chief of the U.S. Soil Conservation Service Walter Clay Lowdermilk moderated the committee of experts' debate over the merits of an International Institute of the Arid Zone, the NSD was already strategizing a publicity campaign for the non-existent program. In January, the science editor of the London *News Chronicle*, Ritchie Calder (later Lord Ritchie-Calder), embarked on a two month, 15,000 mile expedition from Algeria through the Sahara, Libyan deserts and Sinai to

Israel.⁴⁶¹ Over forty publications in twenty-eight countries carried Calder's dispatches, serialized under the title "Men against the Desert." Through a partnership with the British Ministry of Education, Unesco's *Courier* reported, 15,000 English schools incorporated the articles into their curriculum. The *News Chronicle* even produced a wall map on which students could trace the intrepid journalist's journey.⁴⁶² Calder's stories served as a recruitment tool for the international army waging a war against nature.

Calder had served as Director of Plans and Campaigns in the Public Warfare Executive Branch of the British government during the Second World War, and this experience in wartime propaganda was evident in his dispatches from the desert. "A new kind of desert war is on," Calder reported, "It is not a battle of men against men, of weapons against weapons. It is a fight against the sands of the arid zones of the world." He followed the trail of the "desert rats," a famous British brigade, to tell the story of the "legionnaires of science" who fought a battle on two fronts. "Firstly, means must be found to stem the invasion of the desert upon neighbouring arable lands under cultivation. Secondly, ways must be devised by scientists and technicians for improving life in the arid and semi-arid lands, and turning them into valuable new food-producing belts in regions where the world is most hungry. In the train of new-found food resources may come new industrial and cultural strength, much of it built upon or around land which was once the site of former great civilizations." For population growth meant that "now, more than ever, it is true that man cannot live on only two-thirds of the world. He needs it all." The series concluded, "Eagerly, scientists are grappling with the desert. They have

⁴⁶¹ Calder to Auger, 7 Dec. 1949, 551.45, Men Against the Desert, Unesco.

⁴⁶² Ritchie Calder, "Men Against the Desert: Postscript to a Mission," *Courier* 3: 4 (May 1950), 8.

welcomed Unesco's proposed international co-operation and exchange and Unesco's campaign to remind the world of the forgotten Men against the Desert."⁴⁶³

Although Calder sought to rally mankind for the war against the desert, the ultimate enemy turned out not to be nature, but men. Left alone, nature was bountiful. But "wandering men" and their goats, capitalist farmers who mined the soil for short-term profits, and hunters who used fire to prevent savannahs from succeeding into forests had created deserts. Calling for a "New Deal for the World's Arid Lands," another author in the *Courier* repeated the common wisdom: "We made a wilderness when we knew little of nature's laws. We plundered this planet, robbing the good earth of its fertility, destroying the forests, decimating wildlife—creating wilderness."⁴⁶⁴ This was the significance of the "great civilizations" that had once flourished in the deserts of the Middle East; they proved that the arid zone had the potential to support large populations and, conversely, that people were responsible for the desert.

Human culpability was a cause for optimism, however. Calder reminded his readers that centuries ago civilization had sustained itself on dew in the "barren sun-scorched Negev," so with modern science no land, no matter how dry, was beyond hope. "But the immediate challenge," he continued, "is that of the man-made desert. For what man has done, man can by brains and sweat undo." He lamented the fact that despite examples of "efficient damming controls...only too often rivers are allowed to go as they

⁴⁶³ Ritchie Calder, "Report on the Desert: Ritchie Calder begins Special Unesco Project," *Courier* 3: 1 (Feb. 1950), 3; Ritchie Calder, "Using Science and Technology to Transform Nature's Wastelands," *Courier* 2: 12 (Jan. 1950), 9; Ritchie Calder, "Men against the Desert," *Courier* 3: 2 (March 1950), 6; Ritchie Calder, "Postscript to a Mission," 8.

⁴⁶⁴ Maurice Goldsmith, "A New Deal for the World's Arid Lands," *Courier* 4: 6 (June 1951), 13.

please,” yet his description of victory was headlined “Nature Reasserts Herself.”⁴⁶⁵

Restoring nature’s fertility meant protecting “her” from the degradations of man, which, ironically, required asserting more comprehensive controls over her. The war against the desert was a fight to *reclaim* lost land.

“Men against the Desert” provided a rather crude popular rendition of the development narrative that justified the Arid Zone Program. The program itself played a central role in refining and spreading the narrative, but Unesco certainly did not invent the story. Rather, the diverse participants in the program found the narrative compelling because it was already meaningful. Historians, geographers, and political ecologists have carefully traced the development of this narrative of environmental degradation at local and global scales.⁴⁶⁶ By the mid-twentieth-century, the dramatic dustbowl in the United States and similar events in Australia and Southern Africa, famine in India, and the French obsession with the desiccating effects of deforestation in North and West Africa had made “deserts on the march” the common enemy that the emergent global conservation movement rallied against.

⁴⁶⁵ Calder, “Postscript to a Mission,” 8.

⁴⁶⁶ W. M. Adams, “Dryland Political Ecology,” in *Green Development: Environment and Sustainability in a Developing World* (London: Routledge, 2009), 202-241; Thomas J. Bassett and Donald Crummey, eds., *African Savannas: Global and Local Knowledge of Environmental Change* (Oxford: James Currey, 2003); Diana K. Davis, *Resurrecting the Granary of Rome: Environmental History and French Colonial Expansion in North Africa* (Athens: Ohio University Press, 2007); Ramachandra Guha, *Environmentalism: A Global History* (New York: Longman, 2000); Vasant K. Saberwal, “Science and the Desiccationist Discourse of the Twentieth-Century,” *Environment and History* 4: 3 (Oct. 1998), 309-43; Melissa Leach and Robin Mearns, eds., *The Lie of the Land: Challenging Received Wisdom on African Environment*, (Oxford: The International African Institute, 1996), especially Jeremy Swift, “Desertification: Narratives, Winners and Losers,” 73-90; Tamara L. Whited, *Forests and Peasant Politics in Modern France* (New Haven: Yale University Press, 2000); Donald Worster, *Dust Bowl: The Southern Plains in the 1930s* (New York: Oxford University Press, 1982), 93-105.

Ecological theory furnished the scientific basis of what the geographers Thomas and Middleton call the “myth of desertification.”⁴⁶⁷ In nature, plant species lived in predictable associations, which existed in a dynamic balance with their environment. Through processes of adaptation and succession, these communities achieved a mature stability in what the American ecologist Fredric Clements termed the “climatic climax” and the French botanist Charles Flahault simply the “natural vegetation.” Plant ecologists typically determined that, except in truly arid zones, the natural vegetation was a forest, which maximized the biological potential of the environment. Indeed, French phytosociologists named the natural plant association after its dominant species, which was usually a tree even when other species were more prevalent. Since organisms were exquisitely adapted to their environments, natural vegetation could be deduced from data on a particular place’s soil, climate, and geomorphology.

All too often, however, predicted natural vegetation was not found where it ought to be—savannahs stretched where forests ought to grow. The climax association, ecologists argued, had regressed to a sub-climax. Scientists perused historical documents (e.g. ancient Greek and medieval histories that described forests where none now existed and petroglyphs showing giraffes in the Sahara) and located “relict” populations (often, ironically, at well-tended religious shrines) that showed what the “original vegetation” had been. The climatic climax was the natural state; therefore, humans were responsible for the degradation. Even in semi-arid zones climatically unfit for trees, scientists discovered evidence that the natural vegetation ought to be trees. Since soils, vegetation

⁴⁶⁷ David S. G. Thomas and Nicholas J. Middleton, *Desertification: Exploding the Myth* (Chichester, UK: John Wiley & Sons, 1994).

and climate were interdependent, human induced deforestation and soil erosion could actually desiccate the environment, turning forests into savannahs and fields of wheat into bowls of dust. Thus, the narrative went, the cradle of agriculture had been turned into a man-made desert that now posed an existential threat to civilization. A FAO Forestry Officer stationed in Cairo warned that “the terrible desert has already reached the shore of the Mediterranean on a wide front and sends out its drying winds to the European countries.”⁴⁶⁸

This declensionist narrative antedated the discipline of ecology, of course. Indeed, U.S. environmental historians often trace their own discipline’s roots to G. P. Marsh’s nineteenth-century classic *Man and Nature*, which described how “advances in civilization” had led to the “exhaustion of the natural resources of the soil” so that the area from North Africa to India, which had once sustained “a population scarcely inferior to that of the whole Christian world” on “milk and honey,” could no longer “contribute anything to the general moral or material interests of the great commonwealth of man.”

⁴⁶⁹ Yet while historians of the American environment celebrate Marsh’s creative use of sources, subtle understanding of human-environment interactions, and prescient advocacy of planned resource conservation, scholars of colonial environmental history are more

⁴⁶⁸ K. H. Oedekoven, “Forestry—A World Problem,” *Impact of Science on Society* 11:1 (1961), 18-30, 18. For an extended analysis of the historical development of this ecological argument, see Davis, *Resurrecting the Granary of Rome*, especially 144-157. For examples connected to Unesco’s *Arid Zone Research* series, see L. Emberger and G. Lemée, “Plant Ecology,” in *The Problems of the Arid Zone: Proceedings of the Paris Symposium* (Paris: Unesco, 1962), 197-206; H. L. Shantz, “History and Problems of Arid Lands Development, in *The Future of Arid Lands: Papers and Recommendations from the International Arid Lands Meetings*, Gilbert F. White, ed. (Washington, D.C.: American Association for the Advancement of Science, 1956), 3-25; R. O. Whyte, “Evolution of Land Use in South-Western Asia,” in *A History of Land Use in Arid Regions*, L. Dudley Stamp, ed. (Paris: Unesco, 1961), 57-113.

⁴⁶⁹ George Perkins Marsh, *Man and Nature* (Seattle: University of Washington Press, 2003 [1864, 1965]), 40, 10; on Marsh’s place in the environmental historiography, see the forward by William Cronon and the introduction by David Lowenthal.

likely to implicate Marsh in the crystallization of a desiccation narrative that justified oppressive and ill-conceived land-use policies, especially in Africa.⁴⁷⁰ These authors trace the remarkable consistency of the environmental degradation narrative around the world and its equally remarkable stability from Europeans' first encounters with unfamiliar lands in the nineteenth century through the colonial period to independent but underdeveloped nation states. The narrative, which actually preceded experience let alone scientific research in the field, provided such a powerful interpretive frame that contradictory evidence was either assimilated or dismissed. In James Fairhead and Melissa Leach's astute phrase, experts and administrators systematically misread the landscape.⁴⁷¹

Part of the disconcerting power of the environmental degradation narrative derives from the fact that its fundamental components can be traced back to the founding myths of Western civilization. Richard Grove locates the roots of modern environmentalism in colonists' recognition of their own destruction of tropical "island Edens" in the seventeenth century, and Richard Drayton traces the intellectual history of the imperative to improve nature to the Biblical creation myth itself.⁴⁷² The parable of

⁴⁷⁰ In his essay reflecting on the lessons non-U.S. environmental historiography hold for American historians, Paul Sutter concludes that we ought to better emulate Marsh's example. Given the split verdict on Marsh's legacy, however, this conclusion is puzzling, to say the least. Paul Sutter, "Reflections: What Can U.S. Environmental Historians Learn from Non-U.S. Environmental Historiography," *Environmental History* 8: 1 (Jan. 2003), 109-129. For historians of colonial environments take on Marsh—and reservations about U.S. environmental history—see the essays in Tom Griffiths and Libby Robin, *Ecology and Empire: Environmental History of Settler Societies* (Edinburgh: Keele University Press, 1997) and Saberwal, "Science and the Desiccationist Discourse of the twentieth-century."

⁴⁷¹ James Fairhead and Melissa Leach, *Misreading the African Landscape: Society and Ecology in a Forest-Savanna Mosaic* (Cambridge: Cambridge University Press, 1996).

⁴⁷² Richard Grove, *Green Imperialism: Colonial Expansion, Tropical Island Edens and the Origins of Environmentalism* (Cambridge: Cambridge University Press, 1995); Richard Drayton, *Nature's Government: Science, Imperial Britain and the 'improvement' of the World* (New Haven: Yale University Press, 2000). Many influential colonial conservationists were literal ministers, and settled, intensive

original sin, of tasting from the tree of knowledge and being cast out of earthly paradise to toil in the desert wilderness, was never far beneath the surface of the myth of desertification. Describing the lost glory of Baghdad, a member of the secretariat could not resist noting in the *Courier* that “somewhere to the south of here, too, is reputed to have been the Garden of Eden—the cradle of mankind.”⁴⁷³ The scientists who sought to organize a crusade against “deserts on the march” were more likely to read the Bible as an unreliable botanical guide than a work of revelation, but they preached with a religious moral conviction that all land ought to contribute to, in Marsh’s words, “the great commonwealth of man.”⁴⁷⁴

Unfortunately, the commonwealth kept getting greater. As much as environmental decline, the narrative that drove the Arid Zone Program was about population growth. As in the original Biblical myth, anxieties about sexual reproduction permeated development discourse, but, unlike the Church, it was politically impossible for any UN agency to address sexual practices. With population control off the agenda but Malthusian scenarios in their reports, experts stressed the imperative to increase agricultural yields and bring virgin lands into production.⁴⁷⁵ In this accounting, it hardly mattered whether deserts

farming was understood as a Christian way of life; see, for example, Richard Grove, “Scotland in South Africa: John Croumbie Brown and the Roots of Settler Environmentalism,” in *Ecology and Empire: Environmental History of Settler Societies*, Griffiths and Robin, eds., 139-153; Nancy J. Jacobs, *Environment, Power, and Injustice: A South African History* (Cambridge: Cambridge University Press, 2003), 57-65

⁴⁷³ Anon., “Pushing Back the Desert Frontiers,” *Courier* 5: 7 (July 1952), 2-4, 2.

⁴⁷⁴ Paul Sears, *Deserts on the March* (London: Routledge & Kegan Paul, 1949). For comments on the untrustworthiness of the Bible, see R. O Whyte, “Evolution of Land Use in South-western Asia.”

⁴⁷⁵ The secretariat’s descriptions of the Arid Zone Program began with a version of the following stock paragraph: “Arid and semi-arid regions cover more than a third of the land surface of the earth, while cultivated ground represents barely one-tenth. For each acre of cultivated land, there are three or four acres which are practically unused by man because they are desert or covered with sparse vegetation permitting only a precarious subsistence economy at best. Yet, the world’s population, which now exceeds 2,700 million, is increasing more and more rapidly, and at the present rate will double itself in fifty years.

were man-made or natural. Deserts, by definition, were underdeveloped; a British expert on wind and local energy sources advising the Arid Lands Major Project felt it necessary to point out that the terms “underdeveloped area” and “arid zone” were not synonymous, even though the latter “must certainly be classed as underdeveloped [given] their relatively small contribution to the general store of wealth.”⁴⁷⁶ Precisely because deserts were useless, the Arid Zone Program established Unesco’s competency over the great undeveloped regions of the world.

Despite the compelling mathematical logic of population growth, resonance with archetypal myths, theoretical grounding in ecology, and refinement over centuries of use, however, the narrative of environmental degradation that motivated the Arid Zone Program was paradoxical, ambiguous, and contested. The contradictions and plain old errors of the “myth of desertification” have been thoroughly debunked, by ecologists and geographers as well as historians and social scientists. But, in fact, the experts who helped determine the program questioned the narrative’s basic tenets, too. For example, in 1949, at a meeting of the study group convened to advise Unesco on arid zone research in Lake Success, the Secretary-General of the International Union for the Protection of Nature, Jean-Paul Harroy, noted the importance of historical studies which showed that Roman villages had thrived in the Northern Sahara and demonstrated that the desert sands were moving forward at a rate of one kilometer a year. As the historical geographer

Meanwhile, the mass of people are coming to realize that their living conditions are far below those enjoyed by a privileged minority, and are striving to improve their lot as quickly as possible... Hence the necessity of urgently developing and exploiting the resources of areas which man has so far somewhat neglected... [Arid and semi-arid zones] are of special importance not only because of their vast extent but also because they concern a large number of countries where the necessity for quickly developing resources is acutely felt.” Anon., “Unesco and Arid Zone Research,” *Arid Zone Newsletter: News about Unesco’s Major Project on Scientific Research on Arid Lands* 1: 1 (Aug. 58), 3-10, 3.

⁴⁷⁶ E. W. Golding, “Arid Zones and Social Change,” *Impact of Science on Society* 11: 1 (1961), 31-52, 31.

Diana Davis has shown, this evidence was crucial in justifying French imperialism in the Maghreb where colonialists claimed to be “resurrecting the granary of Rome.”⁴⁷⁷ But the Chairman of the meeting, Director of the Institut Français de l’Afrique Noire in Dakar, Théodore Monod, who would be an influential expert advising the NSD’s environmental programs for decades, corrected Harroy. The image of the ruins was based on the observations of a lone Scottish forester who had visited the area during the dry season. His oft-cited one kilometer figure had been authoritatively refuted by an official joint Franco-British Forestry Commission in 1936-7. In fact, there was no reliable evidence for “the encroaching Sahara.”⁴⁷⁸

But current critiques go deeper than deriding the hyperbolic warnings of voracious deserts to identify flaws in the theory and method of the science underlying the declensionist narrative. In 2007, Unesco published *The Future of Arid Lands—Revisited: A Review of 50 Years of Drylands Research* commemorating a landmark conference hosted by the University of New Mexico and co-organized by the American Association for the Advancement of Science and the Arid Zone Program. That conference and its proceedings (edited by Gilbert White) set the agenda for the Major Project and led to the establishment of the Office of Arid Lands Studies at the University of Arizona (which employed the authors of the new volume) as well as an AAAS National Commission on

⁴⁷⁷ Davis, *Resurrecting the Granary of Rome*.

⁴⁷⁸ The Scottish forester in question was the Indian Forestry Service’s E. P. Stebbing. On the controversy, see Swift, “Desertification: Narratives, Winners and Losers,”; E. P. Stebbing, “The Encroaching Sahara: the Threat to the West African Colonies,” *Geographical Journal* 8 (1935), 506-24; L. Dudley Stamp, “The Southern Margin of the Sahara: Comments on Some Recent Studies on the Question of Desiccation in West Africa,” *Geographical Review* 30 (1940), 297-300. For Monod’s comments, see “International Institute of the Arid Zone Informal Arid Zone Study Group, 30 Sep. 1949, UNESCO/NS/IIAZ/4VR 2 (Prov.), Unesco; see also Monod’s advisory report for the International Union of Biological Sciences, “Biology and Arid Regions,” 10 Aug. 1949, UNESCO/NS/IIAZ/1, Unesco.

Arid Zone Research. Although celebrating the intellectual and institutional accomplishments of the field's founding figures, the review understandably emphasized a half-century of progress. In particular, it noted the move away from models of ecosystem behavior based on "equilibrium ('balance of nature') towards nonequilibrium ('flux of nature') models"; the explicit inclusion of humans in the models ("contrary to earlier approaches, which saw humans as separate from nature"); and the conviction that "integrated watershed management starts with the understanding that whatever happens in one part of a watershed—e.g., groundwater extraction, soil erosion, or land use change—affects the function of the system as a whole."⁴⁷⁹ It would be difficult to identify a more prominent ideal in postwar development thought than integrated river basin development, but a review of the *Arid Zone Research* series furnishes plenty of models of nature that assume static natural equilibriums and exclude humans.

The best example of this homeostatic conception of natural harmony was the Arid Zone Project's sponsorship of an experiment to establish the true natural vegetation of the Atar region of Mauritania. Under Monod's direction, workers fenced in seven enclosures representing various soil and vegetation associations "to prevent all grazing and degradation by other influences," and observed ecological succession. By 1959, the Institut Français de l'Afrique Noire reported the appearance of unexpected species, and the NSD remarked that "the increase of vegetal productivity have been most

⁴⁷⁹ Eventually the experiment demonstrated that the region's natural vegetation was grassland, not forest. Charles F. Hutchinson and Stéfanie M. Herrmann, *The Future of Arid Lands—Revisited: A Review of 50 Years of Drylands Research* (Paris: Unesco Publishing, 2007), 87, 94, 122.

encouraging.”⁴⁸⁰ Clearly, in this experiment, people (and their animals) were imagined as separate from nature, only entering the field as a degrading factor. It is not surprising, then, that Monod (as well as the phytosociologist Emberger) represented the International Union for the Protection of Nature at meetings of the Arid Zone Advisory Committee.

The IUPN’s most substantial contribution to the program was seconding the French ecologist R. Balleydier to Unesco’s Fundamental Education Centre in Egypt and later to Turkey to produce conservation educational kits for use with twelve to fourteen year old students. Balleydier described his curriculum as combating the “classic phenomenon, now familiar to all Mediterranean naturalists, of man’s spoiling of the natural environment [through] the wasteful use of forests, fires, the ploughing up of land not suited to the purpose...and, above all, an archaic, destructive pastoral economy.” Population growth, of course, increased pressure on soil and water resources and thus accelerated their decline.⁴⁸¹ In the context of an economic development program, faith in a natural ecological equilibrium produced a paradoxical conception of productivity: scientists argued that herds of livestock larger than predicted carrying capacity indicated environmental degradation and that fields entirely removed from the human economy were the most productive. Furthermore, from the Secretariat’s perspective, this version of the desertification narrative engaged nature preservationists in a program intended to intensify land-use.

⁴⁸⁰ Institut Français d’ Afrique Noire, “Unesco-IFAN Protected Areas in Mauretania,” *Arid Zone Newsletter* 3 (March 1959), 13; “Report on the Activities of Unesco in Arid Zone Research, 26 Apr. 1960, UNESCO/NS/AZ/537; see also Bulletin de l’Institut Français d’ Afrique Noire, serie A, XXI: 4 (Oct. 1959).

⁴⁸¹ R. Balleydier, “Education for the Conservation of Natural Resources in Arabic-speaking Countries,” *Arid Zone Newsletter* 3 (March 1959), 9-10; R. Balleydier, “Education for the Conservation of Natural Resources in Turkey,” *Arid Zone Newsletter* 6 (Dec. 1959), 14-16, 15.

But, contrary to the *Future of Arid Lands—Revisited*, even scientists who valorized nature’s balance also understood humans as part of the dynamic equilibrium. In his 1949 report for the International Union of Biological Sciences advising the Secretariat on international arid zone research, for example, Monod noted that despite daily observations of nomads “mutilating” trees, this “had been going on for thousands of years [and so] a certain equilibrium has been established between the destructive power of man and the capacity of regeneration of plant life.”⁴⁸² Monod’s understanding of the environment as well adapted to the nomadic way of life reflected the widespread notion that traditional subsistence economies had evolved cultural traditions that maintained natural equilibriums. In this sense, the experimental fields Monod created were not meant to be read as literal representations of nature but more like social scientists’ ideal types.⁴⁸³

In fact, contributors to the Arid Zone Program routinely rejected a conception of nature that was separate from human culture. When, a decade into the program, the *Arid Zone Research Series* published *A History of Land Use in Arid Regions*, the editor, British geographer L. Dudley Stamp, concluded that the global review called “into question the whole concept of a climatic climax vegetation, at least insofar as the arid lands are concerned.” A “delicate balance” did indeed characterize arid lands, but this balance had to be understood as a symbiotic relationship between plants and animals, including humans.⁴⁸⁴ Indeed, by the time Balleydier designed his educational kits, the nature protectionists had proven themselves archaic relicts unfit for the international

⁴⁸² Théodore Monod, “Biology and Arid Regions,” 10 Aug. 1949, UNESCO/NS/IIAZ/1, Unesco

⁴⁸³ On this point and the idea of climax vegetation more generally, see Robert Kohler, *Landscapes and Labscapes: Exploring the Lab-Field Border in Biology* (Chicago: University of Chicago Press, 2002), 241.

⁴⁸⁴ L. Dudley Stamp, ed., “Some Conclusions,” in *A History of Land Use in Arid Regions* (Paris: Unesco, 1961), 379-388, 385.

environment of the 1950s. In 1956, the IUPN had finally changed its acronym—a bigger deal than a name change in the international community—to the IUCN (International Union for the Conservation of Nature and Natural Resources). Although Balleydier blamed farmers and herders for soil erosion, which disrupted the hydrological cycle causing desertification, the ecologist designed the curriculum for communities working the land. The environment researchers sought to know may have been a product of human abuse, but reclaiming it required gaining greater ecological control. Thus Calder's unacknowledged paradox that in order for nature to reassert herself, rivers and people could no longer be allowed to wander wherever they pleased.

In this version of the environmental degradation narrative, “man” achieved redemption by reversing the terms of nature-society interactions: instead of culture being shaped by the natural environment, nature became part of the cultural system. At the New Mexico symposium on the future of arid zones, Charles Kellogg, the Chief of the U.S. Soil Conservation Service, described the ultimate goal of “science in man’s struggle on arid lands”: “An attempt ‘to return to nature,’” he warned, “would condemn the majority of the world’s population to starvation and death... We are seeking a cultural balance or, more accurately, a cultural dynamic of relationship between resources and people for efficient sustained production.”⁴⁸⁵ The explicit point was that balance—efficient sustained production—was a goal, a normative value, not a description of nature. Moreover, far from manifesting harmonious natural balance, desert ecosystems epitomized nature’s unpredictability. Thus, the Chief Engineer of Public Works in Tunis

⁴⁸⁵ Charles Kellogg, “The Role of Science in Man’s Struggle on Arid Lands,” in *The Future of Arid Lands*, 26-47, 27.

summed-up scientific commonsense in his department: “‘In Tunisia, every year is exceptional.’ Seemingly it should be the same in every arid region.”⁴⁸⁶ Constructing the “cultural balance,” experts of all political and disciplinary loyalties agreed, required hard work and rational planning.

Parallel with the declensionist narrative of desiccation, then, experts produced a triumphalist story of “man” domesticating an unpredictable, unproductive environment. In his history of land use in Egypt, the Cairo University geographer G. Hamdan defined irrigation as “the medium of interaction between men and milieu, whereby he humanizes the natural landscape, models and remodels it into a ‘second-nature’—the cultural landscape.” Instead of the common image of Egypt as naturally limited to a thin corridor of fertile land along the Nile, Hamdan celebrated the “spectacular” growth in cropland through irrigation and the introduction of new crops, fertilizers, and practices that enabled the intensification of agriculture, especially multiple crops per year. Despite acknowledged environmental costs, these innovations had nearly doubled the country’s effective arable acreage during the first sixty-years of the twentieth-century. Hamdan divided Egyptian agricultural history into “Paleotechnic,” and “Neotechnic” periods and heralded the emergence of a new “Biotechnic” phase with the construction of the Aswan High Dam. The Biotechnic period would bring “the final removal of water as the endemic limiting factor of Egyptian land use” and replace nature’s devastating variability with a second-nature that assured an optimal, socially controlled equilibrium.⁴⁸⁷

⁴⁸⁶ J. Tixeront, “Water Resources in Arid Regions,” in *The Future of Arid Lands*, 85-113, 112.

⁴⁸⁷ G. Hamdan, “Evolution of Irrigation Agriculture in Egypt,” *A History of Land Use in Arid Regions* (Paris: Unesco, 1961), 119-142, 119, 127, 140. Compare Hamdan’s narrative to the one described as

Soviet experts presented an even grander narrative of “the transformation of nature” that envisioned the entire planet incorporated in a socialized second-nature. The soil scientist and Director of the NSD, Victor A. Kovda, explained how capitalist development had led to “the gradual desiccation and exhaustion of the soil,” but after the October Revolution, the Soviet Union had begun transforming the natural environment into “a factor which accelerates the rate of development of the country’s productive forces.” The virgin lands program under Khrushchev in the mid-1950s, which, Kovda celebrated for reclaiming 30 million hectares of unproductive dry steppes in Central Asia, was just one example of the triumph of “patriotic scientists devoting their lives to the study and conquest of the desert.”⁴⁸⁸ “The map of the Soviet Union,” proclaimed the Soviet member of the Advisory Committee, academician G. V. Bogomolov, “is thus being reshaped and the desert areas are on the way to disappearing.”⁴⁸⁹ Even if state-mandated, this confidence in the capacity of the socialist state to subjugate the environment to the will of society was paradoxically based on a faith in the harmonious, orderly equilibrium of natural biocenoses, which could be scaled up to include the entire globe in a single metabolic cycle.

In this holistic worldview, the laws of nature, like those of society, were deterministic and, therefore, could be deduced. Soviet science and technology promised to bring the geosphere, hydrosphere, and biosphere under socialist control to produce

ubiquitous by Timothy Mitchell in “The Object of Development,” in *Rule of Experts: Egypt, Techno-Politics, Modernity* Berkeley: University of California Press, 2002), 209-243.

⁴⁸⁸ V. A. Kovda, “Land Use Development in the Arid Regions of the Russian Plain, the Caucasus and Central Asia,” *A History of Land Use in Arid Regions* (Paris: Unesco, 1961), 175-218, 187, 189, 185.

⁴⁸⁹ G. V. Bogomolov, “Study and Agricultural Development of the Arid and Semi-Arid Regions of the U.S.S.R.,” *Arid Zone Newsletter*, 4 (June 1959), 4-7, 5-6.

unprecedented abundance and expose the fallacy of Malthusian overpopulation.⁴⁹⁰ The point here, however, is simply that Soviet experts, who had not participated in the first few years of the Arid Zone Program and bombastically contrasted their heroic progress with imperialists' failures, were quite comfortable with the program's framing narrative. Indeed, experience developing the drylands of the Central Asian and Transcaucasian Republics was the Soviet Union's best evidence of the superiority of its model of social and economic development. The Soviet's sought to compete for the leading role in the program's narrative, rather than reject the story.⁴⁹¹

The Soviet case brings into sharp relief a fundamental tension in agricultural development programs: development was promoted as an effort to extend the benefits of modern civilization to impoverished local populations, but local communities were also obligated to abandon "traditional" ways of life to contribute their share to the Union. Integrating the diverse empire of nations into a cohesive political entity was an end as much as a means of development. The key to the Soviet model for the development of arid lands was the integration of the territories of the Russian Empire into the U.S.S.R. Rationalizing nature and society meant diverting water from parts of the country with a surplus to the vast areas with a deficit, but the goal was to maximize the exploitation of natural resources in the Union as a whole.⁴⁹² The state mandated regional agricultural

⁴⁹⁰ Douglas Weiner, *A Little Corner of Freedom: Russian Nature Protection from Stalin to Gorbachev* (Berkeley: University of California Press, 1999). On the Russian roots of the biosphere concept, see Lloyd T. Ackert Jr., "The 'Cycle of Life' in Ecology: Sergei Vinogradskii's Soil Microbiology, 1885-1940," *Journal of the History of Biology* 40 (2007), 109-145.

⁴⁹¹ On the actual appeal of the Soviet model of development in the West, see David Engerman, *Modernization from the Other Shore: American Intellectuals and the Romance of Russian Development* (Cambridge, Mass.: Harvard University Press, 2003).

⁴⁹² A. N. Askochensky, "Basic Trends and Methods of Water Control in the Arid Zones of the Soviet Union," in *The Problems of the Arid Zone*, 401-410.

specialization (e.g. cotton growing throughout much of arid Central Asia) and set production quotas, thus undermining local communities' relative self-sufficiency and extracting wealth from the imperial periphery. Development projects could look a lot more like exploitation than assistance.⁴⁹³ This same tension between socio-political scales characterized European colonial development schemes, especially during “the second colonial occupation” following World War Two when metropolitan governments intensified development schemes in an attempt to ameliorate their own economic crises.⁴⁹⁴ The historian of the British Empire Joseph Hodge has described the political imperatives that forced colonial experts to vacillate “between raising colonial living standards and welfare, and responding to the pressures of metropolitan needs” as the “enigma” of agricultural development.⁴⁹⁵ The Arid Zone Program’s environmental degradation narrative reproduced this enigma at the level of the world community. The goal was to raise the standards of living of desert communities, but population growth also meant that all areas had no choice but to contribute to the great commonwealth of man.

According to this development narrative, subsistence agriculture and extensive pastoralism, since they produced little or no surplus, could only be problems. It did not matter how well adapted they were to challenging environments or what alternatives were available. In arid environments, agricultural development programs found nomadism

⁴⁹³ On the actual devastating effects of the Soviet transformation of nature, see Douglas R. Weiner, “The Predatory Tribute-Taking State: A Framework for Understanding Russian Environmental History,” in Edmund Burke III and Kenneth Pomeranz, *The Environment and World History* (Berkeley: University of California Press, 2009), 226-316.

⁴⁹⁴ D. A. Low and J. M. Lonsdale, “Introduction: Towards the New Order, 1945-1963,” in *History of East Africa* vol. 3, D. A. Low and Alison Smith, eds. (Oxford: Clarendon Press, 1976).

⁴⁹⁵ Joseph Morgan Hodge, *The Triumph of the Expert: Agrarian Doctrines of Development and the Legacies of British Colonialism* (Athens: Ohio University Press, 2007), 231.

particularly challenging. Nomads, especially nomads with voracious goats, played a leading role in standard versions of the myth of desertification, but ecologically oriented experts also argued that “savannahs [were] the reason for pastoralism, and not vice versa.”⁴⁹⁶ Indeed, a common diagnosis of the problem with nomadism was that it was *too* well adapted to the environment. In this reading, nomads had lost the war against nature; they were submissive to their environment rather than dominating it. In his synthetic account of nomadism in the Sahara for the 1960 symposium, however, Professor R. Capot-Rey of l’Université d’Alger, argued that the state had “no right” to eliminate nomadism because there was no other viable way to make the arid lands pay; settlement schemes would “let a region which feeds a million individuals return to the desert, at a time when a third of mankind is suffering from hunger.”⁴⁹⁷ This anxiety—that misguided development could itself be a leading cause of underdevelopment—bubbled below the surface of much development thinking, but was a central theme of the desiccation narrative. In the rush to extract surplus value from the land, both state and private development projects risked turning marginal lands into true deserts. The ruins of great cities in the desert sands, as well as famines in colonial possessions, could be read as evidence that civilization caused underdevelopment.

Beyond material concerns, many experts worried that the homogenizing effects of development programs impoverished the world’s cultural heritage. French authors, for example, typically expressed a romantic admiration for nomads’ freedom, resiliency,

⁴⁹⁶ O. Brémaud and J. Pagot, “Grazing Lands, Nomadism and Transhumance in the Sahel,” in *Problems of the Arid Zone*, 311-324, 320.

⁴⁹⁷ R. Capot-Rey, “The Present State of Nomadism in the Sahara,” in *Problems of the Arid Zone*, 301-310, 308. See also, Lawrence Krader, “The Ecology of Nomadic Pastoralism,” 499-510, 509.

physical prowess, and sense of honor. With anticipatory nostalgia, they mourned the inevitable passing of this manly way of life so well adapted to the environment but now forced to adjust “to the inexorable demands of modernization.”⁴⁹⁸ Stamp offered a more intriguing observation in his conclusion to *A History of Land Use in the Arid Regions*: not only was a “modernized version of semi-nomadism” the “right answer for vast areas of the arid lands,” but semi-nomadism was the “highest form of human existence” and a world-wide characteristic of modern life—a point that must have resonated with many of the peripatetic experts who participated in the Arid Zone Program.⁴⁹⁹

Despite these prominent endorsements, however, it proved impossible to incorporate nomadism into the development narrative as something more than an anachronism in need of development. A subtle, probably incidental, change in language is meaningful here. When Gilbert White suggested “the nature of nomadism” as a topic for the 1960 arid lands symposium, claiming there was a “surprising lack of knowledge” about how nomads actually made a living, the secretariat changed the proposal to the “the problem of nomadism” in its draft program.⁵⁰⁰

It would be a mistake to attribute the bias this change symbolizes to the power of the environmental degradation narrative, however. The fundamental problem with nomads was not that their livestock overgrazed or even that they did not produce a surplus to contribute to the great commonwealth. Nomads’ original sin was that their

⁴⁹⁸ J. Berque, “Introduction,” *International Social Science Journal: Nomads and Nomadism in the Arid Zone* 11: 4 (1959), 481-498, 484.

⁴⁹⁹ Stamp, “Some Conclusions,” in *A History of Land Use in Arid Regions*, 386.

⁵⁰⁰ “Draft Programme and Organization of the 1960 General Symposium on Arid Zone Problems,” and “Annex: Memorandum on Subject for 1960 General Symposium,” 28 Aug. 1959, UNESCO/NS/AZ491.

loyalties were to the clan or tribe not the nation.⁵⁰¹ For in the end, it was not land that was the object of development but nations. Elites from developing countries were unapologetic about the necessity of nation-building. The Egyptian Chairman of Unesco's Executive Board, Mohamed Awad, for example, observed that the extent of nomadism in the Middle East was in "direct proportion to the weakness of the central government":

"The prominence given to local tribal solidarity has often been a handicap in the development of a national spirit and outlook. It is therefore not enough from the point of view of the country's welfare merely to settle the nomads—they must also be socially integrated."⁵⁰² In assessing contemporary settlement schemes, another Egyptian expert emphasized the need to reclaim land that nomads' abuse had turned into desert, but concluded that "the crowning achievement of these projects will be the reduction of the cultural and social contrast...between the Western Desert...and the rest of the country."⁵⁰³ The goal of development was to cultivate productive, loyal citizens of a modern nation state. Whether nomads played the role of tragic hero, innocent rube or plundering villain, therefore, the fate of nomadism in the environmental degradation narrative was sealed.

The case of nomads reveals how the enigma of agricultural development—the tension between the local community and the greater commonwealth—was both resolved and perpetuated by decolonization. In the international community of states—the first

⁵⁰¹ One of the key themes Kenneth Pomeranz found in his review of world environmental histories was the modernizing state's campaign against nomads. Kenneth Pomeranz, "Introduction: World History and Environmental History," in *The Environment and World History*, 3-32. See also, in the same collection, Makesh Rangarajan, "Environmental Histories of India: Of States, Landscapes, and Ecologies," 229-254.

⁵⁰² Mohamed Awad, "Nomadism in the Arab Lands of the Middle East," in *Problems of the Arid Lands* 325-339, 335, 334.

⁵⁰³ A. M. Abou-Zeid, "The Sedentarization of Nomads in the Western Desert of Egypt," *International Social Science Journal: Nomads and Nomadism in the Arid Zone* 11: 4 (1959), 550-557, 558.

UN—the local essentially stopped at the nation. Governments determined the interests of their citizens, and Third World elites often echoed the coercive logic of imperialism. A. S. Helaissi, for example, asserted that the Saudi government was justified in requiring Bedouins to settle because “living as they do outside modern civilization, [they] cannot appreciate or determine what their real interests are, nor can they envisage the means of achieving higher social standards.”⁵⁰⁴ Many experts challenged this presumption. For instance, the director of an African research institute (probably Monod) advised the Major Project to perform more social research before intervening in people’s lives because “it would be just (and prudent) to know them first and also to ask them” what their “notions of happiness” were. A Unesco officer noted, however, that this research path had been foreclosed by the General Conference “when the Major Project was established on the basis of promoting scientific research with a view to improve living conditions.”⁵⁰⁵ What counted as a rational use of the land (or improvement) was worked out between governments and their experts, and the key measure was gross national product. As a FAO report in preparation for the 1960 symposium noted, underdeveloped countries should request technical assistance from UN agencies only for projects that “related to its general economy and not to an isolated section of it, or affect a certain class of its population.”⁵⁰⁶ In this vision of a liberal international order, nation states, not local

⁵⁰⁴ A. S. Helaissi, “The Bedouins and Tribal Life in Saudi Arabia,” *International Social Science Journal: Nomads and Nomadism in the Arid Zone* 11: 4 (1959), 532-538, 534.

⁵⁰⁵ “Suggestions and Comments of the Panels of Consultants Concerning the Major Project,” 5 Sep. 1958, UNESCO/NS/AZ/358.

⁵⁰⁶ “The Activities of FAO in the Development of the Natural Resources of the Arid Zones,” Paris Symposium Paper no. 30, UNESCO/NS/AZ/539.

communities or individuals, were endowed with autonomous rights; democracy at the international scale depended on its absence at the domestic scale.

The urgency of national development obscured the moral and material tension between maximizing the local and the general good. Since the conservation of natural resources called for rational planning by a central authority possessing a national view from above, the narrative of environmental degradation provided a moral imperative for government intervention. It thus appealed to newly independent states struggling to unite culturally fragmented nations.

The purposeful destruction of traditional ways of life and strengthening of national spirit seems a long ways from the celebration of unity in diversity and the fiction of a world community. But this contradiction could be reconciled by focusing on the federal structure of the international community. An Iraqi expert, for example, explained that a “tribesman’s loyalty [was] stronger towards his tribe than towards his country,” and so the government had used land reforms and education to break tribal ties. Assimilating tribesmen into the nation had the effect of “integrating the tribal groups within the global society.”⁵⁰⁷ Individuals gained membership in the international community through national citizenship.

But while national loyalties were sufficient for the infantry in the war against nature, generals had to develop a broader international perspective. And these “men against the desert” were the true heroes of the environmental degradation narrative. The transformative potential of fundamental science was its promise to create a truly international class of experts loyal to the world community. At the inauguration

⁵⁰⁷ A. J. Al-Tahir, “Discussion of Section II,” *Problems of the Arid Lands*, 365-367, 366.

ceremony for the Fouad I Desert Institute (rechristened the Cairo Desert Research Institute after Nasser took power) in December 1950, Director-General Torres Bodet declared that the fight against the desert was a task for “the new man that Unesco hopes will emerge—a man who not only thinks in terms of the world as a whole but also acts on a basis of solidarity towards his fellow men.”⁵⁰⁸ It followed that more than its practical advice, the Advisory Committee was important as an example of these new men at work: “The chairman was an Indian, Dr. A. N. Kholosa,” reported Calder from the first meeting of the Advisory Committee, “and at the same table sat an expert from Egypt comparing notes with an expert from Israel. They were, however, representing not countries but common problems.”⁵⁰⁹

Gaining this worldly perspective and winning promotion into the elite corps of the international army was not just a matter of comparing notes at international meetings, however. After describing how his research on the sediment loads of ephemeral desert streams in New Mexico had led him to chase thunderstorms and wade into flash floods, Luna Leopold insisted that transforming mere environmental data into true understanding required emulating the self-sacrificing “zeal” of the seventeenth-century Spanish explorers who had been the first Europeans to penetrate this inhospitable desert.⁵¹⁰ Scientific prophets earned their wisdom through trials in the wilderness. And the narrative of environmental degradation provided a profoundly important mission for the

⁵⁰⁸ “Unesco National Commission and Fouad I Desert Institute Inaugurated in Egypt,” *Unesco Courier* 4: ½ (Feb. 1951), 11.

⁵⁰⁹ Ritchie Calder, “Men Against the Desert,” *News Chronicle*, 13 Dec. 1950, 551.45, Men Against the Desert/Calder, Unesco

⁵¹⁰ Luna B. Leopold, “Data and Understanding,” *The Future of Arid Lands*, 114-120.

scientific vocation—world prosperity and peace depended on these “men against the desert.”

Like all myths, the myth of desertification was open to interpretation. In some readings, peasants ignorance of the modern techniques of soil conservation or nomads’ relentless herds created man-made deserts. In other readings, modern techniques combined with the capitalist imperative to maximize profits initiated a cycle of desiccation. Many experts combined these two narratives to blame “the rape of the earth” on the colonial encounter; traditional communities and virgin environments had not had time to adjust to potent modern technologies and market penetration. Others, adopting a longer planetary perspective, argued that deserts were the product of atmospheric circulation patterns on which humans had no effect. In some reports, desert encroachment was a literal threat; in others, desert expansion was invoked figuratively, especially as a metaphor for soil erosion. Some scientists idealized environments in which humans worked in harmony with self-regulating natural processes, while others glorified thoroughly socialized environments in which man dominated nature. Despite their contradictions, most participants in the Arid Zone Program subscribed to each of these views at different times, often within the same paper, or creatively combined them to produce more subtle explanations. Which interpretation scientists selected depended not only on their national traditions and personal predilections, but also on the temporal and time scales of analysis, the particular place under investigation, the problem being addressed, and the intended audience.

Scholars have provided compelling critiques of the hegemonic power of the degradation discourse that emphasize its stability over time and place. But the ambiguities and contradictions of the narrative were just as important. They helped enroll nature preservationists and development advocates, socialist and capitalist experts, colonial officers and anti-colonial intellectuals in a common conversation. They united these diverse participants in the international army waging war against nature, even as they necessarily left the nature of the enemy undetermined.

An Intimate History of the International Army

The myth of desertification provided a poly-synonymous narrative capable of engaging the interests of Unesco's diverse participants. This useful ambiguity implies that the narrative did not determine the direction that the Arid Zone Program would take. Indeed, the narrative can be interpreted as a product of the international environment in which Unesco operated; it survived because it could be adapted to the pressures of bureaucratic rivalries, ideological conflicts, and contradictory visions of the future. Understanding the evolution of the Arid Zone Program, therefore, requires analyzing the interactions of the three UNs: the interplay between international, bureaucratic, and disciplinary politics; between international and local milieus; and between ideas and institutions. But it would be a mistake to assume that international structures mechanistically determined the nature of the Arid Zone Program, too. Entrepreneurial civil servants and international experts crafted a program designed to establish Unesco as a leader of the international crusade against the desert—and by extension build the organization's reputation for competence in the field of natural resources. In other words,

the course of the war was undetermined. This final section briefly reviews a few exemplary episodes to show how the strategies of the “men against the desert” played out on the ground.

Irrespective of the program, the ranks of Unesco’s international army of experts certainly grew over the duration of the program. In the early 1950s, Unesco’s organizational culture was dominated by the secretariat. Experts passed through Paris on their way to assignments in the field and then were forgotten until their official report arrived. But as the organization’s role shifted from coordination to performing technical assistance projects, these outside contractors were absorbed into the institutional culture of the secretariat. Indeed, in 1959 field experts became subject to the same rules and regulations as regular staff members, although they still worked on a limited-term contract basis.⁵¹¹ Decolonization fueled this growth as the specialized agencies took over aspects of the colonial powers’ development mission. In 1960, the addition of seventeen new African states not only transformed the balance of power in the General Conference, but also accelerated a fundamental change in Unesco’s cultural geography. By 1962, Director-General Rene Maheu announced that the field staff, including more than 400 experts on mission, now equaled the professional workforce in Paris and was projected to double it in just a couple of years. An article describing the transition in *Opinion*, the Staff Association magazine, was titled “Turning Unesco Inside Out.” “More and more obviously,” it opined, “we are at the centre of an operational network, the rear headquarters of a vast army whose members are serving in the front line.” Uniting the home front and the front line required a change in the magazine itself; it “must become a

⁵¹¹ Martin Ennals, “New Status for Field Experts,” *Opinion* 25 (1959), 11-13, 11.

two-way channel of communication between Headquarters and the field.”⁵¹² This was the familiar norm of the two-way street, an integral element of the view from everywhere.

But the expansive if vague ideal of a world community was replaced by a narrower, more concrete goal: developing the international civil service into an international community.

War metaphors were ubiquitous in development discourse, so it was quite natural to equate the field with the front line, but one of the points of this analogy was that experts often experienced their missions as taking them into hostile territory. Beyond the discomforts of working in underdeveloped countries, experts’ encounters with local bureaucracies frequently incited international epistolary skirmishes. The French soil scientist Roger Schaefer’s 1966 mission to the University of Alexandria to lead a month-long regional training course in Soil Biology provides a scandalous example.

Schaefer left for Egypt full of confidence and enthusiasm. He had co-directed the conference twice before, once as a last-minute replacement at the Indian Agricultural Research Institute in New Delhi and then at the Latin American Institute of Soil Biology in Santiago. The later course was a tremendous success; Schaefer’s Austrian colleague declared it “the best geo-ecological course organized so far in the whole world.”⁵¹³ But much of the credit went to the prestigious Institute of Soil Biology: the local organizers handled logistics, planned the program, delivered many of the lectures, and assured that governments sent well trained scientists. As a rule, the quality of international seminars depended on the competence and cooperation of the local partners.

⁵¹² R. J. Spector, “Turning Unseco Inside Out,” *Opinion* 2 (1962), 15.

⁵¹³ H. Franz, “Report on the First Latin American Course in Soil Biology, Santiago Chile,” 11 Oct. 1965, 631.46 (8) A06 (83) “65” Regional Training Course in Soil Biology – Chile -1965.

Cooperation did not characterize the Alexandria course. Although Schaefer initially approved of the location because of the University's highly regarded soils program, his brusque confidence made his Egyptian counterpart, Abdel Ghaffar, feel like a mere functionary. Or perhaps Ghaffar was not cooperating in good faith from the beginning—the archival record leaves a nasty stain on both scientists' reputations. As the course ended, Ghaffar informed Unesco that his government would file a formal complaint against Schaefer, who had referred to participants in the course as “half-savages” and showed how “UNESCO under-estimated the Egyptian scientists and university staff members” by offering them a meager cash “tip” for their hard work. According to Schaefer, Ghaffar had set out to sabotage the course because it had not been locally designed. The “half-savages” remark, Schaefer revealed, had been taken from a private letter to an American colleague in which he complained that the “students range from a half-savage to a PhD”; University Security had opened his mail because of speculation that he was an Israeli agent. And Ghaffar was holding some of Schaefer's personal papers hostage for thirty Egyptian pounds—“ransoming [was] just not among the virtues of a cultured scientist.” When Ghaffar wrote an American bacteriologist that Schaefer had plagiarized him in a student handout, Schaefer announced that he was compelled to report the incident to the Ministries of Education and Foreign Affairs to defend the honor of French science. A clash of personalities certainly contributed to “L'affaire Schaefer,” as Batisse named it.⁵¹⁴ But the incident should be read not as an

⁵¹⁴ Schaefer to Ghaffar, 1 June 1966; Schaefer to Smid, 1 June 1966; Smid to Batisse, 16 Nov. 1966; Ghaffar to Batisse, 24 Nov. 1966; Schaefer to Batisse, 28 Nov. 1966; Smid to Batisse, 28 Nov. 1966; Batisse to Smid, 1 Dec. 1966; Schaefer to Exteev, 13 March 1967; Smid to Exteev, 17 Apr. 1967, 631.46(=327) A06 (62) “66,” Training Course in Soil Biology – Alexandria – 1966.

anomaly caused by eccentric characters, but as a parody of technical assistance.

International experts' status as privileged outsiders, parachuting into savage lands to enlighten and reform, often embroiled Unesco's international army in bureaucratic battles.

The unpleasant sense of cultural superiority was inherent in the missionary objectives of technical assistance, evident even in relatively successful missions, such as the establishment of a Geophysical Institute in cooperation with the Pakistani Meteorological Institute. Beginning in 1951, the NSD sent experts in geodesy, seismology, geomagnetism, and atmospheric physics, as well as \$35,000 worth of technical instruments, to train young Pakistani scientists and oversee the construction of an observatory.⁵¹⁵ Building an independent scientific organization was the goal of the mission, but creating an effective scientific institute required more than state-of-the-art instruments and technical competence. For better and worse, this was truly missionary work. The expert on the geophysical mission who most clearly articulated the necessary faith in scientific rationality was the English atmospheric physicist Fournier d'Albe, whose mission was devoted to the ancient practice of rainmaking: "A mission of this sort has an ideological impact which may leave behind more permanent effects than the material results of its achievement," he reported (an especially apt conclusion in his case). "What we are trying to bring to Pakistan may be called...the scientific spirit of endeavor." This task, the irreverent d'Albe mused, required defeating the three "evil Jinnis" endemic to contemporary Muslim culture: the "Passive Acceptance of

⁵¹⁵ "The Geophysical Observatory Quetta: A Study of Technical Assistance" (Government of Pakistan, N.D.) in Technical Assistance Reports, Pakistan Box CPX/REP. 3/378).

Misfortune” (the most fearsome); the “Magic of the Written Word” (also leading to fatalism); and finally, the “Prejudice against Manual Work.”⁵¹⁶ The technical expert’s task was to impart a zealous commitment to the scientific life, just as Leopold had preached. But in the context of a European expert in a newly independent nation, this vocation carried the condescending residue of the colonial civilizing mission, which the Schaefer affair exposed.

The Geophysical Institute also demonstrates that international cooperation could be a tremendous asset for local institutions. Beyond the prestige earned from international service, participants from underdeveloped countries could channel aid—that is, experts, instruments and sometimes even dollars—to their favored institutions. The Director of the Pakistan Meteorological Service, S. N. Naqvi, was probably the most successful practitioner of this tactic. Geophysics was not a centerpiece of the Arid Zone Program. But like most of West Pakistan, Quetta was classified as an arid region and the geophysical project was gradually incorporated into the program. Indeed, by the time the Geophysics Laboratory was firmly established and most of Unesco’s experts returned to Europe in 1955, Naqvi had been appointed to the Arid Zone Research Advisory Committee. The Meteorological Service became the central node of Unesco’s Arid Zone Program in Pakistan. Adopting the interdisciplinary norm of the program, Naqvi was soon reporting on an experimental orchard planted on the Geophysical Institute’s grounds, oceanography, mineral prospecting, and groundwater research. In 1959, Naqvi initiated an integrated survey of the nearby Isplingi Valley to demonstrate the methodology’s value for development planning. To perform the survey, the Geophysical

⁵¹⁶ E. M. Fournier d’Albe, “Final Report,” 12 Nov. 1954, in Box PAKISTAN, CPX/REP.3/380, Unesco.

Institute's Arid Zone Research Laboratory, under the leadership of Unesco expert H. I. S. Thirlaway, a Cambridge University seismologist, coordinated the work of the Pakistan Soil Conservation Project, Forest Research Institute, and Geological Survey.⁵¹⁷

International engagement could help expand a national agency's fields of competence and enhance its bureaucratic autonomy.⁵¹⁸

For scientists, participation in the international program could also be a means of extending the reach of their work. This dynamic was obvious in the program's first major research endeavor, mapping the distribution of the world's arid and semi-arid regions. The NSD contracted this assignment to Peveril Meigs, a geographer of the U.S. Army Quartermaster who, as Chairman of the newly established Arid Zone Committee of the International Geographical Union, had initially proposed the project.⁵¹⁹ Deserts, obviously, are areas with little water, but defining deserts as lands receiving less than a certain amount of annual precipitation could be misleading. Most importantly, a hot area might actually be more arid than a cool area that received less precipitation. Meigs, therefore, followed accepted practice by basing climatic classification on calculations of potential evapotranspiration; that is, the amount of "water that would be needed for

⁵¹⁷ Sibte Nabi Naqvi, "Arid Zone Research: A report on the Meteorological and Geophysical Researches for the development of arid areas in Pakistan" (Karachi: Pakistan Meteorological Service, March 1960) in Technical Assistance Reports, Pakistan Box CPX/REP. 3/378), Unesco. H. I. S. Thirlaway, "The Results of Arid Zone Research of the Geophysical Institute, Quetta," *Arid Zone Newsletter* 4 (June 1959), 8-12; Wright, "Land System Survey of Nagarparkar Peninsula, Pakistan."

⁵¹⁸ The impact of Unesco's always scarce material resources should not be exaggerated. For example, when the Arid Lands Major Project made an unusually large grant of \$33,000 to the Negev Institute for Arid Zone Research in Beersheba, Israel, it still paled in comparison to the \$110,000 gift for a Saline Water and Solar Energy Research Laboratory from the U.S. Congress. But, especially for Israel, a grant from Unesco could be more valuable in the currency of prestige or political legitimacy, since it signaled the approbation of the international scientific community. Advisory Committee on Arid Zone Research: Fourteenth Session, 12 Sep. 1958, UNESCO/NS/AZ360, Unesco.

⁵¹⁹ Peveril Meigs, "Suggestions for the Research Programme of the Proposed International Institute of the Arid Zone," 27 Oct. 1949, UNESCO/NS/IIAZ/6, Unesco.

maximum evaporation and transpiration in the course of a year.” A negative evapotranspiration index indicated that less water was available than necessary for complete vegetative cover; on the potential evapotranspiration index Meigs used, developed by the Johns Hopkins University climatologist C. W. Thornthwaite, semi-arid lands fell between –20 and –40 and arid below –40.⁵²⁰ But to be useful for agricultural development, a host of other factors had to be taken into account, too: absorbent characteristics of the soil, intensity of rain, winter or summer rainy seasons, length of days, windiness, extremes of hot and cold, etc. Indeed, Meigs explained that “almost every type of land utilization...theoretically should have its own tailor-made system of climatic classification.”⁵²¹ In order to avoid scientific classifications that violated commonsense on the homoclimatic map, Meigs adapted the Thornthwaite formula by using measures of extreme months rather than annual thermal indices.⁵²²

The theory and practice of thematic mapping are the subject of Chapter Six; what is important here is that Thornthwaite, through his position as President of the Commission for Climatology of the World Meteorological Organization, objected to any alteration of his formula and insisted that the map be redrawn according to his system. The WMO, already suspicious of Unesco’s foray into climatology, delayed endorsing the maps for two years, and then only conceded that they were “satisfactory...for a preliminary survey of the problems” given the “short time and limited facilities” at

⁵²⁰ Peveril Meigs, “World Distribution of Arid and Semi-Arid Homoclimates,” in *Reviews of Research on Arid Zone Hydrology* (Paris: Unesco, 1953), 203-210, 204.

⁵²¹ Meigs to Malina, 27 March 1951, 551.45:551.581 A 332, Arid Zones – Homoclimatic Maps, Part I up to 31/XII/1952, Unesco.

⁵²² In defending his decision, Meigs pointed out that Thornthwaite’s methodology placed San Francisco, Salt Lake City, Chicago, New York, the central Chilean coast, and the core of the Russian Steppes in the same thermal category. Meigs to Swoboda, 3 Nov. 1961, 551.45:551.581 A 332, Arid Zones – Homoclimatic Maps, Part I up to 31/XII/1952, Unesco.

Meigs' disposal.⁵²³ Since the Arid Zone Program was intended to establish standardized scientific practices globally, debates over whose classificatory system, laboratory protocol or survey methodology to follow carried high professional stakes for members of the third UN.

But it was national rather than disciplinary politics that hampered Meigs' career in the international scientific community. Indeed, despite Thornthwaite's petulance and the WMO's damning praise, his homoclimatic map was a great success. It won the official imprimatur of the International Union of Geodesy and Geophysics and the International Geographical Union and became the standard reference for the global distribution of deserts. The Arid Zone Program even adopted a simplified version of the map for its logo; an elegant symbol of a world without political boundaries, united by a common natural enemy. Meigs loved the work and wrote NSD Director Auger that he wished to join the department in order to contribute to "the development of a program of scientific and human development" despite a cut in pay: "Satisfaction, genuine service, and professional growth" were more important than money.⁵²⁴ Auger proposed that he head the Arid Zone Program, but the State Department did not approve the appointment.

In fact, Meigs had the time to prepare the homoclimatic map because he had been suspended from the Army without pay while under investigation for un-American activities. By 1954, he had been subjected to five rounds of security hearings over twelve years. When the NSD considered hiring Meigs to create a homoclimatic map of humid

⁵²³ World Meteorological Organization, 23 March 1953, 551:45 : 551.561 A 332, Arid Zone – Homoclimatic Maps, Part II from 1 Jan. 1953, Unesco.

⁵²⁴ Meigs to Auger, 5 June 1951, 551.45:551.581 A 332, Arid Zones – Homoclimatic Maps, Part I up to 31/XII/1952, Unesco.

climates, the State Department reported that, although he had been repeatedly cleared and was technically competent, he had been “number 2” on McCarthy’s list and the subject of congressional inquiries regarding his relationship with Unesco. The State Department recommended hiring a less controversial figure.⁵²⁵ No other Unesco expert could claim the distinction of making it all the way to number two, but intrusive and tedious questionnaires, missed conferences, canceled contracts, and rescinded job offers due to security clearance problems were absolutely typical for American international experts into the 1960s. After all, in some corridors of the U.S. government, an earnest commitment to the ideals of the world community raised suspicions of subversive tendencies.

The subtext of Arab-Israeli animosity in the Schaefer affair also hints at the limits of “concrete approaches to the problems of the Middle East” to cut through national political tensions.⁵²⁶ Not only were Israelis always excluded from conferences and seminars in Arab countries, Arab scientists, often under government orders, boycotted Arid Zone meetings attended by Israeli scientists. International cooperation was as effective at dramatizing national conflicts as manifesting common interests.⁵²⁷ When

⁵²⁵ Ironically, a greater blow to Meigs’ scientific productivity came in 1961 when the Army insisted on promoting Meigs’ to Chief of a Earth Sciences Division against his will. In fact, Meigs thought his persecution might have enhanced his reputation in the scientific community as he became something of an unwilling martyr. Auger to Meigs, 24 Sep. 1951; Auger to Meigs, 10 Oct. 1951, 551.45:551.581 A 332, Arid Zones – Homolimatic Maps, Part I up to 31/XII/1952, Unesco. Meigs to Swarbrick, 16 Dec. 1954; Meigs to Moller, 17 Aug. 1961, 551.45:551.581 A 332, Arid Zones – Homolimatic Maps, Part II from 1/Jan. /1953, Unesco. Dep. of State to Trueblood, 31 March 1955, 1955-1959 398.43-GE/1-1459 to 398.43-UNESCO/3-355, Box 1552, RG 59, NARA.

⁵²⁶ Boke to Malina, 3 Jan. 1950, 551.45A 022/06 – I Advisory Committee on Arid Zone Research, 1st Session Algiers, Unesco.

⁵²⁷ Alexis De Greiff, “The Politics of Non-cooperation: The Boycott of the International Centre for Theoretical Physics,” *Global Power Knowledge: Science and Technology in International Affairs: Osiris*, 2nd Series 21 (2006), 86-109. The effect of the boycotts, however, often seemed to damage Arab national scientific reputations, as when a Unesco report on an Arid Zone symposium on wind and solar energy

Naqvi attempted to organize a regional training seminar on integrated surveys, the Meteorological Services' parent department "vetoed" the plan—apparently the Ministry of Defense did not approve of using West Pakistan as a field laboratory for training Indians in cartography.⁵²⁸ "National" replaced "International" in the course's title.

But at other times, national governments did take advantage of the apparently apolitical quality of science to find common ground. In December 1956, Louis Emberger was scheduled to lead a regional training course in plant ecology in Cairo. With the Anglo-French-Israeli Suez debacle, however, the notion of a French-led course in Cairo became preposterous. Yet less than a year later, a member of the Egyptian Unesco National Commission informed Batisse that Emberger's visit would be a "great honour for the Egyptians." According to Unesco's resident officer, Emberger was the first French expert officially invited to Egypt since the Suez crisis, and he made attendees "forget by his personality and tact all national barriers and helped also in such a way most considerably in the spiritual task of Unesco regarding the mutual understanding and the respect of the qualified scientist without any narrow distinction."⁵²⁹

It is easy to write the history of international development as a story of neo-imperial blunders. But it is also important to acknowledge the joy bursting through the conventions of bureaucratic writing in this official report. This long-serving international

noted that scientists interpreted the Egyptian boycott as evidence that "there was no competent Egyptian who could have participated." Swarbrick to Auger, 1 Dec. 1954, 551.45 A 022/06 – VIII, Advisory Committee on Arid Zone Research – 8th Session – India – October 1954; see also Purnell to Malina, 8 Jan. 1951, 551.45 A 022/06 – I, Unesco.

⁵²⁸ R. L. Wright, "Pakistan: Geomorphology Survey and Training," (Paris: Unesco, Oct. 1964) UNESCO/EPTA/PAKIS/27, 3.

⁵²⁹ Emberger to Swarbrick, 19 Dec. 1956; Batisse to Jeffries, 21 Oct. 1957; Smid, "Regional Training Course in Plant Ecology," Desert Institute, March 1958, 551.45 : 581.5 A 06 (62) "58", Training course on plant ecology – UAR, 1958, Unesco.

civil servant experienced the regional training course as a sort of scientific communion, and so a victory for the forces of internationalism. These high ideals help explain what kept so many professionals loyal to an international army so often characterized by futility. In the scientific vocation, there was nobility in defeat.

And for Unesco, the capacity of science to bridge political divides proved its practical value. By 1957, Unesco's American Director-General Luther Evans felt obligated to concede to Soviet demands for a top position in the Unesco Secretariat. While the Soviets pushed for the head of Relations with Member States or the Cultural Department, the State Department counseled that the Department of Natural Sciences was least "subject to distortion and possible subversion."⁵³⁰ The Education and Social Sciences Departments, the later so often ridiculed as ineffectual, were out of the question. The Soviets first candidate for the post was the physicist Stanislav Shumovsky, who had attended MIT and served as an advisor to the U.S. Air Force during the war. Even after the State Department informed the Director-General that Shumovsky had been publicly exposed as a spy, the U.S. government quietly approved the Soviet's replacement, the soil scientist Victor Kovda.⁵³¹ Kovda became the first Soviet director of any UN specialized agency department. Because the Cold War became defined as an ideological battle for hearts and minds, the perception that science was non-ideological provided a basis for international cooperation between East and West. Irrelevance was a political asset.

⁵³⁰ Paris to Secretary of State, 17 May 1957; McCullough to Carson, 1 Apr. 1957, 398.43-UNESCO/10-1656 to 398.43-UNESCO/11-3056, Box 1559, RG 59, NARA.

⁵³¹ Foreign Service Despatch, Unesco Series 132, 17 May 1957, 398.43-UNESCO/10-1656 to 398.43-UNESCO/11-3056, Box 1559, RG 59, NARA; Paris to Secretary of State, 20 May 1958, ; Bonn to Secretary of State, 17 Sep 1958, 398.43 UNESCO/5-1958, Box 1564, RG 59, NARA.

In the international scientific community, however, the appointment of a Soviet director of the Natural Sciences Department was a momentous event. Kovda exemplified how scientists could balance patriotic national service with the ideals of the transnational scientific community, and he remained a key player in the international scientific community for decades.⁵³² He was a vigorous advocate for Soviet science, comfortable framing his own work on soils within the logic of dialectical materialism and quite sensitive to perceived slights to Soviet accomplishments. But within months of assuming his office, Kovda was pushing for a U.S. deputy director to shore-up the credibility of his department as a politically neutral international functional organization.⁵³³

Assessing the effect of Kovda's appointment on the course of the Cold War is equivalent to judging the Arid Zone Program by its impact on the global extent of deserts. But for many Western scientists, the opportunity to collaborate with a Russian was a profound experience. The most zealous American acolyte of the Arid Zone Program provides a poignant example of how Kovda's appointment raised the emotional stakes of international cooperation.

Peter Duisberg was an indefatigable booster of desert research. Duisberg was a private agricultural consultant based in El Paso, Texas and chairman of the Committee on Desert and Arid Zone Research of the Southwestern and Rocky Mountain Division of the AAAS. The landmark American Association for the Advancement of Science-Unesco International Arid Lands Conference owed much to his behind-the-scenes work. He was disappointed by the practical follow-up to the 1955 meeting in the United States, but still

⁵³² Allan Needell, *Science, Cold War and the American State: Lloyd V. Berkner and the Balance of Professional Ideals* (Amsterdam, 2000).

⁵³³ Paris to Secretary of State, 27 March 1959, 398.43 UNESCO/3-275, Box 1567, RG 59 NARA.

directed his boundless enthusiasm towards helping realize an Argentinean proposal for a Latin American international arid lands meeting, which convened in Buenos Aires in 1963. For Duisberg, the conference was a means of catalyzing an arid zone scientific movement at a critical moment in the development of the continent. He canceled his business contracts and spent most of 1959 through 1962 traveling through South America to organize national arid lands research committees—sometimes as a paid consultant, sometimes as an unpaid, semi-official Unesco representative.⁵³⁴

Duisberg passionately advocated for extending the Arid Lands Major Project to Latin America, but he understood his work within the historical context of Pan-American cooperation, arguing that the conference should be a hemispheric rather than a continental meeting. Latin Americans could learn from the mistakes of the United States. On his own initiative, he explored the possibility of financial support, perhaps even co-sponsorship, from the Organization of American States. Batisse gently warned Duisberg that “he had gone a bit far in [his] discussions with O.A.S.,” whose participation would “change somewhat the politically neutral character of the conference.”⁵³⁵ But Duisberg’s mistake was a result of truly seeing no conflict between U.S. and UN internationalism.

He recognized that others had good reason to, however. After meeting Kovda in Argentina, he wrote Batisse that he “had gained some, appreciation of [Kovda’s] warm

⁵³⁴ Duisberg to Ibáñez, 21 Jan. 1960; Duisberg, “Condensed Observations Concerning Arid and Semi-arid Zones in South America,” n.d.; Duisberg to Batisse, 14 Aug. 1961; Duisberg, “Proposal for Unesco Arid Zone Program in Connection with Pan-American Arid Zone Meetings to be Held in Argentina in 1963, 551.45(8)A 06(82)”63”, Arid Zones – Scientific Conference on the Arid Regions of Latin America – Argentina – 1963, Part I to 31/XII/62, Unesco.

⁵³⁵ Batisse to Duisberg, 14 Sep. 1962, 551.45(8)A 06(82)”63”, Arid Zones – Scientific Conference on the Arid Regions of Latin America – Argentina – 1963, Part I to 31/XII/62, Unesco.

personality, his love of his scientific field soils, and his keen intellect [sic]." And he wrote to the Director of the NSD to clear up potential misunderstanding:

I understand you had serious doubts about my motives at first because I seemed so interested in my arid lands assignment for UNESCO. If I had been any other nationality than american [sic] I suppose that would have been a sign of virtue...I didn't take this assignment for UNESCO without considering the possibility of my nationality being a disadvantage [but] when David Baytelman of Chile told me that I wouldn't meet anyone much farther left or anti-U.S. than [sic] he and that he would support me all the way, I decided to take it. As a UNESCO representative I will always try to think of what is best from an international point of view.⁵³⁶

In the international scientific community, the Cold War was experienced at the level of interpersonal relations. In its quaint way, then, this letter pledging loyalty to the international army waging war against nature was an effort at easing international tensions. International service demanded that, in pursuit of the view from everywhere, Duisberg strive to empathize with declared enemies of the United States.

The myth of desertification described an epic battle between man and nature. For internationalists, the war against nature provided a common cause that transcended political ideologies and national interests and so could unite the great commonwealth of mankind. But in practice, professional ambitions and mundane bureaucratic alliances and rivalries shaped the Arid Zone Program. International projects fostered transnational communities, but also exposed national hostilities. And internationalists were both celebrated and persecuted for their ideals. International civil servants, of course, were all too familiar with the perils of using the apolitical quality of science as an instrument of political reform. As the lead article in a special issue devoted to international scientific

⁵³⁶ Duisberg to Kovda, 27 March 1962, 551.45(8)A 06(82)"63", Arid Zones – Scientific Conference on the Arid Regions of Latin America – Argentina – 1963, Part I to 31/XII/62, Unesco.

cooperation of Unesco's *Impact of Science on Society* concluded: "[The] functional approach to the overall and supreme problems of international amity...*can* be of scientific, economic and political value. The game is well worth the candle, but it must be played with consummate skill."⁵³⁷ The goal of the game was to get the three UNs playing on the same team.

Conclusion

International scientific cooperation dedicated to desert research turned out to be well adapted to the pressures of the three UNs. For member states, the conquest of the desert not only promised to make unproductive lands pay, it also justified increased government intervention in rural economies and the centralization of power. The first UN liked the program so much that the secretariat was put in the unusual position of arguing in the General Conference that one of its programs should be wound down. In the institutional ecology of the UN functional agencies, basic research on arid lands provided a strategic foothold in the natural resources turf. Most importantly, the Food and Agriculture Organization was willing to cede jurisdiction over useless knowledge of useless land. Yet deserts were also the very symbol of underdevelopment, the antithesis of civilization; the domestication of desert wilderness resonated with deep cultural traditions. And, in the postwar decades, the cultural authority of science was at its apex. For the experts who comprised the third UN, therefore, the Arid Zone Program provided a calling worthy of the scientific vocation. Membership in the cosmopolitan fraternity of scientists, and the model of a transnational community this provided, was as important as

⁵³⁷ Albert King, "International Scientific Co-operation—Its Possibilities and Limitations," *Impact of Science on Society: Special Issue on International Scientific Co-operation* 4: 4 (Winter 1953), 189-220, 220.

the mission to stave off a Malthusian demographic collapse. Of course, participation could enhance a scientist's reputation and a bureaucrat's resources, too. In terms of enhancing its reputation, building an international network of supporters, and expanding its field of competence—that is, of forging bureaucratic autonomy—the Arid Zone Program was the best thing the NSD had going.

Much of the program's success can be attributed to the skillful work of the NSD's civil servants and the experts serving on the Advisory Committee. But the power of the myth of desertification should not be underestimated either. A testament to the myth's power was its endurance. Not only did the narrative precede the program, but when the 1972 UN Conference on the Human Environment led to the creation of a new specialized agency, the United Nations Environmental Program, UNEP made the fight against desertification the centerpiece of its program. UNEP dusted off the most hyperbolic prophecies of deserts on the march, going so far as to predict that, if its program was not supported, within 200 years “there will not be a single, fully productive hectare of land on earth.” Critics have subjected UNEP's version of the desertification narrative to withering critique, debunking it as an “institutional myth.”⁵³⁸ “Myth” here is a term of derision. But as Emery Roe pointed out two decades ago, development narratives are indispensable precisely because they make action possible by ordering overwhelming complexity and providing a common basis for action. Like all myths, development narratives are necessarily open to interpretation.⁵³⁹

⁵³⁸ Thomas and Middleton, *Desertification: Exploding the Myth*, 5.

⁵³⁹ Emery Roe, “Development Narratives, Or Making the Best of Blueprint Development,” *World Development* 19: 4 (1991), 287-300.

The protean quality of development narratives can make them frustrating objects of criticism. Instead of falling apart when subjected to deconstructive analysis, development experts rearrange narratives to incorporate criticism. This strategy goes beyond co-opting counter-narratives. The critique of development has been a fundamental and necessary component of development discourse. One of the critical tasks of development intellectuals, after all, is to explain how society got into this mess, and in the process distinguish current initiatives from past failures. The scientists who participated in the Arid Zone Program were vigorous critics of the field in their time. “If there is one lesson which seems to stand out above all others in this review,” Stamp wrote in the conclusion of *A History of Land Use in the Arid Regions*, “it is the almost complete lack, in many areas, of precise knowledge of the present position.”⁵⁴⁰ The lesson was not that society should rush to heed the warnings of scientists, but that scientists did not know what they were talking about. Of course, this blunt criticism was also a call for expanded patronage. Indeed, perceptions of failure more than experiences of success have driven institutional growth and intellectual innovation in the development field.

The narrative of environmental degradation, which the Arid Zone Program reproduced on a global scale, was not about explaining the cause of underdeveloped lands so much as articulating a common cause worth fighting for. Too often, the normative quality of this basic science program was cloaked. The key ecological concept of natural vegetation, for example, illustrates how a powerful theoretical construct could slip into a description of an idealized past that the future ought to resemble. At their worst, scientists attempted to usurp the authority of nature by arguing that their findings compelled social

⁵⁴⁰ Stamp, “Conclusion,” 380.

policy. But experts who participated in the Arid Zone Program were often quite explicit that they did not derive the basic values for which they campaigned from some prelapsarian harmony of nature. Indeed, unpredictable, unproductive, unstable desert environments were the enemy. They had to be domesticated to produce an ecological balance. For these scientists, equilibrium was the goal, not a naïve description of nature. This stance could justify wholesale transformations of nature that precipitated environmental degradation on an unprecedented scale and destroyed human communities. Such misreadings of human-environment interactions and ill-conceived projects have contributed to discrediting the paradigm of natural balance, replacing it with a more historically sophisticated conception of contingent ecological fluctuation, at least in sophisticated academic and professional circles.

As a normative proposition, however, a model of ecosystem behavior based on flux hardly seems like an improvement on a model based on equilibrium. Flux is not an objective likely to galvanize an international army; indeed, one of its analytical strength's is a purposeful rejection of a vision of the common good. It is hardly surprising that stories of contingent, meaningless change have not captured the public imagination. But the choice between balance and flux is false. Rather, society is perpetually trying to regain its balance amid all the fluxing change.

Chapter Five
The Cautious Optimism of Scientific Propaganda: The University College of Rhodesia and Nyasaland Chair of Race Relations and the Eclipse of Liberal Internationalism

“...the most valuable citizens any country can possess are the troublemakers, the public nuisances, the fighters of small, apparently unimportant battles. No government, no political party anywhere cares a damn about the individual. That is not their business. So I believe in the ginger-groups, the temporarily associated minorities, the Don Quixotes, the takers-of-stands-on-principle, the do-gooders and the defenders of lost causes.” Doris Lessing, *Going Home*⁵⁴¹

The 1950/51 Statements on Race are Unesco’s best remembered early products. Historians find the Race Statements useful markers for the postwar establishment of an international liberal orthodoxy on the meaning of race: race was a legitimate biological category of trivial importance but an illegitimate social category of tremendous importance.⁵⁴² The scientific consensus was forced, but this only suggests the strength of the antiracist position; the biological equality of the races was now presumed. Eliminating racial barriers to human cooperation was a critical prerequisite to cultivating a view from everywhere. In addition to the Statements on Race, the Social Science Department’s Race Program published a series of antiracist pamphlets, *The Race Question in Modern Science*, to celebrate the “unity in diversity” of mankind and cultivate rational attitudes towards race relations. The series, which the Race Program’s head, the anthropologist Alfred Métraux, frankly referred to as propaganda, was the Social Science Department’s most popular publication. The goal was to make “race

⁵⁴¹ From the 1967 postscript “Eleven Years Later” to Doris Lessing, *Going Home* (New York: Harper Perennial, 1996), 252.

⁵⁴² The liberal orthodoxy held that the biology of human races was trivial only in its social implications. Races—often synonymous with sub-species and understood as incipient species—were a core concept of the population genetics that galvanized the mid-century evolutionary synthesis. See Ernest Mayr and William Provine, eds., *The Evolutionary Synthesis: Perspectives on the Unification of Biology* (Cambridge, Mass.: Harvard University Press, 1980); Theodosius Dobzhansky, *Genetics and the Origin of Species* (New York: Columbia University Press, 1951).

prejudice... a shameful sentiment that men will hesitate to avow.”⁵⁴³ The liberal experts talked about race incessantly, but, in an ideal society, the public would ignore race completely.⁵⁴⁴

The Race Program’s literature was hardly innovative—the pamphlets mostly popularized the findings of interwar U.S. race relations research for an international audience—but it provided a clear script for antiracist activists and educators. Because Unesco acted on an international stage, the Race Program’s texts helped articulate (along with documents such as the Atlantic Charter, the Universal Declaration of Human Rights, and the United Nations’ Charter) the norms and values required for membership in the emerging liberal world community. For liberal democracies, which claimed to represent meritocracies, this new orthodoxy denaturalized inequitable distributions of wealth and power. The Race Program was an attempt to internationalize the American creed—that complex of positive values Gunnar Myrdal had so influentially argued contradicted the historical reality of racial oppression—for a new, American-led world order.⁵⁴⁵

⁵⁴³ Alfred Métraux, “Unesco and Race Problems,” *International Social Sciences Bulletin* 2: 3 (1950), 390.

⁵⁴⁴ For a collection of the brochures in the *Race Question in Modern Science Series*, see Unesco, *The Race Question in Modern Science: Race and Science* (New York: Columbia University Press, 1961). For evidence that the consensus was forced, see the remarkably fair sampling of expert opinions solicited by the Race Program in Unesco, *The Race Concept: Results of an Inquiry* (Paris: Unesco, 1952). For a recent appraisal of Unesco’s antiracist activities and their reception, see Michelle Brattain, “Race, Racism, and Antiracism: Unesco and the Politics of Presenting Science to the Postwar Public,” *The American Historical Review* 112: 5 (Dec. 2007), 1386-1413; Jenny Reardon, *Race to the Finish: Identity and Governance in an Age of Genomics* (Princeton: Princeton University Press, 2005), 17-44. For the UN’s antiracism more broadly, see Michael Banton, *International Action Against Discrimination* (Oxford: Oxford University Press, 1996).

⁵⁴⁵ Gunnar Myrdal, *An American Dilemma: The Negro Problem and Modern Democracy* (New York: Harper, 1944); Walter Jackson, *Gunnar Myrdal and America’s Conscience: Social Engineering and Racial Liberalism, 1938-1987* (Chapel Hill: The University of North Carolina Press, 1990). See also, Elazar Barkan, *The Retreat of Scientific Racism: Changing Concepts of Race in Britain and the United States between the World Wars* (Cambridge: Cambridge University Press, 1992); John P. Jackson, Jr., *Science for Segregation: Race, Law, and the Case against Brown v. Board of Education* (New York: New York University Press, 2005).

For all the historical importance of the Statements and the popularity of the pamphlets, however, the architects of Unesco's Race Program acknowledged that racial prejudice derived not from rational analysis but from "emotional attitudes" and, conversely, that racial discrimination could be a rational economic strategy. They fretted that they were merely "preaching to the converted," and that "scientific research [had] taken the place of action that is more direct, but also more difficult and more dangerous."⁵⁴⁶ Even with the cultural authority of science near its historical apex, activist experts understood that science was one of the weaker social forces affecting race relations. Indeed, contemporary social science showed that the persuasive power of rational argument paled in comparison to emotional appeals.⁵⁴⁷ In many ways, as this chapter suggests, the international community's ecological expertise played a more important if subtler role in structuring racial inequality than did its scientific pronouncements on race.

The Race Program was not designed to propagate complacency, however. Its purpose was less to describe the world as it really was than to reform it as it ought to be—and intergroup relations ought to be conducted rationally and in good faith. The role of the race relations expert was to act as a trusted mediator who could engage conflicting races in transformative conversation. This was a version of the view from everywhere's expert as group therapist, his objectivity assessed by his ability to empathize yet not identify with the position of each group. As much as through its content, the message of

⁵⁴⁶ Anon., "Preface," *International Social Science Bulletin* 2: 4 (1950), 455.

⁵⁴⁷ Cf. Robin Murray Williams, *The Reduction of Intergroup Tensions: A Survey of Research on Problems of Ethnic, Racial, and Religious Group Relations* (New York: Social Science Research Council Bulletin 57, 1947).

the Race Program—and race relations more generally—was expressed through a mature tone of cautious optimism.

It is easy to see why the rhetoric of deliberative progress was congenial to Western governments. The war against fascism and the ascension of former European colonies to legal equality in the international community had further discredited the already discreditable racial justification of white power. The United States responded to Soviet propaganda, which exploited America's shameful record on race to challenge its leadership of a multiracial world, with a propaganda campaign of its own that emphasized the democratic superpower's peaceful progress towards racial equality.⁵⁴⁸ For the United States, race relations had been defined as a domestic dilemma before it became an international public relations liability; for European powers, race relations (understood in terms of color) was a colonial problem. The United Kingdom updated its self-proclaimed civilizing mission—always a more significant justification for colonialism than biological racism—to articulate a vision of empire compatible with the principles of the Free World: colonies would be granted independence within an interracial New Commonwealth when they had achieved the necessary standard of civilization.⁵⁴⁹ Like the U.S. State Department's propaganda and the imperial civilizing

⁵⁴⁸ Carol Anderson, *Eyes Off the Prize: The United Nations and the African American Struggle for Human Rights, 1944-1955* (Cambridge, UK: Cambridge University Press, 2003); Mary Dudziak, *Cold War Civil Rights: Race and the Image of American Democracy* (Princeton: Princeton University Press, 2000); Azza Salama Layton, *International Politics and Civil Rights Policies in the United States, 1941-1960* (Cambridge, UK: Cambridge University Press, 2000).

⁵⁴⁹ Michael Adas, *Machines as the Measure of Men: Science, Technology and the Ideology of Western Dominance* (Ithaca: Cornell University Press, 1989); Peter Mandler, *The English National Character: The History of an Idea from Edmund Burke to Tony Blair* (New Haven: Yale University Press, 2006); Paul Rich, *Race and Empire in British Politics* (Cambridge, UK: Cambridge University Press, 1990).

mission, the cautious optimism of liberal race relations focused on the potential of equality and valued gradual progress over radical change.

Yet it is equally clear why race was a dangerous subject for an IGO: it was a transnational identity. Attempts to define a nation racially were the clearest violation of the liberal orthodoxy, but race was also the most visible manifestation of an affiliation in competition with nationality. Racial identities crossed national borders and divided nations in ways that could threaten the legitimacy of a government to represent its citizens. The United Nations, however, was founded upon the principle of national sovereignty. Investigations of racial discrimination provoked angry accusations that the UN was meddling in a state's internal affairs. Neatly demarcating the boundary between race and nation, therefore, was granted a privileged place on the UN's agenda, but UN agencies' activities on the race question were tightly constricted. As an organization of member states, political realities mandated that Unesco focus on positive progress, not entrenched injustice.

The meaning of the international antiracist script depended on where it was performed. This chapter analyzes a particularly tragic performance: Unesco's participation in the establishment of a Chair of Race Relations at the University College of Rhodesia and Nyasaland. The campaign to endow the Chair was initiated in 1953 by the Salisbury Round Table, a Southern Rhodesian chapter of a young businessmen's service club, to promote the country's new policy of Partnership. Partnership was a vague celebration of interracial cooperation that promised to fulfill Cecil Rhodes' famous dictum: "Equal rights for all civilized men." In classic liberal fashion, racial inclusivity

was qualified by cultural exclusivity.⁵⁵⁰ Partnership was intended to demonstrate the settler colony's adherence to international norms, and thus bolster its case for full independence; non-racist governance was now a key standard of civilization in the world community.

Unesco did not participate in the project until 1960, by which time the optimistic spirit of Partnership had been replaced by conflict between racially defined nationalisms. At the international level, the 1950s saw a shift away from the human rights of individuals to the collective rights of "minorities"—from the elimination of racial identity and the weakening of primordial affiliations to the empowerment of oppressed groups.⁵⁵¹ And in the UN, the civilizing mission itself was under attack. In Central Africa, not only did race prove inseparable from nationality; other sub- and supra-national affiliations—to the middle class, international business, academia, urban or rural communities, the British Commonwealth, Africa, and the international community—shaped the discourse on race.⁵⁵²

⁵⁵⁰ John Carson, *The Measure of Merit: Talents, Intelligence, and Inequality in the French and American Republics, 1750-1940* (Princeton: Princeton University Press, 2007); Uday S. Mehta, "Liberal Strategies of Exclusion," in Ann Laura Stoler and Frederick Cooper, eds., *Tensions of Empire: Colonial Cultures in a Bourgeois World* (Berkeley: University of California Press, 1997), 59-86. On the civilizing mission in Southern Rhodesian, see Ngwabi Bhebe and Terence Ranger, "Introduction to Volume One," in Ngwabi Bhebe and Terence Ranger, eds. *The Historical Dimensions of Democracy and Human Rights in Zimbabwe: Volume One: Pre-colonial and Colonial Legacies* (Harare: University of Zimbabwe Publications, 2001), xxi-xLvii.

⁵⁵¹ Roland Burke, "From Individual Rights to National Development: The First UN International Conference on Human Rights, Tehran, 1968," *Journal of World History* 19: 3 (Sep. 2008), 275-296; John David Skrentny, *The Minority Rights Revolution* (Cambridge, Mass: Harvard University Press, 2002).

⁵⁵² In demoting scientific statements on race to the category of scripts, as well as emphasizing the relational character of identity, I follow Charles Tilly, *Durable Inequalities* (Berkeley: University of California Press, 1998). As this chapter shows, scripts are vitally important, but their significance is less likely to be discovered through close textual analysis than through detailed investigation of how different actors have made use of them. My attention to the fluidity of identities—or, as the authors prefer, the process of identification—was influenced by Frederick Cooper and Rogers Brubaker, "Identity," in Frederick Cooper, *Colonialism in Question: Theory, Knowledge, History* (Berkeley: University of California Press, 2005).

The Round Table boasted that Central Africa was the world's best living laboratory of race relations. Whatever the limitations of the metaphor, the campaign to endow the Chair of Race Relations provides a revealing case study of the evolving, paradoxical meanings of racial liberalism in the context of decolonization. Unesco's participation in the experiment—deploying an expert on a mission to enhance mutual understanding in the troubled region—demonstrates the limits of the view from everywhere in practice.

The Local Situation: The Promise of Partnership

In the 1950s, political observers often described Southern Rhodesia as the crux of Africa, a critical point at which the world's racial frontiers met and new cultural possibilities might evolve. Across the territory's southern border, Dr. Malan's defeat of Field Marshall Smuts in the 1948 election signaled a resurgence of Afrikaner nationalism and intensification of white supremacy. Debates in the UN General Assembly showed that the Union of South Africa was the most glaring beacon of hypocrisy in the Free World's battle for the hearts and minds of the non-aligned nations. To the North, the 1952 outbreak of the Mau Mau Uprising and its brutal suppression in Kenya revealed the potential for violence inherent in African nationalist aspirations in a settler colony. In a bid to gain full independence within the Commonwealth, Southern Rhodesia's political leaders attempted to position their territory as the leading member of a Central African Federation that would include Northern Rhodesia and Nyasaland, which was finally established in 1953. Recalling the promise of Federation from the perspective of its demise a decade later, Oxford's Rhodes Professor of Race Relations and the first Chair of

Race Relations at the University College of Rhodesia and Nyasaland Kenneth Kirkwood explained that it sought a “*via media*...between *apartheid* and Mau Mau.”⁵⁵³ This perilous yet peaceful middle road was supposed to be constructed by a partnership between enlightened whites and an emergent black middle class.

According to Colonial Office civil servants and white Rhodesian boosters, an economically dynamic Federation would contain Afrikaner nationalism South of the Limpopo, satisfy Africans’ rising expectations, and immunize Central Africa from communist influence. Uniting Southern Rhodesia with its two Northern neighbors would promote economic development by taking advantage of regional economic complementarities: Southern Rhodesia’s agricultural capacity and urban economic potential; Northern Rhodesia’s rich mineral reserves; and Nyasaland’s large African labor force. Viewed from above, Federation made sense. But since Southern Rhodesia occupied an ambiguous status between British colonial territory and independent dominion—and Northern Rhodesia and Nyasaland were Crown Colonies—the small European minority could not simply declare Federation. It required approval from the Colonial Office, and so had to be justified to the British domestic public and the international community. Thus, Prime Minister Geoffrey Huggins, who dominated Southern Rhodesian politics for two decades before assuming leadership of the Federation, proclaimed that interracial Partnership would replace separate development

⁵⁵³ Kenneth Kirkwood, *Britain and Africa* (London: Chatto and Windus, 1965), 66.

as the guiding principle of Federation policy.⁵⁵⁴ To appeal to an international audience, the settlers promised to pursue a sort of view from everywhere.

At its most cynical, Partnership was a vague rhetorical strategy designed to avoid addressing the social, economic, and political forces that structured race relations. When Southern Rhodesian settlers ended British South Africa Company Rule by winning the right to “responsible government” in 1923, there were 35,900 Europeans and around 900,000 Africans in the colony. At Federation thirty years later, the European population had increased to 157,000, nearly doubling in the eight postwar years, but the estimated number of Africans had grown to 2,360,000. European immigrants were attracted to Central Africa by one of the highest standards of living in the postwar world. There was a postwar industrial boom—between 1946 and 1953, employment in the manufacturing sector doubled—but white prosperity was subsidized by black poverty. Land and labor laws were rife with contradictions—industry depended upon African labor but denied Africans employment status; peasants were supposed to adopt modern farming practices but were denied access to credit and markets; land tenure was based on individual possession, but Africans usually could not own land—all of which ultimately derived from the contradiction that European incomes depended on African labor, yet Africans were legally excluded from the white economy. The racially structured labor market and division of the land—codified in the 1930 Land Apportionment Act, which Europeans called their *Magna Carta*—helped assure that, whatever their class or ethnic origins,

⁵⁵⁴ Colin Leys, *European Politics in Southern Rhodesia* (Oxford: Oxford University Press, 1959), 191-192; Eugene P. Dvorin, “Central Africa’s First Federal Election: Background and Issues,” *The Western Political Quarterly* 7: 3 (Sep. 1954), 369-390; Ronald Hyam, “The Geopolitical Origins of the Central African Federation: Britain, Rhodesia and South Africa, 1948-1953,” *The Historical Journal* 30: 1 (Mar., 1987), 145-172.

European immigrants were quickly assimilated into the white community. White workers afraid of African competition provided a dependable base of conservative political power.⁵⁵⁵

If whites enjoyed a “civilized standard of living,” Africans struggled to survive on sub-subsistence wages and harvests. Instead of revising their *Magna Carta*, however, Europeans attempted to use scientific conservation to ease the pressures on soil and population caused by segregation. Starting in the late 1920s, the Native Affairs Department had promoted soil conservation, and in 1951 the Native Land Husbandry Act made far reaching conservation practices compulsory. Among the measures Africans resented most were attempts to control soil erosion through labor intensive contour ridging requirements and destocking quotas based on shamefully crude estimates of carrying capacity. The key to the Land Husbandry Act was the institution of land tenure based on individual rights instead of communal membership. The legislation used ecological expertise to justify a standard eight-acre “economic holding” mandated for African peasant households on the Native Reserves, regardless of local soils and climate. Converting Africans to intensive settled agriculture had long been a key goal of Christian missionaries and colonial authorities. But the explicit purpose of the new tenure regime was to separate the urban and rural economies in order to make both legible and, more importantly, increase the supply of African workers for the projected industrial boom. To

⁵⁵⁵ Leys, *Rhodesia*, 17, 22, 82-84; F.M.G. Willson, Gloria C. Passmore and Margaret T. Mitchell, *Source Book of Parliamentary Elections and Referenda in Southern Rhodesia 1898-1962* (Salisbury: University College of Rhodesia and Nyasaland, 1963), 94; Brian Raftopoulos, “Nationalism and Labour in Salisbury, 1953-1964,” in Brian Raftopoulos and Tsuneo Yoshikuni, eds., *Sites of Struggle: Essays in Zimbabwe’s Urban History* (Harare: Weaver Press, 1999), 113-128, 135; Nathan M. Shamuyarira, *Crisis in Rhodesia* (New York: Transatlantic Arts, 1965), 99-100.

claim a plot, land holders had to be actively farming the land (not working in the city) when surveyors made their assessments. The legislation thus recognized the dependence of African families on the combination of rural and urban work, but sought to sever the link.⁵⁵⁶

The conservation practices legislated by the Land Husbandry Act were every bit as much a product of international exchange as was the discourse of racial liberalism that is the primary focus of this chapter. The first Agriculturalist of the Native Affairs Department, Emory Alvord, was a former missionary from the United States with a degree in agriculture from Washington State University. He preached the tenets of American soil conservation.⁵⁵⁷ The Land Husbandry Act, which legislated Alvord's vision, was designed to halt desertification and raise the carrying capacity of semi-arid lands; it was based on the same science that Unesco's Arid Zone Project promoted. Furthermore, the capacity to perform the population censuses and land surveys necessary to enforce the Land Husbandry Act's precise requirements depended upon engagement with the international community. For example, government experts performed Southern Rhodesia's first agricultural sample surveys in 1949 in order to contribute to FAO's 1950 World Agricultural Census. The experts followed up by participating in workshops on

⁵⁵⁶ Michael Drinkwater, *The State and Agrarian Change in Zimbabwe's Communal Areas* (London: Macmillan, 1991); Nancy Jacobs, *Environment, Power, and Injustice: A South African History* (Cambridge, UK: Cambridge University Press, 2003); Victor E.M. Machingaidze, "Agrarian Change from Above: The Southern Rhodesia Native Land Husbandry Act and African Response," *The International Journal of African Historical Studies* 24: 3 (1991), 557-588; Tsuneo Yoshikuni, "Notes on the Influence of Town-Country Relations on African Urban History, before 1957: Experiences in Salisbury and Bulawayo," in *Sites of Struggle*, 113-128.

⁵⁵⁷ Drinkwater, *The State and Agrarian Change in Zimbabwe's Communal Areas*, 44-45, 50-51; R. Kent Rasmussen and Steven C. Rubert, *Historical Dictionary of Zimbabwe*, 2nd ed. (Metuchen, NJ: The Scarecrow Press, Inc., 1990), 19. On the influence of American conservation practices in Southern Africa more generally, see William Beinart, *Environment and History: The Taming of Nature in the USA and South Africa* (London: Routledge, 1995); Kate Showers, *Imperial Gullies: Soil Erosion and Conservation in Lesotho* (Athens: Ohio University Press, 2005).

survey methods at joint FAO-Commission for Technical Co-operation in Africa (the inter-imperial technical assistance agency) training centres in 1953 and 1957.⁵⁵⁸ Although not part of its acknowledged purpose, this international scientific expertise, which was intended to help the Federal government gain a view from above, played a critical role in structuring racial inequality in Central Africa.

The elaborate legal apparatus that assured racial inequality depended on maintaining white political power, but the legitimacy of that power depended on the nonracial franchise. In a developing liberal democracy, voting was the responsibility of the civilized—or, after 1951 when Huggins' government raised the voting means test, the privilege of those twenty-one years or older, literate in English, and with an income of at least £240 or property worth £500. In a signal of the colony's national ambitions, the new law also required voters to be Southern Rhodesian citizens, not just British subjects. The effect of this nonracial franchise was that in 1952 there were only 380 African voters out of an electorate of roughly 46,000.⁵⁵⁹

The British Conservative government and white Rhodesian electorate imposed Federation against the opposition of the Labour Party and African majority. In the two Northern colonies, African leaders even petitioned the UN to stop Britain from abdicating its trusteeship responsibilities. But the domestic reactionary right—the only viable opposition in the white electorate—was suspicious of Federation, too. Adding the four million Africans in the two Northern territories emphasized the vulnerability of white

⁵⁵⁸ John R. H. Shaul, "African Sample Surveys in the Federation of Rhodesia and Nyasaland," in Kenneth Kirkwood, ed., *African Affairs: St. Antony's Papers* 10 (London: Chatto & Windus, 1961), 102-119.

⁵⁵⁹ Willson et al., *Source Book of Parliamentary Elections*, 9-12.

rule. In response (and after Federation was a done deal), Huggins infamously defined Partnership as the relationship between a horse and rider.

A different spirit of Partnership inspired the activities of several hundred white liberals and an even smaller, but ultimately more significant, African middle class. European liberals founded interracial societies and hosted mixed parties where they sipped tea with educated Africans. Not surprisingly for a middle class movement, liberal ideals were vested in the practical vision of nonracial meritocracy. For Europeans, the dangers of nationalisms white and (especially) black could only be avoided by encouraging the incorporation of African elites into civilized society. Although only a handful of Africans joined the interracial organizations, they included many of the future leaders of the nationalist organizations that would emerge within a decade. In the early 1950s, however, African urban elites—grocers, journalists, ministers, teachers—were generally more concerned with gaining recognition of their ascension into the ranks of civilized Christian society than in solidarity with the laboring masses and rural peasants. This aspiring middle class pursued upward social mobility through education. Despite evident hypocrisy in practice, the notion that rights (and respect) depended on merit not race was appealing. In the first book published by an African in Southern Rhodesia, Bradfield Mnyanda averred, “By all means, let us have a ‘culture bar’ in place of the present colour bar.” The ideal of a culture bar, with education as the metric, neatly captured the liberal spirit of Partnership.⁵⁶⁰ It also resonated with the message of

⁵⁶⁰ Ian Hancock, *White Liberals, Moderates and Radicals in Rhodesia, 1953-1980* (New York: St. Martin’s Press, 1984); Jon Lunn, “The Meaning of the 1948 General Strike in Colonial Zimbabwe” and Brian Raftopoulos, “Nationalism and Labour in Salisbury, 1953-1965,” in *Sites of Struggle*, 163-182, 113-128;

Unesco's Race Program. For example, Métraux, the Program's head, wrote in an article that accompanied the publication of the "Statement on Race" in Unesco's popular magazine the *Courier*: "Ironically, the worst sufferers of racial dogma are usually the people whose intellect most forcibly demonstrates its falseness."⁵⁶¹

But in a community so worried about maintaining the high standards of Western civilization, Southern Rhodesia still lacked the premier institution of high culture: a university. At the end of World War II, a group of leading Salisbury citizens formed the Rhodesia University Association to found a university for Europeans. Far from education as a lever for social reform, the leader of the Association declared that "until the whole of our mixed society becomes convinced that a mingling of the races is socially and biologically desirable, [the only answer] is to continue at the university the social segregation which is in evidence throughout the country."⁵⁶² The University of Rhodesia Association, however, failed to raise sufficient money.

Fortunately, the British government had taken a belated interest in higher education in the colonies. In 1945, the Asquith Commission recommended the establishment of the Inter-University Council for Higher Education in the Colonies (IUC) to advise colonial university colleges, which now were supported by grants from Colonial Development and Welfare funds. To assure high British standards and the equivalency of degrees, the University of London performed graduate examinations. According to the Asquith Commission:

Michael O. West, *The Rise of an African Middle Class: Colonial Zimbabwe, 1898-1965* (Bloomington: Indiana University Press, 2002), 66, 193.

⁵⁶¹ Alfred Métraux, "Race and Civilization," *Courier* 3: 6-7 (July-August, 1950), 8-9, 8.

⁵⁶² Michael Gelfand, *A Non-Racial Island of Learning: A History of the University College of Rhodesia from its Inception to 1966* (Gwelo: Mambo Press, 1978), 57.

It is the university which should offer the best means of counteracting the influence of racial differences and sectional rivalries which impede the formation of political institutions on a national basis. Moreover, universities serve the double purpose of refining and maintaining all that is best in local traditions and cultures and at the same time of providing a means whereby those brought up in the influence of these traditions and cultures may enter on a footing of equality into the world-wide community.⁵⁶³

The IUC's colonial mission resonated with the key themes of postwar liberal democratic internationalism that undergirded the view from everywhere: racial equality, national sovereignty, unity in diversity, world community. As the IUC's Carr-Saunders Commission for Higher Education for Africans in Central Africa made clear, the British would only support a multiracial Rhodesian university.

Potential American funding would also require an integrated institution.⁵⁶⁴ Earlier in the century, the American Phelps-Stokes Fund had exported U.S. Southern-style vocational education for Africans to support Southern Rhodesia's policy of "separate development."⁵⁶⁵ But after the Second World War, American philanthropies pushed for compliance with the racial ideals of Cold War liberalism. The Carnegie Corporation, for example, had a mandate to assist British education in the colonies, and, according to the IUC's semi-official history, the Corporation's finances and philosophy played a "profoundly important, and in the later years of the [1950s] quite decisive, part in the evolution of the IUC's policy towards Africa."⁵⁶⁶ Segregation might still be the *de facto*

⁵⁶³ Quoted in A. M. Carr-Saunders, *New Universities Overseas* (London: George Allen & Unwin Ltd, 1961), 35.

⁵⁶⁴ Gelfand, *A Non-Racial Island of Learning*, 73.

⁵⁶⁵ West, *Rise of the African Middle Class*, 45-47.

⁵⁶⁶ I. C. M. Maxwell, *Universities in Partnership: The Inter-University Council and the Growth of Higher Education in Developing Countries 1946-1970* (Edinburgh: Scottish Academic Press, 1980), 47.

rule in U.S. higher education, but the country's foundations now promoted integration—which thus called Partnership's ideological bluff.

Although the University College of Rhodesia and Nyasaland (UCRN) became the premier symbol of Partnership, the international community imposed multiracialism on the university against the wishes of Salisbury boosters. Fittingly, the first secretary of the IUC, Walter Adams, was named Principal of the UCRN. Under a Royal Charter and inaugurated by the Queen, the UCRN was proof that the Federation measured up to postwar civilized racial standards. Yet an integrated institution was so anomalous in Southern Rhodesia that special amendments had to be made to the Land Apportionment Act and pass laws for African, Colored, and Indian students to travel to and live at the university in Salisbury. The Royal Charter—which stipulated that “no test of religious belief or profession or of race, nationality or class shall be imposed” on any person associated with the university—was more than a symbol of British patriotic pride. Like the College's high academic standards, it was intended to shore-up the UCRN's autonomy and protect its multiracial mission from the caprice of Southern Rhodesian politics. Nevertheless, for Southern Rhodesians who recognized that the success of the Central African Federation depended on making Partnership a reality, the multiracial College represented the nation's future.

**The International Context:
The Round Table and Unesco, Unlikely Partners Blown Together by the Wind of
Change**

Members of the Salisbury Round Table believed in the Federation, and they resolved to contribute to the project of partnership by raising £50,000 to endow a Chair of

Race Relations. The Round Table membership represented nearly an ideal type of Rhodesian moderate racial liberal: a service club restricted to professionals or businessmen between the ages of eighteen and forty. First founded in England in 1927, by the 1950s there were over 400 tables in Great Britain and many more in Europe, Malaya, and South Africa. Membership in the World Council of Young Men's Service Clubs connected the organization with similar American and Commonwealth clubs. The Salisbury branch, founded in 1952 by a "tabler" from Portsmouth, UK, was the first in Central Africa; five years later there were eighteen.⁵⁶⁷ The Race Chair was the Salisbury branch's first and most important attempt to fulfill its mission of promoting international goodwill. It was also about affirming these young white Africans' Britishness and Central Africa's membership in the international community. A description of the scheme emphasized that Race Relations represented "a world problem" since all over the globe "peoples of different races and colours, with widely ranging standards of civilisation, are living together in the one country and under the one government." But the situation was particularly acute in Central Africa:

Here the standard of civilisation of the inhabitants of European stock has been—and generally speaking still is—considerably higher than the indigenous coloured peoples. That in itself creates great, but fairly simple, problems. Portions of the coloured races, however, are gradually—in some cases, rapidly—absorbing the civilisation of the Europeans, and the former differences are lessening. As they diminish, however, new and immensely more intricate problems emerge.

⁵⁶⁷ National Association of Round Tables of Great Britain and Ireland, "Chair of Race Relations" 323.12:37 (689), AMS—Teaching of Race Relations—Rhodesia and Nyasaland—Part. Prog., Unesco.

Central Africa was a great “human laboratory” in which the problems of a multiracial society could be worked out, thus providing a service both “to the local community and to the Community of Nations.”⁵⁶⁸

The appeal to endow the “Princess Margaret Chair” kicked off in May 1953 (two months before the Queen Mother laid the University’s foundation stone) with a reception hosted by the Governor of Southern Rhodesia (i.e. the United Kingdom’s representative in Salisbury) that raised £800. The campaign quickly assumed global proportions. The President of Round Table International visited Salisbury and reported that the “project marks one of the decisive steps in the development of Round Table’s ideals and international influence.” At the 1954 meeting of the World Council of Young Men’s Service Clubs in California, all Associations were urged to make funding the Chair a priority. The International office distributed glossy brochures and produced 80,000 stamp books in French and English. By 1958, the Round Table of Great Britain and Ireland prefaced its fundraising appeal with a defense against the “many who have belaboured the National Association for disseminating too much information on this subject.” In fact, the Round Table claimed that the global campaign was as important a service as the Chair itself; all the activity was a “sign of good faith” that “[bore] witness to an earnest and sincere desire to grapple with and to overcome these problems.” Hope derived from the process more than the product. But after five years, when the first class of sixty-eight

⁵⁶⁸ “Preamble” to “The Scheme in Detail,” and National Association of Round Tables of Great Britain and Ireland, “Chair of Race Relations,” 323.12:37 (689), AMS—Teaching of Race Relations—Rhodesia and Nyasaland—Part. Prog., Unesco.

students (eight African) matriculated to the College, collections in fourteen countries on four continents had raised just £14,429.⁵⁶⁹

Ironically, given the Organization's chronic budget woes, the Round Table turned to Unesco for financial not intellectual support. In 1960 the fund still stood at less than £15,000. Reluctantly acknowledging the campaign's failure to demonstrate broad popular support for the African experiment, the Chairman of the Chair of Race Relations Endowment Trust in Salisbury, Sir Ernest Guest, wrote to Unesco to request a substantial contribution to the study of race relations in "the best living laboratory on this subject." According to Guest, race relations were being "aggravated by persons of all extreme political views, whether to the left or to the right, in order to make political propaganda for themselves." Guest warned that "events were such in Africa" that if the first appointment had "to wait until 1962, [it] might result in the psychological effect of the actual appointment being made, being lost."⁵⁷⁰ This was a rare emergency appeal for Unesco to fulfill its constitutional mandate to "build the defences of peace" in the "minds of men."

The most significant event in Africa in 1960, of course, was decolonization. Just nine days before Guest wrote Unesco, British Prime Minister Harold Macmillan had declared in the South African Parliament, "The wind of change is blowing through this continent. Whether we like it or not, this growth of national consciousness is a political

⁵⁶⁹ "Preamble" to "The Scheme in Detail," and National Association of Round Tables of Great Britain and Ireland, "Chair of Race Relations," 323.12:37 (689), AMS—Teaching of Race Relations—Rhodesia and Nyasaland—Part. Prog., Unesco.

⁵⁷⁰ Guest to Director General, 12 Feb. 1960; Marshall to Guest, 21 March. 1960; and Guest to Marshall, 20 Apr. 1960, 323.12:37 (689), Unesco.

fact.”⁵⁷¹ In 1960, seventeen African colonies achieved independence. For the tablers, the psychological effect of the Race Chair would be to slow the revolutionary wind blowing from the Northwest into a calm breeze of deliberative reform. The project had begun full of optimism in the progressive potential of Partnership, but it was winding up in a spirit of pessimistic conservatism.

There was an irony in the Round Table raising the alarm to Unesco over the pace of change in Africa. The United Nations Organizations sailed into Africa on the wind of change, after all. The Third World was defined in relation to the poles of the Cold War, but the solidarity of new nations was based on shared colonial histories and often expressed in racial terms. After the 1955 Bandung Conference had demonstrated the potential power of a non-aligned bloc, the influence of the Third World in the United Nations System steadily grew. All seventeen new African nations became Unesco member states before the end of 1960, accounting for nearly twenty percent of the votes at the 1960 General Conference, where education in “Tropical Africa” dominated the agenda. Indeed, the General Conference enthusiastically fanned the wind of change by electing the Ethiopian Minister of Education, Akale-Work Abte-Wold, its first president from Africa.⁵⁷²

The Soviet Union and its satellites sought to exploit the new political configuration by introducing a belligerently worded declaration calling for the immediate “liquidation” of colonialism. Although African and Asian delegates supported a strong

⁵⁷¹ On the political context that led to the speech, see Ritchie Owendale, “Macmillan and the Wind of Change in Africa, 1957-1960,” *The Historical Journal* 38: 2 (Jun. 1995), 455-477.

⁵⁷² Unesco, *Records of the General Conference, Eleventh Session, Paris, 1960: Proceedings* (Paris: Unesco, 1961); Unesco, *Records of the General Conference, Paris, 1960: Resolutions* (Paris: Unesco, 1961).

anti-colonial resolution, they were more interested in assuring the continued engagement of the wealthy West in their economic and social development programs. Not only did they express a more nuanced understanding of colonialism's legacy than their Eastern Bloc peers, but also they recognized the implicit danger of the French and British turning away from their overseas territories and towards the European Community. The result of negotiations was Resolution 8.2, which declared: "Colonialism in all its forms and all its manifestations must be speedily abolished, and...accession to freedom and independence must not be delayed on the false pretext that a particular territory has not reached a sufficiently high standard in economic, social, educational and cultural matters."⁵⁷³ The resolution struck at the heart of imperialism's ideological legitimacy and Southern Rhodesian settlers' justification of white supremacy: the civilizing mission. Resolution 8.2, tactfully adopted without a vote, demonstrated what an unlikely ally Unesco was in the Round Table's last stand for gradualism in Africa.

And the realities of minority rule in Central Africa added yet another layer to the paradoxes of liberalism. White Rhodesians had been pushing for independence longer than any other sub-Saharan colony. African leaders were placed in the odd position of petitioning the UN Special Committee on the Situation with Regard to the Implementation of the Declaration on the Granting of Independence to Colonial Countries and Peoples (the Committee of Twenty-four), to *prevent* Britain from granting the country independence before majority rule. In fact, the Committee of Twenty-four, formed in 1962 to oversee the 1960 Declaration, focused its first inquiries on the

⁵⁷³ Unesco, "Implementation of Resolution 8.2, Adopted by the General Conference at Its Eleventh Session, on "The Role of Unesco in Contributing to the Attainment of Independence by Colonial Countries and Peoples," 12C/27, 10 Oct. 1962.

territories of the Central African Federation.⁵⁷⁴ The Federation had been formed, in part, to contain the expansion of South Africa, but it was quickly becoming the apartheid state's rival for pariah status in the international community.

Despite its sinking reputation in the UN, however, the Unesco Secretariat was happy to work with institutions in the Federation—and then even in Rhodesia after the Federation had dissolved. When a Unesco conference of African ministers of education met in Abidjan in 1964, it voted to exclude Southern Rhodesian representatives. Director General René Maheu, however, expressed Unesco's "regret" of this decision and described the projects his organization was currently carrying out "devoted to the betterment of the African population and its preparation for the day when the country will obtain independence for its entire population."⁵⁷⁵ Unesco's institutional culture was profoundly shaped by the Cold War imperative to include member states that defined their political ideologies in opposition to each other. No principle was more important than universality. Member states might organize boycotts or haggle over which states to exclude, but the Secretariat's schemes focused on keeping states engaged.

This bias towards inclusion did not mean that the Secretariat simply accepted Southern Rhodesia's social and political status quo. The report of an Educational Planning Mission that visited Southern Rhodesia in 1964 asserted that because the country's segregated schools could "only perpetuate inequalities of educational

⁵⁷⁴ Leo Cefkin, "The Rhodesian Question at the United Nations," *International Organization* 22: 3 (Summer 1968), 649-669; Eshmael Mlambo, *The Struggle for a Birthright* (London: C. Hurst & Co., 1972), 178-179; Eshmael Mlambo, *Rhodesia: The Struggle for a Birthright* (London: C. Hurst & Co., 1972), 165-175.

⁵⁷⁵ Unesco, Conference of African Ministers of Education, Abidjan, 17-24 March 1964, UNESCO/ED 205, 67.

opportunity, a straightforward statement must be made as to its incompatibility with the principles laid down in the United Nations Charter, the Universal Declaration of Human Rights, the Constitution of Unesco, and most specifically, in the Convention and Recommendation against Discrimination in Education” (the last of which, incidentally, had been adopted by the 1960 General Conference). The report went on to lay out a plan for the complete integration of the school system.⁵⁷⁶ Respect for diversity was the flip side of universality. Even when the gap between the international community’s ideals and a nation’s social and political realities appeared unspannable, Unesco was compelled to act as if it could build the bridge.

The intensity of racial tensions in Central Africa, therefore, only made Unesco’s support for Partnership—and the Chair of Race Relations—more vital. After all, Resolution 8.2 included an “urgent appeal to Member States to introduce or develop in their education programmes the teaching of the principles of racial and cultural fraternity and equality.” The civilizing mission was not completely abandoned, but a non-racialist society was now a prominent standard of civilization.

Not only was Unesco preparing to scale up its commitment to Africa when the Round Table’s appeal arrived; the SSD was attempting to reinvigorate its Race Program. After the early success of *The Race Question and Modern Science Series*, the Race Program had struggled to maintain its momentum, but the Executive Board and NGOs continued to push for action in the fight against racial prejudice. The problem, Métraux explained to the SSD’s Director, T. H. Marshall in 1958, was that for its first seven years

⁵⁷⁶ Unesco, “Educational Planning Mission: Southern Rhodesia, July-October 1964 (Paris: Unesco, April 1965, Limited Distribution).

the Program's "research projects were directed towards the study of 'happy' situations. Unfortunately, these not being numerous, we have now reached the end of our tether." In 1954, Métraux had solicited numerous intriguing ideas for his program at the Ford Foundation's milestone Conference on Race Relations in World Perspective at the University of Hawaii; however, he lamented, "All the themes which have been discussed can be considered as 'hot' from a political point of view and are therefore outside Unesco's competence."⁵⁷⁷ To be controversial was to be political, which was by definition outside the jurisdiction of a functional agency. As a result, during the late 1950s, the Race Program was in a state of unintended "abeyance."⁵⁷⁸

In 1960, however, the Race Program tried a new tactic.⁵⁷⁹ The desecration of a synagogue in Cologne on Christmas Eve 1959 inspired a wave of anti-Semitic acts in West Germany that spread into France and beyond. On the continent, anti-racism had been framed in terms of anti-Semitism more than the color-bar.⁵⁸⁰ Concerned intellectuals and Jewish leaders took advantage of the shock of German youth espousing Nazi racial doctrine and swastikas painted on the Paris Metro to call for new studies of prejudice and stronger anti-racist interventions. The Race Program's flagship new project was a study of prejudice in German youth initiated by Unesco's Youth Institute in Munich in

⁵⁷⁷ Métraux to Bertrand, 27 March 1958; Métraux to Marshall, 16 May 1958, 323.12: 342.7, Race Discrimination and Human Rights – General Part I to 31/XII/58, Unesco. Andrew Lind, ed., *Race Relations in World Perspective: Papers Read at the Conference of Race Relations in World Perspective* (Honolulu: University of Hawaii Press, 1955); Melvin Conant, *Race Issues on the World Science: A Report on the Conference on Race Relations in World Perspective, Honolulu, 1954* (Honolulu: University of Hawaii Press, 1955).

⁵⁷⁸ Métraux to Mara, 1 July 1960, 323.12: 342.7, Race Discrimination and Human Rights – General Part II from 1/I/59 up to 30/IV/61, Unesco.

⁵⁷⁹ Métraux to ODG, "14th session of Sub-Commission on Prevention of Discrimination and Protection of Minorities," 21 Dec. 1961, 323.12: 342.7 Race Discrimination and Human Rights – General Part III from 1/V/61 up to 31/VIII/62, Unesco.

⁵⁸⁰ Erik Bleich, "The Origins of French Antiracism from 1945 to the 1972 Law," in *Race Politics in Britain and France: Ideas and Policymaking since the 1960s* (Cambridge: Cambridge University Press, 2003).

collaboration with the German Social Science Study Group for International Problems and the World Jewish Congress.⁵⁸¹ Although not a direct impetus for the change in direction, the 1958 race riots in Notting Dale and Nottingham, which targeted West Indian immigrants, showed that colonial racial tensions were now a domestic issue and helped solidify a sporadic commitment to the field of race relations in England, too.⁵⁸² Unesco's investigation expanded into a comparative study of prejudice in German, French, and British youth and lost its specific focus on anti-Semitism (much to the annoyance of its Jewish sponsors, who resented the conflation of the Jewish and Negro problems, which, Jewish activists regularly complained, implied Jews were a race). Unesco's "new direction" was to forthrightly study the *unhappy* situations; the goal of engagement was always to include more of the "hot" political issues within the technical competence of the specialized agency.

Métraux also hoped to apply his program's risky new direction to race relations in other regions.⁵⁸³ While not included in the Race Program's portfolio, the Round Table's appeal to study race relations in the world's "best living laboratory"—and adjacent to the recalcitrant Union of South Africa, which had withdrawn from Unesco in 1956 to protest the organization's antiracist propaganda—was precisely the sort of opportunity the SSD sought.

⁵⁸¹ Mara to Métraux, 19 July 1960; Métraux to Mara, 10 August 1960, 323.12: 342.7, Race Discrimination and Human Rights – General Part II from 1/I/59 up to 30/IV/61, Unesco.

⁵⁸² Rich, "End of Empire and the Rise of 'Race Relations,'" *Race and Empire in British Politics*, 169-200.

⁵⁸³ Métraux to ODG, "14th session of Sub-Commission on Prevention of Discrimination and Protection of Minorities," 21 Dec. 1961, 323.12: 342.7, Race Discrimination and Human Rights – General Part III from 1/V/61 up to 31/VIII/62, Unesco.

Partnership's Fifth Act

Guest's request for a "substantial contribution" to endow the Chair, however, mistook Unesco for an international foundation. Instead, SSD Director Marshall suggested that the Organization follow its common practice of paying the salary and traveling expenses for a visiting professor—"an 'expert' with the status of a Unesco official"—for one or two years to help the College establish its new program. The Round Table was thrilled with the proposal, which appeared to be a simple way to finally fill the Race Chair while building its endowment.⁵⁸⁴ As the young businessmen quickly discovered, however, few endeavors were simple once an IGO got involved. As a general rule, the height of bureaucratic hurdles was inversely proportional to the incentives bureaucrats had to clear them. Although Unesco agreed to provide an expert for the semester beginning March 1961, the position was not filled until June 1964. While Unesco bent rules and the Round Table persistently nagged the interested parties, the unexplained silences, impossible demands, and sudden reversals of the UK and Federation governments and the UCRN revealed the changing international dynamics of race relations in Central Africa.

In the UN, Britain had consistently denied responsibility for Southern Rhodesia. Even as the request for an expert on race relations was channeled through London, the UK argued before the UN General Assembly that it should not have to report on Rhodesia because the latter was a self-governing territory. This was wishful as much as legal thinking. With the end of empire, the problem facing Her Majesty's Government

⁵⁸⁴ Marshall to Guest, 21 March 1960; Guest to Marshall, 20 Apr. 1960, 323.12.37 (689), Race Relations Chair, AMS – Teaching of Race Relations – Rhodesia and Nyasaland – Part. Prog., Unesco.

was how to divorce itself from a territory that only a few years earlier had appeared to be a vanguard of European civilization on the Dark Continent, but was now an international symbol of reactionary white supremacy. In 1961, the UK negotiated a new constitution with the Federation intended to allow the territory to ascend to independence, only to witness the overtly white supremacist Rhodesian Front win elections in 1962 and finally oversee the dissolution of the Federation in 1963. On multiple occasions, the SSD lost months waiting for approval from the UK National Commission, but the National Commission was simply waiting for events to clarify the situation in Central Africa. It was hardly to Britain's credit, but it was practically true that Southern Rhodesia had become a self-governing territory.⁵⁸⁵

The Central African Federation government's approval of the Chair of Race Relations, therefore, was essential. To demonstrate the government's support, the Round Table's initial appeal to Unesco included a statement from Jasper Savanhu, one of two African representatives of Southern Rhodesia in the Federal Parliament and a leading spokesman for Partnership. It was not every day that a black M.P. in a segregated country asked Unesco to engage in interracial education. Yet the government's immediate response to Unesco's offer to send an expert was that it was unwilling to pay even the nominal eight percent of the cost (£450) required by agency rules. The government only agreed to let the project proceed on the Round Table's guarantee that it would reimburse

⁵⁸⁵ Guest to Marshall, 20 Apr. 1960; McPhee to Zyss, "Exchange of correspondence between Miss Guiton, U.K. and Mr. Friedman, SS, 10 Oct. 1961; Guiton to Zyss, 26 Jan. 1962; Dovey to Zyss, 7 Feb. 1964, 323.12.37 (689), Race Relations Chair, AMS – Teaching of Race Relations – Rhodesia and Nyasaland – Part. Prog., Unesco.

the government's portion.⁵⁸⁶ A Unesco sponsored Chair of Race Relations perfectly matched the international public relations objectives of Partnership, but the government's parsimony hardly implied enthusiastic support. Rather, this grudging acquiescence reflected the fact that Unesco did not enter the stage until the fifth act of the Partnership tragedy.

As a vague policy that was never put into concrete practice, Partnership did not have an official end, but by 1958 its failure was clear. That was the year that the Southern Rhodesian Prime Minister, Garfield Todd, was kicked out of office. Todd embodied the spirit of Partnership. A former missionary from New Zealand who had been an influential figure in African education, he had replaced Huggins in the clubby world of Southern Rhodesian politics when the elder statesman assumed leadership of the Federation. As Prime Minister, Todd eloquently articulated the ethos of Partnership, even addressing electorally insignificant African audiences; yet his administration pushed through no significant anti-discriminatory legislation. Nevertheless, Todd's defeat in the polls, widely attributed to his endorsement of mild electoral reforms designed to allow African nurses and teachers to participate in the non-racial franchise, demonstrated a white backlash against even symbolic reform. For many African elites—Partnership's domestic target audience—Todd's defeat confirmed what five years of empty rhetoric had already

⁵⁸⁶ Office of Prime Minister of External Affairs to Wilson, 24 June 1960; SSD to BMS; U.K. National Commission to Director-General, 19 Dec. 1960, 323.12.37 (689), "Participation Programme 1961-62 – Federation of Rhodesia and Nyasaland, 22 Sep. 1960, Race Relations Chair, AMS – Teaching of Race Relations – Rhodesia and Nyasaland – Part. Prog., Unesco.

made too clear: Partnership “was conditional on the maintenance of white political domination and economic privilege.”⁵⁸⁷

Even before Todd’s defeat, however, a more militant and broadly based African nationalist movement was replacing Partnership’s interracial tea parties. In 1955, two Southern Rhodesians founded the City Youth League, which recruited Africans aged sixteen to forty—ironically, also the cutoff age for Round Table membership. In historian Michael O. West’s words, the self-consciously non-intellectual Youth League “scorned the newly hegemonic multiracialism in black politics.”⁵⁸⁸ Yet after proving their power in African politics, the leaders of the Youth League co-opted more established, university-educated African leaders. The Southern Rhodesian African National Congress that emerged from this alliance in 1957 gestured towards the ideals of interracialism, but the label “tea drinker” quickly became a slur. By 1960, to be an African moderate was to be a government stooge.⁵⁸⁹

Most importantly, the Southern Rhodesian ANC reached out from the city to mobilize the vast majority of the population: peasants struggling to scratch out a living in the sandy soil of the Native Reserves. The nationalists found a receptive rural audience because, after a slow start, by the mid-1950s the government was actively implementing the conservation measures legislated in 1951. The nationalist leader Ndabaningi Sithole captured the African reaction to the Native Land Husbandry Act: “Of course, the European governments did all this in the name of preventing soil erosion, conserving soil and water and flora! And these measures, in actual practice, turned out to be effective

⁵⁸⁷ Shamuyarira, *Crisis in Rhodesia*, 26.

⁵⁸⁸ West, *The Rise of an African Middle Class*, 204.

⁵⁸⁹ Raftopoulos, “Nationalism and Labour in Salisbury,” *Sites of Struggle*, 129-150.

instruments in preventing white supremacy from being eroded and in conserving white supremacy!”⁵⁹⁰ The Congress Party’s General Secretary called the conservation law “the best recruiter Congress ever had.”⁵⁹¹ Instead of the intended effect of making marginal land productive and separating urban from rural communities, compulsory scientific conservation practices highlighted the political causes of rural poverty and helped unite city workers and country farmers into a national movement.

One need not check the math to know that the calculations of carrying capacity that legitimated the eight-acre “economic holding” mandated by the Native Land Husbandry Act represented international ecological standards no better than Partnership represented international liberal racial norms. Still, international economic development programs across Africa often appeared more like a war against peasants than the “war against nature” internationalists hoped would unite nations across ideological divides (see Chapter Three). Internationally sponsored nature protection programs could have a similar radicalizing effect on rural Africans, and here Unesco played a key role. For example, Unesco helped the Federation submit a request for assistance to the UN Special Fund that promised that through skillful management of Central African national parks and game reserves “marginal lands” could be made to “yield large returns.” The request only mentioned race to point out the country’s non-racial franchise, but the “marginal lands” to be set aside as “representative ecological units of Africa’s unique wilderness” required the displacement of established communities and the alienation of sacred

⁵⁹⁰ Sithole, *African Nationalism*, 132.

⁵⁹¹ Quoted in West, *The Rise of an African Middle Class*, 215.

sites.⁵⁹² By helping extend the reach of the authoritarian state into rural communities, the international expertise that promoted wilderness preserves, prescribed soil conservation techniques, and refined survey methodology raised the political consciousness of peasants. It helped make possible an African—that is, a racial—national identity.

But just as importantly, the African nationalists drew strength from positive identification with the international community. The new Zimbabwean nationalism was imagined as part of a greater Pan-African movement, which was institutionalized in 1963 with the creation of the Organization of African Unity.⁵⁹³ It also drew on and appealed to the international community's ideals of liberal democracy. Instead of seeking to differentiate a worthy black elite from the uncultured masses, the new movement called for universal suffrage; "one man, one vote," replaced Rhodes' "equal rights for all civilized men" as the standard. As the historian Ngwabi Bhebe argues compellingly, even the nationalists' relatively limited acts of violence and sabotage against whites in the early 1960s were designed to incite British intervention and demonstrate determination to the leaders of other African nations—a strategy that depended on the conviction that Africans occupied the moral high ground.⁵⁹⁴

In contrast to the African nationalists' strategy of internationalizing the crisis in Central Africa, white nationalists began to define their cause through conflict with the

⁵⁹² Terence Ranger, "Whose Heritage? The Case of the Matobo National Park," *Journal of Southern African Studies* 15: 2 (Jan. 1989), 217-249. "Request from the Government of the United Kingdom, Federation of Rhodesia and Nyasaland for assistance in Wild Life Conservation," 17 Jan. 1962, 502.7 : 37 (689.1) SF Rhodesia (South) – Training and Research in Wild Life Conservation SF Project, Unesco; see also, Julian Huxley, *The Conservation of Wild Life and Natural Habitats in Central and East Africa: Report on a Mission Accomplished for Unesco, July-September 1960* (Paris: Unesco, 1961).

⁵⁹³ On the reciprocity between nationalism and Pan-Africanism, see Toyin Falola, *Nationalism and African Intellectuals* (Rochester: University of Rochester Press, 2001).

⁵⁹⁴ Ngwabi Bhebe, *The ZAPU and ZANU Guerrilla Warfare and the Evangelical Lutheran Church in Zimbabwe* (Gweru: Mambo Press, 1999), 13-28.

Commonwealth and the international community. The postwar wave that sought to spread British loyalties throughout the Commonwealth had receded back to the Isle. While the symbols of the British Crown still inspired lingering patriotic pride, H.M.G.'s policy of decolonization in Africa, its demands for African political representation before Rhodesian independence, and the notion of an interracial Commonwealth aroused disdain.⁵⁹⁵ For white supremacists, the UN was even worse. The Rhodesian Front government blamed the Afro-Asian bloc in the UN for forcing an irresolute United Kingdom into taking irresponsible positions on Rhodesia. For example, in December 1963, less than a month after the dissolution of the Federation, a Lieutenant Colonel warned the Southern Rhodesian Legislative Assembly that Britain might "hand us over to UNO and power drunk Pan-Africanist demagogues." Similar to the anti-Unesco vitriol in the McCarthy-era United States, the UN's anti-colonialism and racial equalitarianism became an important rationale for extreme white supremacist policies.⁵⁹⁶

Todd's successor as Prime Minister, Edgar Whitehead, attempted to crush African nationalism and dampen white reaction by banning African nationalist political parties and enacting the repressive Law and Order (Maintenance) Act, essentially establishing a permanent state-of-emergency in Southern Rhodesia. At the same time, his United Party spearheaded the 1961-62 Build a Nation and Claim your Vote campaigns to engage Africans in the political system. Although also an attempt to improve Rhodesian race

⁵⁹⁵ On the irony of the increasing symbolic importance of the monarchy throughout the empire even as the Crown's real political authority decreased, see David Cannadine, "The Context, Performance and Meaning of Ritual: The British Monarchy and the 'Invention of Tradition', c. 1820-1977," in Eric Hobsbawm and Terence Ranger, eds., *The Invention of Tradition* (Cambridge, UK: Cambridge University Press, 1992), 101-164.

⁵⁹⁶ Quoted in George Alfred Mudge, "Domestic Policies and UN Activities: The Cases of Rhodesia and the Republic of South Africa," *International Organization* 21: 1 (Winter, 1967), 72.

relations through propaganda, the Build a Nation campaign tacitly acknowledged the failure of Partnership; instead of forging an alliance between progressive whites and African elites, it reached out to “all Rhodesians,” targeting rural Africans and even promoting the repeal of the white *Magna Carta*, the Land Apportionment Act.⁵⁹⁷ Not surprisingly, this combination of repression and propaganda failed to moderate either white or black nationalism. Detaining legitimate African leaders and banning nationalist parties highlighted the hypocrisy that imbued the Build a Nation campaign, which in any case came far too late to persuade blacks, but provided ample hot air with which to stoke white reaction.

Thus, by 1964, the prospect of a Unesco sponsored Chair of Race Relations at a multiracial university in Salisbury—a swell idea in 1953 and an urgent last stand in 1960—had an anachronistic feeling. Yet the Salisbury Round Table was irrevocably committed to its own international community—the World Council of Young Men’s Service Clubs had made the endowment its first world project—and 1964 was the year its persistence finally paid off.⁵⁹⁸ In case there were any doubts over the Rhodesian Front’s commitment to progressive race relations and international exchange, the government insisted on including an entirely gratuitous clause in the contract requiring Unesco’s expert to attain official approval for foreign participants invited to “any meeting, seminar, conference or training course.”⁵⁹⁹ But while the UK and Rhodesian governments

⁵⁹⁷ Anthony King, “We are all Rhodesians: The Build a Nation campaign 1961-62,” in *The Historical Dimensions of Democracy and Human Rights in Zimbabwe*, 143-157; Hancock, *White Liberals, Moderates and Radicals in Rhodesia*, 95-96.

⁵⁹⁸ Wilson to Zyss, 21 March 1963, Race Relations Chair, AMS – Teaching of Race Relations – Rhodesia and Nyasaland – Part. Prog., 323.12.37 (689), Unesco.

⁵⁹⁹ Dovey to Zyss, 7 Feb. 1964, Race Relations Chair, AMS – Teaching of Race Relations – Rhodesia and Nyasaland – Part. Prog., 323.12.37 (689), Unesco.

certainly did not expedite the Chair of Race Relations, neither was the main culprit of the delay; the University College was the real problem.

Kenneth Kirkwood and the Chair of Race Relations

When the Round Table first offered the endowment, a Chair of Race Relations had perfectly matched the UCRN's political function within the Federation: to manifest partnership. After a slow start, the College had developed rapidly, especially once Walter Adams left the IUC to become Principal in 1955, but remained a fragile institution. Adams was dedicated to building a first class British university, and his vision of the Race Chair reflected these ambitions. Instead of a long-term appointment, he decreed, the Chair should be filled by a series of established scholars, each "eminent in his own academic field." The relevant academic fields, according to Adams, included: "Sociology, Anthropology, Genetics, Psychology, Moral Philosophy, Political Science, Law, History [and] Economics." At the end of a one-year appointment, during which the visiting professor would participate in an on-going seminar on race relations, the distinguished scholar would give a public series of lectures, which would be published under the title of the Chair. After a decade of rotating through the various disciplines and, not incidentally, national perspectives, the "series would provide a substantial original contribution to scholarship and a many-sided study of race relations within Central Africa."⁶⁰⁰ Not only would this plan use Central Africa's human laboratory to promote Partnership in the international community; it also resonated with the SSD's methodology for constructing a view from everywhere.

⁶⁰⁰ "Memorandum by Professor Walter Adams," 10 Jan. 1960, 323.12.37 (689), Race Relations Chair, AMS – Teaching of Race Relations – Rhodesia and Nyasaland – Part. Prog., Unesco.

But after this initial endorsement, Adams' appeared to be purposefully sabotaging the project. In 1962, after nearly a year of unreturned letters on the subject, the SSD was left with "the impression that the University is not in fact favourable to the appointment of the expert, or at least changed its mind since the [original] request." Meanwhile, much to the SSD's irritation, Adams informed the increasingly frustrated and embarrassed Salisbury tablers that the delay was "entirely the fault of Unesco."⁶⁰¹

Unesco's struggle to find an expert acceptable to Adams suggested aspects of the dilemma the UCRN faced as an integrated institution in a segregated society. When the SSD leaked the name of a candidate likely to assume the Chair to the anxious Round Table, Adams wrote indignantly:

We have been gravely embarrassed in our discussion here to discover that the possible availability of Professor Kirkwood has been disclosed to the Round Table Race Relations Endowment Trust, with the result that it is now widely known in outside circles in Salisbury.... [The Round Table] and the Trust have nothing whatsoever to do with the appointment of the Chair, which on all accepted university principles must be at the unfettered discretion of the College.⁶⁰²

Adams' vehemence reflected the reality that the College's survival depended on maintaining the fiction of its "unfettered discretion" to run its own affairs. In fact, the appointment of a Unesco expert to fill the Chair, like all UN agency assignments, required the approval of the recipient country's government. And the Federal government influenced the staffing of the UCRN even when a UN agency was not involved. But UCRN's vulnerability to governmental interference only increased Adams' urgency to reinforce the boundary between academics and politics.

⁶⁰¹ Zyss to Sackey, Dec. 62; Wilson to Zyss, 24 Dec. 1962; Zyss to Adams, 22 Jan. 1963, 323.12.37 (689), Race Relations Chair, AMS – Teaching of Race Relations – Rhodesia and Nyasaland – Part. Prog., Unesco.

⁶⁰² Adams to Henquet, 14 May 1963, , 323.12.37 (689), Race Relations Chair, AMS – Teaching of Race Relations – Rhodesia and Nyasaland – Part. Prog. Unesco.

When the Rhodesian Front assumed power, the government's interventions became more heavy-handed. In 1963, for instance, it deported the dynamic young historian Terence Ranger. As an academic, Ranger engaged in groundbreaking research recovering the "African voice"; that is, reconstructing the continuity of African resistance to colonial rule, which had obvious implications for the African nationalist movement. As a political activist, he earned public notoriety by founding the Anti-Colour Bar Association and serving as vice-chairman of the nationalist Zimbabwe African People's Union District Council in Salisbury. Ranger was a prominent example, but the social science faculty in general was several standard deviations to the left of whatever political center remained in Southern Rhodesia.⁶⁰³ Between radical faculty like Ranger and an increasingly nationalist African student body, the UCRN became known to white Rhodesians as the "Kremlin on the hill." Predictably, the presence of professors affiliated with Unesco provided evidence in Parliament of communist infiltration.⁶⁰⁴

Under siege, Adams had little choice but to fall back upon the College's Royal Charter. Rather than an outpost of international communism, the College was a refuge of international science. To promote the UCRN as a symbol of Southern Rhodesia's membership in the civilized community of nations, the country had to respect the Free World's norm of academic freedom. This defense was a delicate maneuver, to say the least. In 1961, Adams wrote in a circular to the staff that the College Council was "worried by the effect on the College of the publicity by the political activities of a few members of the staff...outside the College and their repercussion upon the position of the

⁶⁰³ Gelfand, *A Non-Racial Island of Learning*, 153, 239.

⁶⁰⁴ Mlambo, *The Struggle for a Birthright*, 225, note 7.

College in the community.” Since the political activity was performed outside the College, “the problem [was] not therefore, one of academic freedom.” In his “personal capacity as a citizen,” a faculty member was “free to engage in public political activity.” However, “there may be some limit to the extent or kind of public political activity that is appropriate for a member of the university staff... The obligation [of faculty] is twofold—an obligation to speak and to lead, an obligation to weigh with scrupulous care the effects of speech and action. Membership implies a loyalty to the interests and strength of the university institution itself.”⁶⁰⁵ By pledging their primary loyalty to the College—through which they gained membership in and became accountable to the international academic community—the faculty assured the autonomy of the UCRN and thus their right, in theory, to think and speak freely.

When Adams awkwardly implied that the faculty ought to curtail “outside” political activities, he acknowledged the impossibility of cleanly separating one’s academic “public” identity and civilian “private” identity, although this was the very distinction on which the College’s autonomy depended. He also made the uncomfortable admission that in Central Africa “academic freedom” required sacrificing civil liberties. With the stakes so high and the sacrifice so great, Adams was incensed that the College’s business—especially collaboration with a controversial UN agency that promoted racial equality—had leaked to “outside circles in Salisbury”; it revealed the gaping holes in the boundary separating the College from society.

When Adams described the qualifications for the visiting professor, only one item appeared problematic: the first holder of the Chair of Race Relations should not be an

⁶⁰⁵ Quoted in Gelfand, *Non-Racial Island of Learning*, 236-7.

American. The reason he preferred a non-American was that he thought the Carnegie Corporation or Ford Foundation might fund the subsequent appointment, which, according to Adams, would mean selecting an American.⁶⁰⁶ Support from Unesco could help establish a truly international, as opposed to American, reputation for the Race Chair.

But escaping U.S. influence was not so easy. Race relations was an American academic industry. There were, of course, non-American experts in the field, but the pool of scholars with an established reputation in race relations was so much deeper in the United States that after six months of searching, the SSD sent Adams a list five American professors who had expressed interest. It had “come to the conclusion that it would be exceedingly difficult to find an interested and available candidate elsewhere than in the United States.”⁶⁰⁷ One of the effects of Unesco’s Race Program was to spread American-style social science research into intergroup relations.

In fact, spreading American-style research and anti-racist propaganda was one of the Race Program’s purposes. When Unesco’s German Youth Institute together with the Social Science Study Group for International Problems submitted its proposal for a “Research and Education Programme for Combatting [sic] Ethnic and Racial Prejudice,” one of the primary goals was “to interest social scientists in Europe in research on prejudice in order to catch up with the USA.”⁶⁰⁸ This aspect of the project did *not*

⁶⁰⁶ Adams to Bernard, 323.12.37 (689), Race Relations Chair, AMS – Teaching of Race Relations – Rhodesia and Nyasaland – Part. Prog., Unesco.

⁶⁰⁷ Henquet to Adams, 12 Dec. 1961, Race Relations Chair, AMS – Teaching of Race Relations – Rhodesia and Nyasaland – Part. Prog., 323.12.37 (689), Unesco.

⁶⁰⁸ Sozialwissenschaftlicher Studienkreis für internationale Probleme, “Proposals for a Unesco Research and Education Programme for Combatting Ethnic and Racial Prejudice,” Munich, 19 July 1960, 323.12 : 342.7, Race Discrimination & Human Rights – General – Part II from 1/1/59 up to 30/IV/61, Unesco.

represent a new direction for the Race Program. For example, Métraux wrote to warn the U.S. National Commission in 1951 of the harm caused by “the appalling [sic] ignorance of what is being done in the United States to fight racism in all its forms.” “It has been my policy since I accepted my present job,” he assured the Commission, “to let the public know that, in the fight against racism, America is on the fore-front and that the material which we use in our own campaign is mostly of American origin.”⁶⁰⁹ Métraux was a sincere booster of American social science and society, but by echoing the line of the U.S. Information Service’s international propaganda on race—yes, America has a race problem, but through determined effort it is making extraordinary progress—he also shored up U.S. patronage for a potentially threatening program. Unesco was thus an unlikely place to find an alternative to the American perspective on race relations.

Adams had political as well as intellectual reasons for avoiding an American expert. On the one hand, Jim Crow had provided a model for separate development in Central Africa; the Federation’s Partnership propaganda complimented American race propaganda; and Rhodesia proudly allied with the United States against the communist “savages” in the Congo. Rhodesia, according to the country’s European establishment and Southern U.S. politicians, was the Free World’s bulwark against communism and the chaos of tribalism in Central Africa. On the other hand, Europeans in Southern Rhodesia accused the United States, like the United Kingdom, of betrayal. Whereas the Rhodesian backlash against Partnership had swept the Rhodesian Front into power, the Southern

⁶⁰⁹ Métraux to Thomson, 15 March 1951, 323.12 : 342.7, Race Discrimination & Human Rights – General – Part I to 31/XII/58, Unesco. For a similar later statement to a Howard University professor, see Métraux to Walker, 21 Jan. 1957, 323.12 : 342.7, Race Discrimination & Human Rights – General – Part I to 31/XII/58, Unesco.

states' massive resistance to *Brown v. Board of Education* had forced Eisenhower to deploy Federal troops in Little Rock to enforce desegregation. An analogous British action was what European nationalists dreaded and African nationalists hoped to provoke in Rhodesia. U.S. international propaganda on race relations provided leverage for its own domestic civil rights movement, which turned the United States into a largely negative example for most Europeans in Southern Rhodesia.⁶¹⁰

For Unesco and the UCRN, the fundamental problem was finding an expert for the Race Chair who would be accepted as “unbiased” by white Rhodesians yet respected by the international community. This challenge was explicitly addressed by Philip Mason, the Director of the nascent Institute of Race Relations (IRR) in London, when he recommended candidates to the SSD. Mason understood the Southern Rhodesian context well because, with support from the Rockefeller Foundation, which underwrote the establishment of the IRR, he had researched the historical roots of the territory's racial crisis in the IRR's first published monograph.⁶¹¹ It was Mason who first recommended,

⁶¹⁰ On postwar United States-African international relations, see Thomas Borstelmann, *The Cold War and the Color Line: American Race Relations in the Global Arena* (Cambridge, Mass.: Harvard University Press, 2001). On the importance and dynamics of the backlash, Michael J. Klarman, “How Brown Changed Race Relations: The Backlash Thesis,” *Journal of American History* 81 (1994), 81-118. A more specific example of white distrust of American scholarship was the controversy surrounding *Racial Themes in Southern Rhodesia: The Attitudes and Behavior of the White Population*, published in 1962 by an American scholar and a UCRN Psychology lecturer and sponsored by the University of Chicago's African Universities Program. The study correlated the results of a questionnaire on racial attitudes with social and economic data to reveal the social structure and infer the causes of racism. Criticism focused on the hypocrisy of Americans meddling in Southern Rhodesia's affairs. A letter to the editor of the *Chronicle* titled “Nonsensical Survey” warned that the study might influence U.S. foreign policy and contrasted it to the “vague approbation with which most liberal Rhodesians will have contemplated the project of a Chair of Race Relations in Salisbury. Much can be done for the common weal by dispassionate examination of this multi-racial society of ours.” Cyril A. Rogers and C. Frantz *Racial Themes in Southern Rhodesia: The Attitudes and Behavior of the White Population* (New Haven: Yale University Press, 1962), 358, 359, 370, 371, v.

⁶¹¹ Philip Mason, *The Birth of a Dilemma: The Conquest and Settlement of Rhodesia* (London: Oxford University Press, 1958).

as “an obvious name,” Kenneth Kirkwood, as well as the University of Manchester’s Chair of Anthropology Max Gluckman. The political and intellectual differences between the liberal Kirkwood and the Marxist Gluckman were profound, but for Mason, they presented the same problem: both had views on Central Africa (“very definitely expressed” in Gluckman’s case) that were “already fairly well-known in Rhodesia.” The reason “previous knowledge of the country [was] something of a disadvantage,” Mason explained, was that he was “thinking of this Chair, as...the founders of the Chair originally did, as an educative influence among the Europeans of Rhodesia.”⁶¹² Ignorance of Central Africa was an advantage because it meant the expert would not have prematurely revealed his bias against the color bar, the Land Apportionment Act, and minority rule. With the proper tact, he might engage the European community in a constructive conversation.

In fact, for a few months it looked like ignorance of race relations would be a prerequisite for the first Chair of Race Relations. Adams summarily dismissed all of Mason’s recommendations. He proposed a few improbable candidates, and finally, after a delay of several months that rendered the decision moot, accepted the nomination of the thirty-two year old Dutch physical anthropologist Johan Huizinga.⁶¹³ Huizinga’s dissertation analyzed the “cephalometric relationship between first degree relatives,” and he had just founded the Institute of Human Biology at Utrecht.⁶¹⁴ Adams’ letters rarely

⁶¹² Mason to Zyss, 13 Nov. 1961, 323.12.37 (689), Race Relations Chair, AMS – Teaching of Race Relations – Rhodesia and Nyasaland – Part. Prog., Unesco.

⁶¹³ Zyss to Wilson, 5 Dec. 1962, 323.12.37 (689), Race Relations Chair, AMS – Teaching of Race Relations – Rhodesia and Nyasaland – Part. Prog., Unesco.

⁶¹⁴ Machteld Roede, “In Memoriam: Johan Huizinga,” *Fysisch-Anthropologische Mededelingen: Newsletter of the Dutch Association of Physical Anthropologists* 17 (Jan. 2009), 14-18.

explained his rationale, but physical anthropology certainly had the benefit of sidestepping the urgent conflicts of contemporary Rhodesian society. Ironically, research on the biology of race would not compromise Adams' commitment to making the UCRN a "non-racial island of learning" in a racially fraught nation.

In any case, after Huizinga fell through, Adams went silent on the Race Chair for almost all of 1962, only to reassert his enthusiasm for the project when Unesco's Assistant Director-General in charge of Technical Assistance, Malcom Adiseshiah, visited the UCRN. Adams could hardly afford to disclaim the College's commitment to race relations when the issue was sandwiched between negotiations over Unesco's collaboration on two major UN Special Fund projects, one to develop a secondary teacher training program and the other to implement a plan to make the College a regional center for wildlife conservation.⁶¹⁵ Race relations came as part of the UN's development package.

But by 1963 the tablers, too, had begun to wonder whether directly addressing race relations was such a good idea. "Would it not be better," the Round Table's L.K.S. Wilson asked the SSD, "for a Sociologist or a Social Scientist or an Anthropologist, whatever you may care to call him, be the person to bring to bear on the subject the question of human feeling after it has been studied by a person who holds qualifications in what might be termed a pure or more exact science?" "At the present moment," an

⁶¹⁵ The Secretary of the Round Table's Endowment Trust, L. K. S. Wilson, who sat in on the discussion of the Race Chair, wrote the SSD to express his appreciation for the "very tactful and diplomatic way in which Dr. Adiseshiah dealt with the matter." Wilson to Zyss, 21 March 1963, Race Relations Chair, AMS – Teaching of Race Relations – Rhodesia and Nyasaland – Part. Prog., 323.12.37 (689), Unesco. "Visit of Dr. Malcolm S. Adiseshiah, Assistant Director-General of Unesco to Northern Rhodesia and Southern Rhodesia," 1 Feb. 1963, Race Relations Chair, AMS – Teaching of Race Relations – Rhodesia and Nyasaland – Part. Prog., 323.12.37 (689), Unesco.

economist, for example, “might be more realistic.”⁶¹⁶ It was as if nationalist passions had contaminated the laboratory, rendering safe investigation of race relations impossible. Apparently, the situation called for either an expert on race relations who was ignorant of Central Africa or an expert on Central Africa who ignored race relations.

In the end, Adams acquiesced to the appointment of Kirkwood. Kirkwood may have had the disadvantage of being an acknowledged expert on race relations and Central Africa, but he was exquisitely sensitive to the challenging position the UCRN Professor of Race Relations would occupy: between Africans and Europeans, the academy and the public, Southern Rhodesia and Britain and the international community. Indeed, when the SSD asked Kirkwood if he would accept the appointment, he answered that he would, but thought a professor “outside the immediate context of British-Central African relations” (i.e. not British) would be better: “A ‘neutral’ appointment might induce a properly academic view of the new chair at the outset.” The point was not so much bias as the appearance of bias; to be effective, the Chair had to be respected “by the people of all ethnic groups in Rhodesia and Nyasaland.”⁶¹⁷

Kirkwood strongly identified with an international British community. Born in Transvaal in 1919 and educated at the University of Witwatersrand in Johannesburg, he was married to a Southern Rhodesian whose father had been elected to the colony’s first Parliament under responsible government. A former Lecturer in Native Administration at

⁶¹⁶ Wilson to Zyss, 24 Apr. 1963, Race Relations Chair, AMS – Teaching of Race Relations – Rhodesia and Nyasaland – Part. Prog., 323.12.37 (689), Unesco.

⁶¹⁷ The suggestion that an “outside” perspective on race relations would be more credible recalled the logic that led the Carnegie Corporation to contract its study of American race relations to a Swede; indeed, Kirkwood recommended Gunnar Myrdal, whom Adams had also requested, for the Salisbury post. Kirkwood to Henquet, 18 Apr. 1963, 323.12.37 (689), Race Relations Chair, AMS – Teaching of Race Relations – Rhodesia and Nyasaland – Part. Prog., Unesco.

the University of Natal, his mission was to keep the liberal ideals of the British Empire alive through decolonization. “Given confidence in the West, and especially realistic and determined co-operation by Britain,” he wrote upon return from his Unesco mission to Salisbury, “Africa’s gifts, both human and material, can contribute to the world in the manner which was foreseen in the past by Lugard and the other pioneers who proclaimed the principles of the ‘dual mandate.’”⁶¹⁸ He did not, however, hesitate to criticize Colonial Office policies—although he was that type of self-assured British scholar who tended to blame bad policies on a “lack of imagination.” He had advised the Round Table on the Race Chair for a decade. He was a cosmopolitan, but he was a local, too. Here was a social scientist who could be relied upon to salve, not stir up, the frightening “human feeling” that discussions of race relations in Central Africa inevitably aroused.⁶¹⁹

Once Kirkwood accepted the position, the Round Table’s only concern was assuring that he arrived by September 1963 when the World Council of Young Men’s Service Clubs would hold its General Conference in Salisbury to celebrate the installation of the Chair of Race Relations.⁶²⁰ Even though he could not accept the position for another year, Kirkwood made the long trip from Oxford. His acceptance speech, delivered to an audience that included the President of the College Council, the architect of Federation and Partnership Lord Malvern (Geoffrey Huggins), explained the purpose and practice of a professor of race relations. Summarizing the postwar liberal racial orthodoxy, he dismissed “race in its narrower physical sense” as significant mostly as it

⁶¹⁸ Kirkwood, *Britain and Africa*, 228.

⁶¹⁹ Wilson to Zyss, 21 March 1963; Wilson to Zyss, 24 Apr. 1963, 323.12.37 (689), Race Relations Chair, AMS – Teaching of Race Relations – Rhodesia and Nyasaland – Part. Prog, Unesco.

⁶²⁰ Wilson to Zyss, 21 March 1963; Wilson to Zyss, 27 May 1963, 323.12.37 (689), Race Relations Chair, AMS – Teaching of Race Relations – Rhodesia and Nyasaland – Part. Prog., Unesco.

manifested as “social conceptions [of biology], or attitudes, rather than any inherent biological differences.” Culture, which was always changing, was “of much greater social significance than race.” He therefore supported the “U.N.E.S.C.O. endeavour to see ethnic group and ethnic used increasingly instead of race and racial.” The goal of race relations was to make the study of race relations obsolete—the Chair “might then be re-designated ‘the History of Race Relations.’” In this respect, Métraux would have been hard pressed to find a better representative of Unesco’s Race Program.⁶²¹

He also tackled the knotty question of patronage; the common assumption, as he put it, that “he who pays the piper calls the tune.” He agreed that part of the value of the UCRN Chair derived from the fact it had “been instituted solely through the combined contributions of so many individuals.” (Not true, but then Unesco’s press release announcing Kirkwood’s appointment neglected to mention the Round Table.) He noted, however, that his own professorship at Oxford had been endowed in 1954, in commemoration of the centenary of Cecil Rhodes birthday, by the Rhodesian Selection Trust Group of Copper Mining Companies. The American-British owned RST was an active supporter of Partnership that attempted to push the government to actually implement the policy. For example, the obscenely profitable and genuinely paternalistic RST attempted to influence political opinion by founding the liberal, pro-partnership *Central African Examiner* in 1957; touted its housing and education programs for African workers as models of progressive development; and confronted the European mine workers’ union over the color bar (which, incidentally, prevented the RST from hiring

⁶²¹ Unless otherwise noted, the following three paragraphs are based on this speech. Kenneth Kirkwood, “The University Study of Race Relations,” Kirkwood Report, Participation Program, Unesco.

cheaper black labor).⁶²² The purpose of race relations often appeared to be to correct the social distortions that prevented a liberal economic regime from delivering on its promise to produce the greatest public good—race relations as international corporations’ HR research, providing the knowledge necessary to manage the racial division of labor.

But Kirkwood did not call attention to the Rhodesian Selection Trust’s patronage to imply the progressive power of international capitalism. Instead, he emphasized that the RST and the World Council were wise to “invest in the disinterested pursuit of truth by individuals who, by deliberate policy throughout the free world, are protected from the exercise of any financial, political, religious or other influence.” No subject was “in greater need of the truly scholarly and scientific approach than ‘race relations,’” which was why it was so important that the World Council had chosen to “invest in ‘objectivity.’” Too often, he acknowledged, “Exhortations to be objective are...no more than injunctions to share particular prejudices. Such, however, is the universality of Oxford that every known viewpoint demands and receives its full attention.” The university community—at least its ideal type, Oxford—was a model for a national community and a world community struggling to find unity in diversity. The disinterested and deliberate interaction of individuals representing “every known viewpoint” produced an objective perspective; that is, a view from everywhere.

Within the sacred walls of the university, the role of a professor of race relations was not to discover, much less prescribe, the correct social structure for a multi-racial society. Borrowing a phrase from his intellectual lodestar, John Stuart Mill, Kirkwood explained that there was no “ideally best polity.” Kirkwood himself preferred a

⁶²² Anthony King, “The Central African Examiner, 1957-1965,” *Zambezia* XXII (II) (1996), 133-155.

“permissive official attitude towards self-regulatory integration or voluntary segregation,” but recognized that such a policy only worked given “comparable standards of living and mutual trust and a mature tolerance between peoples.” A scholar’s duty was to encourage “tolerance and humility to prevail over intolerance and arrogance in the realm of study as well as in policy and practice.” Patience was essential. In Central Africa, as elsewhere, “alarmists” were always crying that “the sands of time are running out,” but the sands of time were always running out: “The present constitutional and political difficulties are and must be seen to be ephemeral... The achievement of mutual trust and confidence between Africans, Europeans, Asians and Coloured peoples is as necessary now as it was in 1953 when the goal of partnership was written into the preamble of the constitution which is shortly to be dissolved. That particular constitution was short-lived but the zone and the peoples who it sought to unite form one of the most significant human frontiers in the world.” A professor of race relations had to demonstrate faith in “confident and calm analysis and rational adjustment even in times of rapid change or crisis.”

As a professor of race relations, Kirkwood certainly upheld his own standards. In the early 1950s, he had written against the proposed Federation because Southern Rhodesian whites were not sincerely committed to racial partnership. He asserted that “education for citizenship in multiracial societies” to reduce “white fear and black suspicion” was necessary before the new nation was formed.⁶²³ Then a year after its establishment, Kirkwood analyzed the prospects of the Federation. His investigation

⁶²³ Kenneth Kirkwood, *The Proposed Federation of the Central African Territories: New Africa Pamphlet 21* (South African Institute of Race Relations, 1952), 24.

showed that the polity was unlikely to last because it had been imposed on an unwilling, increasingly assertive African majority. Yet his conclusion contradicted his analysis: “My cautious optimism for the future of the Federation of Rhodesia and Nyasaland is founded largely on an appreciation of the human qualities of Africans, especially the moderation and patience of many educated men and women. In concert with the nonracial whites they can create a union based on partnership.”⁶²⁴ Just before leaving to assume the professorship at the UCRN in 1964, Kirkwood completed the manuscript *Britain and Africa*. While deploring “facile optimism,” he was “pleased that the continuous appraisal of relations between Britain and Africa...should have led me to a confident view of the future.” With the dissolution of the Federation, a planned chapter on Central Africa had to be divvied up between East and South Africa, but the final chapter was titled “Britain and Independent Africa: Partnership—the Uncompleted Task.”⁶²⁵ Ever the paragon of cautious optimism, Kirkwood arrived in Salisbury determined to do his part for Partnership.

His six-month tenure at the UCRN offered little to justify his optimism. Upon arrival, he set about organizing a “Seminar on ‘National Unity’ in Southern Rhodesia” to “examine in detached, academic rigour certain aspects of ethnic, cultural and racial pluralism—social, economic, political, legal and educational—with a view to identifying particular obstacles to understanding and co-operation, and considering possible methods of reducing or removing any such obstacles.” The SSD congratulated Kirkwood on his “care and prudence” in maintaining discussion of race relations at a “strictly academic

⁶²⁴ Kenneth Kirkwood, “British Central Africa: Politics under Federation,” *Annals of the American Academy of Political and Social Science* 298 (March 1955), 130-141, 141.

⁶²⁵ Kirkwood, *Britain and Africa*, 13, 219.

level.” But the faculty on whose collaboration the seminar depended was “from opposite political standpoints...openly hostile to the U.N.E.S.C.O race relations project.”⁶²⁶ The SSD airlifted its besieged expert a complete series of Unesco’s Race Pamphlets and a provisional version of a new statement on the biological significance of race. (The latter, as if designed to be discreditable to white Rhodesians, was drafted in Moscow.) Kirkwood reported that in the face of the “extreme tension” in the surrounding society, the UCRN seminar was conducted “as normally and objectively as possible, with the fullest distribution of U.N.E.S.C.O material, and with a maximum focus upon U.N.E.S.C.O.’s publications on Race.”⁶²⁷ Kirkwood’s refuge in Unesco’s pamphlets shows how securely established the postwar liberal orthodoxy had become. With their focus on “happy situations” and cautious optimism, the pamphlets were safe—nostalgic artifacts from the hopeful days of interracial tea parties.

Kirkwood took solace in the fact that he was attacked by both the right (white supremacists) and left (African nationalists), but in fact there was no more middle ground to stand on. As racial tensions in Rhodesian society intensified, European and African students, who had never really mixed socially, broke into openly hostile camps. The factions negotiated ever more complex formulas to assure racially balanced student government, but the African students ended up boycotting the Student Council. It was time to choose sides. Even Garfield Todd, Southern Rhodesia’s Prime Minister during the heyday of Partnership, had thrown in his lot with the African nationalists; his daughter, a

⁶²⁶ “Initial Report,” Aug. 1964; De Franz to Kirkwood, 31 Aug. 1964, 323.12.37 (689), Race Relations Chair, AMS – Teaching of Race Relations – Rhodesia and Nyasaland – Part. Prog., Unesco.

⁶²⁷ “Summary of Report by Expert,” 30 Apr. 1966, 323.12.37 (689), Race Relations Chair, AMS – Teaching of Race Relations – Rhodesia and Nyasaland – Part. Prog., Unesco.

UCRN student, openly joined ZAPU.⁶²⁸ Equivocation implied a moral equivalency between white supremacy and African liberation, and African nationalism was the only legitimate progressive force in Central Africa.

In fact, Kirkwood's emphasis on the significance of sub-racial ethnic identities resonated with the Rhodesian Front's reversion to a form of indirect rule. During the 1950s, implementation of the Native Land Husbandry Act had attempted to break tribal customs, but during the 1960s, the Rhodesian Front pursued conservation through Community Development programs that elevated chiefs and revived traditional tribal practices. The Rhodesian brand of Community Development, which was reliant on social surveys and ethnographic knowledge, was designed to empower local leaders at the expense of nationalist leaders and to separate traditional African rural society from modern Rhodesian society.⁶²⁹

Rather than breaking the color bar, African elites' strategy now emphasized race as the foundation of a shared Zimbabwean identity that had never before existed; they sought to elevate racial unity to eliminate ethnic diversity. Thus, writing in 1964 while at Princeton on a Unesco fellowship, the nationalist intellectual and UCRN lecturer Nathan Shamuyarira described "tribalism" as more dangerous than "the racialism we are defeating." "We must proceed positively," he wrote, "like true Pan-Africanists, to destroy every vestige of tribalism." African nationalist dogma held that all power must be vested

⁶²⁸ Gelfand, *A Non-racial Island of Learning*, 233-288; Maxwell, *Universities in Partnership*, 242-256.

⁶²⁹ Terence Ranger, "Democracy and Traditional Political Structures in Zimbabwe," in Ngwabi Bhebe and Terence Ranger, eds., *Historical Dimensions of Democracy and Human Rights in Zimbabwe: Pre-Colonial and Colonial Legacies*, 31-52, 38-41.

in an undifferentiated majority. And the African majority could be identified by the color of its skin.⁶³⁰

Shamuyarira was temperamentally inclined towards Kirkwood's brand of liberalism and it is easy to imagine him debating differences with detached academic rigor in an Oxford seminar. But for Zimbabwe, Shamuyarira rejected the whole idea of the disinterested, dispassionate seminar: "The NDP [National Democratic Party, founded in 1960] added one important factor that had been singularly missing in Rhodesian nationalism: *emotion*. Nationalism is basically emotional, and has to be to succeed. At times—particularly in early years—it should be blind and blinkered if it is to establish its principles, and begin to transform or reform a decadent society."⁶³¹ The clenched fist, not the open mind, was the appropriate symbol of contemporary race relations.

Kirkwood's summary of his final report opened by regretting that the mission had been conducted under Prime Minister Ian Smith's threat of a Unilateral Declaration of Independence: "The optimism of a Teilhard de Chardin—who saw promise for mankind in the first atom bomb—was required if pessimism was not to be felt at the prospect of U.D.I." Yet he refused to submit to defeatism. The summary of his report ends with words that might have made Teilhard de Chardin blush: "The talents and energies of [able and sympathetic individuals of all races and walks of life] exist to be mobilized as soon as opportunity allows and the shock of U.D.I. might indeed serve to hasten such mobilization."⁶³²

⁶³⁰ Shamuyarira, *Crisis in Rhodesia*, 171, 186. On the colonial invention and other ironies of tribalism in Central Africa, see Terence Ranger, *The Invention of Tribalism in Zimbabwe* (Harare: Mambo Press, 1985).

⁶³¹ Shamuyarira, *Crisis in Rhodesia*, 67.

⁶³² "Summary of Report by Expert," 30 Apr. 1966, Kirkwood Report, Participation Program, Unesco.

Although Kirkwood returned to Oxford in January 1965, he did not file his report for more than a year-and-a-half. The difficulty was that there was so much *not* to say. The final report was to be submitted to the Rhodesian government, and Unesco issued the standard instruction to “omit any politically controversial matters,” which should be included in a confidential annex. Ever sensitive to controversy, Kirkwood decided that his first effort “was too outspoken on certain matters.” The SSD was impressed by the more circumspect report he filed a year later, and congratulated itself on having selected the ideal expert for the post. But the report was still too controversial. There was no question of sending it to the illegal government in Rhodesia, with which all communications had ceased. The SSD tentatively suggested that it might be acceptable to the British government; it had been a UK participation program project, after all.⁶³³ In the end, the report appears to have been buried under a pile of paper on a civil servant’s desk before inadvertently finding its way into a wastepaper basket. It can’t be located in the archives, at any rate.⁶³⁴ Such a fate seems fitting for a report on a mission so out-of-sync with the time and place in which it was performed. The Chair of Race Relations at the University College of Rhodesia and Nyasaland had been established for a nation that no longer existed. But then, in the imaginations of most of its citizens, it never had existed.

Yet the liberal ideals enshrined in the Chair of Race Relations should not be dismissed. Even in Africa in the mid-1960s, the pressures of colonial liberation

⁶³³ SSD to BMS, 11 Oct. 1966, Kirkwood Report, Participation Program, Unesco; Zyss to Elmandjra, 4 Oct. 1966, 323.12.37 (689), Race Relations Chair, AMS – Teaching of Race Relations – Rhodesia and Nyasaland – Part. Prog., Unesco..

⁶³⁴ The report certainly was not intentionally destroyed. Unesco’s expert mission files are full of reports that were deemed too critical to submit to member governments, and antagonizing Ian Smith’s government would hardly have worried Unesco.

movements had not completely swept them aside. African nationalists recognized the danger of subjugating the rights of individuals and sub-national communities to the needs of the People, who were represented by the Party, itself embodied in a charismatic leader. In 1963, Kirkwood had recommended Léopold Sédar Senghor, the poet and first President of Senegal, for the UCRN Chair of Race Relations. (In a sign of how incautious his optimism could be, Kirkwood thought Senghor's command of English might present a difficulty.) That year, Senghor had presented a paper at Kirkwood's African Affairs Seminar at St. Antony's College. In "Negritude and African Socialism," Senghor attempted to define an African identity that was expressed through interdependence with, not opposition to, Europe. Inspired by the University, Senghor spoke of Africa's contribution to the "Civilization of the Universal," of which Oxford was "one of the peaks." Unesco, he declared, was playing a "major role" in building "the Civilization of the Universal by bringing the different civilizations together in discussion." "*Revised negritude*," he declared, "is a form of *Humanism*."⁶³⁵ Even as he mocked the tea parties he had once attended, Shamuyarira wrote, "The basic aim of nationalism is to broaden the area of freedom and free action for the individual, in the first place, and for the goodwill of the majority to ensure equal rights for minorities, once the battle has been won."⁶³⁶

Tragically, as in so many cases, it turned out that the battle was not won with independence. When Terence Ranger retired from Oxford in 1997, where he, too, had served as the Rhodes Professor of Race Relations, he returned to Harare (formerly Salisbury) and the University of Zimbabwe (formerly the UCRN) where his distinguished

⁶³⁵ Léopold Sédar Senghor, "Negritude and African Socialism," *African Affairs: St. Antony's Papers* 15 (London: Chatto & Windus, 1963), 9-22, 22, 21.

⁶³⁶ Shamuyarira, *Crisis in Rhodesia*, 189.

career had begun. Reflecting on the history he had lived, Ranger wrote: “The emancipatory potential of Zimbabwean nationalism, in which I had so confidently believed, had been very imperfectly fulfilled. But I could not have foreseen in 1963, when I was removed from Rhodesia and from the University College, a future in which there would be over 10,000 African students at the University of Zimbabwe, all with high A-level entry qualifications, and in which research and scholarship would be thriving so.”⁶³⁷ Unfortunately, at the beginning of the twenty-first century, the University was again under attack by an authoritarian regime as an “anti-Government mentality factory.” The Ministry of Education and Unesco had collaborated to produce hundreds of thousands of textbooks on *Education for Human Rights and Democracy* that “represented universalist history at its best” but, Ranger sadly reported, the expensive texts were moldering in warehouses—banished as insidious examples of “bogus universalism.”⁶³⁸ Ranger wrote in defense of a pioneering school of “post-nationalist” historians at the University of Zimbabwe who performed pluralist analyses that honored the complexities, contradictions, and internal divisions of Zimbabwe—the sort of social imagination so desperately needed outside the University. White supremacy had been defeated at home, but the quest for a community that found unity in diversity and debated politics while sipping tea continued.

⁶³⁷ Terence Ranger, “Nationalist Historiography, Patriotic History and the History of the Nation: the Struggle over the Past in Zimbabwe,” *Journal of Southern African Studies* 30: 2 (June, 2004), 215-234, 217.

⁶³⁸ Ranger, “Nationalist Historiography, Patriotic History and the History of the Nation: the Struggle over the Past in Zimbabwe,” 219, 225.

Conclusion

The Salisbury Round Table's international appeal advertised Central Africa as the world's best living laboratory on race relations. An odd boast, but a claim with more merit than many others boosters have made. What made the experiment with Partnership so revealing was not that the Federation of Rhodesia and Nyasaland was a typical or a simple society or a miniature model of the world community. It was none of these. But it was anomalous and complex in illuminating ways, and the international community was fleetingly fascinated with the experiment. A self-governing colony, Southern Rhodesia, the "leading partner" of the Federation, defied classification in the UN's typology of states, and anti-colonial activists petitioned against its independence. A politically, economically, and socially segregated society, white elites portrayed it as an exemplar of racial cooperation. A self-proclaimed redoubt of the Free World and European civilization on the Dark Continent, Western powers found it an embarrassing reminder that their unenlightened history was alive in the present. It resembled a living laboratory of race relations because the contradictions at the core of Western liberalism were manifested in purified form.

First conceived in the early-1950s, the campaign to endow the Chair of Race Relations outlasted the Federation and spanned the postwar transition in human rights discourse from a focus on antiracism and individual rights, equality of opportunity and universalism to racial pride and minority rights, social equality and diversity of groups. The promise of Partnership and the New Commonwealth corresponded to the cautious optimism of the Race Program's scientific propaganda and the ideology of the Free

World. More than discovering the laws of harmonious race relations, the value of the Chair would be to model dispassionate inquiry performed in good faith in a multiracial community. The postwar liberal racial orthodoxy had promised all individuals access to the rewards of civilization based on merit, but a decade later the metric of civilization itself was under attack by anti-colonial leaders as a Western—that is, white—ploy to preserve inequality. In Africa, decolonization formed new states that often had little but the experience of colonial resistance and a common racial identity from which to construct nations. Instead of reinforcing the boundary separating race from nation, therefore, African intellectuals articulated a distinctly racial nationalism. By the time Unesco became involved with the Chair of Race Relations, patience and faith in rational dialogue had come to seem like rationales for appeasement not reform—or, more generously, like naiveté not wisdom.

The history of the Chair of Race Relations reflects these major shifts in the political significance of the liberal antiracist script. But it also reveals the subtler ways in which other transnational affiliations were reproduced in relation to, and in turn shaped the meaning of, race. Individuals were not just white or black; they were British, Afrikaner, African, Shona, Christian, university graduates, businessmen, professionals, skilled workers, peasants, scholars, immigrants, liberals, socialists, conservatives. Not only did each of these identities overlap differently with race, the valence of an identity—the strength of its attraction and its affinity with other identities—changed over time. Indeed, during the era of decolonization in Central Africa, the speed of change could be astonishing. Furthermore, with varying degrees of success, each of these identities was

institutionalized—in political parties, tribes, unions, universities, service clubs, Churches, IGOs—which added substance to the symbolism of identity politics.

This kaleidoscope of institutionalized identities created opportunities for individuals who could claim membership in multiple, apparently disconnected communities to influence the pace and direction of change. The ability to move between communities, to try on different identities and experiment with hybrid cultural affinities, was fundamental to the freedom liberal internationalism promised. Members of the tiny African middle class crossed racial boundaries by leveraging their status as cultured Christians, but, when Partnership turned out to be an empty promise, mobilized their transnational affiliations (including race) to represent Zimbabwe to the international community—or, more precisely, to various international communities. Similarly, members of the Salisbury Round Table sought to use their membership in a transnational business community to help solidify Southern Rhodesia's standing in the Commonwealth and the Free World. And the success of the Chair of Race Relations was understood to depend on the scholar's ability to act as a trusted mediator between conflicting communities; thus the importance of recruiting an objective expert whose detachment from the local milieu was supposed to facilitate deeper engagement with both races. The cosmopolitan intellectual sought to empathize with every group, thereby gaining a glimpse of the view from everywhere—and, with patience, perhaps help others decipher the pattern of which they were a part.

If the capacity to link local and international communities could place actors at the center of historical change, a cosmopolitan identity was just as likely to render

potential elites marginal figures. The opportunity to perform creative and at times strategic self-identification was not equally available to everyone. Most obviously, skin color was an indelible marker. But the range of choices all actors had to fashion their identities was constricted and the ability to reinvent one's self limited. It was hard work and a point of vulnerability for the African elites who dabbled in interracialism to reinvent themselves as militant revolutionaries. The Salisbury tablers who had committed to the vision of the New Commonwealth and saw themselves as ushering Central Africa into the modern world turned out to be distinctly marginal historical figures. While cosmopolitan's affiliations with multiple communities made them potentially creative agents of change, it also could render them lonely outsiders rooted in no community. This is why cosmopolitans have so often been simultaneously dismissed as irrelevant and lauded (or vilified) as the makers of history.

Although Kirkwood held an endowed professorship at Oxford, on his mission to Southern Rhodesia, he epitomized the marginal cosmopolitan. To the Round Table and the SSD, Kirkwood appeared to be ideally positioned to help integrate Rhodesia into the international community, but he had little standing with the racial nationalists, white or black, who performed on history's center stage. The kaleidoscope had already turned, and in the new cultural configuration Kirkwood found himself a stranger in a familiar land; an intellectual who represented no viable local community. This experience of marginality was one of the challenges of being an international expert. It is easy to imagine that on their lonely missions to improve deeply troubled countries many representatives of UN agencies felt like particles in an inexorably revolving kaleidoscope.

In a sense, even the African intellectuals who played such a critical role in the transformation of Southern Rhodesia into Zimbabwe only affected history at the margins. Life changed dramatically for them, but, especially for Zimbabwe's rural producers, many of the old inequalities endured. In part, this continuity was possible because the racially defined political revolution did not transform peasants' relationship with the state or mend the cleavage between urban and rural communities. International experts were cosmopolitan in both senses of the word; political leaders in the city continued to rely on international expertise to guide coercive land-use practices in the country.⁶³⁹ Indeed, as the historiography of Southern Africa confirms, scientific knowledge of ecology was more important than (although also interconnected with) scientific theories of race in structuring race relations. Appropriately, the current Rhodes Professor of Race Relations at Oxford, William Beinart, is an environmental historian of the British Empire.

⁶³⁹ This is the central historical thesis of Drinkwater, *The State and Agrarian Change in Zimbabwe's Communal Areas*; see also Ian Scones, "Landscapes, Fields and Soils: Understanding the History of Soil Fertility Management in Southern Zimbabwe," *Journal of Southern African Studies* 23: 4 (Dec. 1997), 615-634.

Chapter Six
Mapping Soils to Cultivate Scientists
The FAO-Unesco Soil Map of the World and the Politics of Scale

If one historical artifact could represent the logic and ambition of the view from above, it would be the FAO-Unesco Soil Map of the World. At a scale of 1:5 million, it took eighteen 76cm by 110cm sheets to cover the terrestrial planet (excluding Antarctica), and an additional sheet to record the map's legend. These eighteen sheets were organized into nine areas. Each area and the legend were accompanied by an explanatory text. Together, the eighteen sheets graphically displayed "a first appraisal of the world's soil resources." They showed the distribution of 106 distinct classes of soil, termed Soil Units, each represented by a color. Similarities between soils were suggested by color "clusters" so that large swathes of red and pink in Central Africa or a broad band of peach and orange in Southeastern North America revealed major soil regions. Patterned overlays, termed phases, indicated important characteristics affecting agriculture, such as stoniness or salinity, that were not included in the definition of soils. Finally, alpha-numeric symbols indicated three degrees of relief (from gently undulating to mountainous) and soil texture (from coarse to fine). This code also corresponded to a key on the back of each map that named other soils making up more than 20 percent (associated soils) and additional important soils comprising less than 20 percent (inclusions) of a delineated area. The combination of colors, patterns, letters, and figures made up some 5,000 unique map units. Although the place names of the 1942 American Geographical Society base map remained visible beneath the gaudy patterns, the map presented a world without political borders. The patches of red banding the tropics did

not symbolize the territorial claims of the British Empire, but rather the predominance of Ferralsols. The patterns revealed by the Soil Map of the World were esoteric, but the basic message was clear: the great commonwealth of man was dependent on the planet's finite soil resources and, therefore, on the scientific elite who could decipher the map's meaning.⁶⁴⁰

Of course, from an ecological perspective that emphasized the interdependence of natural resources, a similar conclusion could be drawn about virtually any small scale resource map.⁶⁴¹ But, as we have seen, soil held a privileged, almost sacred, position in the postwar international scientific community. For mid-twentieth century conservationists, soil erosion filled the role global warming played for early twenty-first century environmentalists; it was the final cataclysm towards which all modern society's little sins against the earth converged. As the most fundamental renewable resource, soils both reflected and determined the health (that is, the carrying capacity) of ecosystems—and of the human communities that depended on them. In the context of a perceived Malthusian crisis, the production of the Soil Map of the World was a critical episode in the construction of the global environment in the second half of the twentieth century.⁶⁴²

⁶⁴⁰ FAO, *FAO-Unesco Soil Map of the World, 1 : 5,000,000, v. 1-10* (Paris: Unesco, 1971-1981). The ten volumes are: I. Legend; II. North America; III. Mexico and Central America; IV. South America; V. Europe; VI. Africa; VII. South Asia; VIII North and Central Asia; IX. Southeast Asia; X. Australia.

⁶⁴¹ In practice, as described in Chapters Three and Four, water probably was the natural resource most coveted by UN functional agencies, and integrated river basin development rivaled soil conservation as conservationists' favorite theme. On the importance of the TVA model, see David Ekbladh, *The Great American Mission: Modernization and the Construction of an American World Order* (Princeton: Princeton University Press, 2010).

⁶⁴² On the construction of a global environment (e.g. global climate, population, biodiversity), Cf. Alison Bashford, "Nation, Empire, Globe: The Spaces of Population Debate in the Interwar Years," *Comparative Studies in Society and History* 49: 1 (2007), 170-201; Matthew Connelly, *Fatal Misconception: The Struggle to Control World Population* (Cambridge, Mass.: Harvard University Press, 2008); Paul N. Edwards, "Meteorology as Infrastructural Globalism," in John Krige and Kai-Henrik Barth, eds., *Global Power Knowledge: Science and Technology in International Affairs: Osiris* 21 (2006), 229-250; Paul N.

What makes the Soil Map of the World such a revealing epitome of the view from above, however, is not just its affinity with the ideology of resource conservation. Rather it is the daunting challenges posed by the cultural significance of soil, which conflicted with the values of a global synoptic perspective, and by the material characteristics of soil, which resisted standardization. These qualities are what make soil mapping an effective example of the tedious work required to enable scientific knowledge to circulate around the world for Bruno Latour and make soil taxonomy the exemplar of hard to classify nature for Geoffrey Bowker.⁶⁴³ Similarly, this chapter is about how scientists produced standardized, classified, mobile knowledge out of the apparently boundless diversity of soil.

Just as race was the most intractable obstacle to the view from everywhere, soils represented a fundamental problem for the view from above. Soil is a profoundly local thing. It is, as the cliché goes, what local communities are rooted in. Locals may take a perverse pride in even the most abysmal weather, but it is the land beneath the wintry-mix they vow to defend. And knowledge of a particular soil has traditionally been understood to derive from the virtuous experience of working that soil.⁶⁴⁴ Indeed, as discussed in Chapters Three and Four, the intimate relationship between peasants and the

Edwards, *A Vast Machine: Computer Models, Climate Data, and the Politics of Global Warming* (Cambridge, Mass.: MIT Press, 2010).

⁶⁴³ Bruno Latour, "Circulating Reference: Sampling the Soil in the Amazon Forest," in *Pandora's Hope: Essays on the Reality of Science Studies* (Cambridge, Mass.: Harvard University Press, 1999), 24-79; Geoffrey Bowker, *Memory Practices in the Sciences* (Cambridge, Mass.: MIT Press, 2005), 143-146. In the vast on classification, mobility and control, see also, Geoffrey Bowker and Susan Leigh Star, *Sorting Things Out: Classification and Its Consequences* (Cambridge, Mass.: MIT Press, 1999); Jim Endersby, *Imperial Nature: Joseph Hooker and the Practices of Victorian Science* (Chicago: University of Chicago Press, 2008).

⁶⁴⁴ Benjamin Cohen, *Notes from the Ground: Science, Soil, and Society in the American Countryside* (New Haven: Yale University Press, 2009). As earlier chapters made clear, the moral aspect of soil knowledge continued through the mid-twentieth century, and it certainly has not disappeared today; Cf. David R. Montgomery, *Dirt: The Erosion of Civilizations* (Berkeley: University of California Press, 2007).

soil was what could make imperial soil conservation edicts such intrusive and deeply resented policies for colonial subjects. It was also one of the appeals of soil conservation for U.S. agricultural extension programs; in conversations over large scale soil surveys, experts and farmers were expected to bring their different ways of knowing to bear on the problem of achieving sustainable maximum yields. In terms of legitimacy, expert knowledge and lay experience with soils met on relatively level ground.

Maps generally are not thought of as instruments of participatory democracy. Mathew Edney began his seminal study of the cartographic construction of British India by invoking Borges' "famous fantasy of an empire so addicted to cartography that its geographers constructed an 'unconscionable' map at the same size as the empire itself." The illusion of a perfect correspondence between the territory and the emperor's knowledge of it, Edney argues, was at the core of empire and made cartography the quintessential imperial science.⁶⁴⁵ Similarly, James Scott has emphasized the oppressive potential of state sponsored large scale development schemes based on a synoptic perspective that inevitably represents only a thin simplification of nature and society.⁶⁴⁶ In important respects, the Soil Map of the World fulfills the expectations of these now familiar arguments. At the other extreme of the cartographic scale from maps of individual farms, the Soil Map of the World embodies the values of universal knowledge legible only to an elite class of cosmopolitan experts. And yet at a scale of 1:5 million, the Soil Map of the World was also the very antithesis of Borges' fantasy. It was so

⁶⁴⁵ Matthew Edney, *Mapping an Empire: The Geographical Construction of British India, 1765-1843* (Chicago: University of Chicago Press, 1997), 1.

⁶⁴⁶ James Scott, *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed* (New Haven: Yale University Press, 1998).

obviously a thin simplification that governments wondered what useful purpose it could possibly serve. Nevertheless, many of the experts who collaborated in its construction worried more about users mistaking the map for reality than defending its verisimilitude. What was the purpose of a world map of something as profoundly local as soil? What kind of power did it inscribe?

For soil scientists, the most powerful effect of the map would be to resolve the terminological Babel that undermined international scientific communication. When FAO and Unesco initiated the Soil Map of the World project in 1961, no international soil classification existed. Many countries, in fact, had multiple competing regional classifications or were in the process of developing national systems. Soil surveyors often relied on officially obsolete systems or invented *ad hoc* classifications depending on the soils and intended uses of a particular survey. It was impossible to achieve any plausible semblance of collective empiricism under these conditions.⁶⁴⁷ For soil scientists, then, it was not the eighteen sheets of maps that were the project's enduring accomplishment, but the legend, which proposed a new, international classification system. The legend provided a common currency for exchanging information. In this sense, the map was a heuristic device intended to cultivate an international community of soil scientists.

The key selling point of the Soil Map of the World to the member states, however, was its usefulness for development planning, and this promise ultimately depended on the universality of the laws of nature, not intercultural collegiality. Convincing member states to invest scarce resources in what turned out to be a twenty

⁶⁴⁷ On collective empiricism, see Chapter Three and Lorraine Daston and Peter Galison, *Objectivity* (New York: Zone Books, 2007).

year project to produce a map at the dubious scale of 1:5 million was an accomplishment. As the first global inventory of soil resources, scientists explained, the map would reveal the potential of the world's last agricultural frontier, the uncultivated soils of the tropics. Exploiting these vast reserves of unproductive soils would require further scientific research, of course, but here, too, the map was vital. Experts explained that it would “supply a scientific basis for the transfer of experience between areas with similar environments”—the map as analogy generator. Moreover, a map based on a standardized classification system would enable systematic, controlled experimentation and the rapid extrapolation of findings on experimental farms to analogous areas. As the last sheets were being readied for publication, two key figures in the success of the project, Michel Batisse of Unesco and Rene Dudal of FAO, invoked the requisite martial metaphor to describe the maps potential in the war against nature: “Perhaps this is a first step towards the ‘ultimate agricultural weapon’ which will make it possible to know what can be produced, under what conditions, with what interventions and at what risk, in any part of the world.”⁶⁴⁸ The tension between the map's dual objectives as an instrument of development planning and as a heuristic device for cultivating an international discipline resonates with the central theme of this study, the tension between the view from above and the view from everywhere.

The combination of applied and basic science rationales justified making the Soil Map of the World a joint project of FAO and Unesco.⁶⁴⁹ In fact, a more idiosyncratic set

⁶⁴⁸ Rudy Dudal and Michel Batisse, “The Soil Map of the World,” *Nature and Resources* 14: 1 (Jan.-March 1978), 2-6, 6.

⁶⁴⁹ The often reproduced official objectives of the Soil Map of the World project were: 1. Make a first appraisal of the world's soil resources; 2. Supply a scientific basis for the transfer of experience between

of political interactions between the three UNs determined the participants and shaped the final product. Despite its overt claim to merely represent nature, politics (of course) were inscribed in the Soil Map of the World. To illuminate the co-production of the world map and international organizations, I first describe how the project found a comfortable niche in the institutional ecology of the UN System. Then I turn to the intellectual history of soil classification and cartography. Finally, I analyze the cartographic practices that produced such a beautiful and bizarre document. A word of warning: I delve into more of the technical details of soil science than I have other sciences in previous chapters. Aside from an admitted fascination with this underappreciated, under-analyzed science, I think the payoff in terms of broad but well-grounded generalizations is worth the price.

The Political and Institutional Conditions of Possibility for the Soil Map of the World

Few tasks could be dearer to internationalist ideals than the construction of a new classification system that would facilitate the unification of a transnational disciplinary community—an Esperanto of soil science. The de-territorialized vision of the world presented by the map was a testament to the power of scientific cooperation to transcend the fissures that dissected the international community during the Cold War. Such triumphs of internationalism depend on openings in international political opportunity structures, on good timing. This section describes the institutional and political conditions

areas with similar environments; 3. Promote the establishment of a generally accepted soil classification and nomenclature; 4. Establish a common framework for more detailed investigations in developing areas; 5. Serve as a basic document for educational, research, and development activities; 6. Strengthen international contacts in the field of soil science.

that made the project possible, which reflect broader patterns in the development of science in the UN System.

The Soil Map of the World was certainly well timed. The postwar decades were the golden age of soil survey.⁶⁵⁰ At any given time, FAO and other international aid and imperial technical organizations were engaged in dozens of soil survey projects in the Third World, but these were dwarfed by programs in the United States, Canada, Western Europe, the Soviet Union, and Australia. Especially in relatively small, densely settled Western European countries with centuries of experience farming—countries without agricultural frontiers—soil surveys had traditionally been a low priority. But, following the American lead, soil surveys enjoyed something of a European renaissance in the postwar push for efficiency. Throughout the 1950s, soil scientists were busy developing national classification systems and drafting soil maps. Indeed, FAO's European Commission on Agriculture's Working Party on Soil Classification and Survey had begun work on the Soil Map of Europe in 1957. These scientists presented themselves as a model for the methodology of the larger project into which the European soil map was incorporated.⁶⁵¹ The Soil Map of the World made sense as a natural extension of the

⁶⁵⁰ For quick synopsis of the repetitive national survey histories, see the country entries in Pavel Krasilnikov, Juan-José Ibáñez Martí, Richard Arnold, Sherghei Shoba, *A Handbook of Soil Terminology, Correlation and Classification* (London: Earthscan, 2009). R.W. Simonson, "Historical Aspects of Soil Survey and Soil Classification" *Reprint Soil Survey Horizons* (Madison: Soil Survey Society of America, 1987), 23-29; J. M. Hollis & B. W. Avery, "History of Soil Survey and Development of the Soil Series Concept in the U.K." in Dan H. Yaalon and S. Berkowicz, eds., *History of Soil Science: International Perspectives* (Reiskirchen, Germany: Catena Verlag, 1997), 109-145; René Tavernier, "The 7th Approximation: Its Application in Western Europe," *Soil Science* 96: 1 (1963), 35-9.

⁶⁵¹ FAO, *Report of the First Session of the Working Party on Soil Classification and Survey* (Rome: FAO, 1957); FAO, *Report of the Third Session of the Working Party on Soil Classification and Survey* (Rome: FAO, 1961).

development work of *developed* countries that had recently acquired an extensive knowledge of their national soils.

Still, to justify government patronage, and undoubtedly also out of genuine faith in their mission, soil scientists emphasized the Soil Map of the World's contribution to development. Their product could easily be incorporated into the enduring development narrative of environmental degradation, but also was well-adapted to the particular historical moment. It officially began in 1961, just a few months before President Kennedy proclaimed the 1960s the Development Decade at a meeting of the UN General Assembly. Recalling the pattern set by the UN's original technical assistance program, which followed Truman's Point Four speech, the United Nations embraced the Development Decade. As a recent review of the history of UN development concluded, planning was "priority number one" of the Development Decade. The goal of integrated planning at the national, regional and world scales reinforced UN agencies' proclivity for surveying; planned programs were supposed to be keyed to specific targets that were based on empirical assessments of needs and potential. For developing countries that depended on commodity exports, natural resource surveys remained a priority.⁶⁵² The promise of a global inventory of the world's soil resources resonated with the period's renewed emphasis on planning. Moreover, the audacity of the project matched the grand rhetoric of 1960s development plans—without threatening ideological or budgetary constraints.

⁶⁵² Olav Stokke, *The UN and Development: From Aid to Cooperation* (Bloomington: Indiana University Press, 2009), 141-143.

Not only did FAO's area of competence position the organization to take advantage of increasing development funding in the 1960s, but also the organization was in the middle of a period of revitalization under Director-General B. R. Sen. Sen sought to recapture FAO's original energy and imagination through a high profile Freedom From Hunger Campaign. Like the Development Decade itself, however, the Freedom From Hunger Campaign combined grand ambition with a limited budget. Indeed, following a pattern set early in FAO's brief history, the plan was largely preempted by the United State's own Food for Peace program (begun in 1958) and then by the World Food Program (initiated by the Kennedy administration) in which FAO and the UN essentially administered bilateral aid. At the end of the day, the U.S. government was more concerned about alleviating the domestic problem of grain surpluses, and perhaps winning a few hearts and minds through stomachs along the way, than increasing production in poor countries. Sen's solution to the organization's limited capacity borrowed a page from Unesco strategy; FAO would encourage the formation of national campaign committees and partner with NGOs, governments, other INGOs, and (unlike Unesco) corporations—theoretically, then, even the Food for Peace program could be recast as a component of the Freedom From Hunger Campaign. “The role of FAO would be generally that of a catalyst and coordinator of these world-wide efforts,” Sen informed the Seventh International Congress of Soil Science in Madison, Wisconsin just weeks after the Freedom From Hunger Campaign was launched. By alerting the world to the horrifying facts of hunger and to the potential of technical expertise to solve the problem, FAO would galvanize the political will to win “the greatest challenge of our time—the

conquest of hunger.” The International Congress of Soil Science itself was a vital component of the campaign.⁶⁵³

The International Congress of Soil Science fit the method and message of the Freedom From Hunger Campaign perfectly. The Congress’ motto was “Alleviate Hunger, Promote Peace Through Soil Science.” The opening speeches and technical papers reflected tremendous optimism in the power of science to increase production and thus provide a critical window of opportunity to get population growth under control. Dramatically displaying the self-consciously broad perspective of participants in the Congress, leading soil scientists presented small scale soil maps of South America, Sub-Saharan Africa, Australia, Western and Eastern Europe, the Soviet Union and Asia.⁶⁵⁴ Demonstrating the effectiveness of the catalytic strategy, the resolution that instigated the Soil Map of the World project, which the President of the Congress forwarded to FAO

⁶⁵³ B. R. Sen, “Freedom from Hunger Campaign of FAO,” in *International Congress of Soil Science, Transactions of the 7th International Congress of Soil Science: Madison, Wisc., U.S.A., 1960, v. I: Official Communications* (Amsterdam: Elsevier Publishing Co., 1961), XIII-XIX, XIV, XIII. On the Freedom from Hunger Campaign, see Amy Staples, “Redefining an International Role for the Food and Agriculture Organization,” in *The Birth of Development: How the World Bank, Food and Agriculture Organization, and World Health Organization Changed the World, 1945-1965* (Kent, Ohio: Kent State University Press, 2006), 105-122. Other surplus countries shared the U.S. preoccupation with dealing with this domestic problem through international aid. On Canada, see Ignatieff, “Notes on Visit to North America,” 1957, in folder Land and Water Use Branch Soils – Fertility (V. Ignatieff), Box Land and Water Development Division, Land and Water Use Branch, Chief Dr. R. Schickele, 10AGL566, FAO.

⁶⁵⁴ These soil maps were 1. Soil Map of South America, presented by Luis Bramao and Petezval Lemos of FAO; 2. The Soils Map of Africa South of the Sahara by J. L. D’Hoore, of the CCTA (Commission for Technical Cooperation in Africa South of the Sahara); 3. The Australian Soil Landscape by C. G. Stephens of CSIRO (Commonwealth Scientific and Industrial Research Organization); 4. La Carte Des Sols de L’Asie by E. V. Loboba and V. A. Kovda of the Soils Institute of the Soviet Academy of Sciences; 5. International Soil Map of Eastern Part of Europe by I. V. Tiruin, N. N. Rozov and E. N. Rudneva of the Dokutchaevev Soil Institute; 6. Classification of Soils and the Soil Map of the USSR by E. N. Ivanova and N. N. Rozov; 7. The Soil Map of Western Europe on Scale of 1:2.5 Million by R. Taveneir of Centre for Soil Survey, Ghent and E. Mückenhausen, of Institute for Soil Science, Bonn German. The technical papers that introduced the maps are in *Transactions of 7th International Congress of Soil Science, Madison, Wisc. U.S.A., 1960, v. IV* (Amsterdam: Elsevier Publishing Co., 1961).

for implementation in cooperation with Unesco and other international organizations, called for the publication of these seven small scale maps.

The head of FAO's soil survey work, Luis Bramao, proposed that the organization publish the maps with a uniform legend and scale—a subtle shift that fundamentally transformed the task from a minor service to a major international project. Unlike some experts, Bramao was no skeptic regarding the potential value of small scale soil maps. In fact, he had presented the first draft of FAO's Soil Map of South America at Madison and had played a liaison role in the production of another of the seven maps, the Soil Map of Western Europe, the international cooperative venture of FAO's European Commission on Agriculture. Bramao's objection to simply publishing the maps was that they did not use the same cartographic conventions, terminology, and legend; they were based on different proportions of empirical data, reasoned inference and wild speculation; and they expressed differing conceptions of the significant differentiae of soils. The Soil Map of the USSR, for example, presented 75 types of soil organized into 36 subclasses, which were derived from 12 classes that were grouped into four climatic zones, which were, finally, divided between two world soil groups. This scheme was closely linked to a new, rigorously logical, six-tiered hierarchical classification. The legend of the Sub-Saharan soil map, on the other hand, claimed not to represent any classification system at all.⁶⁵⁵ On different maps, the “same” soils could have different names while different soils had the same name. Dudal, for example, would claim to have discovered forty names for dark

⁶⁵⁵ E. N. Ivanova and N. N. Rozov, “Classification of Soils and the Soil Map of the USSR,” and J. L. D'Hoore, “The Soils Map of Africa South of the Sahara,” *Transactions of 7th International Congress of Soil Science, Madison, Wisc. U.S.A., 1960*, v. IV (Amsterdam: Elsevier Publishing Co., 1961), 77—87, 11-19.

clay soils that ought to be classified together on a small scale map.⁶⁵⁶ The symptomatic misunderstandings generated by the incommensurability of the maps meant that their publication was liable to compound confusion rather than increase clarity. Certainly it would not contribute to FAO's longstanding commitment to the "systematic collection of field soils information [necessary for] the unified soil classification of the world which is essential for the broader understanding and more effective use of soils surveys and land use." Instead, Bramao argued, FAO and Unesco should synthesize the maps to produce a Soil Map of the World with a unified, international legend.⁶⁵⁷

At Unesco, Batisse and the Natural Sciences Department's new Director, Victor Kovda—a soil scientist who also had presented one of the maps at Madison, the Soil Map of Asia—agreed with Bramao. They easily convinced the Dutch Secretary-General of the ISSS, Hans van Baren, to interpret the congress' resolution as an endorsement of the Soil Map of the World project. Within weeks, the two specialized agencies decided that the Soil Map of the World would be a joint project coordinated by a new World Soil Resources Office at FAO under the direction of Bramao. Key players both inside and outside the specialized agencies' secretariats were officers of the International Society of Soil Science (ISSS), which was nearly an equal partner with the specialized agencies in the project. In fact, the image of a porous membrane between the secretariats and the ISSS may exaggerate the integrity of the boundary. An Advisory Panel, initially consisting of lead authors of the maps presented at Madison plus experts from France, the

⁶⁵⁶ R. Dudal, "Problems of International Soil Correlation," in *Approaches to Soil Classification: World Soil Resources Reports* 32 (n.d., [1968]) 137-143, 137.

⁶⁵⁷ Bramao to Schickele, 28 Sep. 1960, UNESCO/FAO Relations & Cooperation in the Field of Natural Science, 1956-1964, UN18/7, FAO.

United States, and India, met in June 1961 to select the base map, negotiate the principles of the legend, and work out the methodology for international soil correlation. Initial projections envisioned the project costing \$176,000 and completed by the Eighth International Congress of Soil Science in Bucharest in 1964.⁶⁵⁸ The project would make a mockery of the budget and timeline, but the basic operating plan worked remarkably smoothly. Indeed, for a joint project of two mutually suspicious specialized agencies involving cooperation between experts from the three worlds of the Cold War, the Soil Map of the World was organized with incredible speed, even ease.

The project certainly fit the zeitgeist of 1960s development, but the general context does not explain the unusually smooth cooperation between FAO and Unesco or the ability of the project to transcend the Cold War ideological divide. From the archival evidence just a couple of years prior to the Madison meeting, such intensive interagency cooperation in soil cartography certainly would have been hard to predict. When Bramao discovered Kovda's impending appointment to Unesco in 1958, for example, he warned his director that, in alliance with the ISSS, Kovda would use the "power and resources" of his position to launch a "vast program in the field of soil science." Giving up any pretence of confining Unesco's soils work to disciplinary development, Kovda would seek to "penetrate all the agricultural research institutions." Unless FAO took strong action to strengthen its own soils program, Bramao warned, "this field will be lost to us." And the main battlefield of the interagency war would likely be FAO's Soil Resources of

⁶⁵⁸ FAO/UNESCO Proposal for the Publication of The Soil Map of the World, n.d.; Batisse to Bramao, 9 Dec. 1960 in UNESCO/FAO Relations & Cooperation in the Field of Natural Science, 1956-1964, UN18/7, FAO. Soil Map of the World FAO/UNESCO Project, *World Soil Resources Reports: Report of the Advisory Group on the FAO/UNESCO Soil Map of the World Project*, Rome, June 1961.

the World program. Since the Soviet Union had not joined FAO, Russian scientists could not participate in the program, and so Kovda “bitterly resented” it.⁶⁵⁹ In fact, for Bramao, the issue went beyond interagency rivalry; when the Russians expressed an interest in cooperating on the Soil Map of Europe through contacts in the ISSS, he advised that FAO should discourage any cooperation.⁶⁶⁰

Furthermore, beyond the petty cold war between UN agencies, the Kennedy administration certainly did not intend the Development Decade as a means of rapprochement; it saw modernization programs as key components of the global ideological Cold War.⁶⁶¹ This dynamic was subtly suggested by the opening speeches of the Seventh International Congress of Soil Science. Whereas in the late 1940s, the absence of Soviet scientists from major international scientific conferences was publically (and sincerely) lamented, none of the opening speakers even remarked on the presence of the Soviet Union’s most eminent soil scientists at the meeting. Instead, the American plenary speakers intoned “the climate of freedom” assured by the conference’s location.⁶⁶² Ironically, the interactions of national and bureaucratic rivalries in the field of soil science helped make the Soil Map of the World project a sort of neutral ground in which productive cooperation was possible.

⁶⁵⁹ Bramao to Shickle, 24 Oct. 1958, UNESCO/FAO Relations & Cooperation in the Field of Natural Science, 1956-1964, UN18/7, FAO.

⁶⁶⁰ Bramao to Ignatieff, 24 Sep. 1958; Tavernier to Bramao, 6 Sep. 1958, in folder Soil Classification and Survey Working Party, Box Land and Water Division, Land and Water Use Branch (Soils (2)), 10AGL570, FAO.

⁶⁶¹ Cf. Michael Latham, *Modernization as Ideology: American Social Science and ‘Nation Building’ in the Kennedy Era* (Chapel Hill: University of North Carolina Press, 2000); Odd Arne Westad, *The Global Cold War: Third World Interventions and the Making of Our Times* (Cambridge, UK: Cambridge University Press, 2005); Ekbladh, *The Great American Mission*.

⁶⁶² C.A. Elvehjem, “Welcome to the University of Wisconsin,” and Richard Bradfield, “Opportunities for Soil Scientists in Freeing the World from Hunger,” *Transactions of 7th International Congress of Soil Science, Madison, Wisc. U.S.A., 1960*, v. IV (Amsterdam: Elsevier Publishing Co., 1961), X-XII, XXIX-XXXVIII.

Russian scientists could justifiably claim credit for the sudden revival of interest in small scale, schematic soil maps evidenced at the 7th International Soils Congress in Madison. At a celebration of the 220th anniversary of the Soviet Academy of Sciences in 1945, Russian scientists had agreed on the need to resurrect the moribund ISSS, yet another of the international scientific associations that had dissolved during the war. As arrangements for the first postwar International Soils Congress were falling into place, Canadian FAO soil scientist V. Ignatieff hoped the international society would provide a forum for contacts with Russian experts.⁶⁶³ Predictably however, no Russians attended the 1950 Congress. Then rather abruptly, a large Soviet delegation showed up at the Sixth International Congress of Soil Science in Paris in 1956 with small scale maps depicting the world's soils. Bramao appreciated the attention the maps brought to the scientific problems of inventorying world soil resources, but reported that, at least for the soils of Latin America which he knew well, "any similarity with reality is just pure coincidence!"⁶⁶⁴ Still, the Russian maps were the talk of the conference, and led to a resolution calling for the presentation of other small scale maps at the Seventh Congress.

More fundamentally, Russian contributions to soil classification, genesis, and cartography informed the whole project. Contemporary soil scientists, concerned with shoring up their self-consciously young science's autonomy from geology and chemistry, traced their discipline's origins to the articulation of the modern concept of soils in the

⁶⁶³ Ignatieff to Buck, 14 March 1947, in folder International Congress of Soil Science, Land and Water Development Division, Land and Water Use Branch, Box 10AGL570, FAO. On Russian enthusiasm for reconstituting the ISSS in 1945, see Charles Kellogg, "Soil Genesis, Classification, and Cartography: 1924-1974," *Geoderma* 12 (1974), 347-362.

⁶⁶⁴ Bramao to Rainer, 2 Sep. 1956, in folder Land and Water Use Branch Soils – Survey + Classification (L.Bramao), Land and Water Development Division, Land and Water Use Branch, Box 10AGL566, FAO.

late-nineteenth century by the Russian scientist Vasily Dokuchaev. Dokuchaev developed his theory of soil “as an *independent natural-historical body*” through intensive surveys of agricultural lands for cadastral surveys combined with detailed field and laboratory analysis of soils intended to increase production and prevent erosion. As planning, research, and educational tools, maps were at the center of Dokuchaev’s practice. Indeed, in this reading, the origin of international soil science can be traced to the production and reception of maps at what historian Catherine Evtuhov calls the “confluence of practical and scientific interests.”⁶⁶⁵

European’s were inspired by a small scale soil map of Russia that Dokuchaev’s students presented at the Paris World Exhibition of 1900 and were soon producing their own maps based on the Russian idea of soil zones. When the ISSS was established at the Fourth International Agrogeology Conference in Rome in 1924, the pedologists created a Sub-commission for a Soil Map of Europe. This group produced two continental maps based largely on Russian ideas before the Second World War.⁶⁶⁶ Although Americans failed to respond to a display of Dokuchaev’s soil maps and monoliths at the World Columbian Exposition at Chicago in 1893-4, U.S. soil scientists pointed to the translation of a seminal text by K. D. Glinka (one of Dokuchaev’s students) twenty years later as a pivotal course correction in their science’s early development. The U.S. system of Land Grant Colleges and the Department of Agriculture’s experiment stations, Soil Survey Bureau, and Soil Conservation Service (the latter two agencies were combined in 1952)

⁶⁶⁵ Catherine Evtuhov, “The Roots of Dokuchaev’s Scientific Contributions: Cadastral Soil Mapping and Agro-Environmental Issues,” in Benn P. Warkentin, ed., *Footprints in the Soil: People and Ideas in Soil History* (Amsterdam: Elsevier, 2006), 125-148, 144, 136.

⁶⁶⁶ H. E. Stremme, “Preparation of the Collaborative Soil Maps of Europe, 1927 and 1937,” in *Footprints in the Soil*, 145-158.

helped assure that American soil science gained international preeminence. But unlike in genetics, the caprices of Soviet ideology shared an affinity with the multi-causal environmentalist theory of soil genesis; thus, when introducing a legend for a new world soil map, Kovda could write in good faith that “only classifications based on the principles of the materialistic dialectics are the most long living, the most fundamental and promotes in the highest degree the scientific progress [sic].”⁶⁶⁷ The Soviet’s embraced the pre-revolutionary Russian origins of soil science. On a scientific exchange to the Soviet Union in 1958, American experts “received the impression that [the traditional classification system had] become accepted as highly classical and almost beyond criticism.”⁶⁶⁸ Nevertheless, Russian soil scientists remained powerful intellectual actors in the international community, and both superpowers’ knew they had something to gain through intellectual exchange. An internationally credible Soil Map of the World would have to engage Russian experts.

And, given the political realities of cartography in the UN (where even thematic maps that did not record political borders carried a disclaimer disavowing “any opinion whatsoever...concerning the delimitation of frontiers or boundaries”), if the Russian’s did not participate, FAO could only produce a Soil Map of the World minus most of Asia

⁶⁶⁷ V. A. Kovda et al., “An Attempt at Legend Construction for the 1:5,000,000 World Soil Map,” *World Soil Resources Report 32: Approaches to Soil Classification* (Rome: FAO, 1968 [reprint of the technical papers presented at the 5th meeting of the Advisory Panel in Moscow in 1966]), 107-136. This at least potentially “positive” relationship between ideology and scientific theory was not a unique case; Alexei Kojevnikov gives a more surprising example from condensed matter physics based on a theory of “collectivized particles.” “Cold War Mobilization of Science in the Soviet Union,” presented at Intellectual History of the Cold War Conference, Hamburg Institute for Social Research, Hamburg, Germany, 1-3 Sep. 2010.

⁶⁶⁸ Soil Conservation Service, *Soil and Water Use in the Soviet Union: A Report of a Technical Study Group* (Washington D.C.: GPO, June 1959), 5.

and a third of Europe.⁶⁶⁹ Instead of warning against Unesco's invasion of FAO's territory in his project proposal, Bramao pointed out that in a joint project, "Unesco would co-opt the USSR's participation, and through the USSR, information would be made available from Mainland China and other non Member Countries."⁶⁷⁰

But this accounting of how international and bureaucratic politics intersected with disciplinary history to determine the institutional basis of the Soil Map of the World leaves out a critical element: personalities. Upon assuming his position at Unesco, Kovda quickly reached out to FAO to assure its bureaucrats he had no desire to encroach on their territory (although he certainly did). More importantly, he completely disarmed Bramao with his awkward charm. "It was our third meeting in our life," Kovda wrote Bramao days after the first official discussion of the new project. "This last time... I particularly admired your scientific background, your personal behaviour and your private interest in science and ancient art. If the culmination of our official activities was our full agreement in every aspect of scientific cooperation, so the culmination of our private friendship was the wonderful dinner given to Madame Kovda and myself in an ancient Rome tavern."⁶⁷¹

Bramao was the son of a distinguished Portuguese family—the man FAO chose to send to Franco's Spain for the 25th anniversary celebrations of the nation's Research

⁶⁶⁹ The place names on the old base map of the Soil Map of the World caused its share of headaches (e.g. "Juan Peron" and "British Guiana"), but even the Berlin address of the printer of the Soil Map of the World proved problematic. "Notes on FAO's Map Production, 5 Feb. 1970, Editorial Branch – Graphics and Maps (General), Department of Public Relations and Legal Affairs, 19 July 65 to 3 June 1970, PU2/50.

⁶⁷⁰ In fact, although no one seemed to realize it at the time, FAO needed Unesco to co-opt the ISSS's participation, too, since the society was not made a consultative NGO until 1967. This was a legacy of FAO's early proprietary approach to all things agricultural as opposed to Unesco's strategy of engagement. Bramao to Schickele, 28 Sep. 1960, UNESCO/FAO Relations & Cooperation in the Field of Natural Science, 1956-1964 UN18/7; Sen to van Baren, 27 Sep. 1967, World Soil Resources Office: Correspondence with Organizations International Society of Soil Science, Land and Water Development Division, Jan. 1965 to Dec. 1973, LA 10/7.

⁶⁷¹ Kovda to Bramao, 17 Oct. 1960, UNESCO/FAO Relations & Cooperation in the Field of Natural Science, 1956-1964 UN18/7.

Council—so this was a friendship that truly transcended political divides.⁶⁷² Before the project even began, evidence of its success was archived.

The Intellectual Conditions of Possibility for the Soil Map of the World

Ideas about soil and the material peculiarities of soil were as significant factors in the genesis of the Soil Map of the World as were international politics and bureaucratic rivalries, professional prestige and disciplinary traditions. The material characteristics that make soil such a vivid symbol of local identity—its boundless variability—made it particularly resistant to the standardization necessary to achieve the view from above. Soils are not discrete entities; they form a three dimensional continuum across the earth's surface with more and less obvious boundaries between types. Moreover, the important differentiae for a large scale map of a single farm could not be shown on a county soil map at a smaller scale, let alone a sheet of the Soil Map of the World. Different scales, therefore, required mapping units of differing levels of specificity. Ideally, these different levels would be categories of a hierarchal system, so that the specific soils depicted on the detailed map of a farm would be included in the more general categories of soils covering that location on the maps of the county and world. Yet it was far from obvious which characteristics were appropriate differentiae for higher or lower categories—a soil at the lowest (most specific) category routinely contained properties separated between classes at a higher (more general) category. The elite soil scientists who fashioned classification systems and created small scale maps thus grappled with the fundamental

⁶⁷² “Report on Attendance of the 25 Anniversary of the Research Council of Spain on behalf of FAO,” 19 Nov. 1964, Speeches – Notes, Land and Water Use Branch, Land and Water Development Division, 10AGL570, FAO. For a remembrance of the project and Kovda as exemplars of international cooperation, see Rudy Dudal, “International Co-operation in Soil Science: the Role of V. A. Kovda,” *Newsletter* (Commission on the History, Philosophy and Sociology of Soil Science) 13 (June 2006), 9-12.

intellectual problem of the view from above (and of globalization more generally): reconciling the global and local scales. In this section, I sketch the theory of soil classification and cartography, beginning with the difficult question, what exactly is a soil?

For all the diversity of terminology and competing systems of classification, there was at least broad agreement on Dokuchaev's concept of soil as an independent natural body—the solum, in pedological terminology.⁶⁷³ According to the U.S. Soil Survey Staff's 1951 *Soil Survey Manual*, the international standard reference for postwar soil surveyors, "*Soil is the collection of natural bodies occupying portions of the earth's surface that support plants and that have properties due to the integrated effect of climate and living matter, acting upon parent material, as conditioned by relief, over periods of time.*"⁶⁷⁴ There were pronounced disagreements over the relative weight to assign to each of Dokuchaev's five soil genetic factors (climate, parent material, flora and fauna, relief, time) usually associated with national geographies; for example, Russians, with experience of soils across their vast steppe, emphasized the effects of broad climatic zones, while scientists from the United Kingdom and the smaller continental countries were more likely to focus on parent material (i.e. surface geology). But the general theory of soil genesis was well established.

⁶⁷³ Pedology could be used synonymously with soil science, but generally denoted that aspect devoted to classification, survey, and genesis.

⁶⁷⁴ Soil Survey Staff, *The Soil Survey Manual* (Washington D.C.: USDA, 1951), 8 [emphasis in original]. I have primarily relied on the *Soil Survey Manual* for the discussion of soil profiles in this and the following two paragraphs. The *Manual* remained the international standard for decades—FAO was still citing it when it published a revision of the legend of the Soil Map of the World in 1988. FAO, *World Soil Resources Report: FAO-Unesco Soil Map of the World Revised Legend 60* (Rome: FAO, 1988). Another key background resource is S. W. Buol, F. D. Hole, and R. J. McCracken, *Soil Genesis and Classification* (Ames: Iowa State University Press, 1973). Additionally, the FAO *World Soil Resources Reports* provide an invaluable entre into international debates and national styles.

The *Soil Survey Manual* described the Russian revelation of soil as an independent body as “a revolutionary concept, as important to soil science as anatomy to medicine.” It “made a soil science possible” by enabling the direct, synthetic study of soil “morphology,” rather than merely approaching soil through the lens of geology or chemistry or the climate.⁶⁷⁵ Morphology was meant quite literally. “Mature soil” was not a mere layer of unconsolidated rock and decaying plants, but an organized body that could be dissected to understand the relations of parts to the whole.

In the field, soil scientists dug pits or sunk augers to study soil profiles, vertical cross-sections of the solum. Profiles were made up of soil horizons, horizontal layers of soil produced through the interactions of soil-forming factors. Building on Dokuchaev’s famous studies of Chernozem, soil scientists had defined a normal pattern of “master horizons,” labeled A, B, and C horizons. The A horizon was the upper-most mineral horizon (an organic layer often covered it), containing more organic matter and/or lighter in color than the underlying B horizon. The A horizon was “eluvial,” in that minerals migrated out of it into the “illuvial” B horizon, which thus accumulated clay, iron, and other materials. The C horizon was essentially unconsolidated rock that had not been transformed by the genetic factors. Profile descriptions did not strictly follow this ABC pattern (one or more master horizons were often missing, a single horizon could reveal properties of two master horizons, etc.) and national surveys added their own master horizons over the years. Furthermore, each unique soil bore witness to the nearly infinite permutations of soil-forming processes. In descriptions of profiles, surveyors subdivided master horizons into multiple layers by adding an Arabic numeral (e.g. A₁, A₂), and added

⁶⁷⁵ Soil Survey Staff, *The Soil Survey Manual*, 3.

lowercase letter suffixes to indicate common features (e.g. Bt signified a B horizon with clay accumulation). In the reports that accompanied soil maps, a detailed account of a soil profile included qualitative description, texture assessments, standardized color names and values according to the Munsell color chart, and various quantitative measurements of properties such as Ph and cation exchange. Like any dissection, each soil profile description revealed a familiar pattern and a unique body.

Even with this flexibility, however, one of the great challenges of postwar soil science was adapting a concept of soil derived from studies of recently glaciated landscapes in the temperate, humid North to other areas. An important master horizon in one region could seem like a trivial sport of nature somewhere else. Even before the war, arid soils had shown that the “normal” top horizon need not be illuvial, since precipitation did not leach minerals and water might even rise through capillary action and evaporation. The implicit norm of the ABC soil profile was especially problematic for deciphering the ancient soil landscapes of Sub-Saharan Africa and Australia, which, unlike the relatively young post-Ice Age soils of North America and Eurasia, had evolved through multiple bio-climatic eras unlike the present.⁶⁷⁶ For postwar pedologists, however, the most urgent practical questions revolved around the exotic soils of the humid tropics, many of which appeared not to conform to temperate expectations. A Canadian participant in the Fifth International Congress of Soil Science in the Belgian Congo, the first outside of Europe, expressed a common anxiety: “Not being familiar with tropical soils, the featureless nature of their profiles and the lack of distinct

⁶⁷⁶ Michael C. Laker, “Advances in the South African Soil Classification System,” in Hari Eswaran et al. eds., *Soil Classification: A Global Desk Reference* (Boca Raton, FL: CRC Press, 2003), 201-220. C. G. Stephens, “The 7th Approximation: Its Application in Australia,” *Soil Science* 96: 1 (1963), 40-48.

pedogenetic horizons was rather disappointing to me... This makes one wonder how much stress should be placed in these soils on some of the commonly accepted morphological characteristics.”⁶⁷⁷ The internationalization of soil science thus called into question basic assumptions regarding how the identity of soils could be known.

But making sense of the vertical dimension of a soil was the easy part; determining the boundaries of a soil laterally was where things really got dirty. A scientific classification, experts argued, required pedologists to isolate the “soil individual” from the seamless continuum of soils. This problem became particularly acute in the United States, which from early on focused on large scale detailed mapping, rather than the broad soil zones favored by Russians. Pragmatically, the boundaries tended to depend on differences that mattered for agriculture.⁶⁷⁸ Surveyors in the field could often use relatively obvious geographic signs of change in the complex of genetic factors (e.g. changes in vegetation, slope, or aspect) to locate the boundaries, but sometimes important boundaries were invisible on aerial photographs. In any case, this solution did not resolve the intellectual problem, especially since soils on either side of a boundary were likely more similar to each other than to soils at the center of a map unit.

At mid-century, the theory that justified the practice was essentially to treat soils as populations of individuals little different from organisms—except that in the continuum of soil populations, it was as if every living organism that had ever lived were extant. Each individual in a soil population represented a range of variation from a modal

⁶⁷⁷ P. C. Stobbe, “Some Observations on the Fifth International Congress of Soil Science held in the Belgian Congo, 16.8-5.9.1954,” *Bulletin of the International Society of Soil Science*, 7 (1955), 29.

⁶⁷⁸ F. F. Riecken and Guy D. Smith, “Lower Categories of Soil Classification: Family, Series, Type, and Phase,” *Soil Science* 67: 2 (Feb. 1949), 107-115, 107.

soil profile; at some point differences reached a degree where a soil was identified with another closely related modal profile.⁶⁷⁹ But soil scientists found this reliance on two dimensional profiles unsatisfying; it did not include the range of variation (which often followed discernable, even cyclic patterns across space) within the definition of the soil. The U.S. Soil Survey Staff devised a practical solution to the problem of consistently drawing essentially arbitrary distinctions. They defined the smallest unit necessary to sample the full variation of the soil “a soil.” This unit, named the pedon, was a hexagonal cylinder ranging from one to ten square meters across. A soil individual was a population of pedons (termed a polypedon) bounded on all sides by not soil (e.g. rock, water) or a different soil.⁶⁸⁰

The concept of the pedon emerged out of the Soil Survey Staff’s effort to devise a completely new, comprehensive, rigorously logical classification system. Beginning in 1951, Guy D. Smith, Director of Soil Survey Investigations, headed this highly collaborative endeavor. The new system went through a series of “approximations.” The first two approximations were circulated to a select few experts in the United States, but then each successive version was circulated to an ever wider community of soil scientists for critique and field testing, including foreign scientists. The classification system was explicitly intended to be a global system. Indeed, when the seminal *Soil Classification: A Comprehensive System, 7th Approximation* was published, the first three of four

⁶⁷⁹ Marlin G. Cline, “Basic Principles of Soil Classification,” *Soil Science* 67: 2 (Feb. 1949), 81-91; Soil Survey Staff, *Soil Survey Manual*, 6. The effect of the evolutionary synthesis on soil biology could be an interesting topic, Ernst Mayr and William B. Provine, *The Evolutionary Synthesis: Perspectives on the Unification of Biology* (Cambridge., Mass: Harvard University Press, 1980).

⁶⁸⁰ Actually, it would seem that the analogy to biology works better if the pedon is the individual and the polypedon is the population. Soil Survey Staff, *Soil Classification: A Comprehensive System, 7th Approximation* (Washington D.C.: USDA, 1960), 2-3.

exemplary soils used to illustrate the concept of the pedon were from Belgium, Australia, and Canada.⁶⁸¹ And Smith first presented the Seventh Approximation at the 1960 International Congress of Soil Science in Madison. Thus, although U.S. scientists did not present a continental map, they presented an even more ambitious framework for controlling global soil knowledge. The Advisory Panel of the Soil Map of the World co-opted Smith to represent the United States.

The ultimate goal of the system was to create a natural taxonomy of soils. But unlike actual living organisms, soils were not the product of biological evolution—similar soils may or may not have been formed under similar environmental conditions, but they were not literally related. There was not even the illusion that a real evolutionary family tree could be discovered, and so a “natural” taxonomy had a special meaning. “Classifications are contrivances made by men to suit their purposes,” began the *7th Approximation*’s theoretical chapter on classification. “They are not themselves truths that can be discovered...the best classification is that which best serves the purpose...for which it is to be used.”⁶⁸² The authority Smith cited for this claim was not a text of Linnaeus or Ernst Mayr, but rather John Stuart Mill’s *A System of Logic*. As with delimiting the soil individual, the solution to the problem of ordering the boundless diversity of soils lay in imposing human logic on nature, not in discovering nature’s logic. Noting the *7th Approximation*’s citation of P. W. Bridgman’s *The Logic of Physics*, the philosopher Bennison Gray commented, “Ironically, soil science seems to have had

⁶⁸¹ Soil Survey Staff, *7th Approximation*, 3-4.

⁶⁸² Soil Survey Staff, *7th Approximation*, 6. In addition to the *7th Approximation*, special issues of the journal *Soil Science* are helpful for explaining the logic and assumptions that guided the production of classification systems; *Soil Science* 67: 2 (Feb. 1949); *Soil Science* 96: 1 (July 1963).

less effect on the philosophy of science than the philosophy of science has had on soil science.”⁶⁸³

In these circumstances, a natural taxonomy meant not a technical one. A technical classification system was one created for a specific application, such as farm planning or highway construction. In contrast, the goal of a natural taxonomy was to further science: “the purpose of a classification is to arrange the ideas of the objects in such order that ideas accompany or succeed one another in a way that gives us the greatest possible command of our knowledge and leads most directly to the acquisition of more.”⁶⁸⁴ The natural system, therefore, took into account all the significant traits of a soil, not just the ones relevant for corn growth or canal building. Since it (ideally) encompassed all of the properties that affected soil behavior, any applied classification—even ones as yet unanticipated—could be derived from the natural taxonomy. Therefore, as the eminent head of the Soil Survey Staff, Charles Kellogg, passionately argued for years, this instrument of “basic science,” purposefully designed without a specific application in mind, turned out to be the most practical and economic system of all.⁶⁸⁵

⁶⁸³ Bennison Gray, “Popper and the 7th Approximation: The Problem of Taxonomy,” *Dialectica* 34: 2 (1980), 129-154, 149. Another influence on Smith was Arthur J. Cain, *Animal Species and their Evolution* (London: Hutchinson’s University Library, 1954).

⁶⁸⁴ Soil Survey Staff, *7th Approximation*, 6.

⁶⁸⁵ Kellogg’s defense of the superior practicality of basic science soil maps compared to technical maps designed for a specific developed in the context of bureaucratic battles between his Soil Survey Bureau and H. H. Bennett’s breakaway, much larger Soil Conservation Service in the late 1930s through the 1940s. The Soil Conservation Service specialized in Land Capability Classification maps aimed at promoting practices that limited soil erosion. Since these maps did not require the detailed profile descriptions and laborious traverses of the Soil Surveys detailed soil maps they were much cheaper to produce and easier for farmers to understand, but the shortcut also meant their usefulness was limited and, Kellogg argued, their simplicity ignored important interactions between properties of the soil that could make their categories unreliable. When Bennett retired, Congress combined the two agencies and put Kellogg in charge. Ironically then, as Douglas Helm’s shows, Kellogg’s vision of soil surveying benefited from his adversary’s success in building the Soil Conservation Service into a large agency with a strong popular reputation. Douglas Helms, “Land Capability Classification: The U.S. Experience,” in Dan H. Yaalon and

Of the many radical innovations of the 7th *Approximation*, probably the most radical was the claim to rigorous empiricism: unlike previous systems, it was based only on morphology, not on genetic processes. Following Dokuchaev, previous U.S. systems had grouped soils by climatic zone in the higher (i.e. more general) categories. The highest category, the Order, consisted of three classes: Zonal soils, which expressed the characteristics normally associated with the climate in which they predominated; Intrazonal soils, which had developed soil profiles, but possessed properties that reflected localized conditions independent of the general climate; and Azonal soils, which did not have genetic horizons (e.g. Alluvial soils). But even the best soil scientists often were unsure or disagreed on the genetic process that produced particular horizons.⁶⁸⁶ The definitions of soils in the 7th *Approximation*, therefore, sought to include only properties present in the soil, preferably properties that could be quantified. The objective was to construct

a system of classification that can be applied uniformly by competent soil scientists working independently but having diverse kinds of education and experience...Uniformity can be obtained only if the application is objective and not subjective, objective in the sense that the classification proceeds from the properties of the soil itself and not from the beliefs of the classifier about soils in general.⁶⁸⁷

S. Berkowicz, eds., *History of Soil Science: International Perspectives* (Reiskirchen, Germany: Catena Verlag, 1997), 159-76; Anne E. and William R. Effland, "Soil Geomorphology Studies in the U.S. Soil Survey Program," *Agricultural History* 66 (1992). On Kellogg, see Douglas Helms, "Early Leaders of the Soil Survey," in Douglas Helms, Anne B. W. Effland, and Patricia J. Durana, eds., *Profiles in the History of the U.S. Soil Survey* (Ames: Iowa State Press, 2002), 46-56.. For statements on the practical value of basic science surveys, Charles Kellogg, "Introduction," *Soil Science* 96 (1963), 77-80; Cline, "Basic Principles of Soil Classification,"; Marlin Cline, "Logic of the New System of Soil Classification," *Soil Science* 96 (1963), 17-22.

⁶⁸⁶ M. Baldwin, C. E. Kellogg, and J Thorp, "Soil Classification," in *Soils and Men: USDA Yearbook for 1938* (Washington D.C.: GPO, 1938), 979-1001.

⁶⁸⁷ Guy D. Smith, "Objectives and Basic Assumptions of the New Soil Classification System," *Soil Science* 96 (1963), 6-16, 6.

Ideally, definitions would be written in operational terms; that is, texture was not described as the size of a particle but the rate of settling when the surveyor followed a standard operating procedure. And to eliminate the confusion caused by recycled soil names, the authors invented an entirely novel, exquisitely logical nomenclature using Greek and Latin bases.

The system received a mixed reception. Its rigor, precision, logic, and erudition were undeniably impressive. But when applied to the boundless variability of soils in the field, the logical precision of the 7th *Approximation* could be difficult to work with, like spreading peanut butter with a scalpel. Roy Simonson, Director of the Soil Conservation Service's Correlation and Classification Division, reported that most soil surveyors in the United States continued to use one of the more familiar old systems for several years and recalled "vividly how [his] friends from other countries recoiled at their first encounters with the nomenclature of the system."⁶⁸⁸ Furthermore, identifying soils often required complex procedures (such as determining soil temperature and moisture *in situ*) or complicated laboratory work that could not be done in the field—or at all in some countries.

But the most vigorous and substantial disagreements were over the wisdom of jettisoning the traditional genetic basis of classification. The argument for the objective criteria of morphological properties was compelling, but pedologists worried that the resulting system grouped soils on trivial grounds that produced meaningless associations. Asked to review the system for his country, the lead author of the Soil Map of Australia wrote that "it noticeably brings together superficially similar soils from widely different

⁶⁸⁸ Simonson, "Historical Aspects of Soil Survey and Soil Classification," 25.

climatic regions or with different chronologies, and violently separates slightly unlike soils from similar regions. Consequently it does great violence to the widely accepted degree of soil-climate relationship.”⁶⁸⁹ At FAO, A. J. Smyth, an ex-British colonial expert, wrote Guy Smith regarding the identification of agriculturally important soils of the Western Nigerian cocoa growing region; all the soils in this 9,000 square mile area seemed to belong in the same Subgroup (the fourth category down), “providing they can be placed within a single Order” (the highest category). He nervously proposed an entirely new Order.⁶⁹⁰

The new classification of Russian soils that scientists from the Dokuchaev Institute had presented at Madison was the antithesis of the morphological approach.⁶⁹¹ The higher categories of the new system were displayed in tables of soil zones (e.g. Table 1: “Polar-boreal group of soil formation”). Along the left-hand column were geographic subzones, further subdivided in the next column into parent material/vegetation. Along the top row were water regimes (e.g. “boggy water regime”). The boxes in the middle contained the soil types produced by the interactions of these factors, including boxes with question marks—presumably for soils predicted but not yet discovered. In fact, the Russian system stuck closely to traditional classification systems by concentrating on the classification of “virgin soils”; that is, even soils that had been under cultivation for

⁶⁸⁹ Stephens, “The 7th Approximation: Its Application in Australia,” 47; Gray, “Popper and the 7th Approximation: The Problem of Taxonomy.” For an objection to the whole idea of the taxonomy, see R. Webster, “Fundamental Objections to the 7th Approximation,” *Journal of Soil Science* 19 (1968), 354-365.

⁶⁹⁰ Smyth to Smith, 27 Apr. 1966, Soil Classification and Correlation, April 1966 – 1972, LA-2/10, FAO.

⁶⁹¹ Soviet scientists disagreed with this common criticism of their classification, claiming that it was historical morpho-genetic system that, like the new American system, emphasized properties in the soil that expressed genetic histories. Like many contemporary scientists, I am unconvinced, but the argument reveals the general agreement on what an ideal system would look like. Cf. I. P. Gerasimov, “World Soil Maps Compiled by Soviet Soil Scientists,” *Approaches to Soil Classification: World Soil Resources Report* 32 (n.d. [1968]), 25-36.

centuries were classified according to natural soil-forming factors. In other words, the soil map was equivalent to a natural vegetation map that showed the plant associations that would exist in the absence of civilization. In contrast, the new American approach explicitly attempted to define criteria applicable to cultivated soils. The Russian emphasis on virgin soils and determinative soil-forming processes was the key to a classification system that could produce a soil map of a continent its author had never visited.⁶⁹²

Yet defenders of the 7th *Approximation* argued that it did reveal meaningful relationships between genetically associated soils, just at one remove. The properties they chose as differentiae were those thought to be significant indicators of a soil's genesis and predictors of its behavior. The higher the category, the fewer but more significant the associated soil forming factors. To explain how the properties were chosen, Smith used the example of the traditional distinction between Pedalfers and Pedocals. These were the soils of the moist Eastern and dry Western United States respectively, which previously had been separated at the highest category. Collaborators on the 7th *Approximation* wanted to preserve this important distinction, but struggled to find diagnostic properties that did not result in apparently arbitrary groupings. They contemplated annual soil moisture (virtually impossible to measure), a weak horizon of salt accumulation or calcium content (both inconsistent), and more before settling on "base saturation, on conductivity of the saturation extract, and on changes with depth in the saturation with sodium and potassium."⁶⁹³ The point was that the authors knew the "natural" classes before they constructed the definition. To assure collective empiricism, they sought to

⁶⁹² E. N. Ivanova and N. N. Rozov, "Classification of Soils and the Soil Map of the USSR," 80-83.

⁶⁹³ Smith, "Objectives and Basic Assumptions of the New Soil Classification System," 12.

discipline surveyors in the field with a rigid procedural objectivity; yet the objectivity of the taxonomy itself depended on the judgment of experienced experts.

In fact, the classes of the taxonomy were based on collective experience. Smith described the process of constructing the system:

Members of a group representing unlike interests and experience see soils from a number of viewpoints. Different viewpoints toward soil produce different ideas about its classification. Consequently, compromises between the conflicting desires of a number of individuals are not only necessary but might actually produce a system with more general utility than a system which represents a single viewpoint. ‘Compromise’ may not be the exact word. The truth has many facets; each person has a somewhat different view of the truth, and no human can see the whole truth clearly. Our goal has been a blending of many views to arrive at an approximation of a classification that seems as reasonable as we can hope to reach with our present knowledge.⁶⁹⁴

The epistemological logic and values of the view from everywhere, not the view from above, guided the production process of the 7th *Approximation*.

But, of course, in another sense, all the individuals Smith consulted were members of the same group—soil scientists. How far the incorporation of diverse perspectives should be extended was not specified. Would Smith have agreed with the report of FAO’s observer at the 1950 International Soils Congress, Ignatieff, who wrote that even though only scientists from Egypt, South Africa and Southern Rhodesia attended the meeting, “Africa was quite well represented because...there were also those who are working on that continent in the possessions and dependencies of European countries”?⁶⁹⁵ Here diversity of perspectives was closely tied to the identity of diverse soils, rather than the identity of observers with diverse interests. Certainly the 7th

⁶⁹⁴ Soil Survey Staff, 7th *Approximation*, 11.

⁶⁹⁵ “Report of Official Travel of V. Ignatieff in the Netherlands and Belgium, 17 July – 3 Aug.,” 1950, in folder International Congress of Soil Science, Box Land and Water Development Division, Land and Water Use Branch (Soils (2)), 10AGL570, FAO.

Approximation's concept of objectivity supported this stance. A stark contrast between Smith's and Ignatieff's statements would not do justice to the complexity of the issue, or to either expert's epistemic values. The view from above and the view from everywhere co-existed in dynamic tension.

Of course, classification systems were not intended to be philosophical exercises or sociological experiments; they were intensely practical endeavors. Beyond aiding memory and organizing information, the practical purpose of soil classification was to make soil maps. Section V of the ISSS was devoted to soil genesis, classification, and cartography because the three topics were inseparable. The scale of soil maps depended on the purpose of the map. Detailed soil maps were made at a scale ranging from as large as 1:1,000 or more for some engineering works or irrigation projects and down to 1:25,000 for farm planning, land assessment, and tax appraisal. Semi-detailed surveys at a scale of 1:50,000 to 1:100,000 were useful for large scale development planning, pre-investment surveys, and county or district maps. Reconnaissance surveys at a scale of 1:250,000 to 1:1 million were useful in national development planning and in scouting areas for new settlements. Finally, there were the rare schematic maps at a scale of 1:1 million or smaller such as the Soil Map of the World.⁶⁹⁶

The larger the scale of the map, the lower the classification category it mapped. For example, detailed maps used the lowest, most specific category; in the six-tiered

⁶⁹⁶ These are the standard scales used by FAO. There was some national variation. For a list of national standard scales, see Smyth to Bramao, "Draft Resume of Discussion on Standard Scales of Soil Survey," 4 March 1965, Soil Survey and Fertility General, 1956-1965, LA – 2/1, FAO. *Soil Survey Staff, Soil Survey Manual*, 16-21.

system of the *7th Approximation*, this was the Soil Series.⁶⁹⁷ An individual Soil Series was named for the place it was first described. It was considered “real” in a sense similar to the way a species is considered real in biology; a soil individual would be called by its Series name. Semi-detailed maps showed the next category up, the Family, or, more commonly, soil associations, which were complexes of Soil Series. In fact, the category of Families had not been developed when the *7th Approximation* was published, so a gap separated the relatively concrete entities in Soil Series from the higher categories.

Reconnaissance surveys and schematic maps used the Great Group category, which was the third from the top, or three levels of generalization above the Soil Series, and included 105 taxa. The assumption that the Great Group could be used for small scale cartography provides graphic evidence of how deeply the concept of soil zones was embedded in the new taxonomy. In fact, since the primary purpose of classification was to make maps, the whole scheme would have been profoundly compromised if the higher categories did not correlate with broad geographical patterns of soil distribution.

In constructing the *7th Approximation* as a tool for soil surveying, the authors emphasized properties presumed significant in soil genesis at the higher categories, including the Great Group, and properties significant for soil behavior, especially behavior under cultivation, in the bottom two categories. A skilled soil scientist, therefore, could interpret the history of a region’s soil from a small scale map showing the distribution of Great Groups. And, since the Soil Series included all the properties defined at the higher categories plus those most pertinent to behavior, a detailed map

⁶⁹⁷ The categories of the *7th Approximation* were, from top to bottom: Order, Suborder, Great Group, Subgroup, Family, Soil Series. This replaced a six tier system, but discarded the highest and lowest categories of the previous system to give more finely graduated categories.

revealed both a soil's past and possible futures. The gap between the Soil Series and the Great Group, however, raised serious questions about the practical utility of small scale maps.

Before turning to the making of the Soil Map of the World, it is worth pausing to reflect on the very different set of practices that went in to making large scale maps. Even those scientists most enthusiastic about small scale mapping understood that detailed maps were their bread and butter. The Dutch scientist C. H. Edelman (who was the primary force behind the reconstitution of the ISSS in the Netherlands after the war) told the FAO European Commission on Agriculture Working Group charged with preparing a soil map of Europe at a scale of 1:2,500,000, "Although small-scale maps are important from a scientific and cultural point of view and useful for purposes of general planning programs, the greatest use of soil survey is the provision of detailed soil maps." His point was that European scientists could win government patronage by demonstrating the value of detailed maps.⁶⁹⁸ By the time FAO and Unesco had published the Soil Map of Europe's final sheet, the entire continent had been covered in systematic soil surveys. In the 1960s United States, the Soil Survey Staff surveyed 60 million acres a year. On any given day, international development agencies had dozens of soil surveys in progress—by the mid-1960s, FAO alone had 150 soil scientists working in 40 to 50 countries.⁶⁹⁹ Far

⁶⁹⁸ "Soil Survey for Land Development in Europe," *Report of the First Session of the Working Party on Soil Classification and Survey (Sub-Commission on Land and Water Use of the European Commission on Agriculture)* (FAO, 1957), 12-14.

⁶⁹⁹ Smith, "Objectives and Basic Assumption of the New Classification System"; FAO, *Report of the Firth Meeting of the Advisory Panel on the Soil Map of the World, Moscow, USSR, 20-28 August 1966* (Rome: FAO, 1966), 9.

more experts and resources were invested in detailed soil surveys than schematic mapping.

The practical work of detailed maps connected scientists to farmers and the land in a way that small scale maps did not. To make a detailed survey, surveyors systematically sampled soils and plotted their progress on aerial photographs. As discussed in Chapter Three, in the United States, the New Deal democratic ethos of agricultural extension emphasized (at least in theory) the collaboration between agricultural experts and farmers in the interpretation of detailed maps in the field. Performing the surveys was another opportunity for scientists to interact with locals who could share valuable knowledge from experience working the land. On their traverses across brooks and property lines, through fields and forests, surveyors acquired a sense of the land and met the (occasionally armed) locals.⁷⁰⁰ As historians of colonial science have shown, struggling to make sense of strange lands, experts often relied on local informants and ended up constructing hybrid knowledge.⁷⁰¹ Moreover leading soil scientists like Charles Kellogg were public intellectuals who felt it was their responsibility to reach a popular audience.⁷⁰² As shown in Chapter Four's analysis of integrated surveys, technical assistance surveys also facilitated crossing boundaries between cosmopolitan and local communities. Field surveys engaged elite international experts with local bureaucracies

⁷⁰⁰For the most colorful account, see Macy H. Lapham, *Crisscross Trails: Narrative of a Soil Surveyor* (Berkeley: Willis E. Berg, 1949).

⁷⁰¹ Cf. D. Graham Burnett, *Masters of All They Surveyed: Exploration, Geography, and a British El Dorado* (Chicago: University of Chicago Press, 2000); Stuart McCook, *States of Nature: Science, Agriculture, and Environment in the Spanish Caribbean, 1760-1940* (Austin: University of Texas Press, 2002).

⁷⁰² Cf. Charles Kellogg, *The Soils that Support Us: An Introduction to the Study of Soils and Their Use by Men* (New York: Macmillan Co., 1941); Charles Kellogg, *Food, Soil, and People*, Unesco Food and People Series no. 6 (New York: Manhattan Publishing Co., 1950). Works in this genre, although universally more alarmist than Kellogg, are discussed in greater detail in Chapter Three.

and in training aspiring experts from developing countries. Ideally, the process and product of large scale mapping facilitated communication between expert and lay communities.

The Soil Map of the World was a very different sort of project; its purpose was to serve as a tool of communication between elite communities. As Bramao had written in a remarkably prescient 1954 memo essentially outlining the scheme followed by the Soil Map of the World, the project required “the creation of...small working groups, one per continent, to work on problems of nomenclature, classification and survey concerning their respective continents. These groups will serve the purpose best...if they are formed of the smallest possible number of members...from the most highly qualified scientists in the field.”⁷⁰³ This was, by design, an aggressively elitist endeavor. But perhaps by necessity, too—it is easier to criticize elite cosmopolitan projects than to imagine an alternative means of constructing global knowledge.

Making the Soil Map of the World

At any scale, the key practice on which all scientific soil mapping depended was correlation. Accurate correlation assured that experimental or experiential knowledge gained in one place could be extrapolated to other places with similar soils. Accurate correlation between soils in different places and on different maps meant any expert who knew the classification could interpret the map. If soils were poorly correlated—if soils were misnamed so that the same soils had different names on different maps or different soils had the same name—than the boundaries of the maps could be perfectly accurate,

⁷⁰³ Bramao, “Suggested FAO Program of Work in the Field of Soil Survey and Classification, 24 Sep. 1954, in folder Land and Water Use Branch – Soils Survey + Classification (L. Bramao), Box Land and Water Development Division, Land and Water Use Branch, chief DrR. Schickele, 10AGL566, FAO.

but the foundations of the whole cartographic system would be undermined. Only experienced, proven soil scientists could rise through the ranks from field surveyors to become soil correlators.⁷⁰⁴ The correlator's job was to guarantee surveyors in the field met the standards of collective empiricism. Instead of correlating soils within a classification system, however, the objective of the Soil Map of the World was to correlate the systems themselves. In practice, this involved the same negotiation and compromise, the same "blending of many views to arrive at an approximation of a classification" that Smith had described in the construction of the 7th *Approximation*. In a sense, then, the project required the correlation of correlators.

Detailed surveys may have occupied more man hours and required greater resources, but global surveys were one of the principal, and most consequential, activities of the functional agencies.⁷⁰⁵ In the genre of small scale thematic mapping, the Soil Map of the World project was unusual for its organizational complexity and intellectual ambition, but its bureaucratic and intellectual practices were well established. The days when Peveril Meigs working alone in his basement could compile an internationally approved homoclimatic map of the world were over before they began. Instead, the typical model was more like the joint FAO-Unesco bioclimatic and climax vegetation maps of the Mediterranean Zone on a scale of 1:5 million.⁷⁰⁶ In 1958, FAO's Forestry Division and Unesco's Arid Lands Major Project appointed experts to a Study Group to

⁷⁰⁴ Joe D. Nichols, "Memoirs of a Soil Correlator," in *Profiles in the History of the U.S. Soil Survey*, 101-148

⁷⁰⁵ In 1966, Batisse listed roughly sixteen small scale thematic maps and correlation projects in the works just relevant to Africa. "Unesco's Activities in the Field of Natural Resources Research," 26 Aug. 1966, UNESCO/AVS/NR/229.

⁷⁰⁶ Unesco, *Bioclimatic Map of the Mediterranean Zone: Ecological Study of the Mediterranean Zone*, Arid Zone Research Series 21 (Paris: Unesco-FAO, 1963); Unesco, *Vegetation Map of the Mediterranean Zone: Ecological Study of the Mediterranean Zone*, Arid Zone Research Series 30 (Paris: FAO-Unesco, 1969).

produce the maps. Unesco appointed two of its stalwart experts, the Egyptian Kassas and the French phytosociologist Emberger, whose previous work was the standard reference on Mediterranean ecological zones. FAO appointed Emberger's principal rival in this field, the botanist Gaussen of Toulouse. For Batisse, the primary interest of the Study Group was the "confrontation between these two schools." After decades of public clashes, the two experts discovered that a combination of their methods improved them both during the second meeting of the Study Group. These maps proved quite influential in their own right and provided a foundation for an important vegetation map of Africa.⁷⁰⁷ But for Batisse, the episode demonstrated international agencies' ability to facilitate a "rapprochement between the points of view of different countries." The small scale of the map, Batisse admitted, had contributed to the experts' ability to find common ground.⁷⁰⁸ This dialectical process, in which the clash of opposing viewpoints produced a superior synthesis, represented the ideal of small scale thematic mapping in the international community.

The Soil Map of the World project's first acts were the appointment an Advisory Panel and the establishment the World Soil Resources Office in FAO as the project's Secretariat. The Advisory Panel met for the first time in June 1961 at FAO headquarters, and four subsequent meetings took place in Rome (twice), Paris and, finally Moscow in 1966. The first Advisory Panel included experts from France, Brazil, Belgium, the Soviet Union, India, the United States, Australia, Belgium, New Zealand, and the Netherlands.

⁷⁰⁷ Davis, *Resurrecting Granary of Rome*, 174.

⁷⁰⁸ The reference to different countries was ironic, of course. Batisse to Kassas, 25 Nov. 1958; Batisse to Director-General, 28 Oct. 1959; Batisse to Director-General, 28 Oct. 1959 [my translation] in 551/445 : 581.5 (262) A 332 FAO/UNESCO, Arid Zone – Ecological Map of the Mediterranean Region – Joint FAO/UNESCO Project, Unesco.

Over the next five years, attendance varied considerably, but by the final meeting, experts from Ecuador, Kenya, Ghana, Argentina, Romania, Canada, Japan, and Senegal had attended meetings of the Advisory Panel.⁷⁰⁹ Yet this list is somewhat misleading. For example, at the third meeting of the Advisory Panel in 1964—a small meeting in Paris to deal with budgetary issues limited to four experts from France, Belgium and the Netherlands and representatives of FAO and Unesco—Aubert of France recommended that D’Hoore, a Belgian, remain the representative for Africa until the final draft of his map, begun under the CCTA (Technical Commission for Cooperation in Africa South of the Sahara), was published. Bramaio concurred, but pointed out the urgency of appointing one or two actual Africans as alternates.⁷¹⁰ It might be too cynical to suggest that the experts from Third World countries were mere tokens; the era when colonial experts’ knowledge of the land empowered them to represent Africa at international meetings was quickly drawing to a close. But the diversity of the participant list certainly did not reflect the real influence of national experts and traditions in the project.

U.S. soil science provided a common point of reference for the international collaboration. Even before the Soil Map of the World project, FAO had used Soil Survey Staff handbooks and guidelines for its field workers. When FAO developed guidelines for soil descriptions in the mid-1960s, its soils staff good naturedly “plagiarized” the

⁷⁰⁹ FAO, *World Soil Resources Office Report 1: Report of the First Advisory Group on the FAO/UNESCO Soil Map of the World Project, Rome, June 1961*; *World Soil Resources Office Report 6: Report of the Second Meeting of the Advisory Panel on the Soil Map of the World, Rome, 9-11, July 1963*; FAO, *World Soil Resources Office Report 8: Report of the Third Meeting of the Advisory Panel on the Soil Map of the World, Paris, 3 January 1964*; FAO, *World Soil Resources Office Report 13: Report of the Fourth Meeting of the Advisory Panel on the Soil Map of the World, Rome 18-21 May 1964*; FAO, *World Soil Resources Office Report 29: Report of the Fifth Meeting of the Advisory Panel on the Soil Map of the World, Moscow, USSR, 20-28 August 1966* (Rome: FAO).

⁷¹⁰ FAO, *World Soil Resources Office Report 8: Report of the Third Meeting of the Advisory Panel on the Soil Map of the World, Paris, 3 January 1964*, 7.

protocols of the *Soil Survey Manual* since “[t]hese already enjoy the widest usage and to depart from them unnecessarily would have defeated our primary purpose of achieving greater uniformity.”⁷¹¹ Although reaction the 7th *Approximation* was often hostile, all the experts were at least familiar with the system, and most national systems were heavily influenced by its structure, nomenclature, and move towards an objective focus on morphological properties. In any case, no other classification even attempted a comprehensive system for the world’s soils. The second meeting of the Advisory Panel agreed to use the 7th *Approximation* as a “correlating medium” between the classification systems of different continents.⁷¹² It was symbolically fitting that the Soil Map of the World was prepared on the American Geographical Society’s topographic base map.

In a less direct and material sense, the tradition of Russian soil science also underlay the whole project, of course. As we have seen, Soviet scientists were largely responsible for initiating the idea for a Soil Map of the World. Under the auspices of the Soil Map of the World, the Soviet Union hosted correlation meetings in Moscow and Uzbekistan and the final meeting of the Advisory Panel. But the Moscow meeting of the Advisory Panel was the only one held outside one of the Secretariats because that was the only way to assure Soviet participation. The Soviet representative to the first meeting of the Panel, I. V. Tiurin had died before the second meeting and, despite Kovda’s intervention, had not been replaced. When the Soviet’s did participate, they often seemed to be working on a parallel project; for example, at the final meeting in Moscow, Soviet

⁷¹¹ Smyth to Pijle, 27 Sep. 1967; Smyth to Simonson, 5 Jan. 1968, Soil Classification and Correlation, April 1966-1972, LA-2/10, FAO

⁷¹² FAO, *World Soil Resources Office Report 6: Report of the Second Meeting of the Advisory Panel on the Soil Map of the World, Rome, 9-11, July 1963*, 13.

scientists (led by Kovda, now back at Moscow State University) presented their own legend for a soil map of the world at a scale 1:5 million. Writing a colleague about another ISSS related project, FAO's A. J. Smyth expressed what must have been a common anxiety: "Have you hear from Fridland...? I am rather concerned that Fridland, with the assistance of the Docuchaev, will suddenly present us with an enormous volume of iron-curtain references?"⁷¹³

In fact, neither the Soviet Union nor the United States was a particularly active participant in the project. The United States did not send an expert to two of the five Advisory Panel meetings, and no American worked in the World Soil Resources Office. The Soil Survey Staff, after all, had already published a soil survey handbook that was the international standard and a comprehensive classification explicitly intended to be the international standard. There was some hesitancy in the American soil science community about the value of a world map when so many of the world's soils had not been surveyed, too.⁷¹⁴ The Soviet's, for their part, were busy trying to reconcile four competing national systems. And neither country's bureaucracy made participating in UN projects easy. The United States and the Soviet Union were not hostile to the Soil Map of the World, but absorbed in their own affairs, they left the leadership of the project to the Europeans.

⁷¹³ Smyth to Bennema, 21 Aug. 1970, Soil Survey Interpretation (Land Capability Classification), March 69 to May 73, LA-2/15, FAO.

⁷¹⁴ For example, the Rockefeller Foundation initially expressed an interest in funding the project, but after conferring with U.S. soil scientists suggested the time for a world map was not ripe. Moseman to FAO, 13 March 1962, World Soil Resources Office: Correspondence with Organizations Rockefeller Foundation, Land and Water Development, 61-67, LA-10/7, FAO.

In particular, to the Dutch and Belgians. Since its founding in 1924, the ISSS had had only two Secretary-General's, both Dutch. F. A. van Baren was Secretary-General from 1950 to 1974, when Rudy Dudal, a Belgian and the international correlator of the Soil Map of the World, assumed the position (following Kovda's nomination). Van Baren was an active and effective Secretary-General, lobbying the Director-General, organizing study groups, and recommending experts. Unesco even seconded his nephew to the World Soil Resources Office, one of several Dutch associate experts to hold the position.⁷¹⁵ But the Netherlands connection went beyond this impresario and intimate networks. In 1955, Bramao had toured European soil survey institutions to recruit for FAO fellowships and TA assignments. Although British and French experts, like the Americans, were occupied with assignments overseas or in national surveys, he found "great interest on the part of Dutch soil scientists in obtaining ETAP [Expanded Program for Technical Assistance] assignments." If anything, the Belgians were more enthusiastic about UN work, and Bramao recruited three experts on the spot. One of these was the young Dudal.⁷¹⁶ As already mentioned, the lead cartographer on the Soil Map of Africa, a project first proposed at the 1954 ISSS congress in Leopoldville, was Belgian. Tavernier, another Belgian, took the lead on the Soil Map of Europe. Furthermore, the Netherlands government, in partnership with Unesco and following a resolution of the 8th International Congress of Soil Science in 1964, established an International Soil Museum

⁷¹⁵ Associate experts were junior professionals who lacked the experience to be appointed as experts. As with most TA experts, the associate experts' governments paid their salaries, and the position could be seen as an apprenticeship.

⁷¹⁶ Bramao, "Report on Trip to European Soil Survey Centres, 25 May - 10 June 1955, in folder, TRAVEL - Dr. Bramao's Trip to Ceylon and Middle East. 16 March - 9 April, Box Land and Water Development Division, Land and Water Use Branch (Soils (2)) 10AGL570, FAO.

at the University of Utrecht intended to complement the Soil Map of the World project.⁷¹⁷

These small nations, both with agricultural research and development experience in enormous tropical colonies, found a comfortable niche in international soil science.

The reason for Dutch enthusiasm for UN work was obvious. In 1957, Ignatieff reported on the difficulty of recruiting soils experts with knowledge of tropical and desert environments—and the impossibility of attracting U.S. or Canadian experts on the UN’s salary schedule—but pointed out optimistically “that some countries which in the past had Colonial possessions, have, at the present time, a surplus of well-trained personnel—some of these countries desire, in fact, ‘to export the brains’ (the Netherlands falls into this category and the United Kingdom may soon be similarly placed).”⁷¹⁸ British ex-colonial experts were already key members of FAO’s staff, but would indeed pour into international agencies with African decolonization. As we have seen, the Belgians were already brain exporters before abandoning the Congo. British and French ex-colonial experts did play key roles in the production of the Soil Map of the World—the French government, for example, seconded an expert to the World Soils Resources Office to assemble the final draft of the map and write the explanatory text for Africa. But in this project, the disproportionate influence of Dutch and Belgian experts, both suddenly left with so much less soil to study, was unmistakable. This reflected the traditionally outsized role of small European nations in international organizations and the fact that, in

⁷¹⁷ Unesco, “Section 2.226 Soil Science,” *Records of the General Conference, Thirteenth Session, Paris 1964* (Paris: Unesco, 1964), 205.

⁷¹⁸ Ignatieff to 5 Feb. 1957, Soil Survey and Fertility General, 1956 to 1965, LA-2/I, FAO. On this phenomenon, see Joseph Hodge, “British Colonial Expertise, Post-Colonial Careerism and the Early History of International Development,” *Journal of Modern European History* 8: 1 (2010), 24-46.

the 1960s, UN development programs functioned, in part, as jobs programs for former colonial powers.

The World Soil Resources Office in Rome did resemble an imperial “center of calculation” of sorts. Making an inventory of the world’s soil resources meant creating a databank of the world’s soil knowledge. By the time the sheets were printed, the collection had grown to over 10,000 maps, 600 of which were the primary sources for the Soil Map of the World.⁷¹⁹ This included all the soil maps officers could get their hands on; not just continental and country maps, but, for example, maps from large scale development projects and detailed surveys from FAO’s experts in the field. The different projections of the small scale maps had to be corrected for and most of the maps had to be reduced to the 1:5 million scale. Many of the surveys had to be translated and some effort made to account for the different methodologies for analyzing and describing soils. The legends had to be correlated with the new international legend, which itself was continuously evolving over the course of the project’s first decade. The variable reliability of the sources had to be constantly born in mind, too. Digesting this abundance of heterogeneous sources required a strong constitution.⁷²⁰

A more obvious problem was an utter lack of soil data. No soil surveys had been conducted over most of the planet. For these areas, soils had to be inferred. Travelers’ accounts, natural histories, agricultural data, and other written sources were useful, but the key to the methodology were other types of small scale thematic maps: climatic and

⁷¹⁹ FAO-Unesco, *Soil Map of the World: v. 1, Legend*; Dudal and Batisse, “The Soil Map of the World.”

⁷²⁰ Each explanatory text of the Soil Map of the World includes a list of key source materials and briefly describes the process by which the map was assembled; the legend includes a longer discussion. The practices described here and in the next paragraph were accepted best practices for the construction of schematic maps, described for example in the *Soil Survey Manual*.

bioclimatic, vegetation and ecological, topographic, geologic, and lithologic maps, and land use maps. These maps were easier to produce without actually performing traverses than soil maps. By superimposing as many thematic maps as possible and comparing the result to similar environments with known soils, scientists could make an educated guess about the classification of soils they had never touched. Moreover, since these thematic maps depicted the key soil-forming factors, brave souls could interpret them in the light of theories of soil genesis to deduce the morphology of soils. In genetic classification systems, in fact, these maps represented the criteria of classification, especially at the higher categorical levels used for small scale maps; for example, the Dokuchaev Institute's 1960 Soil Map of the USSR defined the "arctic half boggy soils type" in terms of the information represented on climate, physiography, and vegetation maps. Then, too, in an interdependent ecosystem, theoretically almost any meaningful variable could be deduced from the others—natural vegetation maps, after all, relied largely on soil, climatic, and topographic maps to determine which tree ought to be the dominant species.

To their credit, participants in the Soil Map of the World project did not try to hide the perilous empirical foundations of their work. Indeed, when the utility of a map at a scale of 1:5 million was questioned, advocates argued that the scale was the largest possible given the current state of knowledge on global soils. These were designated schematic maps for a reason. Not only did each volume describe the main sources from which the map was compiled, but the World Soil Resources Office printed a reliability cartogram on each map.⁷²¹ This was a small inset map that showed three levels of source

⁷²¹ Tavernier first suggested the reliability cartogram at the second meeting of the Advisory Panel, but it was described as a standard component of schematic mapping in the *Soil Survey Manual*. The second

reliability by area: systematic soil surveys, soil reconnaissance, and general information with local observations.⁷²² These reliability cartograms, which occupied the equivalent of roughly 4,900 square kilometers of a sheet's surface, make for an interesting sort of historical speed reading. As mentioned above, Europe had been entirely covered by systematic surveys (excluding a swath of far Northwestern Russia). 55 percent of the African map, on the other hand, was based on general information and just seven percent on systematic surveys, much of this along the Niger River. The Gezira Development Scheme in the Sudan was clearly visible as a dense cross-hatch in an expanse of diagonal lines. In South America, no place names were necessary to identify the state of Sao Paulo. The entire eastern two-thirds of the United States had been intensively surveyed, along with the Central Valley of California and western Washington, but other than systematic surveys of the grain belt in Alberta and Saskatchewan, little of Canada had been surveyed at all. Intriguingly, the entire Malayan Peninsula had been systematically surveyed. And so on. In general, the reliability cartograms confirm expectations. Their main interest lies in the fact that they were a technology designed to distance the user from the map, to remind the user of the gap between the sign of the soil and the soil. They called attention to the physical and intellectual work required to make the map.

meeting also included one of the most complete defenses of the scale. *FAO World Soil Resources Office Report 6: Report of the Second Meeting of the Advisory Panel on the Soil Map of the World, Rome, 9-11, July 1963*. Soil Survey Staff, *Soil Survey Manual*, 20.

⁷²² The reliability of the reliability cartograms seems somewhat questionable. The density of observations required for each level of reliability was not specified. Some sense can be gained by the fact that the path of the only expedition conducted under the auspices of the project is discernable on the reliability cartogram as a Z of reconnaissance data in a vast expanse of general information. This was a joint FAO, Brazilian government and U.S. AID 3,200 km journey through West-Central Brazil. The "windshield survey" negotiated a road still being cut from the rainforest and the going was so slow that the scientists only had time to describe 11 profiles. They did produce soil association, soil productivity, and soil potential maps for the area. *FAO, Soil Resources Expedition in Western and Central Brazil, 24 June – 9 July 1965* (Rome: FAO, 1965).

The reliability cartogram was designed to manage problems inherent in very small scale schematic mapping, but anxiety about users mistaking symbols for soil also inspired debate over the best practices for representing the most detailed representations of an individual soil, profile descriptions. To be meaningful, a standard international classification system required uniform horizon definitions and standardized notations, called horizon designations. In 1967, following a recommendation of the Advisory Panel for the Soil Map of the World, the ISSS convened a working group at FAO headquarters to devise a uniform system. It recommended including H, O, E, and R master horizon designations, along with the traditional ABC designations.⁷²³ The Working Group on Soil Horizon Designations published its proposal in the ISSS *Bulletin* and national soil science journals for comment. The letters flooded in. A vocal minority of scientists rejected the whole project. The venerable S. A. Wilde of the University of Wisconsin not only railed against the “procrustean” effect of replacing written descriptions with standardized symbols, but objected to any deliberate scientific planning: “In recent years, many of us have suffered a great deal because of efforts of some well meaning groups to impose their credos on other people...[I]t is not the meeting of a scientific society, but the collective of professionals that gives the valid approval to an introduced innovation; such is either perpetuated in print and practice, or carried away on the waves of Lethe.”⁷²⁴ This critique actually called into question Unesco’s function in the international scientific community,

⁷²³ FAO, *World Soil Resources Reports: Report of the Fifth Meeting of the Advisory Panel on the Soil Map of the World, Moscow, USSR, 20-28 Aug., 1966* 29 (1966), 161; “Commission V: Working Group on Soil Horizon Designations,” *Bulletin of the International Society of Soil Science* 31 (1967), 3-7.

⁷²⁴ Wilde, “Comments on the Proposal for Soil Horizon Designations,” n.d. [7 Feb. 1968], World Soil Resources Office: Correspondence with Organizations, International Society of Soil Science, Jan. 65 to Dec. [illegible], Land and Water Development Division, LA 10/7, FAO.

since the heart of the organization's program was dedicated to scientific planning and international standard setting.⁷²⁵

Few went so far as denying the value of a formal classification altogether, but many shared Wilde's anxiety that horizon designations encouraged procrustean classifications. Members of the Working Group shared this concern, including Simonson, the top correlator in the U.S. Soil Conservation Service. His most significant critique of the proposal focused on the proliferation of suffix symbols, the lowercase letters that indicated additional diagnostic features of a master horizon (e.g. "m: strong cementation or induration"). "It was easier to look at horizon designations than to read horizon descriptions," Simonson explained, "but the latter carry the actual information being provided. Any horizon designation is an interpretation made by somebody... If the interpretations are carried as far as they can be with the proposed suffixes, a number of people will accept the interpretations as fact and not bother to check the descriptions."⁷²⁶

The integrity of the system depended on not mistaking standardized categories for the identity of unique soils. Dudal recognized the problem with suffixes, but resolved it by emphasizing the necessity to "keep apart the description of a profile—which in most cases has to be done by a local surveyor—from the taxonomic exercise based on the

⁷²⁵ This was partially a generational issue, since older scientists were less enthusiastic about having to learn an entirely novel classification system. More interestingly, Wilde's dramatic defense of individual freedom in science reflected the previous generation's debates over scientific planning. The battle lines were most clearly drawn in Britain, where the leftist Social Relations of Science movement squared off against the right-leaning Society for Freedom in Science, but the debate certainly crossed the Atlantic. As discussed in Chapter Three, key members of the Social Relations of Science Movement were founding members of Unesco's Sciences Department. Cf. William McGucken, *Scientists, Society, and the State: The Social Relations of Science Movement in Great Britain, 1931-1947* (Columbus: Ohio State University Press, 1984).

⁷²⁶ Anon. "Commission V Working Group on Soil Horizon Designations," *Bulletin of the International Society of Soil Science* 31 (1957), 3-7; Simonson to Dudal, 16 Oct. 1967, World Soil Resources Office: Correspondence with Organizations, International Society of Soil Science, Jan. 65 to Dec. [illegible], Land and Water Development Division, LA 10/7, FAO.

recognition and analysis of diagnostic characteristics.”⁷²⁷ These are subtle, even confusing distinctions, but the point was that the gap between the description of a soil and its classification should be left exposed, not papered over.⁷²⁸

Simonson was committed to constructing a uniform international system, however. Unlike Wilde, his solution to the procrustean dilemma was to more minutely control field workers. Simonson warned that the twenty proposed suffixes “will give field men more degrees of freedom in the choice of suffix letters than can be effectively used”—in his experience, surveyors would find a way to use every symbol regardless of the soils they encountered. Instead of facilitating collective empiricism by standardizing the reporting categories of observers in the field, the symbols would produce the dangerous illusion of uniformity. The leading British soil surveyor B. W. Avery agreed, even suggesting that the definitions of horizons should forgo the interpretive temptation of suffix designations altogether and instead “be written in operational terms, using specific soil properties that can be identified with reasonable precision, as in the new USDA classification.”⁷²⁹ To produce an objective view from above, scientists had to submit to the discipline of the system. At the heart of this discipline was a rigorous segregation of observation from interpretation.

⁷²⁷ Dudal to Avery, 7 June 1968, World Soil Resources Office: Correspondence with Organizations, International Society of Soil Science, Jan. 65 to Dec. [illegible], Land and Water Development Division, LA 10/7, FAO.

⁷²⁸ In contrast, in his study of soil mapping, Latour marvels at how subtle a move the substitution of the abstract sign of soil from the earthen clod of soil is, at how scientific practices render the gap between word and world nearly imperceptible. Latour, “Circulating References.”

⁷²⁹ Avery to Dudal., 20 May 1968, World Soil Resources Office: Correspondence with Organizations, International Society of Soil Science, Jan. 65 to Dec. [illegible], Land and Water Development Division, LA 10/7, FAO.

For correlating the classes of a classification, however, no degree of definitional precision could replace observations in the field. Even the 7th *Approximation* admitted that “the play of judgment furnishes a common denominator” for deciding how to classify a particular soil.⁷³⁰ The work of correlation could not be performed over drafting tables in an office in Rome. One of the axioms of soil science was that a complete description of a soil required observation *in situ*, and so reliable correlation required field work. For an experienced correlator, any trip to an unfamiliar area could turn into an opportunity to correlate. Bad weather once caused Bramao’s and D’Hoore’s flight to San Jose to reroute to Panama, where they were marooned for two days. It was a productive detour—they teamed up with Point IV and Panamanian soil scientists for a field trip to observe Reddish Brown Latritics, Red Latosols, Low Humic Gleys and other interesting specimens. Since experts with experience on four continents were present, “a certain amount of soil correlation...was accomplished.”⁷³¹ Correlation was a field science, but an intensely social one. Although opportunistic, this story evoked the essence of intercontinental soil correlation: a few elite scientists, with knowledge of similar environments in different places, standing beside a road cut or over a soil pit debating the identity of a soil and the merits of their classifications. For participants in the Soil Map of the World project, correlation meetings were the most exciting and rewarding part of the experience.

⁷³⁰ Soil Survey Staff, 7th *Approximation*, 16. Another typical comment on correlation, from a top FAO soil specialist: “. . .soil survey is a matter which, to a large extent, depends on personal opinion and unless very close liaison is kept between the parties in the field, very divergent results may be obtained.” Ignatieff to Schickele, 6 March 1958, Soil Survey and Fertility General, Land and Water Development Division, 56-65, LA -2/I, FAO.

⁷³¹ Bramao to Schickele, 23 May 1957, in folder Land and Water Use Branch – Soils Survey + Classification (L. Bramao), Box Land and Water Development Division, Land and Water Use Branch, chief DrR. Schickele, 10AGL566, FAO.

The World Soil Resources Office coordinated around twenty soil correlation meetings.⁷³² In theory, a series of continental meetings preceded intercontinental meetings, but in practice, intercontinental correlation tended to occur through overseas interlopers at continental meetings, international congresses or the mail. Experts associated with the project also conducted a great deal of correlation through exchanges, tours of areas with troublesome soils, and side-trips while on assignment. The formal correlation meetings featured two distinct sets of practices: technical discussions around a conference table and study tours.

In the discussions, representatives briefly reviewed their nation's survey histories, any small scale national maps and classification systems. Then the serious work began; analysis of tricky soils, unique environments, and conceptual incompatibilities between systems. The key document at these sessions was a correlation table, prepared by the World Soil Resources Office. A correlation table listed the national classification systems under discussion along the top row. Under these headings, it listed the hypothesized classifications of particular soils in each system. For example, the correlation table for the second European soil correlation seminar, held in Bucharest in 1963, proposed a classification for soils according to the systems of Romania, Hungary, and Bulgaria, the 7th Approximation, the Dokuchaev Institute, and the FAO-ECA Soil Map of Western Europe.⁷³³ The third draft of the intercontinental correlation table compared the units

⁷³² For accounts of these meetings, which include the most comprehensive collection of contemporary descriptions of national soil survey programs, see *World Soil Resources Reports* 2, 3, 4, 7, 14, 17, 19, 21, 25, 26, 28, 30, 44, 46, 47, and 51. The Project also included a correlation meeting focused on a specific type of soil—volcanic ash—in Tokyo in 1964, and a study of the large group of ill-defined “Mediterranean soils.”

⁷³³ FAO, *Report of the Second Soil Correlation Seminar for Europe, Bucharest, Romania, 29 July-6 August 1963*.

from the legend of the Soil Map of the World, the CCTA's map of Africa, the Dokuchaev Institute's maps of Europe and Asia, the Commonwealth Scientific and Industrial Research Organization's Australian map, and the 7th Approximation.⁷³⁴ The experts debated the accuracy of the correlation table and negotiated resolutions to apparent incompatibilities, which Dudal took into account in the next iteration of the correlation table. The legacy of the international conversation remains visible in the mix of traditional soil names held dear in some traditions, like Chernozems and Podzols, and newer invented names like Xerosols from the 7th *Approximation*.

Some boxes in correlation tables were blank. Either no corresponding soil existed in a region (e.g. Romania had Light brown steppe soils but Hungary and Bulgaria didn't) or the soil existed but was classified according to different criteria. Although natural and cultural factors were both clearly in play, the whole project was based on the gamble that the cultural differences were more significant. Guy D. Smith's conclusion at the first European correlation seminar in Moscow was thus fundamentally optimistic, both for the scientific and internationalist components of the project: "The problems of correlation arose mainly from different approaches to classification rather than to the fact that the soils were different." The same laws of nature applied to soil genesis in the United States and Soviet Union, and so "reconciliation of present differences would be facilitated by visits of Russian colleagues to the North American continent."⁷³⁵

⁷³⁴ FAO, *Preliminary Definitions, Legend and Correlation Table for the Soil Map of the World*, Rome, August 1964.

⁷³⁵ FAO, *World Soil Resources Report 3: First Soil Correlation Seminar for Europe, Moscow, 16-28 July 1962*, 3.

Differences had to be reconciled in the field. On study tours, which had been traditional components of international soil science meetings since the first Agrogeology Conference in Budapest in 1909, scientists examined prepared profiles of typical or particularly interesting regional soils. The second correlation meeting for North America visited 26 profiles between Winnipeg and Vancouver and a Romanian tour observed 21 soils in a week-long loop through the Eastern half of the country. An Indian study tour investigated just twelve soils, but was notable for flying participants to see the three major soil regions of the country, around Delhi, Nagpur, and Mysore.⁷³⁶ Seeing the soil in its environment was essential to definitive correlation work, but the camaraderie of the field trips was also vital to another of the Soil Map of the World's principal objectives, to "strengthen international contacts in the field of soil science."

A Report of a Correlation Study Tour in Sweden and Poland provides revealing evidence of the importance of field work. The tour's mission was to resolve confusion over some of Northern Europe's most common soils: Podzolized Soils, Grey Brown Podzolic Soils, Brown Forest Soils, Psuedogleys and Chernozems. The one-week, 7,140 kilometer tour began and ended in Rome. Although the two FAO scientists did not have time to stop for field work on the drive to Sweden, they did make note through the windshield of the need to add a stony phase and an inclusion of Lithosols to a map unit North of Florence. In Sweden, profile investigations and conversations with experts resulted in six new mapping units, but generally confirmed the quality of the map. The

⁷³⁶ FAO, *Report of the Second Soil Correlation Seminar for Europe, Bucharest, Romania, 29 July – 6 Aug. 1963: World Soil Resources Report 7*; FAO, *Report of the Second Meeting on Soil Correlation for North America, Winniper-Vancouver, Canada, 25 July – 5 Aug. 1966: World Soil resources Report 28*; FAO, *Report of the Meeting on Soil Correlation and Soil Resources Appraisal in India, New Delhi, India, 5-15 April 1965: World Soil Resources Report 26*.

map of Poland, however, turned out to require serious revisions. For example, Polish scientists' Pseudopodzols had been translated to Podzolized Soils on the FAO-ECA Soil Map of Europe, which led to a classification of Humic-Ferric Podzols on the Soil Map of the World when really they belonged in the Albic Luvisols! The travelers identified three other misclassifications at the high categorical level used on the map, as well as various other boundary issues and miscellaneous corrections. This was Europe in 1968—the most densely settled, thoroughly surveyed continent. European scientists—from both the East and West—had been producing collaborative international maps for at least four decades and had already held ten international classification and survey meetings under the auspice of FAO's Soil Map of Europe. As the two scientists concluded, “first hand observations” were critical to understanding the true pattern of soils.⁷³⁷

This comment, a soil science cliché, could be interpreted to undermine the whole project. But the Swedish-Polish correlation tour could also be taken as demonstrating the value of the process; making the map had revealed international misunderstandings and instigated a productive conversation across the East-West divide that reconciled differences. Like a dissertation, this process could be extended indefinitely. Every soil map of the world was a draft, every comprehensive classification an approximation. But eventually the map had to be published.

At the 9th International Congress of Soil Science in Australia in 1968, Bramao and Kovda (who was elected president of the society at the meeting), presented the first draft of the Soil Map of the World, and the ISSS passed a resolution calling for its immediate

⁷³⁷ M. J. Gardiner and R. B. Miller, “A Report of a Soil Correlation Tour in Sweden and Poland, 27 Sep. – 14 Oct. 1968, *World Soil Resources Report 35* (Rome: FAO, 1968).

publication. Unesco published the complete set of maps over a decade, beginning with the sheets for North and Central America and the Legend in 1972 and ending with the explanatory volume for Europe in 1981.⁷³⁸ There was some irony in this order, since the Soil Map of Europe had been projected to be the first printed in order to serve as a model for the other areas. Of course, North American experts only had to blend the viewpoints of two national soil survey organizations (Mexico was relegated to the Central American volume) instead of twenty-seven independent agencies. But it also turned out to be far easier to produce schematic maps of Central America, Africa and South America, where there were fewer data points, than to reduce the detailed view of Europe. More local knowledge certainly made it increasingly difficult to capture the global view from above. Like the faces of an unfamiliar race, most Tropical soils looked similar to an observer from the North. But the absence of empirical data also justified the early publication of volumes; the maps at least provided policy makers and researchers something to work with.⁷³⁹

In the international soil science community, the map was hailed, and is still remembered, as an intellectual achievement that demonstrated the power of international scientific cooperation. In an article celebrating the 75th Anniversary of the ISSS, van Baren described the Soil Map of the World as “one of the main contributions” of the society.⁷⁴⁰ By Wilde’s criteria—use—the project was clearly a success, too. In the early

⁷³⁸ All sources I have seen list the first publication date as 1971, but the earliest date on the published sources themselves is 1972. The explanatory texts generally followed the volumes by a couple of years.

⁷³⁹ On this rationale, see comments from Bramaio at 5th Meeting of the Advisory Panel, *World Soil Resources Report 29*.

⁷⁴⁰ Hans van Baren, A.E. Hartemink, and P.B. Tinker, “75 years The International Society of Soil Science,” *Geoderma* 96 (2000), 1-18, 15.

1990s, the FAO-Unesco Soil Map of the World received the highest number of citations of any documents in a Core Agricultural Literature Project.⁷⁴¹ The classification presented in the legend became the main rival as an international standard to the final version of the U.S. Soil Survey Staff's system, *Soil Taxonomy*, published in 1975.

In fact, FAO aggressively promoted the legend as an international standard, as the organization's African soil program illustrates. During the 1960s, the World Soil Resources Office did not host any soil correlation meetings in Africa, but during the 1970s, FAO established international Soil Correlation and Evaluation Sub-Committees for West and East Africa, which held seven meetings during the decade. These meetings included the requisite Study Tour, but while soils were correlated, the definition of classes in the legend was already fixed—the soils had to fit the preexisting categories. African scientists had little opportunity to adapt the international classification to their ends. Instead, following FAO officers' suggestion, the Sub-Committees recommended that all national surveys—which had inherited the French system, *ad hoc* British practices, or dabbled in the 7th *Approximation*—adopt the legend as a common reference point.⁷⁴² Many nations produced national soil maps using the legend.⁷⁴³ The common currency enhanced the mobility of scientists as well as knowledge; it enabled international experts to move quickly from project to project around the world. And for experts from developing countries especially, competence in the use of this currency was

⁷⁴¹ Peter McDonald, "Major Soil Maps of the World," in *The Literature of Soil Science* (Ithaca: Cornell University Press, 1994), 312-378, 313.

⁷⁴² FAO, *World Soil Resources Report 40: Report of the Regional Seminar on the Evaluation of Soil Resources in West Africa, Kumasi, Ghana, 14-19 December 1970* (Rome: FAO, 1970); FAO, *First Meeting of the Eastern African Sub-Committee for Soil Correlation and Land Evaluation, Nairobi, Kenya, 11-16 March 1974* (Rome: FAO, 1974).

⁷⁴³ FAO, *FAO-Unesco Soil Map of the World: Revised Legend* (Rome: FAO, 1988). This source lists as examples Botswana, Egypt, Indonesia, Japan, Kenya, Mexico, Poland, Sierra Leone, Uruguay, and Zambia.

the price of admission to the cosmopolitan community of experts and the career opportunities this afforded.

Despite the competition suggested by FAO's proselytizing, *Soil Taxonomy* and the FAO-Unesco classifications were intellectually quite compatible. "To keep the system 'natural,'" the volume accompanying the Legend explained, "the differentiating criteria are essential properties of the soil itself."⁷⁴⁴ U.S. government soil manuals provided many of the operations for defining these properties. But there was a key difference between *Soil Taxonomy* and the legend—the legend was essentially mono-categorical. Instead of a six-tiered hierarchy, the legend only listed Soil Units, which were equivalent to the American's Great Groups. According to the history of the project provided with the Legend, agreement could not be reached on the criteria for further subdivision. Should lower categories be based on properties reflecting zonality, evolution, morphology, ecology, geography? In fact, I have found no evidence that participants even attempted to define lower categories. To do so would have jettisoned the critical advantage of small scale mapping for the internationalist agenda; mutual understanding was easier when the details were blurred and the categories broad.

Each volume of the map, however, also included a thick appendix of descriptions of typical profiles. These descriptions demonstrated the soil science community's prized epistemic virtues of precision, detail, and quantification. Thick qualitative descriptions of soil morphology were complemented by horizon depth measurements to the centimeter, color values keyed to the Munsell color chart (e.g. "yellowish brown [10yr 5/8]), particle size distribution calculated to a tenth of a percent, and a battery of chemical tests. The

⁷⁴⁴ FAO, *Soil Map of the World, v. 1: The Legend*, 10.

minimum size of an area delineated on a 1: 5 million map, on the other hand, is about 100,750 hectares.⁷⁴⁵ A gap several orders of magnitude wide separated the intensive detail of the profile descriptions from the extensive perspective of the map. The mono-categorical nature of the classification meant that the sense of groundedness provided by the profile descriptions was slippery; there was no taxonomic ladder to descend from the general properties of Soil Units to the specific properties of soil individuals. The patterns revealed by the global view from above applied to no place in particular.

Despite—or, rather, because—of this gap, the Soil Map of the World quickly proved to be a useful instrument of development planning. The sheets of the map were presented as basic scientific documents. Their application required skilled interpretation for a particular purpose. The volumes of the Soil Map of the World included extremely small scale maps of the area's bioclimatic regions, surface geology, physiographic regions, and potential natural vegetation. By superimposing these thematic maps on top of the soil maps, experts could estimate the potential and suitability of land for various types of agriculture. This practice of isolating components of the environment and then reconstructing a simplified version of the whole perfectly illustrates the perpetual movement between analysis and synthesis that produced the view from above.

According to accepted practice, valid interpretation required objective description; that is, the maps themselves should illustrate natural classifications. As shown in Chapter Four, however, values and theories—interpretations—were deeply embedded in the bioclimatic and natural vegetation maps in particular. Bioclimatic maps

⁷⁴⁵ S. W. Buol, *Soil Genesis and Classification*, cited in Ralph J. McCracken and Douglas Helms, "Soil Surveys and Maps," in Peter McDonald, ed., *The Literature of Soil Science* (Ithaca: Cornell University Press, 1994), 275-311, 308.

were constructed to be useful for specific agricultural regimes; potential vegetation maps portrayed a fictional natural world without humans. Soil maps themselves embedded theories about which properties were significant indicators of soil genesis and behavior under cultivation--and there was no soil unit for concrete. Re-enforcing this issue of compounding interpretations, these same types of thematic maps often had been used to infer the soil patterns in the first place. Thus, the interpretive methodology risked creating a closed, self-referential system.

This possibility recalls William Cronon's classic analysis of the commoditization of nature resulting in the production of a "second nature." In this second nature, corn and cows were transformed into standardized units that could be rapidly sorted, transported, and traded. Second nature maintained tenuous ties to the peculiarities of soils and the cycles of seasons. It was most clearly manifested in the market, a place where abstractions representing the future harvest of a region hundreds of miles away could be bought and sold instantaneously.⁷⁴⁶ In a similar sense, a key objective of the Soil Map of the World was to enable knowledge to travel effortlessly. My earlier reference to the categories of the legend as currency was meant as something more than an analogy; money represents the ultimate instantiation of fungible information.⁷⁴⁷ Following the logic of the Soil Map of the World to its conclusion, it clearly can be understood as part of the long-running commoditization of nature.

⁷⁴⁶ William Cronon, "Nature to Market," in *Nature's Metropolis: Chicago and the Great West* (New York: W. W. Norton Co., 1991), 97-259.

⁷⁴⁷ Bowker, *Memory Practices*, 205-6. On soil and analogies to money in the nineteenth century, see Emily Pawley, "Accounting with the Fields: Chemistry and Value in American Agricultural Improvement, 1835-1860," *Science as Culture* 19: 4 (2010), 461-82.

This point was emphasized in one of the early extensions of the Soil Map of the World project at FAO, an effort to develop a system of global land evaluation. For the soil scientist who headed this project, Smyth, a global system of land capability classification was a natural application of the map, and the Soil Map of the World project provided an organizational model, too. The map units had to reflect far more variables than simply soil characteristics, of course. Advising an expert devising a capability classification in Pakistan, Smyth wrote, “A comparison of ‘land capability’ between Iceland and Timbuktoo...can only be expressed meaningfully in terms of money (indeed in terms of somebody else’s money—dollars preferably) for land capability in such different economic, cultural and agricultural environments does not appear to have any other common denominator.”⁷⁴⁸ This comment provides insight into why FAO policies were extraordinarily hostile to subsistence agricultural. The answer to this question may seem so obvious that it need not even be asked: subsistence agriculture did not produce the surpluses necessary to fuel industrialization, and thus by definition did not contribute to development. But FAO officers often denigrated subsistence practices in places where they had no better alternative.⁷⁴⁹ Along with longstanding cultural prejudices, a subtler

⁷⁴⁸ Smyth to Brammer, 29 Nov. 1966, Soil Classification and Correlation, April 1966-1972, LA-2/10, FAO; see also, “Working Paper for Land Classification Seminar,” 1970, Soil Survey Interpretation (Land Capability Classification), March 69 to May 73, LA-2/15, FAO.

⁷⁴⁹ A dramatic example that illustrates this prejudice, and recalls disputes between experts and government representatives over nomadism described in Chapter Four, was provided by Charles Kellogg’s 1956 proposal that FAO study “natural fallow” or shifting cultivation in the humid tropics. The practice was almost universally condemned, but, according to Kellogg, scientists actually knew very little about how it worked and could offer no viable alternative system for the poor tropical soils. Instead of devising a research program designed to understand and improve soils under natural fallow, however, FAO published a report that began: “Shifting cultivation, in the humid tropical countries, is the greatest obstacle, not only to the immediate increase of agricultural production, but also to the conservation of the productive potential for the future.” Kellogg was so enraged by the “irresponsible” article that he threatened to pursue the project with Unesco. Kellogg to Fracker, 12 Sep. 1957, Land and Water Development Division, Land and

bureaucratic imperative was also at play. Non-market production was difficult to account for, to incorporate into national and global surveys. In fact, Smyth was often skeptical about the possibility of devising a uniform system; his comment here was in the context of a recommendation to keep the terms of the capability classification relevant to the local context. But for FAO's goal of establishing itself as the center for global agricultural planning, dollars were the unit that made sense.⁷⁵⁰

This focus on planning suggests that although the Soil Map of the World was part of the purposeful commoditization of nature, it did not reflect an abiding faith in the unfettered market. Indeed, FAO's first practical use of the map came in the context of its Indicative World Plan for Agricultural Development. This top priority project sought to make a global survey of current agricultural resources versus population needs in the mid-1960s, and then project needs in 1975 and 1985 given population growth projections. In addition to current agricultural statistics, the plan provided potential productivity estimates; for example, the production index for Afghanistan in 1963 was 2.3, but its potential was 7-8. In developing countries for which few data were available, FAO relied on the Soil Map of the World and the database assembled in the World Soil Resources Office.⁷⁵¹ Developing countries, of course, were the places where huge areas of the map

Water Use Branch, Chief Dr. R. Schickele, 10AGL566, folder Land and Water Use Branch Soils – Fertility (V. Ignatieff), FAO.

⁷⁵⁰ On this point, see Lynne Phillips and Suzan Ilcan, "'A World Free From Hunger': Global Imagination and Governance in the Age of Scientific Management," *Sociologia Ruralis* 43: 4 (Oct. 2003), 434-453. On the power of a different standardized unit, see Nick Cullather, "The Foreign Policy of the Calorie," *American Historical Review* (April 2007), 337-364.

⁷⁵¹ *5th Meeting of the Advisory Panel*, 10-11. Bramao, "The Role of Soil Resources Research and Appraisal in the World's Battle against Hunger," 1964; "Soil Map of the World – Exhibition Pamphlet, 5 July 1968, both in folder Speeches – Notes, Box Land and Water Development Division, Land and Water Use Branch (Soils (2)), 10AGL570.

were based on general information and, therefore, the problem of circular inferences most severe.

The Soil Map of the World and the data collected in the World Soil Resources Office were important in the production of many other small scale interpretive maps, too. These included not only a new FAO-Unesco-WMO *Map of World Distribution of Arid Regions* for the UN Conference on Desertification, but also maps of future worlds; for example, FAO *Potential Population Supporting Capacities Maps of Africa* under varying levels of agricultural inputs; United Nations Environment Program-FAO-Unesco-WMO *Desertification Map of Africa*; and a *Soil Degradation Map of Northern Africa*.⁷⁵² These were the maps that UN agencies used to amplify the myth of desertification in order to compel state intervention in peasant agricultural practices and boost their own bureaucracies.⁷⁵³

These interpretive maps did not merely visualize global resource inventories. They did not function as analogy generators intended to facilitate knowledge transfer. Their speculative nature was not justified by invoking their heuristic value. Indeed, none of these maps included reliability cartograms. Instead, they fulfilled the promise of scientific map making; they made predictions. Interpretation put the map in motion; it transformed the map from a metaphor of the world to a dynamic model of it. Ideally, the model's predictive value increased as more and more layers of thematic maps were superimposed on top of each other. But it was also possible that the vivid patterns of the

⁷⁵² Dudal and Batisse, "The Soil Map of the World," 4-6; FAO, *Africa: Potential Population Supporting Capacities* (Rome: FAO, 1982); UNEP, *Provisional Desertification Map of Africa North of the Equator*, N.D. (prepared for United Nations Conference on Desertification, 1977).

⁷⁵³ See chapter Four and David S. G. Thomas and Nicholas J. Middleton, *Desertification: Exploding the Myth* (Chichester, UK: John Wiley & Sons, 1994).

Soil Map of the World blurred as bioclimatic and potential vegetation, geologic and geomorphologic, land-use and population maps piled up. With the increasing density of data, the bright colors of the individual maps turn to black. The view from above projects a Rorschach blot.

Conclusion

The history of the Soil Map of the World illuminates how international, bureaucratic and disciplinary politics, scientific theories and practices, and the natural environment interacted to produce a global view from above. More than the map, the legend represented the project's most remarkable accomplishment; an international classification system that provided a common currency for exchange between national soil science communities. The World Soil Resources Office facilitated the international negotiations necessary to produce the legend. At the international level, not only soils but also national classification systems were the objects of correlation. The process of correlation, which explicitly valued blending the viewpoints of elite experts who represented diverse national traditions and interests, resonated with the epistemic virtues of the view from everywhere. The highly standardized, precisely quantified, operational definitions this process produced, on the other hand, were designed to reduce the interpretive freedom—to eliminate the subjectivity—of observers in the field. This rigid procedural objectivity, in which truth was understood to reside in the universal laws of nature, reflected the values of the view from above. The Soil Map of the World project thus illustrated the complementary roles of the view from everywhere and the view from above in the co-production of international science and international institutions.

The small scale of the map was critical to the production of a global view from above. The high categorical level at which the legend divided Soil Units allowed scientists to elide disagreements over the relative significance of the factors determining soil genesis and behavior. As importantly, the schematic nature of the map allowed scientists to map soils they had never surveyed. The monocategorical quality of the classification accurately reflected a gap between the broad patterns revealed on the map and the intricate patterns of detailed soil surveys. The global view from above necessarily applied to no place in particular.

The small scale of the map also correlated with the small size of the international soil science community. There was a certain irony in the fact that this new, increasingly esoteric international language was understood by just some thousands of people. In terms of both objectives and process, this was a quintessentially elite cosmopolitan project. It was designed to enhance the mobility of scientific facts and experts, to uproot scientists from their local environments. The global view from above was produced by and for people who belonged no place in particular.

The cosmopolitan nature of the project was both its strength and its weakness. The publication of the Soil Map of the World was part of an ongoing process of international scientific exchange and integration. The map and the legend have undergone continuous revision and extension. As national soil survey projects tested it through use, for example, they soon developed a lower category to enable more detailed mapping. More importantly, the whole system had been digitized, which offers new creative

possibilities, as well as new imperatives for international standardization.⁷⁵⁴ As a platform for international scientific research, the Soil Map of the World and projects like it empowered international organizations to produce an ever more compelling view from above of a fragile, interdependent global environment. These projects taught members of an international scientific community to see the world in the same way. They produced what political scientists have termed epistemic communities—transnational networks of experts with shared values and understandings of causality that can play a key role in international policy coordination.⁷⁵⁵ Members of an epistemic community found similar patterns in the Rorschach blots of the global view from above.

Yet these were intellectuals who articulated with no public. In fact, internationalization ineluctably disassociated ideas and intellectuals from their local context. In part, because international organizations and epistemic communities were not embedded in a popular world community—what mid-twentieth century social scientists would have called an organic community—they lacked the ability to galvanize social movements capable of compelling action.

⁷⁵⁴ Actually, attempts to digitize soil data were contemporaneous with the printing of the Soil Map of the World. The expert first assigned to create a Soil Data Bank foresaw the first use to be discovering analogies between similar lands and the last stage (in the unforeseeable future) to be generating predictive models. The creation of the digital Soil Data Bank reinforced the values of the Soil Map of the World project: “Implicit in this concept, of course, is the agreement of all those who wish to contribute to or use the SDB to operate within a uniform framework. The discussion, exchange of ideas and compromise which must precede agreement is one of the valuable corollaries of the initiation of the SDB. In addition, everything in a job must be spelled out explicitly if we wish a computer to do it for us – the computer makes honest men of us all.” Moore, “Report on the Establishment of the FAO Soil Data Bank, 19 Feb. 1970; Moore to Cunningham, 12 March 1969, Soil Data Centre, v. 1, LA-2/3 June 89-72, FAO. See also, FAO, *Revised Legend*, 2; R. Dudal, “How Good Is Our Soil Classification?” and Freddy O.F. Nachtergaeel, “The Future of the FAO Legend and the FAO/UNESCO Soil Map of the World,” in *Soil Classification: A Global Desk Reference*, 11-18, 147-156.

⁷⁵⁵ Emanuel Adler Peter Haas, ed., *International Organization*, “Knowledge, Power, and International Policy Coordination” (Winter, 1992) 46: 1.

Despite the environmental and sociological disjunctures between the global and the local, it would be a mistake to conclude that the world scale was merely an illusion. This would be equivalent to claiming the local scale was irrelevant because it could not be seen from high above. True, in an ideal functional world, the local and global scales would telescope seamlessly into each other; local and global patterns could be deduced from each other. But we live in a dysfunctional world—a world in which enduring patterns are nevertheless unpredictable. In a historically determined world, scales are connected, of course, but the connections are contingent. They have to be worked out from below and from above each time, as I have attempted to do here in describing how the map was made. Given the necessary disjunction between scales, the Soil Map of the World was a tremendous accomplishment. It could not compel action, but it did contribute to the construction of a global environment about which it was possible to debate issues of aesthetics, equity, and sustainability.

Conclusion

During its first quarter-century, world history transformed Unesco. In 1947, Unesco was an organization of three dozen member states; by 1972, that number had risen to 132. Most of this increase, of course, was an effect of decolonization. In 1974, Amadou Mahtar M'Bow of Senegal was elected Director-General, the first African head of a UN specialized agency. Although the United States still contributed 30 percent of the budget in 1970, its influence had been deeply eroded by successive administrations' indifference and Cold War obsessions. Unesco increasingly came to be seen as the UN organization most representative of Third World agendas. UN agencies' inclusive organizational structure assured that Unesco represented more diverse national perspectives in the early 1970s than it had in the late 1940s, and in this sense produced a more authentic view from everywhere. The universalist aspirations of postwar internationalists, however, had lost much of their appeal. As Chapter Five discussed, if some still remembered the old rallying slogan "unity in diversity," the emphasis of the age was firmly on diversity.

Yet for all the assertions of particularism, the new nations reinforced the consensus that the social and economic development of less developed countries ought to be Unesco's primary mission. In 1947, the budget had been almost 7 million dollars; by 1972 it had grown to nearly 45 million dollars (taking inflation into account, still more than triple the 1947 budget), but this figure was more than doubled by extra-budgetary funds from the UN Development Program. In this sense, the technological approach to using science to improve the world had proven its ability to foster international

cooperation. Indeed, the most impassioned appeals to recognize that the planet was One World came from renewed Malthusian fears of natural resource depletion and environmental degradation. In 1966, the first photographs of the planet from space provided a vivid image of what the economist Kenneth Boulding (who had been one of the presenters at Quincy Wright's 1947 World Community conference) famously called "spaceship Earth."⁷⁵⁶ No better symbol of the power of the view from above could be imagined.

There was an obvious conflict between poor countries insistence on rapid economic development and international environmentalists' calls to recognize the world's inherent "limits of growth." This confrontation came to a head, and was partially resolved, in preparations for the 1972 UN Conference on the Human Environment, better known as the Stockholm Conference. Developing countries insisted that Western environmentalists' concerns about pollution and wilderness degradation, which less developed countries perceived to be problems of prosperity, not be used as an excuse to walk away from commitments to development goals. Following the logic of the view from everywhere, the organizers blended the interests and viewpoints of diverse participants in the work of preparatory commissions and meetings to produce a framework that integrated environmental and development objectives. This inclusive agenda required the integration of social and economic expertise with knowledge of natural ecosystems. The Stockholm Conference is remembered as "the single most

⁷⁵⁶ Kenneth Boulding, "The Economics of the Coming Spaceship Earth," in *Environmental Quality in a Growing Economy*, Henry Jarret, ed., (Baltimore: Johns Hopkins University Press, 1966).

influential event in the evolution of the international environmental movement.”⁷⁵⁷ It resulted in the creation of the UN Environment Program, and in retrospect provides a useful birth date for the idea of “sustainable development.” Participants (and many historical accounts) celebrated the radical novelty of the ideas and of the organizational process of the Stockholm Conference.⁷⁵⁸

And yet while the emphasis on pollution and the awareness of threats to oceans were new, in many ways the Stockholm Conference represented a return to the ideas of the United Nations Scientific Conference on the Conservation and Utilization of Resources (UNSCCUR) at the start of the UN’s development program. At UNSCCUR conservationists had struggled to manage the tension between the exploitation of resources for economic growth and the protection of nature for the maintenance of ecological equilibrium. The themes of interdependence and balance, sustainable growth, and the need to integrate scientific knowledge of nature with social and economic expertise animated UNSCCUR. Even the more romantic concerns of the new environmentalist movement were included at Unesco’s partner Nature Protection Conference. And the innovative set of pre-conference commissions and meetings, which sought to facilitate popular participation in the Conference, recalled Unesco’s early experiments with international conferences. In fact, Unesco provided a sort of bridge between UNSCCUR and the Stockholm Conference, between scientific conservation and

⁷⁵⁷ John McCormick, *Reclaiming Paradise: The Global Environmental Movement* (Bloomington: Indiana University Press, 1989), 104.

⁷⁵⁸ All comprehensive reviews of international environmental policy and histories sustainable development discuss the Stockholm Conference. In addition to the chapter in McCormick, Cf. W. M. Adams, *Green Development 3rd Ed.: Environment and Sustainability in a Developing World* (New York: Routledge, 2009), 59-65.

sustainable development. It was no coincidence that in 1968, Unesco hosted an intergovernmental Biosphere Conference that anticipated the ideas and values promoted at the Stockholm Conference. In this respect, it was also notable that developing countries succeeded in adding desertification and soil erosion to the Stockholm agenda. Unesco's environmental sciences and natural resources programs helped maintain a space for the reproduction of these ideas in the international community during the determinedly optimistic development regimes of the 1950s and early 1960s.

My point is not that there was nothing new under the sun—clearly the world was an extraordinarily different place in 1972 than it had been in 1946. But it was revealing that sustainable development was essentially recycled resource conservation. Ironically, given the explicitly linear model of time envisioned by development theorists, there was a cyclical pattern to development thinking, and a bias against acknowledging intellectual debts to the recent past. The cyclical pattern was driven by the perceived failure of development, which increased pressure to proclaim the novelty of new programs. Furthermore, disappointing results were often blamed on failure to take social or cultural or environmental variables into account—failure to grasp the true interdependency of everything. Correcting the problem, therefore, justified expanding the functional mandate of the program—and the development bureaucracy. The cyclical pattern of development thought and the expansion of the international development bureaucracy were, in part, a product of the perceived failures of technical expertise.

But the history of science at UN agencies was not just a history of failures. As Chapter Six showed for the particularly difficult case of soils, UN agencies played a key

role in the production of a global view from above, which was critical to making the global environment an object of policy (and public) debate. When policy-makers, journalists, scholars, and activists seek global or internationally comparable environmental, health, economic, and social data, as likely as not their source is a UN product. The categories of international surveys, censuses, and maps set the terms of debate; indeed, they structure perceptions of global reality. As much as a dense network of weather stations or hundreds of thousands of detailed soil surveys, this accomplishment depended on the reproduction of a transnational scientific community. Producing these communities of shared norms and values, methodologies and classifications—what political scientists call epistemic communities—was a core objective of Unesco and the other UN functional agencies.

In this sense, the functionalist theory of international organization was validated; the technological approach did produce transnational communities of experts and an ever growing network of international institutions. But here it is important to note that the concept of epistemic communities was a direct intellectual descendent of functionalism.⁷⁵⁹ This was a regressive evolution, however; the theory of epistemic communities was essentially the elitist skeleton of functionalism. The transformative, explicitly normative ambition to produce a popular world community had been stripped away.

⁷⁵⁹ Indeed, the genealogy was biological as well as intellectual; the foremost theorist of epistemic communities, Peter Hass, was the son of the most sophisticated theorist of functionalism, Ernst Haas, and the intellectual evolution of functionalism into epistemic communities can be traced through their work. Cf. Ernst Haas, *Beyond the Nation-State: Functionalism and International Organization* (Stanford: Stanford University Press, 1964); Ernst Haas, "Is there a Hole in the Whole? Knowledge, Technology, Interdependence, and the Construction of International Regimes," *International Organization* 29: 3, 827-876; Emanuel Adler and Peter Haas, ed., *International Organization*, "Knowledge, Power, and International Policy Coordination" (Winter, 1992) 46: 1.

This scaled back ambition reflected reality. The international networks that connected experts intersected with national governments and international secretariats, but while the three UNs might be densely interwoven, no popular world community emerged. Indeed, even the ideal of such a world community lost its vividness. Ironically, popular anxiety over the manipulative power of social engineers contributed to the postwar rupture between intellectuals and the public, especially in the United States. But more fundamentally, decolonization and the Cold War assured that nationalism, not utopian dreams of world community, imbued the minds of men.

The technological strategy produced an intellectual community that articulated with no public. Perhaps this elitism was an inherent byproduct of cultivating cosmopolitan communities. But it was a weakness, nevertheless. Like a disembodied head, international experts could produce ever more convincing descriptions of an interdependent world facing global environmental, economic, and social crises, but they lacked the ability to act.⁷⁶⁰

Writing at the end of the first decade of the twenty-first century, my interest in idea of a world community—of “the intellectual and moral solidarity of mankind”—is historical. It seems to me the dream of another world entirely. I can analyze it, but, although I have tried, I cannot dream it. I doubt another sixty more years of globalization will help. Perhaps a Third World War—or a Martian invasion—would do the trick.

⁷⁶⁰ Compare to Claude Lefort, “The Image of the Body and Totalitarianism,” in *Political Forms of Modern Society* (Cambridge, 1986).

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