

**“More than Pawns in the Game of War”:
The Rockefeller Foundation, Council for
Foreign Relations, and Interwar Mineral
Internationalism**

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Abstract

This report is a preliminary attempt to plot the Rockefeller Foundation's connections to resource internationalism into a global history of interwar political economy. The Foundation channeled funds to think tanks, international organizations, and resource internationalists to help devise a peaceable solution to the raw materials problem. Here, I focus on the Council on Foreign Relations (CFR) and a group of economic geologists studying how mineral interdependence influenced international relations. One important outcome of the Rockefeller Foundation-CFR collaboration was the Mineral Inquiry of 1931-33, which had lasting effects on US resource policies.

“More than Pawns in the Game of War”: The Rockefeller Foundation, Council for Foreign Relations, and Interwar Mineral Internationalism¹

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Introduction

This report is a preliminary result of research conducted at the Rockefeller Archive Center (RAC), as part of my ongoing dissertation research. My dissertation, *Building Blocs: Raw Materials and the Global Economy in the Age of Disequilibrium*, charts a global history of interwar political economy through the lens of strategic raw materials—especially metallic minerals needed to make steel, like manganese and tungsten. There were no substitutes for either tungsten or manganese, but both were vital to the foundations of national security and prosperity—military and steel production. The problem, for industrialists and state officials alike, was that none of the industrialized powers possessed adequate domestic deposits. They depended completely on imports from faraway places. The structural condition of mineral interdependence, *Building Blocs* argues, helped drive the creation of hostile trading blocs between the World Wars, while shaping the form and structure of postwar spheres of influence and international institutions. I examine the political economy and geopolitics of tungsten and manganese, and how businesses and states navigated resource interdependence during a time of uncertainty, disequilibrium, and deglobalization.

The Rockefeller Foundation’s interwar work to promote public health, the social sciences, or US cultural diplomacy is well-known, but I am interested in its

connections to interwar resource internationalism. My findings at the RAC show how the Foundation actively funded the efforts of resource internationalists to devise a peaceable solution to the raw materials problem. The RAC's holdings helped me trace how funding was channeled to think tanks and international institutions which directed attention to the rivalries, anxieties, and conflicts engendered by uneven resource distribution and access. Here, I focus on the Council on Foreign Relations (CFR), which from its beginnings had a keen interest in how raw materials—and especially mineral resources—could influence international relations. The Rockefeller Foundation funded the CFR from its earliest days, providing a cadre of economists and geologists with resources to promote an internationalist solution to the raw materials problem.²

The Raw Materials Problem and Interwar Resource Interdependence

The crux of the interwar raw materials problem was that raw materials were unevenly distributed—some countries were relatively rich in them, others were relatively poor. Thus, the world was divided into “have” and “have-not” countries.³ The “haves” included those with colonial or mandatory territories and attendant access to markets and raw materials. The “have-nots” were those either without colonial territories or those perceived to be lacking in raw materials, and generally referred to Japan, Germany, and Italy. On the one hand, “have-nots” insisted that they needed colonies not only for resources, but as markets for their manufactured goods and outlets for excess population. On the other hand, internationalists of various stripes saw the problem in terms of trade and exchange restrictions—liberalized multilateralism and the Open Door, they suggested, could solve the problem of raw materials.

The raw materials problem was everywhere between the wars. The international press gave ample coverage to conferences and studies related to raw materials, and to the increasing bellicosity of countries decrying the injustice and injury caused by uneven resource distribution. International organizations, government

bureaucracies, and networks of geologists and economists spent considerable time, money, and effort studying the issue and exploring solutions. The League of Nations, for example, had been dealing with the issue of raw materials since its founding. At Versailles, there were hopes of subjecting raw materials to supranational control.⁴ The Italian draft for the League of Nations covenant, for example, pointed to the necessity for international control over foodstuffs and raw materials such that every country could secure what was necessary.⁵ The Italians also brought up the question at the League's first Assembly—after all, imperial competition over raw materials was, the delegate argued, one cause of the war.⁶ In response to a League Council resolution in October 1920, Italian economist Corrado Gini led a team of experts to tackle the raw materials problem, to understand the extent and causes of the problems countries were having importing raw materials. In Gini's opinion, most of the difficulties for countries in obtaining raw materials stemmed from the post-war disequilibrium and exchange rate fluctuation.⁷ Meanwhile, the committees of economic experts clustered around the League's Economic and Financial Organization championed multilateralism, the standardization of things like statistics and customs formalities, and the abolition of barriers to trade.⁸ Any time the issue of raw materials was raised at a League-sponsored conference, the recommendations were predictable: restoration of monetary stability (through the gold standard), dismantling tariffs and other barriers to trade, eliminating bilateral agreements, extending the Open Door through colonial territories, and generally making trade more free.⁹ To be sure, freer circulation of capital, goods, and labor were noble pursuits, but League members had different interests and there was little appetite for coordinated action.¹⁰

Interwar economic and geological experts recognized the dangers of resource interdependence in a world of rising economic nationalism. How could states and market actors manage economic disequilibrium, resource interdependence, and bids at self-sufficiency? A wide array of strategies was proposed and debated: liberalized trade; the extension of the Open Door; preferential trade agreements; colonial redistribution; and schemes for international control over raw materials based on the model of the Supreme Allied Council.¹¹ Most states responded with some form of intervention or protectionism, such as exchange controls, tariffs,

quotas, and stockpiling. Other responses included Japan's conquest of Manchuria, Italy's invasion of Abyssinia, and Germany's relentless demands for colonial territories.

The Council on Foreign Relations, Rockefeller Foundation, and Mineral Interdependence

“The Great War put mineral resources ‘on the map’,” proclaimed Director of the US Geological Survey George Otis Smith in early 1922. Smith was addressing a crowd of CFR members at the Hotel Astor in Times Square, where the nascent think tank had organized a conference to consider “Mineral Resources and their Distribution as Affecting International Relations.”¹² “Many people discovered the importance of mineral resources,” continued Smith, “and on that account, being myself one of those who was converted to the idea, we want all that enthusiasm of first converts to our faith spread to other folks.”¹³ Spreading the gospel of mineral interdependence became a cornerstone of the young CFR, which provided funding and a platform for a cadre of like-minded evangelists to proselytize through conferences, monographs, and the pages of *Foreign Affairs*. Minerals, they argued, formed “the foundations of power.”¹⁴ The problem was the profound mineral interdependence of nations. “Whether we call ourselves nationalists or internationalists,” said Smith, “we cannot avoid the world view.”¹⁵ The next speaker was Josiah Spurr, president of the Mining and Metallurgical Society of America, who articulated a single principle to guide mineral policy for the entire world: “Any restrictions, national or international, which interfere with the necessary searching of the earth are in principle undesirable.”¹⁶ Next up was Charles Leith. Leith was professor of geology at Wisconsin, advisor to Woodrow Wilson at the Paris Peace Conference, and chair of the Mining and Metallurgical Society Committee, which was formed to study postwar mineral policy. Leith went even further than Spurr, affirming that “countries that possessed raw mineral wealth, but could not use [it], had no right to tax unduly the industrial nations which must have this raw material.”¹⁷

The task for these internationalist economic geologists was figuring out how to manage resource interdependence amid the disequilibria engendered by the war. The unequal distribution of certain mineral resources around the world was widely regarded as a latent source of conflict—and the First World War had not resolved these tensions. The raw materials problem did, however, take on new dimensions. Resources needed to be sharply diverted from wartime to peacetime production, closed-off raw material sources could potentially be tapped once more, and belligerents turned attention to the urgent task of reconstruction. But the pre-war global trade and financial architecture were in shambles. Germany was saddled with onerous reparations payments, Britain and France were heavily indebted to the United States, and commodity prices plunged while trade imbalances worsened. Trade was throttled as governments raised tariffs in an attempt to raise revenue and stimulate domestic economies. Countries slowly returned to a gold standard between 1922 and 1926, but there was little coordination in how governments chose currency parities—some currencies, like the British pound sterling, were overvalued, while others, like the French franc, were undervalued.¹⁸ This had consequences for not only for competitiveness in foreign trade and trade imbalances, but for how “have not” countries might access minerals in foreign territories.

The CFR, from its early days, sponsored conferences, studies, and monographs devoted to the problem of raw materials—especially minerals.¹⁹ Not only was its first conference organized around these topics, the first of the CFR’s research publications focused on the mineral industries of South America and the Far East.²⁰ The CFR co-sponsored the policy-oriented Mineral Inquiry in 1931, and the pages of the its flagship publication, *Foreign Affairs*, were peppered with articles on the economic geology and international political economy of minerals and other raw materials.²¹ And it wasn’t just the CFR—the proceedings of the Institute of Pacific Relations, American Society of International Law, and Chatham House (Royal Institute of International Affairs) were filled with references to raw materials problems. Like the League of Nations, the International Labor Organization and International Chamber of Commerce also examined the problem of resource interdependence. Philanthropic organizations, like the Rockefeller Foundation, Carnegie Endowment for Peace, and the World

Peace Foundation supported research projects and conferences directed toward the political problem of raw materials.²² Generally, the preferred solution was to resuscitate ideas of free trade underpinned by the gold standard.²³ The old concept of *doux commerce* was alive, well, and repurposed. But the vision of these internationalists was often at odds with the reality they sought to transcend.

Leith had travelled to France as part of Woodrow Wilson's team of advisors negotiating the Treaty of Versailles.²⁴ The lesson he drew from those experiences framed the rest of his career, which he spent raising public awareness of resource interdependence and the impossibility of autarky. "No country," Leith argued again and again, "is entirely self-sustaining in its mineral requirements."²⁵ But in Paris, nation-statism dominated the proceedings—indeed, it nearly scuttled the League of Nations when the United States refused to support the Treaty of Versailles. Slicing imperial territories into political entities of singular nationality would, the peacemakers argued, be the building blocks of peace. Leith had other ideas. Indeed, he was dismayed as political entities were dismembered and reconfigured along perceived racial, linguistic, historical, and geographic lines, rather than industrial and commercial lines. "Needless loss and friction," Leith wrote, "might have been avoided if the distribution of raw materials and the industries based upon them had been taken into account when the terms of peace were settled."²⁶

Leith devoted himself to the problem of mineral interdependence. His proposals ranged from the restoration of nineteenth-century *laissez-faire* commerce to supranational control over the world's scarce mineral resources.²⁷ Similarly in Britain, several mineralogists set about examining the mineral resources of the Empire, in the hope "of finding the Empire to be self-contained."²⁸ "It is absolutely *essential*," wrote Thomas Holland, "to be sure that we can get access to supplies of the necessary ores." But prior to the war, "who thought it necessary to provide for the smelting of an inconspicuous metal like tungsten, either in Britain or in British territory?"²⁹ For Holland, Leith, and others, the lessons of the Great War revolved around resource security. Thomas Holland urged Whitehall to spearhead a comprehensive survey of the Dominions and the colonies to find out what minerals might be at London's disposal. Metal stockpiles would be needed

for national security concerns, and to prevent speculation-fueled price inflation.³⁰ These economic geologists had grasped the multidimensionality of “war minerals,” which created a hydra-headed problem for policymakers: extraction and metallurgy were one consideration; transport, trade, and finance were another; and diplomacy, military strategy, and national security constituted a third. But what would happen to war minerals when there was no war? Would they become “peace minerals,” or would they remain latent ores of war?³¹

Funding from bodies like the Rockefeller Foundation breathed life into the advocacy of economic geologists like Leith.³² One of his favored policy recommendations, though far-fetched, was to place strategic minerals under the jurisdiction of some supra-national entity. The “internationalization” of minerals was meant to protect weaker, “have-not” countries against those “better favored by nature.”³³ At the very least, he argued, the world needed better resource intelligence, more systematic geological surveying, and the Open Door extended to countries wishing to trade, explore, or exploit foreign minerals.³⁴ Across the ocean, Thomas Holland was exploring the logic of international trade in mineral resources. The uneven distribution of these deposits had profound political and economic implications. Mineral trade was international, but economic nationalism was choking off cross-border flows. If rivalries over raw materials were an underlying cause of war, then the trends of global commerce could exacerbate the problem. In 1929, Holland delivered his presidential address to the British Association in Johannesburg, where he and Jan Smuts arrived at the concept of a “mineral sanction.” The idea was premised on the inability of any country to obtain true industrial autarky, due to the far-flung, yet concentrated nature of mineral resources. If the English-speaking countries of the world withheld their mineral resources from a belligerent, or violator of the peace, then the would-be aggressor would not be able to wage war. Not only would a mineral sanction bypass the clunky and ineffective machinery of the League of Nations Article 16 (economic sanctions), it would avoid the unseemliness of starving innocent civilians through full-on economic sanctions.³⁵ Article 16 was, Holland wrote, an “ill equipped workshop that has no hammer available but a steam hammer, which the mechanics are afraid to use.”³⁶ Indeed, Leith and Holland were grounded in the reality of interwar geopolitics, fully alive to the problems of

global resource interdependence in a world that was being ordered into blocs.

The Mineral Inquiry

Into this context—and amid global depression—Leith proposed an internationalist investigation into the problem of mineral distribution and access. Chaired by Leith, the Mineral Inquiry brought economic geologists together to consolidate “comprehensive information upon natural resource problems of the world.”³⁷ The purpose was to not only bring the raw materials problem to light, but to demonstrate its bearing on public policy. The prolific Leith had recently published *World Minerals and World Politics*, in which he argued for a new perspective on mineral resources. The First World War had not only accelerated the consumption of steel-making ores, but also marked the first effort to take stock of mineral resources from a global perspective.³⁸ This work needed to continue. To these ends, Leith tapped representatives from the CFR, the Institute of Pacific Relations, the Brookings Institutions, and geological experts affiliated with the US Bureau of Mines, the Mining and Metallurgical Society of America, and the American Institute of Mining and Metallurgical Engineers.³⁹ The Inquiry examined questions related to political and commercial control of mineral sources, international movement of ores, closed-door versus open-door commercial measures, tariff policies, concessions, taxes and freight rates, conservation, nationalization, economic nationalism, the effect of mineral competition on peace, the effect of war on mineral competition, and the possibilities of framing a coordinated mineral policy for the United States.⁴⁰

The Rockefeller Foundation funded the Mineral Inquiry with \$15,000—over \$250,000 in today’s dollars.⁴¹ The Inquiry organized conferences, circulated papers, and ultimately published *Elements of a National Mineral Policy* and *The Nationality of Commercial Control of World Minerals*, both in 1933. The latter was an attempt to enumerate the world’s strategic mineral resources according to commercial, rather than territorial, control. The former advocated gradual adoption of the Open Door, reciprocal reduction of trade barriers, and the use of mineral resources to pay international debts. These were internationalist,

pacifying proposals. But the Inquiry also encouraged the US government to accumulate stocks of strategic minerals for national defense purposes.⁴²

The intractable questions of free trade versus protectionism and geopolitics versus internationalist cooperation circled the work of the Mineral Inquiry. The years 1931-1933 were, of course, an inauspicious time to be carrying out this work. Many members of the Inquiry felt that it was not able to adequately function.⁴³ Tariff barriers were built up, not dismantled, including the infamous Smoot-Hawley Tariff of 1930 and the promulgation of Imperial Preference at the Ottawa Conference of 1932. Bids at autarkic autonomy were radicalized in Japan, Italy, and Germany.⁴⁴ Leith could not escape the fundamental problem of resource interdependence. Surely, he believed, the territorial concentrations of key industrial minerals like tungsten, manganese, and chrome would push the world toward commercial and industrial cooperation, which would require the dismantling of political barriers.⁴⁵ But instead of cooperation, resource interdependence prompted economic nationalism. Resisting calls for internationalist cooperation in the realm of raw materials entangled business and state interests pushed alternative solutions. Cooperation disintegrated, and the world splintered into hostile trading blocs.

Conclusions

The work of the Mineral Inquiry—and the network of economic geologists clustered around it—found some influence in the Roosevelt administration. CFR members, many of whom had been active in the work of the Mineral Inquiry—like Isaiah Bowman and Herbert Feis—helped shape US commercial policy in the New Deal era. Leith, too, enjoyed newfound access to government channels.⁴⁶ “The ideas we are now working on in Washington,” Leith reported, “have evolved more or less directly out of the efforts of [the Mineral Inquiry] in New York.” Roosevelt had appointed a Planning Committee for Mineral Policy, of which Secretary of the Interior Harold Ickes was chair. Leith was the vice-chair. The same committee also served as the Mineral Section of the National Resources Board. Ickes was no mineralogist—Leith carried the load.⁴⁷

To be sure, the Rockefeller Foundation and CFR are better known for their collaboration in the War and Peace Studies during the Second World War than for their work on mineral interdependence through the 1920s and 1930s. But this spadework, and the interwar experiences of economic nationalism and bids at autarky, can help us understand how and why the idea of a postwar “Grand Area” and the notion of sustained US military supremacy gained currency among postwar planners and policymakers.⁴⁸ The Rockefeller Foundation played an important role in promoting the “scientific” study of international relations between the wars. The money channeled to various think tanks and internationalist endeavors turned the Foundation into an agent of new internationalisms.⁴⁹ Indeed, the Rockefellers were internationalists in their business and philanthropic outlooks. The world was interdependent, and according to the Rockefeller worldview, prosperity depended on a secure peace and liberalized trade policies.⁵⁰ Although the RAC was a secondary archive for my research, it has helped me connect dots among the worlds of philanthropy and business on the one hand, and internationalism and geopolitics on the other.

¹ George Otis Smith, *The Strategy of Minerals: A Study of the Mineral Factor in the World Position of America in War and in Peace* (New York, London: D. Appleton and Company, 1919), vii.

² The Rockefeller Foundation and Carnegie Corporation both pledged substantial sums to the CFR. The Rockefeller Foundation (including the Laura Spelman Rockefeller Memorial) pledged over \$490,000 to the CFR’s research programs between 1928 and 1941. By 1942, over \$150,000 of that had been earmarked for the War and Peace Studies, with more money on the way—\$313,900 was ultimately contributed by the Foundation for the War and Peace Studies (roughly \$5 million in 2019 dollars). By 1946, the total appropriations for Council research programs totaled \$835,900. See Inderjeet Parmar, “The Issue of State Power: The Council on Foreign Relations as a Case Study,” *Journal of American Studies* 29, no. 1 (1995): 73–95; Inderjeet Parmar, *Think Tanks and Power in Foreign Policy: A Comparative Study of the Role and Influence of the Council on Foreign Relations and the Royal Institute of International Affairs, 1939-1945* (New York: Palgrave Macmillan, 2004), 4; Stephen Wertheim, *Tomorrow, the World: The Birth of U.S. Global Supremacy* (Cambridge, MA: Belknap Press, 2020); see also the records in Rockefeller Archive Center, Sleepy Hollow, New York (hereafter RAC), RG 1.1, Series 100, Council on Foreign Relations, 1932-33, Box 96, Folder 871.

³ This language was a common shorthand to refer to specific countries, and it was widespread—the terms “haves” and “have-nots” were used in international forums, publications, and speeches all over the world. “Haves” generally referred to the Britain, the United States, France, the Netherlands, and sometimes to the Soviet Union. “Have-

not” countries referred most commonly to Germany, Italy, and Japan—but these were also often referred to as “dissatisfied” or “complainant” countries. The “have/have-not” terminology was also contested, and usually appeared in scarce quotes, which I have also replicated here.

⁴ Adam Tooze and Ted Fertik, “The World Economy and the Great War,” *Geschichte Und Gesellschaft* 40, no. 2 (2014): 230; Roy MacLeod, “‘The Mineral Sanction’: The Great War and the Strategic Role of Natural Resources,” in *Environmental Histories of the First World War*, ed. Richard P. Tucker et al. (New York: Cambridge University Press, 2018), 99–116.

⁵ Royal Institute of International Affairs, *Raw Materials and Colonies* (London: The Royal Institute of International Affairs, 1936), 55.

⁶ C. K. Leith, *World Minerals and World Politics: A Factual Study of Minerals in Their Political and International Relations* (New York: Whittlesey House, 1931), 59.

⁷ Corrado Gini, *Report on the Problem of Raw Materials and Foodstuffs*, 8-10.

Gini’s study was neither the first expression of raw materials anxieties, nor was it the first study of its kind. Gini’s report was preceded by several other inquiries, including a Raw Materials Committee at the Paris Peace Conference, consideration from the Supreme Economic Council in 1919, and the International Labor Conference in 1920. The resolution indicated that the study should give special focus to the role of monopolies in exacerbating the problems, but monopolies are mostly dismissed by Gini. The committee’s work did not get off to a running start—the questionnaires it sent out came back late and incomplete, if they were returned at all. New questionnaires were prepared and sent, and Gini was quickly convinced that a competent report could not rely on the skimpy information the questionnaires obtained. Gini hit the road, visiting fifteen countries in Europe.

⁸ For a comprehensive survey of the League’s economic and financial work, see Patricia Clavin, *Securing the World Economy: The Reinvention of the League of Nations, 1920-1946* (New York: Oxford University Press, 2013); Scholars have recently returned to the notion that the League’s technical work was its most successful and enduring. The Economic and Financial Organization is only one example of this. See, for example James R. Martin, “Experts of the World Economy: European Stabilization and the Reshaping of International Order, 1916-51” (Dissertation, Cambridge, MA, Harvard University, 2016); Susan Pedersen, “Back to the League of Nations,” *The American Historical Review* 112, no. 4 (2007): 1091–1117; Johan Schot and Vincent Lagendijk, “Technocratic Internationalism in the Interwar Years: Building Europe on Motorways and Electricity Networks,” *Internationalisme Technocratique Pendant l’entre-Deux-Guerres: La Construction d’Europe Par Des Autoroutes et Des Réseaux Électriques*. 6, no. 2 (September 2008): 196–217; Clara E. Mattei, “The Guardians of Capitalism: International Consensus and the Technocratic Implementation of Austerity,” *Journal of Law and Society* 44, no. 1 (2017): 10–31; Daniel Gorman, *The Emergence of International Society in the 1920s* (New York: Cambridge University Press, 2012); Mark Mazower, *Governing the World: The History of an Idea* (New York: Penguin, 2012).

⁹ The Open Door is basically trade policy that doesn’t discriminate - there can be no discriminatory tariffs, quotas, or monopolies, and all people must have the same opportunity to enter and work in a country. It does not imply the absence of tariffs.

¹⁰ To cite just one example, as late as 1937, the League was still offering up the same platitudes. See League of Nations, *Report of the Committee for the Study of the Problem of Raw Materials* (Geneva: League of Nations, 1937).

¹¹ Royal Institute of International Affairs, *Raw Materials and Colonies*.; Carnegie Endowment for International Peace, *Colonies et matières premières* (Paris: Centre européen de la Dotation Carnegie, Division des relations internationales et de l'éducation, 1938); Michael A. Heilperin, *The Monetary Aspect of the Raw Materials Problem and the Revival of International Trade* (Paris: International Institute of Intellectual Co-operation, League of Nations, 1938); League of Nations., *International Trade in Certain Raw Materials and Foodstuffs by Countries of Origin and Consumption, 1936*. (Geneva: League of Nations, 1937); William Oualid and Laurence Ballande, *International Raw Materials Cartels; Causes, Effects, Regulation* (Paris: International Institute of Intellectual Co-operation, League of Nations, 1938); International Studies Conference, *Peaceful Change: Procedures, Population, Raw Materials, Colonies. Proceedings of the Tenth International Studies Conference, Paris, June 28-July 3, 1937* (Paris: International Institute of Intellectual Co-operation, League of Nations, 1938); Leith, Bain, and Marshall, *Elements of a National Mineral Policy*; Wallace and Edminster, *International Control of Raw Materials*; William S. Culbertson, "Raw Materials and Foodstuffs in the Commercial Policies of Nations," *The Annals of the American Academy of Political and Social Science* 112, no. 1 (1924): 1–147; Eugene Staley, *Raw Materials in Peace and War* (New York: Council on Foreign Relations, 1937). This is not an exhaustive list, but an indicative list.

¹² Council on Foreign Relations, *Conference of the Council on Foreign Relations: Mineral Resources and Their Distribution as Affecting International Relations* (New York: William C. Grace for the Council on Foreign Relations, 1922), 5.

¹³ *Ibid.*

¹⁴ *Ibid.*, 6.

¹⁵ *Ibid.*, 10.

¹⁶ *Ibid.*, 20.

¹⁷ *Ibid.*, 21.

¹⁸ C. H. Feinstein, Peter Temin, and Gianni Toniolo, *The World Economy between the World Wars* (New York: Oxford University Press, 2008); Barry J. Eichengreen, *Golden Fetters: The Gold Standard and the Great Depression, 1919-1939* (New York: Oxford University Press, 1992); Robert Boyce, *The Great Interwar Crisis and the Collapse of Globalization*; Charles Poor Kindleberger, *The World in Depression, 1929-1939* (Berkeley: University of California Press, 1986); Adam Tooze, *The Deluge: The Great War and the Remaking of Global Order, 1916-1931* (New York: Penguin, 2014).

¹⁹ The very first research program carried out by the Council for Foreign Relations was on the geopolitical significance of minerals. In 1922, the CFR convened a conference in New York on the subject of "Mineral Resources and their Distribution as Affecting International Relations." Council on Foreign Relations, *Conference of the Council on Foreign Relations: Mineral Resources and Their Distribution as Affecting International Relations* (New York: William C. Grace for the Council on Foreign Relations, 1922).

²⁰ Harry Foster Bain, *Ores and Industry in the Far East: The Influence of Key Mineral Resources on the Development of Oriental Civilization*, 2nd ed. (New York: Council on Foreign Relations, 1933); Thomas Thornton Read and Harry Foster Bain, *Ores and Industry in South America*, Publications of the Council on Foreign Relations (New York: Published for the Council on Foreign Relations by Harper & Brothers, 1934).

²¹ See, for example, Leith, "The Political Control of Mineral Resources"; Spurr, "Steel-Making Minerals"; H. Foster Bain, "World Mineral Production and Control," *Foreign Affairs* 11, no. 4 (1933): 706–10; Leith, "Mineral Resources and Peace"; Jacob Viner, "National Monopolies of Raw Materials," *Foreign Affairs* 4, no. 4 (1926): 585–600;

Herbert Feis, "Raw Materials and Foreign Policy," *Foreign Affairs* 16, no. 4 (1938): 574–86.

²² See, for example: Brooks Emeny, *The Strategy of Raw Materials: A Study of America in Peace and War*, ed. J. Edward Ely (New York: Macmillan, 1934); C. K. Leith, H. Foster Bain, and S.M. Marshall, eds., *Elements of a National Mineral Policy* (New York, 1933); James Wilson Furness and Lucy Marshall Jones, *Mineral Raw Materials: Survey of Commerce and Sources in Major Industrial Countries* (Washington: United States Government Printing Office, 1929); C. Minot Weld, *Manganese for National Defense: Report of Subcommittee on Manganese* (New York: American Institute of Mining and Metallurgical Engineers, 1933); William P. Rawles, *The Nationality of Commercial Control of World Minerals* (New York: American Institute of Mining and Metallurgical Engineers, 1933); *International Conciliation* 15 (1933 1932); George Otis Smith, *The Strategy of Minerals: A Study of the Mineral Factor in the World Position of America in War and in Peace* (New York, London: D. Appleton and company, 1919); Inter-parliamentary Union, *What Would Be the Character of a New War? Enquiry Organised by the Inter-Parliamentary Union* (London: P.S. King & Son, 1931); Culbertson, "Raw Materials and Foodstuffs in the Commercial Policies of Nations." This is only an indicative list, it's far from comprehensive.

²³ In one of the League's final publications, issued after the Second World War, the answer was the same: "There would be few difficult problems of this kind—and none insoluble—in an expansive world economy sustaining a large and stable flow of commodities." Eugene Staley and K.E. Knorr, *Raw Material Problems and Policies* (Geneva: League of Nations, 1946), 108.

²⁴ D.F. Hewett, *Charles Kenneth Leith, 1875-1956: A Biographical Memoir* (Washington, D.C.: National Academy of Sciences, 1959). Leith had cut his political teeth serving as a mineral advisor to the War Industries Board and Shipping Board during the war.

²⁵ C.K. Leith, "International Control of Minerals," in *Mineral Resources of the United States, 1917: Part I, Metals*, ed. US Geological Survey (Washington: Government Printing Office, 1921), 7A-16A.

²⁶ Leith, *World Minerals and World Politics: A Factual Study of Minerals in Their Political and International Relations*, 59.

²⁷ Leith, "International Control of Minerals," 8A.

²⁸ Thomas H. Holland, "International Movement of Mineral Products in Peace and War," *Journal of the Royal Society of Arts* 78, no. 4030 (1930): 375. Emphasis in original.

²⁹ Thomas H. Holland, "Proposed Review of the Mineral Resources and Industries of the Empire, and the Conditions Affecting Their Development," *Transactions of the Institution of Mining and Metallurgy* 36 (1927): 402, 402–3. Emphasis in original.

³⁰ *Ibid.*, 405.

³¹ Charles K. Leith, "'War Minerals' as a Science," *Economic Geology* 13, no. 7 (1918): 497–99.

³² Leith ended up at the Paris Peace Conference in 1919. An advisor to the American delegation on matters of mineral supply and access, Leith was soon frustrated by the lack of attention given to managing resource interdependence during peaceful times. Leith left with a conviction to "educate the world to an internationalist viewpoint" about the dangers of resource exhaustion and insecurity. Quoted in Alfred E. Eckes, *The United States and the Global Struggle for Minerals* (Austin: University of Texas Press, 1979), 24.

³³ C. K. Leith, "The Political Control of Mineral Resources," *Foreign Affairs* 3, no. 4 (1925): 552–53.

³⁴ Charles K. Leith, *The Economic Aspects of Geology* (New York: H. Holt and Company, 1921).

³⁵ Holland, “International Movement of Mineral Products in Peace and War”; Thomas Henry Holland, *The Mineral Sanction as an Aid to International Security* (London: Oliver and Boyd, 1935); Thomas H. Holland, “The Mineral Sanction As a Contribution to International Security,” *International Affairs (Royal Institute of International Affairs 1931-1939)* 15, no. 5 (1936): 735–52.

³⁶ Holland, *The Mineral Sanction as an Aid to International Security*, 9.

³⁷ RAC, RF, RG 1.1, Series 100, Mineral Inquiry—Historical Record, 20 March 1931.

³⁸ Leith, *World Minerals and World Politics: A Factual Study of Minerals in Their Political and International Relations*.

³⁹ H. Foster Bain to Edmund Day, 2 January 1931, RAC, RF, RG 1.1, Series 100, Folder 1031.

⁴⁰ Leith, Bain, and Marshall, *Elements of a National Mineral Policy*, 1–3.

With Rockefeller money, the CFR had already produced a number of monographs on the subjects of strategic raw materials and mineral ores. When its research program was established at the end of the CFR’s first five-year period, its first foray was on the topic of mineral resources of the Far East. In an interview with Edwin Gay, he recalled receiving word about a “confidential mission” to survey Far Eastern mineral resource. The mission was sponsored and financed by a group of businessmen looking for investment opportunities. Led by H. Foster Bain, and sponsored by the New York Orient Mines Company, the survey’s results did not warrant the large-scale investment anticipated by the financiers. Gay was able to get his hands on the report, and financed the writing of the Council’s first research monograph, *Ores and Industry in the Far East*, written by Bain, published in 1927, and re-issued in 1933.

⁴¹ RAC, RF, RG 1.1, Series 100, Mineral Inquiry—Historical Record, 20 March 1931, Folder 1031. Prior to approving the grant, the Foundation sought the opinions of external experts to weigh in on the value of Leith’s research. The responses were glowing in their appraisals of Leith and his team, and adamant about the importance of minerals to international relations. See especially responses from Charles P. Howland and James Shotwell to Sydnor H. Walker’s inquiry on February 5, 1931, RAC, RF, RG 1.1, Series 100, Mineral Inquiry—Historical Record, Folder 1031. The Rockefeller Foundation funded other investigations into raw material supplies and prices. Another notable example was the work of Hermann Schumacher, a leading German economic historian. His project involved the study of raw material prices amid the Great Depression. It was “obvious” to the Foundation’s officers that the catastrophic collapse in prices had further confused prevailing international relations. By 1934, Schumacher had completed studies on a range of raw materials, including oil, coal, and wheat, and studies on copper, aluminum, iron, and steel were underway. Research Aid Grants, 27 March 1934, RAC, RF, RG 1.1, Series 300, Schumacher, H. (Raw Materials Studies), Box 21, Folder 190.

⁴² Leith, Bain, and Marshall, *Elements of a National Mineral Policy*, 4–22.

⁴³ Thomas T. Read to Isaiah Bowman, 10 July 1942, Seeley-Mudd Library, Princeton University, Records of the Council of Foreign Relations (CFR), MC104, Series 2: Administration, Box 33, folder 4.

⁴⁴ Nicholas Mulder, “The Economic Weapon: Interwar Internationalism and the Rise of Sanctions, 1914-1945” (PhD Diss., New York, Columbia University, 2019).

⁴⁵ Leith, *World Minerals and World Politics: A Factual Study of Minerals in Their Political and International Relations*, 61–63.

⁴⁶ Tyler Priest, *Global Gambits: Big Steel and the U.S. Quest for Manganese* (Westport, CT: Praeger, 2003), 126–34.

⁴⁷ Leith to Executive Director of CFR, 21 May 1935, quoted in Research Activities of the Council on Foreign Relations, 1932-1935, November 1935, RAC, RF, RG 1.1, Series 100, Council on Foreign Relations, 1934-35, Box 96, Folder 872.

⁴⁸ For a recent, compelling argument about the origins of US supremacy and the role of the foreign policy elite, see Wertheim, *Tomorrow, the World*.

⁴⁹ K. E. Rietzler, “American Foundations and the ‘Scientific Study’ of International Relations in Europe, 1910-1940” (Dissertation, UCL (University College London), 2009).

⁵⁰ Arthur Ruhl, “Rockefellers, Inc.—Internationalists,” *The Survey* LIV, no. 1 (April 1, 1925), in RAC, Rockefeller Family archives, Office of the Messrs. Rockefeller, Series T: Public Relations, RG 2, Box 1, Folder 7.