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ARTICLE

American Demographers and Global Population Policy in the Postwar World

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The twentieth century saw unprecedented efforts to measure, analyze, and control the world's population. Particularly after World War II, population control and demography—the social science of human population dynamics—developed in tandem and largely through the impetus of U.S.-based philanthropies. This article explains how U.S. actors exercised power over population in sovereign nations throughout the Global South and how demographic theory came to shape population policy worldwide. It contends that U.S.-based philanthropies gained global traction for their population control projects by developing demography as an ally and then leveraging its scientific authority to put population control on the foreign policy agenda of the U.S. government and on the nation-building and economic development agendas of countries in the Global South.

In the twentieth century, Americans began to understand the world and its challenges in terms of population. Though the concept had emerged much earlier, only in the twentieth century did anticolonial nationalism and the global spread of census-making transform all of the world's people into members of national populations that together constituted a global population. U.S. philanthropists, businessmen, and diplomats began to see in national and global population dynamics—whether growth, decline, or imbalance—a threat to the country's economic hegemony and national security. Their anxieties fueled the rapid growth of demography—the social science of human population—funding the establishment of population research and training centers at universities in the United States and overseas. Aiming to stem the tide of population growth, nongovernmental organizations based primarily in the United States leveraged demographic research to legitimate the establishment of family planning programs throughout the Global South in the 1950s; over the next decade, a number of governments in Africa, Asia, and Latin America promulgated their own policies aimed at reducing birth rates.

Most efforts to shape population originated outside of governments, pursued—as Matthew Connelly has shown—by "a constellation of public and private agencies," primarily from the United States, that did not "hav[e] to answer to anyone in particular." This article shows how, in a decolonizing world increasingly organized on the basis of national sovereignty, private U.S. actors, and eventually the U.S. government, called on the power of science—demography—to control populations across international borders. It demonstrates that U.S.-based nongovernmental organizations, primarily the Population Council and the Rockefeller and

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¹Matthew Connelly, "Seeing Beyond the State: The Population Control Movement and the Problem of Sovereignty," *Past & Present* 193 (Nov. 2006): 197–233, here 202.

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Ford Foundations, promoted the rapid growth of demography in order to put their population control projects on the foreign policy agenda of the U.S. government and on the nation-building and economic development agendas of countries in the Global South.

This argument disrupts the linear narrative that implicitly structures most existing histories, namely that population control programs responded to clear evidence from demography that rapid population growth posed a danger to the economic development of individual countries and the environmental integrity of the world as a whole. Instead, ideas of overpopulation originated outside of demography, with demographic research following but never providing more than ambivalent support for population control. It was therefore less the content of the science and more the way in which U.S. businessmen and philanthropists promoted, framed, and communicated it that facilitated the operation of U.S. power beyond U.S. borders.

Existing histories of population control document what population control agencies did on the ground.³ This article examines how those agencies marshaled demography to legitimate their activities and to enlist the participation of the U.S. government and of governments in target countries throughout the Global South. Histories of demography have recognized the field's personal and institutional connections to eugenics in the first half of the twentieth century and have suggested that demographers adapted their theoretical models to serve the needs of population control in the second half of the century.⁴ However, their authors too frequently assume that population data transparently revealed rapid growth and that population growth necessarily signaled overpopulation. Feminist scholars have expressed more skepticism about the concept of overpopulation, recognizing that such claims typically attribute the world's problems to its most vulnerable citizens, poor and nonwhite women.⁵ They often hesitate, however, to critique the demographic underpinnings of overpopulation, leaving room for its recovery as a meaningful concept.⁶ Feminist scholarship that does reveal demography's complicity in population control has not yet accounted for the field's power to project its vision onto the world.⁷

This article draws on archival research in the papers of U.S. demographers, their private patrons, and the United Nations, and on oral history interviews with demographers and population controllers conducted over the past fifty years.⁸ It proceeds in three sections. The first documents the interwar development of demography in the United States, arguing that the

²Matthew Connelly, Fatal Misconception: The Struggle to Control World Population (Cambridge, MA, 2008); Alison Bashford, Global Population: History, Geopolitics, and Life on Earth (New York, 2014); Derek S. Hoff, The State and the Stork: The Population Debate and Policy Making in U.S. History (Chicago, 2012); Thomas Robertson, The Malthusian Moment: Global Population Growth and the Birth of American Environmentalism (New Brunswick, NJ, 2012).

³Connelly, Fatal Misconception; Betsy Hartmann, Reproductive Rights and Wrongs: The Global Politics of Population Control (Boston, 1995).

⁴Dennis Hodgson, "Demography as Social Science and Policy Science," *Population and Development Review* 9, no. 1 (Mar. 1983): 1–34; Dennis Hodgson, "Orthodoxy and Revisionism in American Demography," *Population and Development Review* 14, no. 4 (Dec. 1988): 541–69; Dennis Hodgson, "The Ideological Origins of the Population Association of America," *Population and Development Review* 17, no. 1 (Mar. 1991): 1–34; Simon Szreter, "The Idea of Demographic Transition and the Study of Fertility Change: A Critical Intellectual History," *Population and Development Review* 19, no. 4 (Dec. 1993): 659–701; Susan Greenhalgh, "The Social Construction of Population Science: An Intellectual, Institutional, and Political History of Twentieth-Century Demography," *Comparative Studies in Society and History* 38, no. 1 (Jan. 1996): 26–66.

⁵Jade S. Sasser, On Infertile Ground: Population Control and Women's Rights in the Era of Climate Change (New York, 2018); Michelle Murphy, The Economization of Life (Durham, NC, 2017).

⁶Adele E. Clarke and Donna Haraway, eds., Making Kin not Population (Chicago, 2018).

⁷Carole R. McCann, Figuring the Population Bomb: Gender and Demography in the Mid-Twentieth Century (Seattle, 2017); Agnes Riedmann, Science that Colonizes: A Critique of Fertility Studies in Africa (Philadelphia, 1993).

⁸These interviews are published in Jean van der Tak, ed., *Demographic Destinies: Interviews with Presidents and Secretary-Treasurers of the Population Association of America* (Washington, DC, 2005).

field's agenda was shaped by the needs of its patrons: private philanthropies and the New Deal welfare state. The second section examines how demography's postwar patrons internationalized the field. It documents the construction of the idea of global overpopulation, revealing that it originated outside of demography, among American businessmen, philanthropists, and diplomats who viewed population growth in the Global South as a threat to U.S. global economic hegemony and national security. It also demonstrates that, through the patronage of these actors for demography, demographers became complicit in promoting the idea of overpopulation to the U.S. government and integrating population control into the country's foreign policy portfolio. The third section explores how U.S.-based philanthropies fostered the growth of demography in the United States and used it as a vehicle to promote population control as a key element of nation-building and economic development in the Global South, leading many developing countries to fund family planning programs aimed at slowing population growth. What emerges from this history is a story about how U.S.-based nongovernmental organizations used science to mobilize the U.S. government and sovereign governments worldwide in the second half of the twentieth century in support of their own agendas.

Demography in the United States

Demography coalesced as a scientific endeavor in the United States between the world wars, when biologists, statisticians, sociologists, and economists began to use their expertise to advocate for and against such population-related political projects as immigration restriction, eugenics, and birth control legalization. The field began as an uneasy coalition that tenuously bridged opposing political views, but by the mid-1930s, most of the scientists who identified as demographers espoused birth control legalization as a vehicle for eugenics and eschewed the intra-European racism that had underpinned calls to restrict immigration. These scientists never discussed what they meant by "population," implicitly defining a population as any human aggregate for which data existed. Because they relied on data produced by governments, the populations with which they worked followed political and administrative boundaries: countries, states, counties, and cities. Analysts could also subdivide populations into whatever categories structured the data. In the United States, the census classified people by race and nativity, both highly politicized categories that were central to social scientific analysis. 1

Demography's patrons, each with their own motives, played as much of a role in the development of the field and the establishment of its interdisciplinary institutions as did demographers themselves. In 1922, newspaper magnate Edward Scripps created the country's first population research center at Miami University in Ohio. 12 Having recently traveled to Asia, where he attributed the dire poverty he witnessed to overpopulation, Scripps worried that

⁹Emily Klancher Merchant, "A Digital History of Anglophone Demography and Global Population Control, 1915–1984," *Population and Development Review* 43, no. 1 (Mar. 2017): 83–117.

¹⁰For the uneasy coalition, see Hodgson, "Ideological Origins of the Population Association of America." For the "social eugenics" of demography, see Edmund Ramsden, "Carving Up Population Science: Eugenics, Demography and the Controversy over the 'Biological Law' of Population Growth," *Social Studies of Science* 32, nos. 5/6 (Oct.–Dec. 2002): 857–99.

¹¹For instance, see P. K. Whelpton, "Population of the United States, 1925 to 1975," American Journal of Sociology 34, no. 2 (Sept. 1928): 253–70. For a history of the politics of census classifications in the United States, see Paul Schor, Counting Americans: How the U.S. Census Classified the Nation (New York, 2017). For the politics of census classifications in other countries, see Mara Loveman, National Colors: Racial Classification and the State in Latin America (New York, 2014); Melissa Nobles, Shades of Citizenship: Race and the Census in Modern Politics (Stanford, CA, 2000); and Francine Hirsch, "The Soviet Union as a Work-in-Progress: Ethnographers and the Category Nationality in the 1926, 1937, and 1939 Censuses," Slavic Review 56, no. 2 (Summer 1997): 251–78.

¹²Mike Payne, Scripps Gerontology Center: A Legacy of Leadership (A History of the Scripps Gerontology Center) (Oxford, OH, 2005).

population growth would generate extreme poverty in the United States as well. He hired scientists to address the issue before it was too late. In 1928, following Scripps's death, the Milbank Memorial Fund, a public-health-oriented charity based in New York, became demography's primary sponsor. Its leaders hoped that including the distribution of birth control in the Fund's public health efforts would reduce the rate of poverty by reducing the number of people born into poverty. Birth control was still controversial, however, and there was little empirical evidence to suggest that it prevented even conception, much less poverty. In hopes of producing such evidence, the Fund sponsored the establishment of the Population Association of America (PAA—demography's professional organization in the United States), *Population Literature* (the first journal devoted to population science, now titled *Population Index*), and the Office of Population Research at Princeton University (OPR—the first demography graduate training program in the United States). ¹³

Early demographers hailed from a variety of institutional and disciplinary origins. The PAA exhibited the most diversity, including statisticians Alfred Lotka and Louis Dublin from the Metropolitan Life Insurance Company; sociologist Warren Thompson and agricultural economist Pascal Kidder Whelpton of the Scripps Foundation; Johns Hopkins University biologists Raymond Pearl and Lowell Reed; and eugenicists Frederick Osborn and Frank Lorimer. OPR was less diverse. Directed by Frank Notestein, a young economist, it included sociologists Dudley Kirk and Irene Taeuber, and trained a steady trickle of economics graduate students —most recruited from the Census Bureau—who received generous fellowships from Milbank.

The disciplinary heterogeneity that characterized the PAA extended to the theoretical approaches its scientists took to human population. While some understood population in Malthusian terms, others viewed population through an older mercantilist lens. ¹⁴ In his 1798 Essay on the Principle of Population, Thomas Malthus contended that inevitable imbalances between food supply and population would doom those who could not control their sexuality to a life of poverty and misery. ¹⁵ Though influential, this theory never fully displaced the reigning mercantilist perspective, which conceived of population growth as the primary source of a country's economic dynamism and geopolitical strength. ¹⁶ Malthusian and mercantilist thought co-existed comfortably across the nineteenth century, with most Americans and Western Europeans viewing large families as the source of both individual poverty and national power. ¹⁷

Malthusianism and mercantilism began to chafe against one another at the beginning of the twentieth century. By that point, the limits of Earth's capacity to support humanity had become apparent, and Malthusians began to argue that the world's human population would soon reach a breaking point. The solutions they recommended, however, focused no more on reducing population *quantity* than on increasing what contemporaries termed population *quality*: the proportion of a country's population that was white as opposed to nonwhite, nativeborn as opposed to foreign-born, educated as opposed to uneducated, and middle-class or wealthy as opposed to poor. The term "population quality" signaled eugenics, and supporters of such eugenic policies as immigration restriction and sterilization of and birth control for the

¹³Clyde V. Kiser, "The Work of the Milbank Memorial Fund in Population since 1928," *Milbank Memorial Fund Quarterly* 49, no. 4 (Oct. 1971): 15–66.

¹⁴For an in-depth discussion of mercantilism and Malthusianism, see Barbara A. Anderson, *World Population Dynamics: An Introduction to Demography* (Boston, 2015), 8–9.

¹⁵Thomas Robert Malthus, An Essay on the Principle of Population (London, 1798); subsequent editions were published in 1803, 1806, 1807, 1817, and 1826.

¹⁶David V. Glass, Numbering the People: The Eighteenth-Century Population Controversy and the Development of Census and Vital Statistics in Britain (New York, 1973).

¹⁷For instance, see T. H. Marshall, *The Population Problem: The Experts and the Public* (London, 1938).

¹⁸Bashford, Global Population; Connelly, Fatal Misconception.

poor often presented their programs as solutions to Malthusian problems.¹⁹ Mercantilists, though no less enthusiastic about eugenics, saw the imbalance between people and food as a local problem specific to densely settled parts of Europe and Asia. They worried that food scarcity would inspire countries in these regions to leverage the geopolitical power generated by their large populations to forcibly seize territory in less densely settled regions.²⁰

Although the PAA initially included scientists from both Malthusian and mercantilist camps, the work of younger and quantitatively oriented social scientists came to predominate. Their new mathematical approaches, developed by Lotka at MetLife and readily adopted by Thompson and Whelpton at Scripps and by Notestein and his students at OPR, promoted a mercantilist view of population. They demonstrated that, although national populations continued to grow in the aggregate in North America and Western Europe, birth rates had fallen, signaling an imminent slowing of the rate of population growth.²¹ At the same time, growth rates were increasing in the countries of Southern and Eastern Europe and South and East Asia due to falling death rates, portending an imminent shift in the global balance of power. These findings alarmed American demographers, set off a depopulation panic in the UK, and stimulated the passage of pronatalist policies in France and Italy.²² They also inspired family planning programs throughout the British Empire, which aimed at limiting population growth in the colonies so as to preserve metropolitan power.²³ In 1929 Warren Thompson even proposed the redistribution of land from countries with slower population growth rates to those with more rapid population growth rates as a way to head off the next world war.²⁴

Demography grew and gained public legitimacy during the Great Depression, when the U.S. government turned for advice to quantitative social scientists, especially demographers. The United States had carried out decennial censuses since 1790 for the purpose of apportioning Congressional representation.²⁵ As the federal government increased its responsibility for stimulating economic growth and ensuring social welfare in the 1930s, planners and policy makers sought information, not only about how many people lived in the country at a given moment, but also about how many people to expect in the near future. The Hoover Administration's landmark 1933 study, *Recent Social Trends*, included a volume on population trends authored by Thompson and Whelpton, and the U.S. government requested regular forecasts of future population change from the Scripps Foundation throughout the 1930s.²⁶ The New Deal state hired demographers into existing agencies, such as the Bureau of the Census

¹⁹For instance, see Edward M. East, *Mankind at the Crossroads* (New York, 1923); and Raymond Pearl, "World Overcrowding: Saturation Point for Earth's Population Soon Will Be in Sight, with the Safety Limit for United States Estimated at 200,000,000 People—How the Nations Grow," *New York Times*, Oct. 8, 1922, 96. For more on eugenics in the United States, see Alexandra Minna Stern, *Eugenic Nation: Faults and Frontiers of Better Breeding in Modern America* (Berkeley, CA, 2005); and Daniel Kevles, *In the Name of Eugenics: Genetics and the Uses of Human Heredity* (New York, 1985).

²⁰Warren S. Thompson, Danger Spots in World Population (New York, 1929).

²¹Louis I. Dublin and Alfred J. Lotka, "On the True Rate of Natural Increase," *Journal of the American Statistical Association* 20, no. 151 (Sept. 1925): 305–39.

²²Louis I. Dublin, "The Outlook for the American Birth-Rate," in *Problems of Population: Being the Report of the Proceedings of the Second General Assembly of the International Union for the Scientific Investigation of Population Problems*, ed. G. H. L. F. Pitt-Rivers (London, 1932), 115–24; Richard A. Soloway, *Demography and Degeneration: Eugenics and the Declining Birthrate in Twentieth-Century Britain* (Chapel Hill, NC, 1990); Carl Ipsen, *Dictating Demography: The Problem of Population in Fascist Italy* (Cambridge, UK, 1996); Sandrine Bertaux, "Reproduce or Perish? The Artefact of the Fertility Concept and the French School of Demography," *Historical Social Research / Historische Sozialforschung* 36, no. 2 (2011): 120–39.

²³Karl Ittmann, A Problem of Great Importance: Population, Race, and Power in the British Empire, 1918–1973 (Berkeley, CA, 2013).

²⁴Thompson, Danger Spots in World Population.

²⁵Margo J. Anderson, *The American Census: A Social History* (New Haven, CT, 1988).

²⁶Warren S. Thompson and P. K. Whelpton, *Population Trends in the United States* (New York, 1933); "The Population Forecasts of the Scripps Foundation," *Population Index* 14, no. 3 (July 1948): 188–95.

and the Department of Agriculture, and into new ones, such as the Federal Emergency Relief Administration.²⁷ The PAA held its 1935 meeting in Washington, DC, aiming to further the federal government's reliance on demography and demographers.²⁸

Patronage from the Milbank Fund and the federal government helped to solidify demography as a distinct field of research in the 1930s. Milbank funded graduate training in demography at OPR while the federal government provided jobs, not just for OPR graduates, but also for graduates of the sociology departments at the Universities of Chicago, North Carolina, and Wisconsin, whose training took the quantitative approach to social science that increasingly characterized demography.²⁹

Demography's public and private patrons had divergent goals. The field's public patrons saw future population as a key input in social and economic planning, something the government could plan *for*, but not something that the government could or should explicitly direct.³⁰ The New Deal state viewed population in neither Malthusian nor mercantilist terms, but rather as an independent variable to be measured, monitored, and even predicted. Milbank, on the other hand, sought demographic knowledge that the Fund could use to shape future population growth in a eugenic direction. It had both mercantilist and Malthusian aims, including promoting birth control use among the poor in order to increase population quality while simultaneously encouraging large families among the white middle class to increase population quantity. When the United States entered World War II at the end of 1941, demographers employed by the federal government were working on data collection and population forecasting, while the demographers of OPR and the Scripps Foundation were pursuing research sponsored by Milbank on the determinants of childbearing behavior and decisions about family size, and particularly on how to influence those behaviors in the direction of eugenic pronatalism.³¹

Constructing Overpopulation

American demographers turned their attention to population in other parts of the world during World War II, at the request first of the League of Nations and then of the U.S. Department of State. Although data for much of the world were sparse, OPR's demographers determined that the world's population was growing, and they developed a new theory to explain and predict that growth. Known as demographic transition, it superseded both Malthusian and mercantilist population paradigms, describing population growth as a natural and temporary concomitant of modernization. Yet American businessmen, philanthropists, and diplomats, fearing that

²⁷For the relationship between demography and the welfare state, see Dan Bouk, "Generation Crisis: How Population Research Defined the Baby Boomers," *Modern American History* 1, no. 3 (Nov. 2018): 321–42. For demographers' experience during the Great Depression, see *Demographic Destinies*, ed. van der Tak.

²⁸ Minutes of the PAA Annual Meeting," 1934, folder PAA #1, box 22, Raymond Pearl Papers, American Philosophical Society, Philadelphia, PA [hereafter RPP]. Demography had a clear policy orientation from the beginning. Paul Demeny, "Social Science and Population Policy," *Population and Development Review* 14, no. 3 (Sept. 1988): 451–79.

²⁹Milbank Memorial Fund to Dewitt Clinton Poole, Mar. 23, 1936, folder 21, box 15, Records of the School for Public and International Affairs, Seeley G. Mudd Manuscript Library, Princeton University, Princeton, NJ [hereafter SPIA]. Many prominent twentieth-century demographers got their start as Milbank fellows at OPR. Graduates of the Universities of Chicago, North Carolina, and Wisconsin traced their intellectual roots back to sociologist Franklin Giddings, a pioneer of quantitative methods in the social sciences. For more on Giddings, see Charles Camic and Yu Xie, "The Statistical Turn in American Social Science: Columbia University, 1890 to 1915," *American Sociological Review* 59, no. 5 (Oct. 1994): 773–805.

³⁰This is not to suggest that U.S. policy did not shape population growth. Thompson and Whelpton clearly pointed out in *Population Trends in the United States* that policies regarding immigration, birth control, and social welfare had enormous influence on population, whether intended or not.

³¹Clyde V. Kiser and P. K. Whelpton, "Résumé of the Indianapolis Study of Social and Psychological Factors Affecting Fertility," *Population Studies* 7, no. 2 (Nov. 1953): 95–110.

population growth in other parts of the world—particularly Asia and Latin America—could undermine U.S. global political and economic hegemony, co-opted demography and demographers in the decade following the war in order to promote U.S. government intervention into population growth in the Global South.

When American demographers began to consider population in other parts of the world, they focused on collecting data and predicting future population growth, not on the consequences of that growth. They had no desire to control it. Outside of North America and Western Europe, however, population statistics proved hard to find. The data around which demographers had developed their analytic methods were produced primarily for the purpose of democratic self-government, and simply did not exist in countries with other forms of government, including the colonial territories of countries that made regular metropolitan censuses, namely the UK, France, and the Netherlands.³² In the first decade after World War II, U.S.-based demographers worked closely with the Department of State and the United Nations (UN) Population Commission and Population Division to promote census-making around the world, an effort not just to produce more detailed data but also to extend democracy and the kind of economic planning that had become the hallmark of the New Deal state.

In the absence of complete data, demographic transition theory gave demographers a heuristic tool with which to estimate and project population. The theory held that all countries would go through a process of social and economic modernization, which would have predictable demographic consequences: first, mortality rates would fall as sanitation and food security improved; then birth rates would fall when achievement replaced kinship as the organizing principle for social institutions. Whereas large families were an asset in pre-modern societies, which demographers equated with agrarian economies, they were a liability in modern societies, which demographers equated with industrial economies. According to demographic transition theory, death rates in modernizing societies would always fall before birth rates, producing a brief period of rapid population growth. American demographers did not expect this growth to present a Malthusian dilemma, however; modern industrial societies could support more people at a higher standard of living than could pre-modern agrarian societies.³³

For demographers, this modernizationist paradigm displaced both Malthusianism and mercantilism. According to demographic transition theory, modernization broke societies out of the supposed Malthusian trap, substituting fossil fuel for organic fuel, thereby increasing food availability well beyond human needs. It also generated self-perpetuating economic growth and substituted industrial weaponry for human might, endowing a country with war power far beyond what its population numbers would suggest. Modernization and demographic transition therefore rendered irrelevant both the Malthusian tension between population and food supply and the mercantilist equation between population growth, economic dynamism, and military power.

Demographic transition theory generated a powerful critique of imperialism and the bifurcation of the global economy between the industrial countries of North America and Europe and the countries of primary production in other parts of the world. Princeton demographers Frank Notestein and Kingsley Davis contended that the demographic transition had stalled in the countries of the Global South, leaving them stuck at the point of maximum population growth: colonial governments and multinational corporations had introduced some public

³²Colonial governments did make censuses, but these were very different from metropolitan censuses, and they did not report population in sufficient detail for demographic analysis. Robert René Kuczynski, *Colonial Population* (London, 1937).

³³Dudley Kirk, "Population Changes and the Postwar World," *American Sociological Review* 9, no. 1 (Feb. 1944): 28–35; Kingsley Davis, "The World Demographic Transition," *Annals of the American Academy of Political and Social Science* 237 (Jan. 1945): 1–11.

health measures that reduced death rates, while simultaneously suppressing the industrialization that would have triggered modernization and full demographic transition.³⁴ In the absence of modernization, Notestein and Davis feared, growing populations would remain poor and continue to grow, becoming ever more vulnerable to natural disasters and economic shocks, and ever more reliant on food imports and foreign aid. They recommended decolonization, together with development assistance, as the fastest and most reliable route to modernization, which (they expected) would alleviate poverty. Notestein and Davis recognized that modernization would temporarily fuel further population growth, but they did not view population growth per se as a problem. The problem, in their view, was the growth of poor rural populations, subordinated within the global economy and often dependent for their livelihoods on a single natural commodity.

American businessmen and philanthropists disagreed with the demographers' prescription, which would have interfered with their influence in and access to countries of primary production. They instead rallied around the Malthusian thought of eugenicist Guy Irving Burch, who argued in the 1945 self-published *Population Roads to Peace or War* that the world's human population had already exceeded the planet's natural limit. Burch took inspiration from the racist and anti-immigrant eugenicist writers of the earlier part of the century, who had mobilized Malthusian arguments to advocate for the immigration restrictions of the 1920s. Even as demographers warned of impending depopulation in the 1930s, Burch instead predicted a "population explosion," claiming that growing numbers of immigrants would soon arrive on U.S. shores.³⁵

Republished in 1947 as *Human Breeding and Survival*, Burch's book melded Malthusian and mercantilist perspectives, contending that population growth made countries simultaneously poor and powerful and therefore territorially aggressive. Burch described global population growth as the primary threat to the realization of the Four Freedoms described by President Franklin Roosevelt in his 1941 State of the Union address. *Human Breeding and Survival* perpetuated the interwar conflation of population quantity and quality, recommending that the UN address the problem of global population quantity by reducing the birthrates of the world's poor and nonwhite, thereby also increasing what Burch saw as the world's population quality. Burch maintained that only strict (selective) population control worldwide could preserve the fragile postwar order.³⁶

Burch's calls for global population control attained a louder mouthpiece with the 1948 publication of two bestselling books, *Road to Survival* by William Vogt and *Our Plundered Planet* by Fairfield Osborn. These books expanded the environmental dimension of Burch's Malthusianism, contending that global population growth threatened the fragile natural ecosystems on which the global capitalist economy depended.³⁷ A wide range of recent scholars have credited them with launching the postwar environmental movement and turning world population growth into an environmental issue.³⁸ By describing population growth in countries of primary production as a threat to the ongoing extraction of natural resources for U.S. industry,

³⁴Kingsley Davis, "Demographic Fact and Policy in India," *Milbank Memorial Fund Quarterly* 22, no. 3 (July 1944): 256–78; Frank W. Notestein, "Problems of Policy in Relation to Areas of Heavy Population Pressure," *Milbank Memorial Fund Quarterly* 22, no. 4 (Oct. 1944): 424–44.

³⁵Burch coined this term in Guy Irving Burch, "Headed for the Last Census? I. Overpopulation or Underpopulation—A Review of Conflicting Opinions," *Journal of Heredity* 28, no. 6 (June 1937): 203–12.

³⁶Guy Irving Burch and Elmer Pendell, *Human Breeding and Survival: Population Roads to Peace or War* (New York, 1947).

³⁷William Vogt, *Road to Survival* (New York, 1948); Fairfield Osborn, *Our Plundered Planet* (Boston, 1948). These books relied exclusively on Burch's work for their analysis of population.

³⁸For instance, see Robertson, *The Malthusian Moment*, and Pierre Desrochers and Christine Hoffbauer, "The Post War Intellectual Roots of the *Population Bomb*: Fairfield Osborn's *Our Plundered Planet* and William Vogt's *Road to Survival* in Retrospect," *Electronic Journal of Sustainable Development* 1, no. 3 (2009): 37–61.

these books caught the attention of heads of U.S. corporations, who also led the country's largest philanthropies.

As a result of the public concern about global population growth sparked by these books, Princeton's OPR acquired a new patron, the Rockefeller Foundation. Established in 1913 by Standard Oil co-founder John Davison Rockefeller, the Rockefeller Foundation's board of trustees included presidents of major universities, directors of prominent corporations, and several diplomats, most notably John Foster Dulles, who would become Secretary of State in 1953. Because the same men who ran the foundation also ran the country's major corporations and its foreign policy, the philanthropic projects it pursued around the world aimed to strengthen U.S. global leadership for the benefit of U.S. business.

Notestein's views on population growth began to change in 1944, when the Rockefeller Foundation made its first grant to OPR, instantly replacing Milbank as the Office's largest patron.⁴⁰ Social scientists affiliated with the foundation expressed skepticism about Notestein and Davis's expectation that decolonization and development aid would trigger modernization, thereby providing for growing populations and eventually leading to the establishment of small-family norms.⁴¹ Likely in response, Notestein very quickly began to revise his own view of the relationship between poverty, economic development, and population growth. In his new formulation, imperialism and economic exploitation dropped out of the equation. Now, population growth itself blocked modernization and perpetuated poverty in agrarian societies. 42 Davis also began to change his tune, adopting the Malthusian perspective advocated by Burch, Vogt, and Osborn, that human population growth had exceeded the planet's natural limit. 43 He began to make this argument in 1948, the same year that he relocated from Princeton to Columbia and began accepting research funds from Fairfield Osborn's Conservation Foundation. Historians of population control have pointed to Davis to suggest that demographic research supported the contention that population growth threatened the natural environment, but he was one of a very small number of demographers ever to make that claim.⁴⁴ Even though population data for much of the world remained incomplete, Notestein and Davis began to recommend population control in the second half of the 1940s. Neither man ever gave up his belief that economic development would eventually slow population growth rates. However, realizing that the American philanthropists who had the resources to promote economic development abroad lacked the will to do so, they turned

³⁹Inderjeet Parmar, Foundations of the American Century: The Ford, Carnegie, and Rockefeller Foundations in the Rise of American Power (New York, 2012).

⁴⁰⁴⁰ The Rockefeller Foundation Annual Report 1944," https://www.rockefellerfoundation.org/wp-content/uploads/Annual-Report-1944-1.pdf (accessed Aug. 11, 2021).

⁴¹Robert Redfield to Joseph H. Willits, July 21, 1944, folder "Princeton University—Population Research, 1943–1945," box R1885, series 200 S, RG 1.8, Rockefeller Foundation records, Rockefeller Archive Center, Sleepy Hollow, NY [hereafter RF]; Robert Warren to Joseph H. Willits, Aug. 3, 1944, folder "Princeton University—Population Research 1943-1945," box R1885, series 200 S, RG 1.8, RF.

⁴²Frank W. Notestein, "Summary of the Demographic Background of Problems of Undeveloped Areas," *Milbank Memorial Fund Quarterly* 26, no. 3 (July 1948): 249–55. For additional discussion of Notestein's theoretical adaptation, see Szreter, "Idea of Demographic Transition."

⁴³Kingsley Davis, "Population and Resources in the Americas," in *Proceedings of the Inter-American Conference on Conservation of Renewable Natural Resources, Denver, Colorado September 7–20, 1948* (Washington, DC, 1948), 88–97.

⁴⁴Other demographers refuted the connection between population growth and environmental devastation, pointing out that, at both global and national scales, pollution had grown much faster than population in recent decades. For instance, see Ansley J. Coale, "Should the United States Start a Campaign for Fewer Births?" *Population Index* 34, no. 4 (Oct.–Dec. 1968): 467–74; and Frank W. Notestein, "Zero Population Growth," *Population Index* 36, no. 4 (Oct.–Dec. 1970): 444–52. Today's demographers focus on microlevel and recursive relationships between environmental factors and population processes.

to other means of addressing the rapid population growth that they believed resulted from incomplete demographic transition.⁴⁵

Notestein and Davis expected that U.S.-led efforts to reduce birth rates in supposedly premodern societies would encounter technological, political, and cultural barriers. The technological barrier was that all birth control methods in existence at the time-condoms, diaphragms, and spermicides—disrupted sexual activity, rendering them unpalatable and difficult to use. In political terms, people across the Global South expressed deep suspicion of the United States and its motives in encouraging lower birth rates. Culturally, interwar research on birth control use in the United States had suggested that people would not want to have smaller families until they had alternative sources of economic security. 46 In other words, even if people had access to birth control, they would not use it until they had begun to experience the benefits of economic development. Although demographers had done research on the motivations for childbearing in the United States, they had no idea what lay behind decisions to have children or not in other countries.⁴⁷ They do not seem to have realized that the birth control technologies available at the time had already begun to make their way around the world. Eugenics movements had sprung up on every inhabited continent during the first half of the century, generating support and demand for family planning among elites in many of the countries of concern to American demographers.⁴⁸

In 1952 Notestein joined with John D. Rockefeller 3rd (grandson of the founder of Standard Oil and the Rockefeller Foundation) to establish the Population Council, a nonprofit organization that leveraged demography to pursue and legitimate overseas population control. Still in existence today, it funds biomedical research to develop new and simpler contraceptives and demographic research to determine how to promote their use, and provides technical assistance to overseas family planning programs.⁴⁹ The Population Council widened the scope of the Milbank Fund's interwar eugenic project to the global level. Milbank trustee Frederick Osborn (first cousin of Fairfield) ensured continuity between the agendas of the two organizations. Osborn served as secretary of the American Eugenics Society (AES) for much of the twentieth century and had convinced the Fund to support eugenically oriented demographic research between the world wars.⁵⁰ As a personal friend of John D. Rockefeller 3rd and a close associate of Notestein, Osborn helped found the Population Council and became its second president, serving from 1957 to 1959.⁵¹ During that period, the Population Council made regular grants to the AES. The Council prescribed the same solution for the problem of national underdevelopment after World War II that Milbank had prescribed for individual poverty in

 $^{^{45}}$ Frank W. Notestein, "A Positive Approach to the Problems of World Population," Nov. 14, 1945, folder "OPR 1946-1948," box R1885, series 200 S, RG 1.8, RF.

 ⁴⁶Regine K. Stix and Frank W. Notestein, Controlled Fertility: An Evaluation of Clinic Service (Baltimore, 1940).
⁴⁷National Academy of Sciences, "Conference on Population Problems, Afternoon Session, Saturday, June 21, 1952," folder 722, box 85, series 1.5, RG 5, Rockefeller Family Papers, Rockefeller Archive Center, Sleepy Hollow, NY [hereafter JDR3].

⁴⁸Bashford, Global Population; Connelly, Fatal Misconception.

⁴⁹"Proposed Establishment of Population Council—Draft," Oct. 7, 1952, folder 674, box 81, series 1.5, RG 5, JDR3.

⁵⁰Frank W. Notestein, "Oral History Interview with Anders Lunde, Apr. 27, 1973," in *Demographic Destinies: Interviews with Presidents and Secretary-Treasurers of the Population Association of America*, ed. Jean van der Tak (Washington, DC, 2005), 6–17.

⁵¹Edmund Ramsden, "Frank W. Notestein, Frederick H. Osborn, and the Development of Demography in the United States," *Princeton University Library Chronicle* 65, no. 2 (Winter 2004): 282–316; Frank W. Notestein and Frederick H. Osborn, "Reminiscences: The Role of Foundations, the Population Association of America, Princeton University and the United Nations in Fostering American Interest in Population Problems," *Milbank Memorial Fund Quarterly* 49, no. 4 (Oct. 1971): 67–85.

the United States between the wars: family planning.⁵² Though an independent nongovernmental organization, the Council operated in the service of the corporately endowed philanthropies that provided the vast majority of its funding, first the Rockefeller Foundation and Rockefeller Brothers Fund, and then the Ford Foundation.⁵³

The work of the Population Council was made much easier by the activities of Hugh Everett Moore, a businessman who popularized the idea that overseas population control could avert the global spread of communism. Moore had made his fortune by inventing the Dixie Cup. After reading Vogt's Road to Survival and Burch's Human Breeding and Survival, Moore initiated a correspondence with Burch that lasted until Burch's death in 1951.⁵⁴ Although population data remained sparse in much of the world, Burch convinced Moore that U.S. aid to developing countries "could cause an explosion in world population which could easily bankrupt the United States in its efforts to support the large increase in population to prevent these areas from becoming communistic."55 He warned that "in your lifetime and mine we (certainly our children) are faced with a tremendous world population explosion and also with an immediate atomic explosion." For Burch, these were connected: population growth would exacerbate geopolitical tensions, making the world more vulnerable to nuclear war. He conceded that it might be possible to delay the atomic explosion, but maintained that "if the population explosion continues (we are really already in it), the atomic explosion cannot be suppressed indefinitely."56 At the urging of Northern California eugenicist and land developer Charles Goethe, who described population control as "insurance against excessive taxation, as well as against the future of any business," Moore allied himself with Burch's Population Reference Bureau, an organization that sought to shape public opinion in favor of eugenics and population control.⁵⁷

Moore spread Burch's concern to the business, philanthropic, and diplomatic communities with a pamphlet titled "The Population Bomb." 58 Produced in conjunction with Ellsworth Bunker, former president of the National Sugar Refining Company and former U.S. ambassador to Argentina and Italy, and Will Clayton, founder of the world's largest cotton-trading company and former Under Secretary of State for Economic Affairs, "The Population Bomb" updated Human Breeding and Survival for the nuclear age. It blamed underdevelopment on excess procreation and cautioned that poverty would seed communist revolution and ultimately lead to nuclear war. It portrayed overseas population growth as an existential threat to U.S. business interests and national security. Moore contended that protecting U.S. interests did not merely require collecting population data for other countries; it required controlling population growth in other countries to prevent communist revolution and the nationalization of industry and resources that would inevitably follow. Moore, Bunker, and Clayton mailed their "Population Bomb" to professional and social networks that comprised what Inderjeet Parmar has termed "the East Coast foreign policy Establishment." 59 Fourteen years later, Stanford University biologist Paul Ehrlich would build on Moore's pamphlet in a bestselling book of the same title, merging Burch and Moore's warnings about the global spread of communism with Vogt and Osborn's concern about the destruction of the natural

⁵²For more on the postwar conjunction between individual poverty and national development in the minds of U.S. experts, see Amy C. Offner, *Sorting Out the Mixed Economy: The Rise and Fall of Welfare and Developmental States in the Americas* (Princeton, NJ, 2019).

⁵³Donors frequently made grants to the Council in the form of corporate stock, so the Council's fortunes rose and fell on the fortunes of U.S. corporations.

⁵⁴For the influence of Burch and Vogt on Moore, see Hugh Everett Moore to Frank Boudreau, Nov. 9, 1948, folder 9, box 19, Hugh Moore Fund Collection, Seeley G. Mudd Manuscript Library, Princeton University, Princeton, NJ [hereafter HMFC]. For Moore's correspondence with Burch, see folders 9–10, box 19, HMFC.

⁵⁵Guy Irving Burch to Hugh Everett Moore, Jun. 30, 1950, folder 10, box 19, HMFC.

⁵⁶Guy Irving Burch to Hugh Everett Moore, Jul. 2, 1950, folder 10, box 19, HMFC.

⁵⁷Charles M. Goethe to Hugh Everett Moore, Oct. 23, 1948, folder 9, box 19, HMFC.

⁵⁸Hugh Moore, "The Population Bomb," 1954, folder 17, box 16, HMFC.

⁵⁹Parmar, Foundations of the American Century, 2.

environment.⁶⁰ But while Ehrlich's book kept Malthusianism at the forefront of the American popular imagination, it was Moore's modernizationist arguments, backed up by demographic research commissioned by his supporters, that convinced the government to get involved.

"The Population Bomb" was not grounded in demographic research; rather, it inspired the research that would eventually support its claims. The pamphlet convinced World Bank President Eugene Black that loans would be wasted on countries with high rates of population growth. But he recognized that he could not simply send "The Population Bomb" to leaders of developing countries to explain why the World Bank would not approve a loan: Moore's pamphlet very clearly laid out the U.S. interest in overseas population control and had the potential to deeply offend readers in the Global South. Instead, Black sought a different pamphlet, one that would advocate population control in the interests of developing countries, explaining that economic development could not proceed in the context of rapid population growth. When he requested such a pamphlet from Notestein, however, Notestein replied that he could not produce it because he had no empirical evidence that rapid population growth prevented economic development. In fact, most countries that had already "developed" had experienced substantial population growth along the way as a result of the demographic transition that accompanied modernization. Black responded by arranging for the World Bank to make a grant to OPR to carry out a study that would produce the evidence he sought.

The grant resulted in the 1958 publication of *Population Growth and Economic Development in Low Income Countries*, authored by OPR demographer Ansley J. Coale and CIA economist Edgar M. Hoover. Coale had been one of Notestein's first graduate students at Princeton, where a grant from Milbank paid for his education. Anotestein oversaw Coale's work on the World Bank study. The following year, Notestein became president of the Population Council and Coale succeeded him as director of OPR. The Coale–Hoover Report—as the study was informally known—focused on India, which had a well-developed census infrastructure and, therefore, plentiful demographic data. As the world's largest democracy bordering the world's largest communist country, India played a critical role in the Cold War. U.S. experts hoped it would become a model for free-market development. Its newly independent government participated willingly in the study. Malthusian economists Gyan Chand and Radhakamal Mukerjee, who had served on India's National Planning Commission before independence and continued in an advisory role afterward, had already begun to interpret India's widespread poverty in terms of overpopulation rather than colonial misrule.

The Coale–Hoover Report did not exactly support the claims made by Moore and his colleagues in "The Population Bomb," but advocates for population control referred to it as if it did. Because Coale and Hoover could not wait for the accumulation of empirical evidence regarding the relationship between population growth and economic development in India, they used simulation. Coale projected population growth thirty years into the future under a variety of hypothetical fertility rates, and Hoover projected economic growth for each population scenario. As a simulation, its outcome depended entirely on its assumptions. The model

⁶⁰Paul R. Ehrlich, *The Population Bomb* (New York, 1968).

⁶¹Samuel W. Anderson to Ellsworth Bunker, Dec. 8, 1954, folder 8, box 16, HMFC. Black wrote the foreword to later editions of the pamphlet.

⁶²Ansley J. Coale, "Oral History Interview with Anders Lunde, Apr. 27, 1979, and Jean Van Der Tak, May 11, 1988," in *Demographic Destinies*, ed. van der Tak, 135–63, here 144.

⁶³Frank W. Notestein to Douglas J. Brown, 1954, folder 5, box 13, Ansley J. Coale Papers, Seeley G. Mudd Manuscript Library, Princeton University, Princeton, NJ [hereafter AJCP].

⁶⁴Coale, "Oral History Interview with Anders Lunde," 135.

⁶⁵Nick Cullather, The Hungry World: America's Cold War Battle Against Poverty in Asia (Cambridge, MA, 2010).

⁶⁶Sarah Hodges, "Governmentality, Population, and Reproductive Family in Modern India," *Economic and Political Weekly* 39, no. 11 (Mar. 2004): 1157–63, here 1161.

assumed that, with fewer children, households saved more, fueling investment, capital accumulation, and economic development. As a result of those assumptions, the study found that after thirty years, per capita national income would be 40 percent higher if birth rates fell by half.⁶⁷ The study did not show that population growth would prevent economic growth, only that a reduction in birth rates could enhance it. Nonetheless, the Population Council and even Coale himself presented the study as evidence that "continued high fertility is an impediment if not a total barrier to economic and social development."

The Coale-Hoover Report sounded the final death knell for the mercantilist view of population, according to which more people meant more productivity, more commerce, and therefore more wealth. Coale and Hoover instead emphasized per capita income as the key metric of economic development. In the 1950s, nobody knew how population size affected per capita income, and the Coale-Hoover study did not investigate the question. Later research would find that the answer depended on a country's social and economic institutions and its place in the global political and economic order. 69 In their study, however, Coale and Hoover assumed in advance that additional people did not increase national income (the numerator of the per capita calculation) enough to compensate for their addition to the population (the denominator). Under their modernizationist paradigm, population growth was a liability, even for countries that had not reached the Malthusian limit of carrying capacity or food availability. Whereas the New Deal state had taken future population as a given and aimed to plan economic growth around it, the Coale-Hoover Report took the economy as given, suggesting that economic development instead required population control. India's leaders had already signed on to this modernizationist vision, integrating family planning into the country's first five-year plan and requesting assistance for it from the Population Council. 70 The government's embrace of family planning made it seem possible that India and other developing countries could achieve the Coale-Hoover Report's low birthrate and high economic growth scenario.

Moore worked quickly to bring the results of the Coale–Hoover Report to the U.S. government's attention, hoping to put international population control on the foreign policy agenda. The same year that the report came out, President Dwight D. Eisenhower created a commission to evaluate the military aid program. Moore immediately reached out to the commission's chair, General William Henry Draper Jr., sending him a copy of "The Population Bomb" for every member of the commission and pointing him to *Population Growth and Economic Development in Low Income Countries.*⁷¹ When the Draper Committee issued its final report in 1959, it recommended that the United States provide developing countries with assistance in reducing their birth rates. Eisenhower may have privately believed that overseas population growth posed a threat to national security, but he refused to commit government resources to defusing that threat. The Roman Catholic Bishops of the United States had announced that they would oppose any government program to promote birth

⁶⁷Ansley J. Coale and Edgar M. Hoover, Population Growth and Economic Development in Low Income Countries: A Case Study of India's Prospects (Princeton, NJ, 1958).

⁶⁸Ansley J. Coale, "The Voluntary Control of Human Fertility," *Proceedings of the American Philosophical Society* 111, no. 3 (June 1967): 164–9, here 164.

⁶⁹National Research Council, *Population Growth and Economic Development: Policy Questions* (Washington, DC, 1986).

⁷⁰Ilana Löwy, "Defusing the Population Bomb in the 1950s: Foam Tablets in India," *Studies in History and Philosophy of Biological and Biomedical Sciences* 43, no. 3 (Sept. 2012): 583–93; Sarah Hodges, "South Asia's Eugenic Past," in *The Oxford Handbook of the History of Eugenics*, eds. Alison Bashford and Philippa Levine (New York, 2010), 228–42.

⁷¹Hugh Moore to William Henry Draper Jr., Dec. 19, 1958, folder 28, box 15, HMFC. For additional contact between Moore and Draper in this regard, see Donald T. Critchlow, *Intended Consequences: Birth Control, Abortion, and the Federal Government in Modern America* (New York, 1999).

⁷²"Letter of Draper Committee on Foreign Aid," New York Times, July 24, 1959, 6.

⁷³Connelly, "Seeing Beyond the State," 197.

control anywhere in the world.⁷⁴ Conceding that birth control was not the responsibility of government, Eisenhower called on private philanthropies to fill this role.

Eisenhower's response frustrated his science advisor, chemist George Kistiakowsky, who saw Eisenhower's refusal to act as an example of religion dictating policy when he felt that science should take the lead.⁷⁵ When Kistiakowsky left the White House in 1961, he orchestrated a study of world population by the National Academy of Sciences (NAS), funded by the Population Council, deciding in advance that it would endorse Draper's recommendation that the U.S. government intervene in overseas population growth.⁷⁶ The panel Kistiakowsky appointed did little other than reproduce the results of the Coale and Hoover study. The NAS report, published in 1963, described population growth as the primary barrier to economic development worldwide and called on the government to support and further the research and intervention activities of the Population Council.⁷⁷

The NAS report accomplished Kistiakowsky's objective. Eager to demonstrate his responsiveness to scientific evidence and his independence from the Vatican, President John F. Kennedy announced that the United States would offer family planning assistance to any country that requested it.⁷⁸ Moore and Draper remained unsatisfied. They began to take out full-page advertisements in such prominent newspapers as The New York Times, The Washington Post, and The Wall Street Journal, publicizing the findings of the 1958 Coale-Hoover Report and the 1963 NAS report. They formatted some ads as direct appeals to President Kennedy (and later to President Johnson); others urged the public to pressure their representatives and senators.⁷⁹ This strategy worked. In 1965 Senator Ernest Gruening (D-AK) and Representative Morris Udall (D-AZ), both associates of Moore and Draper, introduced bills into Congress to make overseas population control a function of the State Department and domestic family planning a duty of the Department of Health, Education, and Welfare. 80 When Congress renewed the Food for Peace Act in 1966, it included a provision allowing surplus currencies that accrued through the program to fund family planning and required that countries receiving aid through the program actively work toward food selfsufficiency (either by increasing agricultural production or by controlling population or both).⁸¹ Over the course of the 1960s, Moore and Draper stepped up their advertising campaign in order to increase U.S. government expenditure on overseas population control through the State Department's Agency for International Development (USAID). Largely as a result of their efforts, USAID's population control budget expanded from \$10 million in 1965 to nearly \$125 million in 1972.⁸² In response to lobbying by John D. Rockefeller 3rd, the UN officially took up

⁷⁴Farnsworth Fowle, "Eisenhower Backs Birth-Curb Aids: Changes Stand on U.S. Help for Underdeveloped Lands," *New York Times*, Nov. 10, 1964, 19.

⁷⁵George B. Kistiakowsky, A Scientist at the White House: The Private Diary of President Eisenhower's Special Assistant for Science and Technology (Cambridge, MA, 1976).

⁷⁶S. D. Cornell to Frank Notestein, Aug. 16, 1962, and Frank Notestein to S. D. Cornell, Aug. 21, 1962, National Academy of Sciences—National Research Council Archives: Accession 71-007: Committees and Boards: Committee on Government Relations, Panels: Population Control, 1961–1963, National Academy of Sciences, Washington, DC.

⁷⁷National Academy of Sciences, *The Growth of World Population: Analysis of the Problems and Recommendations for Research and Training* (Washington, DC, 1963).

⁷⁸"Transcript of the President's News Conference on Foreign and Domestic Matters," *New York Times*, Apr. 25, 1963, 16.

⁷⁹For instance, see "Population Explosion Nullifies Foreign Aid: An Appeal to the President of the United States," *New York Times*, June 9, 1963, 176.

⁸⁰U.S. Congress, Senate, Committee on Government Operations, Subcommittee on Foreign Aid Expenditures, *Population Crisis: Hearings (Part 1)*, 89 Cong., 1st sess., June 22 & 23, 1965; Critchlow, *Intended Consequences*.

⁸¹Kristin L. Ahlberg, Transplanting the Great Society: Lyndon Johnson and Food for Peace (Columbia, MO, 2008).

⁸²Raúl Necochea López, A History of Family Planning in Twentieth-Century Peru (Chapel Hill, NC, 2014);Phyllis Tilson Piotrow interview by Rebecca Sharpless, Sept. 16, 2002, transcript, Population and Reproductive

the cause of population control in 1969, establishing the UN Fund for Population Activities (UNFPA, now the UN Population Fund).⁸³ In its early years, the United States supplied the majority of its budget.

Enlisting Other Countries

By the mid-1960s, the philanthropic project of using demography to shape population growth had converged with the governmental project of using demography to plan economic growth, and both had widened their scopes from the United States to the world as a whole. The next challenge was to convince the leaders of countries in the Global South that they should request family planning assistance, either from the U.S. government or from the Population Council or other nongovernmental organizations.

To answer that challenge, the Population Council, together with its primary sponsor the Ford Foundation, used demography as a tool to transform population control from an American strategy for maintaining economic hegemony and preventing the global spread of communism into a nation-building and economic development strategy of governments around the world. In some countries, they had little work to do. Indian nationalists had begun using family planning for nation-building purposes in the latter part of the colonial period. The birthrate in Japan had dropped dramatically with the postwar legalization of abortion. In other countries, the Population Council and the Ford Foundation took two approaches simultaneously. First, they brought students from target countries to the United States to complete graduate degrees in demography, with the idea that they would return home and use their training to convince their governments that only family planning could unlock the door to economic development.⁸⁴ Second, they launched population control programs in developing countries under the guise of demographic research, then used the results of that research to convince local governments to expand the programs. The lack of reliable census data for many of these countries legitimated overseas demographic research and the recruitment of international graduate students for U.S. demography programs. Both approaches required that the Population Council and the Ford Foundation invest in American demography, which grew tremendously in size and influence as a result.

Demography had already begun to expand before the Population Council and the Ford Foundation stepped in. After World War II, it spread from Princeton and the Universities of Chicago and North Carolina to the University of Pennsylvania, Brown University, Cornell University, the University of Michigan, and the University of California at Berkeley. Most demographers at this time held degrees in sociology or economics and took more interest in quantitative analysis than social theory. While the vast majority were male, the field attracted a relatively large number of women who held undergraduate degrees in mathematics or

Health Oral History Project, Sophia Smith Collection, Smith College, Northampton, MA [hereafter SCC]; Reimert Thorolf Ravenholt interview by Rebecca Sharpless, July 18–20, 2002, transcript, Population and Reproductive Health Oral History Project, SCC.

⁸³"UNA-USA Press Release: Rockefeller Panel Urges UN Action on Population," May 25, 1969, folder 6, box 4, series 857, United Nations Archives, New York, NY [hereafter UN]; John D. Rockefeller 3rd to U Thant, May 21, 1969, folder 6, box 4, series 857, UN.

⁸⁴In its first five years, the Population Council provided fellowships to 69 students from 21 countries. "Notes on JDR's Memo: Population Council Program—New Items and Items for Increased Emphasis," 1960, folder 41, box 4, series 1, RG 1, Population Council, Rockefeller Archive Center, Sleepy Hollow, NY [hereafter PC].

⁸⁵Demographic Destinies, ed. van der Tak.

⁸⁶Frank Notestein and Judith Blake both described their love for data in their interviews with Jean van der Tak for *Demographic Destinies*.

statistics.⁸⁷ Demography may have seemed more promising for these women than math or the natural sciences, as it offered job opportunities in government and research at a time when most universities reserved faculty positions for men. Many male demographers of the postwar period had served in the military between college and graduate school or had taken time away from graduate school to serve.⁸⁸ Nearly all American demographers were white, but they did not necessarily come from families of means. Unlike other social scientific fields at the time, demography offered generous graduate fellowships, first from the Milbank Fund and later from the Population Council and the Ford Foundation.

In the 1960s, the Ford Foundation began to sponsor the establishment of university-based population research and training centers akin to Princeton's OPR. ⁸⁹ It did not create demography out of whole cloth, as it did with area studies in the 1950s and as the Rockefeller Foundation had done with molecular biology in the 1930s. ⁹⁰ But as with area studies—for which the Ford Foundation had created interdisciplinary centers at U.S. universities to train experts in the history, languages, and politics of the various parts of the world that might pose security risks to the Cold War United States—Ford took a center-based approach to demography, locating it between, rather than within, university departments. As the Rockefeller Foundation had done with molecular biology, Ford focused its resources on universities with existing strengths in the relevant disciplines, establishing its first population research and training centers at the Universities of Pennsylvania, Michigan, Chicago, and North Carolina.

The population research and training centers of the 1960s were strongly international organizations. Faculty members frequently flew in and out of the country for research, graduate recruiting, and consulting on overseas family planning projects. At any given time, half of the students in a population center might have come from abroad. The official rationale for recruiting these students was to teach population accounting and thereby advance census-making and vital registration in countries that lacked the governmental infrastructures necessary to produce demographic data. These demographic techniques formed the core of the training offered in U.S. population centers. But the centers also trained students to understand the challenges facing their countries through a modernizationist lens: as "population problems" that family planning could solve. The Ford Foundation pursued a similar program in economics, establishing fellowships for students from Latin American countries, with the expectation that they would return home to promote policies that would benefit U.S. business interests. 92

U.S. population centers formed relationships with universities in other parts of the world, developing large-scale research projects and international collaborations and building pipelines for students. ⁹³ In some cases, international graduates of U.S. universities established

⁸⁷Prominent female demographers with backgrounds in mathematics or statistics include Barbara Anderson, Margaret Hagood, Evelyn Kitagawa, Jane Menken, and Mindel Sheps. By contrast, most male demographers had undergraduate degrees in the social sciences.

⁸⁸Demographic Destinies, ed. van der Tak.

⁸⁹John Caldwell and Pat Caldwell, *Limiting Population Growth and the Ford Foundation Contribution* (London, 1986).

⁹⁰For the history of area studies, see Dwight Macdonald, *The Ford Foundation: The Men and the Millions* (New York, 1956). For the history of molecular biology, see Lily E. Kay, *The Molecular Vision of Life: Caltech, the Rockefeller Foundation, and the Rise of the New Biology* (New York, 1993).

⁹¹Greenhalgh, "Social Construction of Population Science."

⁹²Juan Gabriel Valdés, *Pinochet's Economists: The Chicago School in Chile* (New York, 1995). American businessmen also promoted their own interests in Latin America through their work as development consultants, just as American demographers also worked as consultants to the Population Council in countries of the Global South. Offner, *Sorting Out the Mixed Economy*.

⁹³Greenhalgh, "Social Construction of Population Science."

demography training programs in their home countries, also with funding from the Ford Foundation. The UN established stand-alone institutes for international demographic training in Chembur, India (1956), Santiago, Chile (1957), and Cairo, Egypt (1963), with funding from the Population Council. The Council staffed the centers and supplied their teaching materials, so these too became vehicles for educating technocrats from developing countries in the modernizationist population paradigm. Throughout Africa, Asia, and Latin America, the UN mandate to collect demographic data opened doors for the promotion of family planning.

Perhaps the most prominent international student to train at a U.S. population center during this period was Mercedes Concepcion, now known as the "mother of Asian demography." Born in 1928 as the youngest of five children, she had been encouraged by her physician father to attend the University of the Philippines and pursue a career. After completing an undergraduate degree in chemistry, Concepcion went to Australia with a Colombo Plan fellowship to study biostatistics. On her return to the Philippines, she took a position at the UN Statistical Training Center that had just opened at the University of the Philippines. The Center's first Filipinx faculty member, Concepcion was also younger than most of its graduate students. 98

Concepcion began meeting American demographers in 1955 and within ten years had become a demographer herself. She first met Philip Hauser, who would later direct the University of Chicago's Ford-funded Population Research and Training Center, when he spoke on population at the Philippine Statistical Association. Later that year, Concepcion attended the UN Seminar on Population Problems in Asia and the Far East, directed by Pascal Whelpton of the Scripps Foundation and sponsored by the Population Council. She was the only woman among twenty students. Not long after that, Dudley Kirk, Demographic Director of the Population Council, invited Concepcion to pursue a Ph.D. in demography in the United States as a Population Council fellow. Recognizing that Princeton had the country's most esteemed demography program, Concepcion asked to go there, but Princeton had not begun to admit women. Instead, she studied with Hauser at the University of Chicago. Concepcion returned to the Philippines in 1960 to teach, mailing her dissertation, chapter by chapter, to Hauser over a period of three years. Finally, in early 1963, Hauser admonished her, "young lady, you'll have to finish. You will sit down, and in two weeks I want you to return that dissertation, and you will graduate in June of this year." She did. 100

In 1964, the Ford Foundation established a Population Institute at the University of the Philippines and named Concepcion its director. It was a highly unusual position for a woman at that time, when U.S. universities still largely barred women from holding faculty positions, not to mention center directorships. Concepcion was immensely talented, but it was her Filipina background that allowed her to transcend the gender barrier. The leaders of the Ford Foundation and the Population Council felt that local scientists would have more authority to prescribe population control to heads of state in the Global South than would American scientists. 102

⁹⁴Caldwell and Caldwell, *Limiting Population Growth and the Ford Foundation Contribution*; Philip Hauser, "Oral History Interview with Jean Van Der Tak, Nov. 12, 1988," in *Demographic Destinies*, ed. van der Tak, 33–63.

⁹⁵ Notes on JDR's Memo: Population Council Program—New Items for Increased Emphasis," 1960, folder 41, box 4, series 1, RG 1, PC.

⁹⁶For instance, see Necochea López, History of Family Planning in Twentieth-Century Peru.

⁹⁷Mercedes Concepcion interview with Rebecca Sharpless, Aug. 17, 2004, transcript, Population and Reproductive Health Oral History Project, SCC.

⁹⁸Ibid., 3–4.

⁹⁹Ibid., 5–7.

¹⁰⁰Qtd. in ibid., 8.

¹⁰¹Ibid., 13.

¹⁰²National Academy of Sciences, "Conference on Population Problems, Afternoon Session, Saturday, June 21, 1952," JDR3.

Concepcion delivered on their expectation. As director of the Population Institute, she organized population-related events and published articles about population growth in local newspapers to raise public awareness. In 1968, President Ferdinand Marcos appointed Concepcion to direct a government committee on "the population problem." The outcome could have been predicted in advance: Concepcion's committee recommended that the government provide family planning services in order to ensure that "each Filipino could partake of the fruits of national progress." That is, it designated family planning integral to nation-building and economic development. Marcos signed the proposed policy—the Population Act—into law in 1971. The family planning program it established received the majority of its funding from USAID and UNFPA. ¹⁰³

Overall, the Population Council did not encounter as much resistance to its family planning initiatives as its founders had expected. Elites in many developing countries already knew about birth control. 104 In addition to using contraceptives to produce their own small families, they often saw family planning as a way to control poverty and defuse the threat to their political power posed by growing numbers of poor, rural, indigenous, or otherwise disadvantaged citizens. Whereas India's middle-class birth control advocates had focused on securing contraceptives for their own use before independence, after 1947 they turned their attention to promoting birth control among the poor. 105 Indian family planning programs primarily targeted agricultural populations, who came to seem superfluous as the government turned its attention to industrialization. 106 Conversely, early family planning programs in Peru, led by the urban middle class, targeted rural-to-urban migrants. 107 In Jamaica, the seeds of the postcolonial government's family planning program had been sown during the colonial period by members of the mixed-race nationalist middle class, who sought to control the reproductivity of poor Afro-Jamaican women in order to demonstrate their own capacity to rule an independent nation. 108 These are just a few examples of the ways in which U.S.-led efforts to control population quantity in developing countries dovetailed with nationalist efforts in those countries to control population quality.

In addition to promoting the idea that family planning could stimulate economic development, the Population Council and the Ford Foundation brought new contraceptives into developing countries, packaged as part of demographic research projects. In the 1960s, the Population Council funded the development of a new type of intrauterine contraceptive device (IUD) called the Lippes Loop. ¹⁰⁹ The Loop was a flexible plastic squiggle that cost pennies to produce and could be inserted by staff with only minimal training, after which it would prevent pregnancy indefinitely. The Population Council officially promoted the Loop and other IUDs as tools to help couples achieve their small-family desires. But it recognized that IUDs could also *prevent* couples from achieving their large-family desires. As one participant in a Population Council conference put it, "once the damn thing is in the patient cannot change her mind. In fact, we can hope she will forget it's there and perhaps in several months wonder why she has not conceived." The Population Council only promoted what it described as voluntary family planning programs, but the IUD blurred the boundary between voluntary family planning and coercive population control. Because medical professionals control

¹⁰³Conception interview, 16–7. As late as 2004, the majority of contraceptives in the Philippines came from USAID.

¹⁰⁴Connelly, Fatal Misconception.

¹⁰⁵Hodges, "South Asia's Eugenic Past."

¹⁰⁶Cullather, The Hungry World.

¹⁰⁷ Necochea López, A History of Family Planning in Twentieth-Century Peru.

¹⁰⁸Jill Briggs, "'As Fool-Proof as Possible': Overpopulation, Colonial Demography, and the Jamaica Birth Control League," *The Global South* 4, no. 2 (Fall 2010): 157–77.

¹⁰⁹Andrea Tone, Devices and Desires: A History of Contraceptives in America (New York, 2001).

¹¹⁰Qtd. in Connelly, Fatal Misconception, 205.

IUDs' insertion and removal, feminist technology scholars have referred to the devices as "imposable" contraceptive technologies, in contrast to the Pill, which users control. For the Population Council, the challenge was convincing women to accept IUDs in the first place and convincing governments in Africa, Asia, and Latin America to make IUDs widely and cheaply available to their citizens.

Fertility surveys facilitated the accomplishment of both objectives. A fertility survey asks people detailed questions about their childbearing history, attitudes toward family size, and experience with contraception. In the 1960s these surveys served three functions. In conjunction with new demographic methods, fertility surveys produced the kind of population data that were not readily available for many countries. They also served as population control interventions, educating participants about contraception, and they produced information that American philanthropists used to generate international support for the spread of new contraceptive technologies.

Demographers undertook fertility surveys in the mainland United States and in the Caribbean in the 1950s, but the Caribbean surveys served a different function than did those in the mainland. Although the Population Council funded both types (Caribbean surveys received additional funding from the Conservation Foundation), the differences between them resembled the differences between interwar demography sponsored by the U.S. government for planning purposes and that sponsored by Milbank for eugenic purposes. Whereas mainland surveys aimed simply to better predict future childbearing so that it could be planned *for*, fertility surveys in the Caribbean included intervention programs that explicitly aimed to reduce the size of poor families. Mainland surveys only interviewed women because demographers needed to know their childbearing intentions, not those of their husbands or other men, to model future population growth. Caribbean surveys, on the other hand, included men as well as women because, before the development of the birth control pill and the IUD, contraception required the cooperation of both partners.

When the IUD became available in the early 1960s, the Population Council changed its approach to fertility surveys, launching a program titled Knowledge, Attitudes, and Practices of Contraception, or KAP for short. By 1970, approximately 400 KAP surveys had been completed in at least fifty countries in Latin America, Africa, Asia, and the Middle East. KAP surveys focused exclusively on women and on piquing their interest in getting an IUD as a way to improve their family's socioeconomic circumstances and contribute to the economic development of their country. KAP surveys accompanied IUD-based family planning programs and followed up on propaganda distributed through mass communication channels.

¹¹¹Chikako Takeshita, The Global Biopolitics of the IUD: How Science Constructs Contraceptive Users and Women's Bodies (Cambridge, MA, 2012).

¹¹²William Brass, "Demographic Data Analysis in Less Developed Countries: 1946–1996," *Population Studies* 50, no. 3 (Nov. 1996): 451–67.

¹¹³For the U.S. surveys, see Ronald Freedman, Pascal K. Whelpton, and Arthur A. Campbell, *Family Planning, Sterility, and Population Growth* (New York, 1959). For Caribbean surveys, see J. Mayone Stycos and Judith Blake, "The Jamaican Family Life Project: Some Objectives and Methods," *Social and Economic Studies* 3, nos. 3/4 (Dec. 1954): 342–9; and Reuben Hill, J. Mayone Stycos, and Kurt W. Back, *The Family and Population Control: A Puerto Rican Experiment in Social Change* (Chapel Hill, NC, 1959).

¹¹⁴Demographers typically model fertility as a function of the number of reproductive-aged women in a population.

¹¹⁵For a discussion of one of the first KAP programs, see Ronald Freedman and John Y. Takeshita, *Family Planning in Taiwan: An Experiment in Social Change* (Princeton, NJ, 1969).

¹¹⁶KAP surveys occurred repeatedly in the same countries, to measure change over time, which is why the number of surveys exceeds the number of countries surveyed. Albert I. Hermalin, Barbara Entwisle, and Lora G. Myers, "Some Lessons from the Attempt to Retrieve Early KAP and Fertility Surveys," *Population Index* 51, no. 2 (Summer 1985): 194–208.

¹¹⁷For instance, see Freedman and Takeshita, Family Planning in Taiwan.

These communications aimed to instill a small-family norm, not to provide contraceptive information to people who already desired small families. 118

Population control was the primary purpose of KAP surveys, but demographers also used them to estimate birth and death rates in countries whose governments did not collect or publish such data. That is, population control projects *produced* evidence of rapid population growth in the Global South as much as they *responded* to it. To produce such evidence, OPR demographers invented a kind of demographic alchemy: complex mathematical methods for calculating vital statistics from sparse and sketchy data. Known as indirect estimation methods, these tools allowed demographers to generate complete demographic data from the kinds of questions that interviewers could ask of a small sample of women in a fertility survey.

Given that population growth rates in much of the Global South in this period were estimates at best, the Population Council rarely pointed to high birth rates to pressure governments in Africa, Asia, and Latin America to establish family planning programs. Indeed, it appeared that birth rates had already begun to fall precipitously in East Asia, where data were more widely available. Instead, the Council pointed to high levels of demand for family planning. As evidence of demand, Council leaders cited the proportion of survey respondents who expressed approval of family planning and the proportion who indicated that they wanted no more children. Demographers had discovered the challenges of measuring attitudes toward childbearing and contraception between the wars. 120 Yet they made little effort to ensure that KAP surveys accurately measured the attitudes of respondents. Questionnaires used vague language to assess approval of family planning, telling women that "nowadays, some married couples do something to keep from getting pregnant too often or having too many children," and then asking "generally speaking, do you approve or disapprove of their doing this kind of thing?"121 Critics complained that the surveys had been written by "foreign experts who know little of the local culture, do not even speak the local language or dialects, and have often lived only a few weeks in the country" and were delivered "at a very high speed" to "illiterate women" by "poorly trained interviewers." ¹²² Interviewers—typically local middle-class women, many of whom supported the eugenic aims of their own countries' family planning programs—often found themselves "instruct[ing] the respondents concerning the meanings of the questions and ... direct[ing] them to relevant responses when possible." Some respondents supplied the answers they thought interviewers wanted to hear, while others refused to answer altogether, lied outright, or even ridiculed interviewers. 124 Interviewers and analysts coded survey responses into a standard set of answers, eliminating these forms of resistance

¹¹⁸For instance, see Bernard Berelson, "On Family Planning Communication," *Demography* 1, no. 1 (1964): 94–105; and "The Population Council: The Disney Film on Family Planning," *Studies in Family Planning* 1, no. 26 (Jan. 1968).

¹¹⁹United Nations, Manual IV: Methods of Estimating Basic Demographic Measures from Incomplete Data (New York, 1967); William Brass et al., The Demography of Tropical Africa (Princeton, NJ, 1968).

¹²⁰Clyde V. Kiser, "The Indianapolis Fertility Study—An Example of Planned Observational Research," *Public Opinion Quarterly* 17, no. 4 (Winter 1953–1954): 496–510.

¹²¹L. P. Chow, Hsiao-Chang Chen, and Ming-Cheng Chang, *Knowledge, Attitudes, and Practice of Contraception in Taiwan: First Province-Wide Fertility Survey (KAP I), 1965* (Nov. 4, 2005), distributed by Inter-university Consortium for Political and Social Research, University of Michigan, Ann Arbor, https://doi.org/10.3886/ICPSR06862 (accessed Aug. 19, 2021).

¹²²Qtd. in Anthony Marino, "KAP Surveys and the Politics of Family Planning," *Concerned Demography* 3, no. 1 (Fall 1971): 36–75, here 42.

¹²³Harvey M. Choldin, A. Majeed Kahn, and B. Hosne Ara, "Cultural Complications in Fertility Interviewing," *Demography* 4, no. 1 (1967): 244–52, here 247.

¹²⁴Philip M. Hauser, "Family Planning and Population Programs': A Book Review Article," review of *Family Planning and Population Programs*, by Bernard Berelson, and *Research in Family Planning*, by Clyde Kiser, *Demography* 4, no. 1 (1967): 397–414.

from the data and from the historical record.¹²⁵ Council leaders expected to find low levels of demand for family planning and therefore likely aimed to inflate estimates.¹²⁶ While actual demand probably exceeded the Council's expectations, it was almost certainly lower than KAP data suggested.

Previous scholars have recognized that fertility surveys served population control functions through local survey interviewers, who educated respondents about birth control and promoted small-family norms. They have not adequately explained, however, how these studies scaled up, effecting population control at the level of a whole country. Fertility surveys were small and nonrepresentative, generally reaching only easily surveyed segments of a country's population. I do not doubt that fertility surveys aimed to influence the childbearing behaviors of the people who participated in them, but the vast majority of people did not participate. These surveys therefore had their largest effects on birth rates not through their direct interactions with participants, but by producing data that the Population Council could use to demonstrate high levels of demand and "unmet need" for family planning services and thereby convince governments in target countries to expand the family planning programs the Council had initiated. 128

The results of KAP surveys provided scientific support for a resolution drafted by the Council's communications director (and later president), Bernard Berelson, signed at Rockefeller's request by twelve heads of state in 1966, and presented to the UN on Human Rights Day, classifying access to family planning services as a human right. Tellingly, the resolution framed this right in the context of high national birth rates and the desire to slow global population growth, not the desire to provide families with greater reproductive autonomy. It nonetheless legitimated the international population control efforts of U.S.-based foundations and the U.S. government, and it pressured the governments of other countries to accept their assistance. By leveraging demographic training and strategically communicating demographic research, the leaders of the Population Council and the Ford Foundation had put their population control projects on the nation-building and economic development agendas of many developing countries and had enlisted the assistance of the United Nations.

However, while the Council's efforts largely succeeded in establishing population control programs and policies in Asian and Caribbean countries, and even in some Latin American countries, they did not meet the same acceptance worldwide. French-speaking countries generally did not participate in Council programs and sent many fewer students to the United States for training. Demographers from these countries typically trained in France, in a pronatalist tradition that generally eschewed American ideas about population growth and economic development. Latin American economists and demographers in the late 1960s systematically discredited the Coale–Hoover thesis that had underpinned family planning as a route to economic development, arguing that population control could not substitute for structural change. International resistance to U.S.-led population control efforts peaked at the UN's 1974 World Population Conference, where Indian representative Karan Singh famously stated

¹²⁵Riedmann, Science that Colonizes.

 $^{^{126}\}mbox{For the Council's expectation of low demand, see Berelson, "On Family Planning Communication."$

¹²⁷Riedmann, Science that Colonizes.

¹²⁸For the concept of "unmet need," see Charles F. Westoff, "Is the KAP-Gap Real?" *Population and Development Review* 14, no. 2 (June 1988): 225–32.

^{129a}Statement on Population by World Leaders," Dec. 10, 1966, folder 5, box 4, series 857, UN; John D. Rockefeller 3rd to U Thant, Dec. 14, 1966, folder 5, box 4, series 857, UN.

¹³⁰Emily A. Marshall, "Population Projections and Demographic Knowledge in France and Great Britain in the Postwar Period," *Population and Development Review* 41, no. 2 (June 2015): 271–300.

¹³¹For instance, see Eric R. Weiss-Altaner, "Fertility Decline, Savings and Economic Growth," *Concerned Demography* 2, no. 3 (Jan. 1971): 8–11; and Carmen Miró, "Interrelationship of Population Policy and Aspects of Development," Oct. 29, 1974, folder 2559, box 278, series 3, RG 2, PC.

that "development is the best contraceptive." ¹³² By that point, however, 125 countries had established government-sponsored family planning programs. ¹³³ Some of them, notably Peru, abandoned their support for population control after the conference and pursued redistributive measures instead. ¹³⁴ Others, such as India and China, stepped up their coercive population policies as a means of addressing internal poverty and political opposition, even as they rejected population control as a means of equalizing wealth and resources internationally. ¹³⁵

In the decades following World War II, American demography and global population control developed in tandem. Their connection was not straightforward, however, nor were their aims overdetermined by what historians tend to describe as the obvious threat of rapid population growth. Demography had emerged between the wars in the United States to serve the different needs of its two primary patrons: the New Deal state, which sought to use predictions of future population growth to plan economic development, and the Milbank Memorial Fund, which sought to use analysis of childbearing attitudes and behavior to influence future population growth in eugenic directions. Both projects went international after the war. U.S. demographers worked with the UN to expand the collection of demographic data and with the Population Council and Ford Foundation to influence the future growth of the world's populations in ways that would aid American business interests and promote U.S. national security and global power.

But influencing population growth in other countries required that U.S.-based organizations work with, not against, national sovereignty. The Population Council and the Ford Foundation could not simply impose population control in other countries. They could not even suggest it too enthusiastically. Instead, they funded the training of demographers from target countries, who learned to integrate population control into their countries' nation-building projects, and sponsored fertility surveys that produced evidence of rapid population growth and unmet need for family planning, putting pressure on governments in the Global South to meet that need. In the process, they stimulated the meteoric rise of demography as the interdisciplinary social science of human population. Sociologist Agnes Riedmann has described demography as a "science that colonizes." This article, by contrast, has demonstrated that demography was more specifically a *postcolonial* science, one that that helped U.S. philanthropies promote U.S. interests in a decolonizing world.

The population control programs of the mid-twentieth century were not simply an overzealous response to a clear and present danger. During this period, demographic data for much of the world remained sketchy. American businessmen and philanthropists worried about population growth overseas because the mercantilist paradigm, still alive and well at the end of World War II, cast human numbers as a source of geopolitical strength. It was the mid-century modernizationist paradigm, which redefined national success in terms of per capita national income, that transformed population growth into a burden for the countries experiencing it rather than their rivals and converted population control into an economic development strategy. But demography did not provide unequivocal support for population control. Instead,

¹³²Qtd. in Oscar Harkavy and Krishna Roy, "Emergence of the Indian National Family Planning Program," in *The Global Family Planning Revolution: Three Decades of Population Policies and Programs*, eds. Warren C. Robinson and John A. Ross (Washington, DC, 2007), 301–23, here 318. Also see Philander P. Claxton, Jr., "The World Population Conference: An Assessment," folder 15, box 29, Frank W. Notestein Papers, Seeley G. Mudd Manuscript Library, Princeton University, Princeton, NJ [hereafter FWNP].

¹³³"Progress of Work on the Technical Background Study to the World Population Plan of Action, Prepared by the United Nations Secretariat," June 26, 1973, folder 5, box 17, FWNP.

¹³⁴Raúl Necochea López, "Priests and Pills: Catholic Family Planning in Peru, 1967–1976," *Latin American Research Review* 43, no. 2 (2008): 34–56.

¹³⁵Rebecca Jane Williams, "Storming the Citadels of Poverty: Family Planning under the Emergency in India, 1975–1977," *Journal of Asian Studies* 73, no. 2 (May 2014): 471–92.

population control advocates marshaled demography as an ally for their project by strategically framing and communicating its findings.

In the second half of the twentieth century, U.S.-based foundations advanced American interests by putting those interests on the nation-building agendas of decolonizing and developing countries worldwide. They did so by appealing to science as the ultimate and universal arbiter of the natural world, the global economy, and the international order. But science was never a neutral arbiter of those things. As a major source of funding for science of every kind, U.S. philanthropies shaped the scientific knowledge that served as a foundation for the postwar world order and controlled how and where it traveled.

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