Unequal Encounters

Debating Resource Scarcity, Population, and Hunger in the Early Cold War*

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Introduction

In the early 1950s, Brazilian physician and nutritionist Josué de Castro published a book, entitled *The Geography of Hunger* in its English translation, which emerged from decades-long observation of chronic starvation in his native city of Recife, Brazil. The book, which received reviews both laudatory and scathing in the global press and academic journals, was a direct response to a 1948 publication by American conservationist William Vogt called *The Road to Survival*, which warned of a looming global population crisis. Vogt's writing, influenced by mid twentieth-century American eugenicist thinking, was unapologetic about the need to curb reproduction in what would soon come to be termed the "third world."¹ He adopted the concept of "carrying capacity" (originally used in reference to steam ships) as a purportedly objective measure of how many humans and other species a specified region can sustain, and he used this seemingly straightforward mathematical equation to justify recommending a range of population control measures.

Vogt viewed people in less industrialized countries as abstractions, based on ecological and demographic data but limited direct experience. De Castro's response to Vogt's assertions stemmed from personal encounters, since childhood, with the sort of people whose reproduction Vogt feared. The Brazilian intellectual countered Vogt's call for population control with an emotional appeal to readers, insisting that they confront the geopolitical injustices that make the global poor chronically hungry. Until his death in 1973, de Castro demanded in a variety of forums that the problem of hunger be addressed by reforming political and economic structures that failed to prioritize food

^{*} Archival sources cited in this article are from the Josué de Castro Archive, Fundação Joaquim Nabuco, Recife.

¹ Initially by Alfred Sauvy in "Trois mondes, une planète," *L'Observateur* 118 (August 14, 1952): 14.

cultivation and access. This essay examines the work of Vogt and de Castro with an emphasis on their contrasting forms of encounter with the subjects of their analyses and on the different affective rhetorical strategies that each employed to persuade their readers.

In the past two decades, several historians have written histories of twentieth-century family planning. Matthew Connelly critiques population control in several contexts as examples of the pitfalls of social engineering, highlighting the racism and classism inherent in numerous family planning campaigns. Thomas Robertson examines population concerns as one element of twentieth-century debates that pitted economic growth against environmental conservation, particularly in the United States. Alison Bashford considers immigration and birth control promotion as opposing strategies for managing global population growth. Emily Merchant illustrates how family planning advocacy emerged in conjunction with a new approach to eugenics, both movements understood by their supporters as progressive routes to economic uplift for the poor. She portrays demographers as more tempered advocates for population reduction than biologist Paul Ehrlich and other popularizers of "zero population growth."² Other scholars have provided insightful analyses of demography as a social-scientific discipline with ideological commitments shaped by its initial funders and institutional locations.³ This essay foregrounds the effort by one briefly prominent intellectual from the Global South to oppose the emerging, US-led consensus that population control was central to economic development, particularly in the world's poorest regions.

Both the American conservationist and the Brazilian scientist attuned to structural inequalities were politically progressive within their specific social contexts. Yet Vogt was willing to objectify and dismiss the individual aspirations of people in places far removed from his own experience in order to protect what he cherished as a North American "standard of living." De Castro imagined the global poor as familiar, due to his own experiences among

- ² Matthew Connelly, Fatal Misconception: The Struggle to Control World Population (Cambridge, MA: Harvard University Press, 2008); Thomas Robertson, The Malthusian Moment: Global Population Growth and the Birth of American Environmentalism (New Brunswick: Rutgers University Press, 2012); Alison Bashford, Global Population: History, Geopolitics, and Life on Earth (New York: Columbia University Press, 2014); and Emily Merchant, Building the Population Bomb (Oxford: Oxford University Press, 2021).
- ³ Susan Greenhalgh, "Social Construction of Population Science: An Intellectual, Institutional and Political History of Twentieth-Century Demography," *Comparative Studies in Society and History* 38, no. 1 (1996): 26–66; Edmund Ramsden, "Confronting the Stigma of Eugenics: Genetics, Demography and the Problems of Population," *Social Studies of Science* 39, no. 6 (2009): 853–884; and Carole McCann, *Figuring the Population Bomb: Gender and Demography in the Mid-Twentieth Century* (Seattle: University of Washington Press, 2017).

marginalized Brazilians, and vigorously opposed the relatively affluent North American's agenda as an imperialist imposition on the autonomy of less empowered people. De Castro feared that prioritizing population control as the solution to entrenched poverty would undermine other movements for economic transformation, such as agrarian reform in rural Latin America.

Debating Population during the Early Cold War

In her 2014 history of population studies Bashford notes that while "global food, hunger and population were key elements in the [Cold War] discourse of anti-Communism ... [they were also key elements of] postwar anticolonialism."4 That latter framing, which emphasized the alignment between endemic hunger and areas of former colonial rule, was articulated in the postwar writing of intellectuals from the newly designated "Third World." Their analyses of resource scarcity rejected the rising preoccupation with "overpopulation" emerging from industrialized nations, particularly the United States. Rather than reflecting an overabundance of people, these scholars argued, famines and social unrest were the result of economic injustices that directed inadequate resources (particularly food) to the world's poor. Development efforts, therefore, should focus not on reducing the numbers of poor people but on elevating their food consumption and economic productivity through economic restructuring, both within and among nations. In a 1954 book entitled Hungry People and Empty Lands Indian social scientist Sripati Chandrasekhar promoted the emigration of his country's poor to less populated regions of the Earth as a way to better align human population with food supply.⁵ As another prominent intellectual from one of the regions targeted for population reduction in the 1950s, de Castro argued vigorously against the solidifying US-based orthodoxy that blamed poverty on overpopulation.

Many nationalists from the Global South were wary of population control measures because of the eugenic intellectual roots of American and British fertility control advocates such as Margaret Sanger. In a foreword to Sanger's 1922 book promoting birth control, *The Pivot of Civilization*, author H. G. Wells – Sanger's friend and lover – summarized her message as follows:

The New Civilization is saying to the Old ... We cannot go on giving you health, freedom, enlargement, limitless wealth, if all our gifts to you are to be swamped by an indiscriminate torrent of progeny. We want fewer and better children who can be reared up to their full possibilities in unencumbered homes, and we cannot make the social life and the world-peace

⁴ Bashford, Global Population, 269.

⁵ Sripati Chandrasekhar, Hungry People and Empty Lands: Population Problems and International Tensions (London: George Allen & Unwin, 1954).

we are determined to make, with the ill-bred, ill-trained swarms of inferior citizens that you inflict upon us. 6

Critics of such views from the Global South portrayed foreign-sponsored birth control promotion as a form of imperialism that blamed poverty on the over-fecundity of the poor rather than on global economic relationships that fed citizens of powerful nations at the expense of those in the periphery. Examples like Puerto Rico, in which per capita income tripled over the 1940s at the same time that the population was growing (due to decreased infant mortality), threw US-influenced demographic orthodoxy into question.⁷

In order to combat accusations of imperialist motivation, new organizations focused on global population reduction – like the International Planned Parenthood Federation, established in 1952 – adopted the term "family planning" to connote a focus on the best interests of parents and children rather than the more insidious "control" of birth rates. Nevertheless, when Cornell University sociologist J. Mayone Stycos analyzed Latin American press coverage of population issues in the 1960s and interviewed scholars across the region, he concluded that most Latin Americans viewed "overpopulation" as an imperialist myth used to justify reducing birth rates in the Third World. Those who did believe in a looming demographic crisis thought it should be solved by promoting industrial economic growth, which – according to demographers' own models – would lead naturally to reduced family size.⁸

In the past decade, numerous scholars have traced the multi-institutional focus on population control that was pursued by philanthropic foundations and government agencies in the decades following World War II. Connelly highlights the technocratic modernization ideologies that underlay such efforts.⁹ Robertson traces the merging of concerns about ecological limits to growth with both eugenics and Cold War geopolitical concerns.¹⁰ Many Cold Warriors viewed American-style suburban domesticity as the exemplar of capitalist modernity. They upheld small, nuclear-family households as essential to industrial development driven by increased *per capita* consumption of

⁶ Quoted in Bashford, *Global Population*, 233. Historian Piers Hale asserts that Wells owed his Malthusian views to Thomas Huxley; see *Political Descent: Malthus, Mutualism, and the Politics of Evolution in Victorian England* (Chicago: University of Chicago Press, 2014), 219, 272.

⁷ Laura Briggs, *Reproducing Empire: Race, Sex, Science, and U.S. Imperialism in Puerto Rico* (Berkeley: University of California Press, 2002), 15.

⁸ Karina Felitti, "La 'Explosión Demográfica' y la Planificación Familiar a Debate: Instituciones, Discusiones y Propuestas del Centro y la Periferia," *Revista Escuela de História* 7, no. 2 (2008): 1–16.

⁹ Connelly, Fatal Misconceptions.

¹⁰ Robertson, *Malthusian Moment*; Paul Ehrlich, *Population Bomb* (New York: Ballantine Books, 1968).

manufactured goods. Large families were antithetical to such progress, draining resources at both the household and national levels. As one historian argues, by the early 1950s, "[a]n intellectual orthodoxy concerning the importance of the relationship between national economic development and [managed] population growth solidified among social scientists, economic planners, and political leaders in the West and in those nations that looked predominantly to the liberal democracies of the West" for assistance and emulation.¹¹ This new orthodoxy was based on demographic transition theory, developed by Frank Notestein at Princeton University. In 1952, several philanthropic foundations, including Rockefeller, Ford, and Milbank Memorial, jointly formed the Population Council, allowing them to distance their names from controversial population control efforts; Notestein became head of the council in 1959. Reducing fertility in poor nations became a focus of many international development agencies during the 1950s and 1960s, motivated by demographically based theories of economic development and by Cold War concern that the impoverished masses of Europe's former colonies would be vulnerable to Marxist political movements.

The consolidation of overpopulation as a way of conceptualizing global resource scarcity is an example of intellectual imperialism grounded in social and natural sciences (notably demography and ecology), with significant consequences for globally marginalized people when concerns about population growth were translated into policy – most tragically when such policies were carried out by authoritarian regimes, or by political classes that sought to reduce the influence of minority ethnic groups. Even in less draconian cases (those that did not involve coerced sterilization or abortion), it is a significant intrusion into people's most intimate life decisions to assert that their reproductive choices will have negative consequences for national welfare and the wider human community.¹²

American Conservationist William Vogt and the Road to Survival

Vogt's 1948 book *Road to Survival* argued that curbing population growth was an urgent priority for developing nations. The American conservationist based his analysis of human population limits on what he termed carrying capacity,

¹¹ Simon Szreter, "The Idea of Demographic Transition and the Study of Fertility Change: A Critical Intellectual History," *Population and Development Review* 19, no. 4 (1993): 659.

¹² This analysis is informed by Warwick Anderson's examination of imperialist science, knowledge, and policy and Jan Goldstein's advice to consider the moral field in which particular historical actors – including those deeply committed to curbing human population growth during the 1950s – operated. Warwick Anderson, "Objectivity and Its Discontents," Social Studies of Science 43 (4) 2013, 557–576; Jan Goldstein, "Toward an Empirical History of Moral Thinking: The Case of Racial Theory in Mid-Nineteenth-Century France," American Historical Review 120, no. 1 (2015): 1–27.

expressed as a simple equation: C = B:E, where C is carrying capacity, B is biotic potential to sustain animals, and E is environmental resistance to this potential.¹³ Later ecologists, notably Eugene Odum, would question the usefulness of this means of estimating a region's capacity to sustain life, due to the number of variables in dynamic interaction that impact the maximum population a particular land area can sustain.¹⁴ Soil fertility was a central focus of Vogt's analysis, reflecting concerns about soil depletion that arose during the 1930s as a result of the US Dust Bowl, along with evidence of severe erosion in Australia and South Africa.¹⁵ In Vogt's view, the problem of overpopulation was not only an ecological concern. He believed that an intensifying struggle for *lebensraum* (literally room to live, a term deployed by the Nazis to justify Germany's territorial expansion) underlay the terrible violence witnessed in Europe and Asia during the first half of the twentieth century. Without a curb on human population increase, Vogt predicted, such violence would intensify.

Vogt's analysis acknowledged that overconsumption and waste in the industrialized world contributed to resource scarcity elsewhere. He also noted the rapacious impact of capitalism on natural resources. Uniting these views, he asserted that "Ecological health for the world, requires, above all ... 1. That renewable resources be used to produce as much wealth as possible on a sustained-yield basis ... and 2. We must adjust our demand to the supply, either by accepting less per capita (lowering our living standards) or by maintaining less [sic] people." However, Vogt quickly dismissed the possibility of reducing consumption in the industrialized world by any significant measure: "Since our civilization cannot survive a *drastic* lowering of standards, we cannot escape the need for [global] population cuts," he concluded.¹⁶ And although Vogt saw capitalism as partly to blame for global poverty, he took the eugenicist's view that the poor are somewhat responsible for their own misfortune. Vogt tentatively recommended financial "bonuses" for men (in particular) who voluntarily underwent surgical sterilization. "Since such a bonus would appeal primarily to the world's shiftless," he postulated:

it would probably have a favorable selective influence. From the point of view of society, it would certainly be preferable to pay permanently indigent individuals, many of whom would be physically and psychologically marginal, \$50 or \$100 rather than support their hordes of offspring

¹³ William Vogt, *The Road to Survival* (New York: W. Sloane Association, 1948), 16.

¹⁴ Nathan F. Sayre, "The Genesis, History, and Limits of Carrying Capacity," Annals of the American Association of Geographers 98, no. 1 (2008): 127.

¹⁵ William Beinart, "Soil Erosion, Conservationism and Ideas about Development: A Southern African Exploration, 1900–1960," *Journal of Southern African Studies* 11 (1984): 52–83.

¹⁶ Vogt, Road to Survival, 265.

that, by both genetic and social inheritance, would tend to perpetuate their fecklessness. $^{\rm 17}$

Vogt was not reticent about the struggle for survival between people in wealthier and poorer countries that carrying capacity limitations would eventually necessitate, and he did not disguise his bias against populations he viewed as overly fecund. Why should the United States, Canada, Australia, and Brazil "open their doors to Moslems, Sikhs, Hindus (and their sacred cows)," he asked rhetorically, in a section on immigration as one possible solution to food scarcity, "to reduce the pressure caused by untrammeled copulation. Our living standard must be dragged down, to raise that of the backward billion of Asia.^{*18} With reference to a UN FAO proposal for economic development in Greece, Vogt noted: "At no point in the entire report is there any suggestion that a positive effort be made to reduce the breeding of the Greeks ... Such neglect [of this possible solution] would disqualify a wildlife manager in our most backward states!"¹⁹ Vogt warned his American readers that "Since Greece seems to have planted its hand firmly in the American dinner pail, the question [of population growth in that war-ravaged country] is of more than academic interest to the American taxpayer."²⁰ Regarding President Truman's "Point Four" program of foreign aid following World War II (which Vogt opposed and de Castro praised), Vogt advocated freedom to access reliable contraception as a precondition for receiving American assistance. "Quite as important as the Four Freedoms ... is a Fifth Freedom – from excessive numbers of children," he quipped.²¹

Throughout *Road to Survival*, Vogt criticized twentieth-century public health programs for having exacerbated the mounting problem of overpopulation. "Was there any kindness in keeping people from dying of malaria so that they could die more slowly of starvation?" he asked in the introduction.²² Vogt's critique pointed to Latin America's medical sanitarians as among the well-meaning progressives responsible for unsustainable population growth. His discussion of that world region noted that "drinking water has been improved in many cities to such an extent that intestinal diseases, the most effective factor limiting populations, have dropped sharply."²³ This observation was certain to raise the ire of public health professionals, including de Castro, for whom their nations' early twentieth-century sanitarians were

- ¹⁷ Ibid., 282.
- ¹⁸ Ibid., 228.
- ¹⁹ Ibid., 206.
- ²⁰ Ibid.
- ²¹ Ibid., 211.
- ²² Ibid., 13.
- ²³ Ibid., 164.

heroes. Vogt was evidently aware that his cavalier attitude toward infant mortality could be jarring. He followed the observation that "One of the greatest national assets of Chile, perhaps the greatest asset, is its high death rate" by adding, "This is a shocking statement. Nevertheless, if one does not believe there is a virtue in having more people live ever more miserably, destroying their country with increasing rapidity, the conclusion is inescapable."²⁴ Unabashed, later in the volume Vogt chastised British colonial administrators in India for contributing "to making famines ineffectual, by building irrigation works, providing means of food storage, and importing food during periods of starvation" rather than allowing disease and famine to limit Indian population growth as they had for generations.²⁵ Vogt's book repeatedly depicts the global poor as wallowing in misery. In his view it would be better not to have been born than to live as they did.

Vogt's dismal depiction of hunger and poverty in many regions of the world was influential in shaping overpopulation discourse and related philanthropic efforts over the following decade.²⁶ His warnings about the dangers of overpopulation became the basis for Paul Ehrlich's widely read book The Population Bomb, published in 1968, two months before Vogt's death. An entomologist by training, Ehrlich became a member of Stanford University's faculty in 1959, where he interacted with sociologist Kingsley Davis, ecologist Garrett Hardin, and others who believed firmly in looming demographic catastrophe. Critics of Ehrlich's 1968 book have noted that he attributed to population biology and ecology problems (like the global proliferation of urban slums) that were more directly attributable to industrialization, increasingly concentrated land ownership, and resulting rural-urban migration.²⁷ During the 1960s, Ehrlich cited India as an example of the population crisis that threatened all humanity, but by the following decade he had begun to focus attention on American consumerism as a significant engine of environmental crisis.²⁸ Ironically, this brought him closer to the viewpoint of Josué de Castro. Historian Thomas Robertson argues that this

- ²⁵ Ibid., 226. Notably, British economist John Maynard Keynes opposed immunization efforts in colonial India because he thought population growth would impede economic progress. Michelle Murphy, *The Economization of Life* (Durham, NC: Duke University Press, 2017), 21.
- ²⁶ Robertson, *Malthusian Moment*, 56.
- ²⁷ Charles Mann, The Wizard and the Prophet (New York: Knopf, 2018), 402.
- ²⁸ This shift in Ehrlich's position was probably influenced by his debates with ecologist Barry Commoner, whose 1971 book *The Closing Circle: Nature, Man, and Technology* (New York: Random House, 1971) "insisted that the consumption patterns of industrial society, not the birth rate, lay behind the ecological crisis of the planet." Erika Lorraine Milam, *Creatures of Cain* (Princeton: Princeton University Press, 2019), 186. Commoner debated both Ehrlich and ecologist Garrett Hardin.

²⁴ Ibid., 186.

shift made Ehrlich's position less politically viable than his prior attacks on the overfecundity of the third-world poor.²⁹

In a biography of Vogt that juxtaposes the ecologist's gloomy predictions about humanity's future with those of the more optimistic agronomist Norman Borlaug (often termed the father of the Green Revolution), author Charles Mann emphasizes aspects of Vogt's life that may have contributed to his pessimistic outlook.³⁰ Vogt's father abandoned their small family shortly after his son's unplanned birth. During a lonely childhood on Long Island the young Vogt became an avid amateur ornithologist, and as an adult the rapid urbanization around his childhood haunts alarmed him. In 1934, Vogt became editor of the Audubon Society journal Bird-Lore; through that position he met Aldo Leopold and other prominent naturalists. In 1939, on the recommendation of Robert Cushman Murphy of the American Museum of Natural History, Vogt traveled to guano islands off the Peruvian coast to advise Peru's government about seabird population decline. While there he witnessed a famine among the birds caused by diminished plankton supply during an El Niño period. Vogt interpreted this in Malthusian terms, as a natural cycle that kept the bird population from exploding.

Upon his return to the United States, Vogt was hired by Nelson Rockefeller's Office of Inter-American Affairs, and from 1943 to 1949 he served as head of the Pan-American Union's (later the Organization of American States's) Conservation Section, in which capacity he toured a number of Latin American countries. In 1948, Vogt created the Conservation Foundation in partnership with Aldo Leopold and Fairfield Osborn, whose father had written a preface to Madison Grant's eugenicist 1916 tome *The Passing of the Great Race*; 1948 was also the year in which Vogt and Osborn each published books warning of disastrous environmental decline as a result of human population growth.³¹ Vogt continued this argument in subsequent publications, such as a 1949 *Harper's* magazine article that portrayed Mexico as teetering on the edge of ecological collapse due to accelerating human population growth. Historian Nick Cullather notes that Mexico's population density at the time was lower than that of the United States and speculates that Vogt confused urbanization, caused primarily by

²⁹ Thomas Robertson, "Revisiting the Early 1970s Commoner-Ehrlich Debate about Population and Environment: Dueling Critiques of Production and Consumption in a Global Age," in A World of Populations: Transnational Perspectives on Demography in the Twentieth Century, eds. Heinrich Hartmann and Corinna Unger (New York: Berghann Books, 2014), 116 and 120.

³⁰ Mann, *The Wizard and the Prophet* in which Borlaug is cast as the wizard in contrast to pessimistic prophet Vogt.

³¹ Fairfield Osborn, Our Plundered Planet (London: Faber and Faber, 1948).

internal migration, with overall population increase.³² That internal migration was the result of both agricultural modernization, spurred in part by the US-promoted Green Revolution, and industrialization.

Also in 1948, with help from Julian Huxley and UNESCO, Vogt and several colleagues formed the International Union for the Protection of Nature. During its first conference the following year the IUPN criticized President Truman's Point Four program for aid to developing countries, which advocated increased productivity and consumption worldwide. Due to such outspoken opposition to the economic development agenda promoted by many government officials, Vogt was asked to resign from the Pan-American Union. In 1950, he accepted Fulbright and Guggenheim grants to travel with his second wife, Marjorie, to Scandinavia, to investigate successful population control measures. In 1951, he was hired by Margaret Sanger to head the Planned Parenthood Federation of America where he remained for a decade. Vogt's criticism of economic policies that prioritized growth without heeding environmental costs made him a pariah in some circles during that critical Cold War decade and strained his professional relationships. In 1967, Vogt's third wife died, and he killed himself a year later. None of his marriages produced children.

Vogt's descriptions of the obstacles to global security and prosperity posed by unmanaged population expansion in Asia, Latin America, and elsewhere were ruthless. From his perspective, as an American who prioritized conservation to maintain existing standards of living, this stance undoubtedly seemed eminently defensible, merely embracing hard-nosed solutions to postwar global challenges. Viewed from a very different geographic and political orientation, Vogt's recommendations were appalling. De Castro countered Vogt's dramatic vignettes of impending catastrophe with an optimistic vision of improved global nutrition fueling boundless human ingenuity. Both authors hoped to persuade readers through emotional appeals about the values at stake in this debate.

Brazilian Physician Josué de Castro and the Geography of Hunger

Josué de Castro grew up in the coastal capital city of Recife, Pernambuco, in northeast Brazil (Figure 9.1). There a centuries-old sugar-exporting sector historically dependent on enslaved labor was in decline, and de Castro witnessed the deep poverty of many in the region. His childhood home was adjacent to mangroves where families constructed makeshift shacks to forge a meager living from crabmeat as their primary sustenance. Some of these

³² Nick Cullather, The Hungry World: America's Cold War Battle against Poverty in Asia (Cambridge, MA: Harvard University Press, 2010), 65.

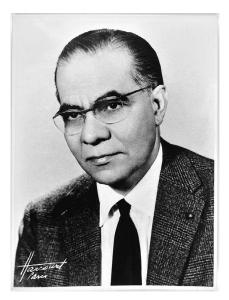


Figure 9.1 Portrait of Josué de Castro, undated. Source: Acervo Fundação Joaquim Nabuco. Recife-PE, Brazil.

desperate souls were escaping droughts in the semiarid interior *sertão*, as de Castro's own father had done; others faced the endemic hunger that plagued many inhabitants of Brazil's coastal sugarcane zone. "Right next to [our] house," de Castro recalled in a memoir, "started the tightly packed area of the hovels – straw and mud huts, piled one on top of the other in a network of alleys in desperate anarchy. The houses penetrated the water, the tide invaded them. The branches of the river overtook the street and the mire overwhelmed everything."³³ As a child, de Castro listened to stories of servitude told by two formerly enslaved men who worked for his father. Over time he came to understand that the crabs on which residents of the mangroves subsisted provided a more reliable source of nutrition than what many people in northeast Brazil enjoyed – and that the "drama" of constant hunger that colored the daily existence, and even the metaphorical language, of his childhood playmates played out with slight variation in communities around the world.³⁴ The physician had witnessed first-hand the human

³³ Josue de Castro, Of Men and Crabs, trans. Sue Hertelendy (New York: Vanguard Press, 1970), xvii–xviii.

³⁴ Ana Maria de Castro, ed., Fome: Um tema proibido, 3rd ed. (Recife: CONDPE/CEPE, 1996), 28–29.

misery of slow starvation. He disagreed vehemently with Vogt as to its fundamental causes and solutions.

De Castro's professional training took him to medical school in Rio de Janeiro during the late 1920s and back to Recife, where he graduated from the city's new faculty of medicine in 1932. Soon after, he received funding from the Pernambuco (state) Department of Public Health to study the relationship between income and cost of living among working people in Recife. This research was conducted by surveying patients at public health clinics about their family size, income, and expenses for necessities (housing, clothing, and food). The resulting, widely cited publication, "Living Conditions of the Working Class in Recife: An Economic Study of Their Diet," was the first of its kind in Brazil and a model for subsequent investigations by de Castro and others.³⁵ The report concluded that Recife's workers lived in a constant state of debt, with average salaries lower than what was required to sustain a family of five or more. Food absorbed three-quarters of workers' budgets and was nonetheless nutritionally inadequate; the typical diet amounted to 1,650 calories each day with no milk, fruits, or vegetables. De Castro cited malnutrition as the cause of high infant mortality (almost 260/1,000 in Recife - and higher in rural areas) and low life expectancy, which amounted to a tremendous loss of "human capital."³⁶ What had often been characterized as "mal de raça" (racial weakness) was in fact "*mal de fome*," he argued – physical debility caused by poor nutrition.³⁷ The data from de Castro's study became the empirical basis for passage of a minimum wage law for urban workers, supported by President Getúlio Vargas.

De Castro held a series of academic and political positions over several decades, all centered on problems of nutrition and political economy. From 1937 to 1957, he occupied the Human Geography chair at the new University of Brazil in Rio de Janeiro, where he was appointed director of the Institute of Nutrition. Along with his academic posts, in 1942 he became director of a Brazilian agency intended to address food supply problems during the world war. During this period, de Castro shifted his research focus from the physiological study of malnutrition (its direct causes and impact on the human body) to a political-economic analysis of hunger as a widespread social scourge. He deliberately rejected the term "malnutrition" in favor of the more evocative "hunger" (*fome*), rather than adopting a more objective and distanced approach to questions of food scarcity.³⁸ His goal was to emphasize the human

³⁵ Josue de Castro, As Condições de Vida das Classes Operárias no Recife: Estudo Econômico de sua Alimentação (Rio: Dept. de Estatística e Publicidade, Min. do Trabalho, Indústria e Commercio, 1935).

³⁶ Ibid., 19–20.

³⁷ Ibid., 7.

³⁸ De Castro, *Fome*, 14.

suffering and injustice at the core of this phenomenon. This focus is evident in a fictional sketch de Castro published in the Rio de Janeiro newspaper *Diário de Notícias* during a drought in 1951, in which a farmer is forced to witness his young child's death by dehydration after years of backbreaking labor in the semiarid interior of northeast Brazil. In this and similar (but nonfictional) accounts de Castro worked to elicit sympathy from his countrymen for the chronic tragedy that plagued the most marginal citizens of his home region.³⁹

In 1948, de Castro organized a Latin American conference on nutrition in Montevideo, sponsored by the UN FAO and World Health Organization. Two meetings followed, in Rio de Janeiro (1950) and Caracas (1953), all addressing similar themes to those highlighted in his publications.⁴⁰ In 1950, conservative landowners blocked de Castro's appointment to become Brazil's Minister of Agriculture, due to his support for controversial land redistribution measures. He then became president of the UN FAO's Executive Council, a post that he held for four years. While at the FAO in Rome, de Castro founded a campaign against world hunger with which he remained involved through 1965. President Vargas appointed de Castro to a National Commission for Agrarian Reform (Comissão Nacional de Política Agraria), which aimed to extend rights to rural workers that had been obtained by urban workers during the 1930s. Vargas also made him vice-president of a national social welfare commission (Comissão Nacional de Bem Estar Social) in 1953.

De Castro was not the only Brazilian nutritionist to criticize the political and economic foundations of malnutrition during the mid twentieth century. Several others conducted similar studies and published books and articles that highlighted undernourishment as a crisis as important as poor sanitation, a public health issue that had received considerable attention and federal funding during the first decades of the twentieth century.⁴¹ Like de Castro, these authors emphasized that what had often been interpreted as signs of racial inferiority among Brazil's poor were instead indicators of malnutrition, stemming from a range of social inequities.⁴² Scientists like Pernambuco's

- ⁴⁰ See O Estado de S. Paulo, 27 maio 1953: "Instalado em Campinas o Primeiro Seminario Latino-Americano Sobre os Problemas da Terra," clipping obtained from Centro Josué de Castro, Recife.
- ⁴¹ Eric D. Carter, "Social Medicine and International Expert Networks in Latin America, 1930–1945," *Global Pubic Health* 14, no. 6–7 (2019): 791–802.
- ⁴² Ruy Coutinho, O Valor Social da Alimentação 2nd ed. (Rio de Janeiro: Agir Ed., 1947); Nelson Chaves, O problema alimentar do Nordeste brasileiro: Introdução ao seu estudo economico social (Recife: Ed. Medico Científica, 1946); Nelson Chaves, A sub-alimentação no Nordeste brasileiro (Recife: Imprensa oficial, 1948); and Orlando Parahym, O Problema alimentar no sertão (Recife: Imprensa Industrial, 1940). On medicine and racial discourses in northeast Brazil, see Stanley E. Blake, The Vigorous Core of Our

³⁹ Josue de Castro, "A Seca," *Diário de Notícias* (Rio de Janeiro), 1951. Newspaper clipping held in JdC archive, undated.

secretary of public health Nelson Chaves, a physiology professor at Recife's medical school, mobilized quantifiable data and their own professional status to generate sympathy for the chronically malnourished, in hope of promoting more just access to essential resources.

De Castro's Response to Vogt

De Castro reached international readers with his 1951 book *A Geopolítica da Fome*, which outlined the problem of global hunger as a product of economic relationships within and among nations. Published in English as *The Geography of Hunger* to avoid use of a term tainted by association with Nazi ideology, the book was translated into over twenty languages during the 1950s.⁴³ Neither Vogt's *Road to Survival* nor Fairfield Osborn's *Our Plundered Planet* was as broadly translated.⁴⁴ *The Geography of Hunger* expanded on de Castro's 1946 study of hunger in Brazil, which itself stemmed from his mid-1930s analysis of the diets of Recife's working poor. The book vigorously opposed the view, ascendant within American development organizations in particular, that global hunger was rooted in excessive population growth. Its specific target was *Road to Survival*, which de Castro satirically termed *The Road to Perdition*.

In *A Geopolitica da Fome*, de Castro accused Vogt and other "neo-Malthusians" of laying blame for social unrest and looming environmental crises on the poor for their undisciplined reproductive choices, when they should instead be seen as victims of global economic and political forces that conspired to deprive their families of sufficient food. De Castro insisted that hunger is not a biological or ecological phenomenon; it is the product of human economies. He cited the dedication of vast tracts to monocrop exports as the primary culprit, both because of the soil erosion that ensues and because those crops displace food cultivation. "Hunger has been chiefly created by the inhuman exploitation of colonial riches, by the *latifundia* and one-crop culture which lay waste the colony, so that the exploiting country can take too cheaply the raw materials its prosperous industrial economy requires," de Castro wrote.⁴⁵ Those guilty of creating this crisis were not the famished "as Vogt asserts," but rather "those who go in for neo-Malthusian theories while they defend and benefit from the imperialist type of

Nationality: Race and Regional Identity in Northeastern Brazil (Pittsburgh: University of Pittsburgh Press, 2011).

- ⁴³ These included English, Spanish, French, Italian, German, Swiss, Russian, Polish, Czech, Hungarian, Bulgarian, Yugoslavian, Lithuanian, Norwegian, Swedish, Hebrew, Japanese, Chinese, and Hindi.
- ⁴⁴ *Road to Survival* was translated into at least eleven languages.
- ⁴⁵ Josue de Castro, *The Geography of Hunger* (Boston: Little, Brown, 1952), 7.

economy."⁴⁶ The neo-Malthusian recommendations of Vogt and his colleagues "reflect the mean and egotistical sentiments of people living well, terrified by the disquieting presence of those who are living badly," the Brazilian asserted bluntly.⁴⁷

In de Castro's reading of modern history, the dominant global model of "economic colonialism," driven by raw materials export from the tropics, generated hunger among laborers in those peripheral regions. He proposed an alternative model that he termed a "geography of abundance," mutually beneficial to the world's wealthy and poor. Instead of trying to limit the growth of populations in the Global South, de Castro argued, those countries should expand the land and sea areas used for food cultivation and intensify agricultural production with the aid of fertilizers, pesticides, and better soil conservation. By raising the real wages and consumption of the poor, economic exchange would be stimulated worldwide - and population reduction would no longer be necessary or desirable. De Castro disputed Vogt's central claim that all of Earth's fertile soils were already under cultivation. "A great many areas of very good soil are to be found in South America" and elsewhere, he asserted, and not yet farmed.⁴⁸ Within Latin America, only Puerto Rico could be said to be overpopulated, and "chronic starvation" there was the result of neocolonial policies by the United States, which displaced food production in favor of sugar, tobacco, and coffee exports.⁴⁹ "The fundamental truth can no longer be concealed," De Castro intoned in his conclusion. "The world has at its disposal enough resources to provide an adequate diet for everybody, everywhere. If many of the guests on this earth have not yet been called to the table, it is because all known civilizations, including our own, have been organized on a basis of economic inequality."50

De Castro had great faith in human creativity, capacity for technological innovation, and instinct for survival. There is no "impassable limit to human population" fixed by nature, he insisted – in contrast to Vogt's postulation of firm limits to Earth's carrying capacity. Rather, people "transform natural limitations into social opportunities" through science and ingenuity.⁵¹ De Castro deemed chemical fertilizers and other technologies for intensive farming to be critical for increasing food production, along with fish farming

⁵¹ Ibid., 25.

⁴⁶ Ibid., 17.

⁴⁷ Ibid., 312. Historian Piers Hale observes that English socialists also rejected the application of Malthusianism to human societies, believing that "Humanity could raise itself out of the struggle for existence through labor, cooperation, the application of technology to the natural resources that lay all around them, and the fair and equitable distribution of the goods that they produced." Hale, *Political Descent*, 258.

⁴⁸ De Castro, *Geography*, 97.

⁴⁹ Ibid., 123.

⁵⁰ Ibid., 281.

and hydroponic agriculture. Like many other Cold War technocrats he was enthusiastic about the US Tennessee Valley Authority model, through which "rational control of land, water, and all the various resources of the region" raised incomes and improved living conditions for millions of people within the agency's jurisdiction.⁵² "When deserts of ice and impenetrable tropical jungles are being turned to gardens and orchards, when the lands we farm and the plants we grow are being made to multiply their yield, and while we are barely learning how to tap the great food reservoirs of the waters, the wild flora, and of artificial synthesis, the Malthusians go on setting up their sinister scarecrows," he chided. "It is nothing to us, since we have no reason to fear them."⁵³

Paralleling the organization of Vogt's book, de Castro's substantive chapters analyze deficiencies in the typical diet of poor people from many global regions, based on prevailing understanding among nutritionists in the late 1940s of the importance of minerals, vitamins, and amino acids. The Brazilian viewed hunger as correctable through effective use of modern technologies, but also as a matter of equitable resource distribution (as economist Amartya Sen would argue several decades later).⁵⁴ Both of these elements - the technological and social limits on food supply - must be addressed simultaneously to provide adequate food for expanding human communities. De Castro cited a recent UN FAO proposal as one potentially helpful intervention in the global food economy: "What we propose is an international instrument of consultation and co-operative action in the commodity field, so that nations may join in concerted efforts to attack the common enemies of mankind - poverty, disease and hunger - instead of each attacking the other's prosperity in a futile effort to defend its own."55 Ensuring food sufficiency was fundamental to global security, de Castro insisted, deploying one of Vogt's motivating concerns in service of an opposing position.

Central to de Castro's argument was the belief that hunger itself contributes to population growth, so reducing hunger would correspondingly slow population increase: "The psychological effect of chronic hunger is to make sex important enough to compensate emotionally for the shrunken nutritional appetite," he speculated.⁵⁶ In support of this theory de Castro cited research on the suppression of fertility in rats that consume a high-protein diet, as

⁵² Ibid., 137. On the TVA as a regional development model, see Amy C. Offner, Sorting Out the Mixed Economy: The Rise and Fall of Welfare and Developmental States in the Americas (Princeton: Princeton University Press, 2019).

⁵³ De Castro, *Geography*, 299.

⁵⁴ Amartya Sen, *Poverty and Famines: An Essay on Entitlement and Deprivation* (Oxford: Clarendon Press, 1981).

⁵⁵ De Castro, *Geography*, 306.

⁵⁶ Ibid., 69.

wealthier people do.⁵⁷ He provided data on the inverse relationship between national birth rates and protein consumption and suggested a mechanism to account for this, based on research by physiologists at the University of Chicago:⁵⁸ protein deficiency reduces liver function, which reduces "the liver's ability to inactivate estrogens," thereby *increasing* women's fertility.⁵⁹ Higher fertility among less well-fed populations might be an evolutionary protection, de Castro hypothesized, as prospects for the survival of offspring diminished due to food scarcity.⁶⁰

Another cornerstone of de Castro's opposition to overpopulation discourse was his conviction that a better-fed population would be more industrious and could therefore produce more food. "In diet [lie] the origins of Chinese submissiveness, of the fatalism of the lower castes in India, of the alarming improvidence of certain populations in Latin America," he insisted, uncritically referencing widely held stereotypes.⁶¹ "The 500,000,000 Chinese could have a life absolutely free of hunger if they were physically capable of work, if their nutritional and hygienic conditions allowed them to make use of the geographic potentialities of their country."⁶² Sons were often deemed essential to farmers without livestock, such as Chinese working tiny plots to feed their families (who could not waste meager food on animals). This produced a vicious cycle of population growth, de Castro argued. Thus, "[t]o wipe out hunger ... it is necessary to raise the productive levels of marginal peoples and groups, and through economic progress to integrate them into the world economic community."⁶³ In de Castro's developmental imagining, resource constraints would be overcome by the same people whom Vogt targeted for fertility control. Adequately fed human communities would become an asset to greater productivity, rather than a drain on ecological resources or a threat to political stability. Extrapolating from his extensive experience with marginalized communities in Recife, de Castro attributed similar potential for resourcefulness and ingenuity to impoverished people worldwide. Vogt, with little personal experience of the world's poor, projected a pessimistic vision of the future on continents overrun by desperate, starving hordes. De Castro's contrasting vision stemmed from frequent encounters with the chronically hungry and a more sympathetic understanding of their plight.

- ⁶¹ Ibid., 68.
- 62 Ibid., 166.
- ⁶³ Ibid., 303.

⁵⁷ Ibid., 70.

⁵⁸ Ibid., 72. The physiologists were Anton Carlson and Fred Hoelzel, with whom de Castro corresponded in the 1950s.

⁵⁹ Ibid., 164.

⁶⁰ Ibid., 71.

It is notable that de Castro's writing emphasized class location and social marginalization but rarely made explicit mention of race, despite the fact that in his native region African ancestry correlated closely with poverty - and that as a child he knew men who had spent their youth as slaves. De Castro's silence with regard to race is likely traceable to the emphasis in Brazil, particularly from the 1930s through the 1950s, on racial harmony ("racial democracy") as a national characteristic.⁶⁴ It is not clear that he embraced northeastern sociologist Gilberto Freyre's depiction (in seminal works like Casa Grande e Senzala, about colonial slaveholding) of Brazilian society as racially harmonious.⁶⁵ Nevertheless, he may have been disinclined to take direct aim at the widespread assumption that explicitly racial prejudice was not an issue in Brazil. Reference to social class, often in terms of contrasts between elite and marginal groups, sufficed - in de Castro's view - to describe the divisions and injustices that he wished to draw attention to. De Castro himself was sometimes described as a Mulatto man, suggesting that he had both European and African ancestry (and that this mixed lineage was evident in his appearance), but he did not discuss this as a significant aspect of his own identity. In his worldview and experience, class loomed larger than race as a way of conceptualizing the inequities in power and resource access that he wished to draw attention to. De Castro's concerns were with global capitalism and the legacies of imperialism, which he understood in political and economic terms rather than racial ones. He also disregarded gender as an analytical category, which seems astonishing to a contemporary reader, given his subject matter, but was true of virtually all the men who debated population growth as a global issue in the mid twentieth century. Their central focus was the quantitative relationship between human birth rates and food supply, and they debated this with little reference to women - notwithstanding women's essential roles in childbirth and nutrition.⁶⁶

Reception of De Castro's Work

The Geography of Hunger elicited a range of responses from reviewers worldwide. In August of 1952, demographer Kingsley Davis published a blistering condemnation in the American Sociological Review, calling de Castro emotional, utopian, and unscrupulous; a dishonest cheat who "makes no fetish of consistency" in his use of facts. Davis accused the Brazilian of masquerading "under the cloak and prestige of science" while discarding "all the canons of

⁶⁴ George Reid Andrews, "Brazilian Racial Democracy, 1900–90: An American Counterpoint," *Journal of Contemporary History* 31, no. 3 (1996): 483–507.

⁶⁵ F. Vasconcelos, "Fome, eugenia e constituição do campo da nutrição em Pernambuco," História, Ciências, Saúde – Manghinhos 8, no. 2 (2001): 322-326.

⁶⁶ Bashford, Global Population, 92-94.

scientific logic and evidence," and he called upon social scientists to issue a robust condemnation of the book. Several critics in the United Kingdom objected to de Castro's indictment of British imperialism despite efforts by British scientists to promote intensified agricultural production of precisely the kind that de Castro was calling for. Others accused him of naive credulity regarding the socialist experiments underway in China, the Soviet Union, and (later) Cuba – and of dishonestly omitting mention of the 1930s famines in Stalinist Russia from his published work. A reviewer in the *New Statesman and Nation* noted that de Castro's idealistic prescriptions for greater global cooperation with regard to food distribution seemed inconsistent with his thesis in the section criticizing European imperialism, namely, that "the heart of man is deceitful above all things and desperately wicked."⁶⁷

Other readers were much more complimentary. The American Political Science Association gave de Castro their FDR Foundation award in 1952. Novelist and Nobel laureate Pearl S. Buck, who contributed a preface to the American edition of *Geography of Hunger*, called it "the most hopeful and generous book I have read in my entire life."⁶⁸ Several explicitly anti-Malthusian authors wrote to de Castro commending his important work. "Population pressure is always directly and immediately related to the number of people who are able to make only very meager economic demands ... on the existing soil and other natural resources of any given area or of the whole planet, irregardless [*sic*] of how great or abundant these resources might be," noted Fred W. Smith of Camden, Ohio. The mystery, in his view, was why Malthusianism continued to hold any sway in the twentieth century. However, he concluded:

When one recalls . . . how universally and effectively it supports the status quo and is able to place, with a fair show of science, philosophy, and reason, the responsibility and the blame for vice, misery, and starvation squarely on the shoulders of nature and providence, and finally on the sexual incontinence of the dispossessed and starving people themselves, then the phenomenal success enjoyed by this theory appears to be very much less remarkable.⁶⁹

Other supporters of de Castro's critique highlighted the resource pressures caused by overconsumption (especially of beef) by citizens in the industrialized world and the tremendous waste of food in the United States, suggesting that any global food crisis was not caused by inadequate supply. Daniel Slutzky of the Department of Social Sciences, University of El Salvador, noted that the

⁶⁷ Walter Elliot in New Statesman and Nation, March 8, 1952.

⁶⁸ In the *Herald Tribune*, 1952, according to De Castro (O Drama Universal da Fome [Rio de Janeiro: ASCOFAM, 1958], 299).

⁶⁹ Letter to J. de Castro from Fred W. Smith, JdC archives, física 331 pasta 51.

International Planned Parenthood Federation conducted similar contraceptive promotions throughout Central America regardless of national and local population densities, which differed substantially. This supported his thesis that the central goal of IPPF and related organizations was neither economic development nor improving the welfare of the poor but rather reducing population numbers in places the United States feared as potential incubators of communism. Slutzky compared this to the Nixon administration's contraceptive promotions among poor urban Blacks in the United States.⁷⁰

Establishing Global Networks for Development Action

Following his return from the FAO, de Castro served two terms as a Pernambucan representative in the national legislature and member of the Brazilian Workers' Party (PTB). He was appointed Brazil's ambassador to the UN in 1962. The right-wing military regime that came to power in 1964 stripped de Castro of his political rights, due to his support for leftist causes, including granting voting rights to illiterate people, labor protections for rural workers, and agrarian reform (land redistribution). He took refuge in Paris, remaining there until his death in 1973.⁷¹

De Castro continued his campaigns against hunger and poverty well beyond his years with the FAO. He established ASCOFAM (Associação Mundial de Luta Contra a Fome) in Brazil to better organize production and distribution of nutritional foods in his native northeast region, home to many of the country's most impoverished people. From 1960 to 1965 he led the UN FAO's World Campaign Against Hunger. He established an international NGO known as CID (Centro Internacional para o Desenvolvimento) in 1962 to address structural issues underlying global poverty and continued this work from his exile in Paris after 1964.⁷²

Upon his departure from the FAO in 1955, de Castro chastised his colleagues there for "lacking courage" to confront global hunger as a political issue, asserting that they preferred to view it as a problem of technical knowhow, a less contentious position.⁷³ His critique of the UN and its agencies intensified over the following decade. By 1965, de Castro was referring to the UN as a reactionary organization established by elites with regressive views, one that impeded the development of solutions to the world's problems and

⁷³ A 1955 newspaper clipping in Portuguese; no source. JdC archive, fisica 14 pasta 29.

 ⁷⁰ Daniel Slutzky, "Politica Demografica y Subdesarrollo en America Latina," *Out* 1969, p. 32. JdC archives, física 331 pasta 51.
⁷¹ Manoel Correia de Andrade, "Josue de Castro: O homem, o cientista, e o seu tempo," in

⁷¹ Manoel Correia de Andrade, "Josue de Castro: O homem, o cientista, e o seu tempo," in de Castro, *Fome*, 285–321.

⁷² See Archive Davies, A World without Hunger: Josué de Castro and the History of Geography (Liverpool: Liverpool University Press, 2023).

served instead to obfuscate with statistics.⁷⁴ Nevertheless, his years as president of the FAO's Executive Council had immersed him in an international network that he expanded strategically over subsequent decades. While representing the FAO, de Castro visited President Truman to discuss the establishment of an international food reserve and met with Popes Pius XII and Paul VI. The latter (while still a cardinal) reportedly told the Brazilian that *Geography of Hunger* was "the most Christian text I've read in my life."⁷⁵

De Castro's letters from the 1950s until his death reference trips to China in 1957 (he was impressed by how well-fed the rural population appeared to be) and Russia, and a celebration of the Cuban Revolution with Fidel Castro in 1961. He met or corresponded with an array of influential figures, including Americans Eleanor Roosevelt and Robert Kennedy, Italian Roberto Rossellini (who had plans to make a film based on Geography of Hunger), Indian prime minister Pandit Nehru, former Argentine president Juan Perón, French philosopher Jean-Paul Sartre, and UN secretary-general U Thant, from Burma. De Castro's correspondence indicates that he was popular among "anti-Malthusians," including Catholic clergy, from numerous countries across the Americas and Europe. These scholars and activists raised the alarm about the Nixon administration's support for coercive sterilization, with backing from Paul Ehrlich (who reportedly proposed that the United States lace its food aid with sterilizing chemicals⁷⁶) – measures that de Castro referred to in some of his writings as contraceptive genocide. But de Castro also maintained cordial correspondence with representatives of the International Planned Parenthood Foundation, including Lady Rama Rau of India.

In 1962, de Castro was instrumental in establishing an International Center for Development (CID) headquartered in Paris. The goal of this nongovernmental organization was to provide an alternative to existing development efforts that were "contaminated by neocolonialism" and, in de Castro's view, amounted to little less than alms.⁷⁷ CID hoped to promote development efforts that would be of genuine assistance to Third World populations and to provide a forum for frank discussion of global problems, followed by concerted action. The founders, including representatives from Greece, Hungary, France, Belgium, Peru, Chile, the United States, India, and Senegal, proposed the creation of an International Development University with a focus on education and human resources as key to global development. In addition to his work with this group, during his exile in Paris de Castro

- ⁷⁶ Comment attributed to Ehrlich during the 13th UNESCO-North Am. Conference as reported in O Globo, November 26, 1969. JdC archive, fisica 541 pasta 58.
- ⁷⁷ "Centro Internacional para o Desenvolvimento," JdC archive, fis. 314 pasta 118.

⁷⁴ Newspaper clipping from *Folha de São Paulo*, May 5, 1965. JdC archive, fisica 96 pasta 40.

⁷⁵ Interview with de Castro published in *Prova*, January 8, 1966. JdC archive, fisica 96 pasta 40.

became deeply involved in nuclear nonproliferation and global peace movements spearheaded by Robert Oppenheimer and Bertrand Russell. His meetings and correspondence with political leaders and activists around the world maintained his sense of connection to marginalized people and his commitment to opposing injustice, despite geographic distance from the communities that had forged these sensibilities earlier in his life.

By the mid-1960s, the central argument of de Castro's writing was that since underdevelopment and hunger are closely correlated, while population density and hunger are not, population is not the causal factor leading to hunger. Science could be used to solve problems of food supply and distribution, but only where there was political will to do so (as in Britain during World War II). "Neo-Malthusians" attempted to explain political–economic dynamics and their consequences as natural, when they are fundamentally social phenomena. Highly technocratic approaches to development, such as those espoused in the early 1970s by the Club of Rome (which sponsored a widely read publication entitled *The Limits to Growth*)⁷⁸ did not adequately acknowledge the political variables that affect resource access. De Castro had become increasingly fascinated by the United States as an exemplar of underdevelopment; a draft chapter of one unpublished manuscript written near the end of his life was entitled "Misery in the Midst of Abundance" and focused on impoverished minority communities within that wealthy nation.

Conclusion

From 1948 until his death in 1973, de Castro sought to elevate alternative ways of conceptualizing global development, decentering the interests, priorities, and cultural assumptions of the most powerful governments and their populations. His critique emphasized that many variables can be analyzed in considering the relationship between human populations, natural resources, global security, and ecological health – and that the decision to problematize one of those variables rather than another (e.g., the fertility rates of women in less industrialized nations rather than the consumption habits of Americans) is a political choice, influenced in the mid twentieth century by geopolitical concerns, nascent modernization theories, and the geographic and social positions of the most highly resourced participants in this debate.

There are provocative parallels between the early Cold War debate about overpopulation and more recent discourse about climate change. In both cases, significant regional and social-class differences in contribution to the problem are elided to suggest that human communities face a shared challenge

⁷⁸ Dennis Meadows et al., Limits to Growth: A Report for the Club of Rome's Project on the Predicament of Mankind (New York: Universe Books, 1972).

for which they are similarly culpable and must sacrifice in the interest of a secure future. Anna Tsing has written about climate change discourse in the following terms, focusing on debates that preceded the 1992 Earth Summit in Rio de Janeiro:

Spokespeople for the global south argue that global climate models are an articulation of northern interests. Global climate models show everyone invested in the same reductions of greenhouse gases; they cover up the fact that most of these gases are emitted in northern countries. In blaming southern countries for a share of the greenhouse gas problem, the models also obscure differences between northern and southern emissions. Many greenhouse gases emitted in southern countries are "subsistence emissions," in contrast to the "luxury emissions" of northern countries. Global modeling, they imply, is not neutral.⁷⁹

This assertion by Tsing's "spokespeople" is somewhat analogous to de Castro's arguments decades before. There are contrasts, notably that de Castro thought overpopulation was not nearly as significant a concern as Vogt believed it to be, whereas Tsing's protagonists did not aim to diminish the significance of the climate crisis. But in both cases, voices from postcolonial regions highlight the culpability of industrialized nations in precipitating catastrophe. And in both instances, the objectivity of scientific paradigms emanating from centers of global power is questioned by advocates for marginal regions who highlight the political agendas embedded in those first-world discourses. Like Tsing's southern voices, de Castro questioned what countries such as the United States stood to gain through an overpopulationist framing of resource scarcity, and he drew attention to dynamics that were elided by emphasizing Third World fecundity as the root cause of rising hunger. In a world of vastly unequal wealth and power, any implication of shared responsibility for accelerating resource scarcity should reasonably be viewed with skepticism; de Castro's life's work stands as a reminder of this.80

In a recent critique of the economic ideologies underlying twentieth-century population policies, historian Michelle Murphy describes Notestein's advice to Pakistan's government in the late 1950s as "symptomatic of an *economized* reformulation of Foucault's description of the violent purifications of state racism as some must die so that others might live into *some must not be born so that future others might live more abundantly (consumptively).*"⁸¹ She emphasizes that American economists in the 1960s valued "averted births"

⁷⁹ Anna Tsing, Friction: An Ethnography of Global Connection (Princeton: Princeton University Press, 2005), 105–106.

⁸⁰ Ethnographer Jade Sasser offers a similar critique in On Infertile Ground: Population Control and Women's Rights in the Era of Climate Change (New York: New York University Press, 2018).

⁸¹ Murphy, *Economization of Life*, 41. Italics in the original.

more highly than lives lived in poverty, which were often evaluated negatively in relation to GDP. In a section reflecting on overpopulation concerns in relation to climate change Murphy asks, "What kind of population control practices and racisms are reactivated by pointing the finger at human density in a moment when wealthy human-capital assemblages with often low levels of fertility are responsible for the vast bulk of [carbon] emissions?"82 Murphy's analysis highlights the demographic abstractions wielded to justify a range of population control measures in the interest of economic growth, limiting births in some communities so that other people (whiter, wealthier, and more connected to centers of global power) can live more lavishly. What de Castro strove to broadcast during the years when theories promulgated by Notestein and others were gaining influence was that "population" is not abstract. To critique public health efforts in a city like Recife, as Vogt did, was to advocate for the painful and avoidable deaths of thousands of infants, deaths witnessed by family members powerless to intervene. This searing reality was obvious to de Castro because he had lived among people who benefited enormously from cleaner water, vaccinations, and other public health interventions in his native city. The Geography of Hunger implored readers to reckon with this reality. De Castro hoped to invert Vogt's apocalyptic portrayal of a world overburdened by hungry bodies, emphasizing instead what those people could contribute if reasonably provided for - and pointing out the significant per-capital resource drain of the world's wealthiest people.

82 Ibid., 47 and 138.