Food, Soil, People:

The Geopolitics of Population, 1920s-1950s

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“The Earth is filling up fast, and one of our questions is what to do about it,” commented the American eugenics leader Charles Davenport at the 1927 World Population Congress in Geneva.² The prospect and implications of world overpopulation engaged many Anglophone experts in the interwar years, connecting earth, life, and human scientists with political economists, indeed turning not a few earth and life scientists into Malthusian political economists. There were several responses to the question of what to do about this newly “filled up” Earth, although historical scholarship has emphasized one: the racialization of global space, through the invention and implementation of immigration restriction. The connection between the reduction of fertility in England, France, the US, and Australasia from the 1880s and the apparent increase in population growth rates in South and East Asia, is well researched at the level of ideas, personnel, policy, and implementation. Trope-like Madison Grant’s The Passing of the Great Race (1916) and Lothrop Stoddard’s Rising Tide of Color Against White World Supremacy (1920) represent the relation between “Race Suicide” and a “Yellow Peril,” and scholars have detailed a growing band of nationalists and race patriots, including Davenport, who designed and argued for an immigration restriction system, which, amongst other objectives, would keep an apparently booming Asian population out of “white men’s counties.”³

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This account is not misplaced or incorrect; it just leaves out many of the interwar population experts who argued the opposite. Not advocacy, but critique of immigration restriction was a strong strand of Malthusian political and economic writing from the 1920s through to the middle of the twentieth century. In a series of world population conferences, in new international associations for population problems, in international economic fora associated with the League and early UN agencies, a tradition of Malthusian thinkers were deeply troubled by the immigration restriction acts, and their implications for a divided world. In the context of an accelerating problematization of global population growth, the Acts served to focus a cosmopolitanism and pacifism that circulated amongst many — though of course not all —Malthusian political economists, part of twentieth-century internationalists’ “quest for one world.” ⁴ In this global perspective many experts argued that “hungry peoples” had a right to land outside their national or colonial territory, when that land was demonstrably uncultivated.

The world population problem was about space, as much as reproductive sex. ⁵ Population experts were as likely to be geographers, agriculturalists, plant geneticists, economists, soil scientists, even international lawyers, as they were physicians and feminist birth-control lobbyists. Indeed, when many “Malthusians” became “neo-Malthusians” in the sense of birth control advocates (and most of them did) it was not because they were concerned with sex, health, or reproductive rights, far less feminism. It was because they were concerned with economies of land, food, territory, and migration. Conceptually and politically, many twentieth-century Malthusians — Margaret Sanger aside — partook of food, well before

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they partook of sex.

The proposition that I put forward in the book project of which this paper is a part, is that the twentieth-century world population problem be understood as both biopolitical and geopolitical, a history of the international politics of both “life” and “earth.” By “geopolitical” I certainly mean the place of classical geopolities, Weimar and Nazi, Italian and Japanese renditions and uses of _lebensraum_, with its persistent concern for population and land, its own connection to “life” and “earth”. I also analyze the “geo” of geopolitics more broadly, suggesting that population was primarily a spatial and territorial problem of both earth, and Earth. In short, for the first half of the twentieth century, the world population problem was as much about the fertility of soil, as the fertility of women. This raised not only the question of immigration restriction, but also the question of effective occupation: sovereignty.

**Geopolitics and Early Twentieth-Century Malthusians**

A sudden proliferation of books, meetings, and organizations on “world population” appeared after the First World War, developing, amongst other elements, a pre-war Anglophone discussion on the world’s wheat supply. It was all galvanized by Keynes’s _Economic Consequences of the Peace_ that re-authorized Malthusianism for the postwar generation. One commentator labeled this deluge of studies “a series of economic thrillers:” plant geneticist Edward East’s _Mankind at the Crossroads_ (1923); Englishman Harold Wright’s, _Population_ (1923) written under Keynes’s instruction; statistician George Knibbs’s _Shadow of the World’s Future_ (1928); sociologist Edward Alsworth Ross’s _Standing Room Only_ (1928);

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7 The book also suggests that the scope of what is usually analyzed as “biopolitical” should be considerably opened up beyond sex, to think about governance of food and diet, and even soil as living.


9 John Toye, _Keynes on Population_, (Oxford: Oxford University Press, 2000). Connelly argues that after “the long decline of orthodox Malthusianism,” Sanger “revitalized the cause by appealing to individuals’ rights to health and happiness while organizing services to meet their needs.” _Fatal Misconception_, 52-53. But this underplays the continual discussion of Malthus within political economy, the investment of economists in population, and the sudden postwar surge of interest. Keynes and Sanger together (and not unimportantly, often jointly) I suggest, drove the two strands of Malthusian ideas in the immediate post World War 1 moment.
economist and demographer Warren Thompson’s *Danger Spots in World Population* (1929). Reviewing this trend in the *Journal of Political Economy*, A.B. Wolfe noted that “the decade since the close of the World War has been a period of remarkable recrudescence of interest in population problems, much activity in population research, and some striking changes in population policy.” It was the immigration acts that he referenced here, not only, but not least the series of US Acts, which Wolfe said “shoved the migration problem out onto the stage of international politics, where it now promises to play no inconsiderable role.”

Some of these 1920s “economic thrillers” certainly sustained a concern for entitled white global dominance, and the shoring up of land as “white men’s countries,” the response we are familiar with historiographically. Ross’s work fitted this model, for example, as did some aspects of the ideas of Harvard’s Edward East. For many other population experts in the interwar years, however — Australian Sir George Knibbs, American Warren Thompson, Indian Radhakamal Mukerjee, Frenchman Albert Thomas — the nationalist response to strongly restrict and regulate movement was at the least questionable in the light of world population growth, at worst deeply problematic and likely to exacerbate, not diminish the possibility of war, including a global race war in an overpopulated world.

The geopolitically closed world of Ratzel and Kjellen, Mackinder and Haushofer became as much a trope of early twentieth-century Anglophone population expertise as Malthus’ relative geometric and

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12 Wolfe, *The Population Problem Since the War*, 534. The immigration restriction acts usually targeted for critique were, in broad order of prominence (in world population texts) those of the US, Australia, New Zealand, Natal, South Africa, Canada, Newfoundland.
13 This line of argument drew not just from the Charles Pearson-Theodore Roosevelt “race-suicide in the new world” context, but also from British anxiety about its own reliance on external food-production: 75 per cent of its consumed wheat came from elsewhere, cautioned chemist William Crookes in 1898. Significantly, in this instance, it was not fertility decline but the massively increasing population of the “bread-eaters of the world,” especially placed against diminishing wheat-growing lands, that spelled looming crisis, and that was the rationale for the securing of white-man’s wheat-growing land across the globe. It is important to note that arguments about both white population growth and white fertility decline could accord with the new trend towards immigration restriction: the legislative and policy response of so many governments of the period to strongly regulate entry to territory, on combinations of population quantity and population “quality” criteria (including, but not only, racial).
Repetedly, population writers noted that there is no new New World, no new hemisphere, no new continent. What was theoretical for Malthus, was quickly approaching a reality as eastern and western, northern and southern hemispheres, New Worlds and Old, had been either claimed, or “filled up” with people, or both. This was comprehended both in terms of European colonial space, and in terms of the closed frontier of the North American continent. To cite just one interwar rendition:

“Whatever technical advances may still be in store, there will never be added to them another hemisphere.”

In this formulation, “overpopulation” was not (yet) a discursive phenomenon that clung solely to Asia: it was also about Europe, sometimes considered regionally, sometimes nationally. The decline of fertility rates in the US, Australasia, England, and France from the 1880s that is so focused upon historiographically, was often analytically dwarfed by the massive longer-term demographic change: the European growth rate over the long modern period. “Overpopulation” was a specifically global problem, less because of Indian, Chinese or Japanese population growth — which was disputed in any case — than because of the prior European population growth which was never disputed, the concomitant territorial expansion, and the new twentieth-century reality of global limits.
The population problem was as much the spatial one of maldistribution of people over land in the present moment, as it was the biopolitical one of calculating the relation of births and deaths over time, into the future. Thus, for example, when geographer Isaiah Bowman wrote that “the population of the world has become stabilized,” he was not referring to population growth rates (that would be a later twentieth-century reading) but to the peaking of global movement at World War 1, the end of “an epoch of migration” where global lands had been discovered, occupied, exploited, and then reserved in a system of racially exclusive use. Many experts at this early moment of demography considered the relative densities of nations, regions, continents to be the most problematic population issue. High-density regions adjacent to low-density regions were a new kind of problem in the twentieth century because of the new immigration restriction system, and because so few “frontier lands” were either available or readily cultivable. In the standard argument, this added up to a globe set for ongoing twentieth-century war.

Warren Thompson’s _Danger Spots in World Population_ (1929) began, typically for the genre, with “the causes of war”. “The attempt by people either living in low-pressure areas or holding such areas as dependencies for their own exclusive use, to keep the people living in high-pressure areas pent up within their present boundaries indefinitely is what is likely to cause trouble.” His opening graphic was not a time-based projection of relative population growth rates, or rates of fertility or mortality, it was a world map of relative density, showing the “danger spots:” Europe, India, China, Japan. His chapter headers were not about sex and fertility, but about space, land, and movement: “Where Can the Indian Go?” for example. The problem was immigration restriction.

**Opposition to Immigration Restriction**

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There were several grounds on which the immigration acts were opposed by those concerned with global population growth. French political economist Étienne Dennery thought they would exacerbate and even create, rather than solve the problems of a racially divided world: the ramifications of the immigration acts may have worse consequences than emigration and immigration itself, he wrote. The people of Asia have been “shut within their own territories.” 20 “The prejudice against colour denies him [the Indian] and the Japanese alike access to nearly all the lands where they would like to earn their daily bread.” 21 This produced anti-colonial sentiment and political activity, especially in India, with far-reaching consequences, argued Dennery in this not unfamiliar line of critique. 22 Asia’s Teeming Millions and its Problems for the West, often presumed to be part of a “yellow peril” genre, 23 in fact called up the idea in order to dispel it. 24 In this instance, population growth in South and East Asia was not justification for the “dikes” as Lothrop Stoddard proposed, but an argument against them.

Lucknow economist and sociologist Radhakamal Mukerjee agreed, and turned Stoddard’s arguments around entirely: “it is the aggressive policy of America and Canada, and particularly of Australia, against the Asian migrant which is responsible for the rising tide of colour.” 25 Or as Taraknath Das put it a decade earlier at an international birth control conference, “there is no menace of ‘rising tide of color’ but a menace of ‘white peril’,” referring to eighteenth and nineteenth century European

21 Dennery, Asia’s Teeming Millions: And its Problems for the West, 83. Dennery cited Thompson’s Danger Spots in World Population, which had been published in 1929, as well as the Proceedings of the World Population Conference from 1927, and the Institute of Pacific Relations’ meetings on Population and Migration in 1929. Dennery also read, and used the work of Sun Yat Sen on The International Development of China (1922), R.K. Das’ Hindustani Workers on the Pacific Coast (1923).
22 “The protests are made not only in the name of the Indian nation, but more generally, in that of all peoples of colour. From India are heard the voices that echo in China and Japan, claiming equal rights of emigration. A solidarity of the coloured races is aroused, far more intense than mere nationalist feeling.” Not just anti-colonial nationalism, but pan-Asian politics, Dennery argued, citing Sun Yat Sen, was produced by the exclusionary immigration acts themselves. Dennery, Asia’s Teeming Millions, 198.
24 Dennery, Asia’s Teeming Millions, 269.
population growth and territorial expansion. It is important to recognize that Das and Mukerjee’s position — analyzed more extensively below — did not spring only from the anti-colonial nationalism that they certainly shared. It accorded with an a clearly discernable line in Anglophone population scholarship more broadly. Harold Cox, author of *Problem of Population* (1922), who wrote the Foreword to the English edition of Dennery’s book, summarized the way in which the immigration acts created the problems they ostensibly sought to solve: “This application of the colour bar is regarded as an insult by the Japanese nation and adds impetus to the ambition of Japan to conquer new territories and make them her own.” And it was not uncommon for Malthusian writers to affirm both Japanese and Italian colonial expansion. “Both Italy and Japan must find outlets for their people,” wrote Sir George Knibbs to his fellow government statistician, British Registrar-General Bernard Mallett, where the US and Australian immigration acts were rendered specifically problematic.

Other arguments deployed against the immigration acts concerned principles of freedom of exit and entry. On the grounds both of the liberty of movement, and the need to redistribute populations away from overly dense Europe, many at the 1927 World Population Congress argued for a return to a nineteenth-century model of (supposedly) unrestricted emigration and immigration. “That was a period of liberty, and this liberty had far-reaching results,” said Albert Thomas of the International Labor Organization. A decade later, at the 1937 Assembly of the League of Nations, the Polish delegate spoke similarly on the need to return to “pre-1914 freedom of movement” as a way to equalize problematic differential population densities between nations.

Many of those who argued against the nationalist immigration acts sought support for some kind of

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supranational agency that would manage policy on, and even implementation of, mass world migration. Modern nations had proven themselves unlikely to implement population policies “in the interest of the whole human race,” warned Knibbs.\textsuperscript{31} The ILO pursued the idea of a world body to manage migration most fully, driven largely by Albert Thomas’s cosmopolitan politics. But this was a cosmopolitanism widely shared. Migration was a question “for international settlement,” argued Mukerjee,\textsuperscript{32} concluding that future world cooperation required “a revision of the tenaciously held doctrine of territorial sovereignty and the restrictionist immigration policy flowing from it, so that the over-crowded and dissatisfied nations in both Europe and Asia might obtain facilities of colonization and settlements in the wide open spaces of the earth.” Open frontiers plus equal opportunity in the treatment of immigrants were the only solutions to world economic development, for “world amity,” and for a lasting peace.\textsuperscript{33}

The argument against immigration restriction that emerged most commonly in interwar world population discussion, and that retained real purchase through the post World War Two period, concerned the right to land according to need, where that need was food. At one level, of course, this was a reiteration of \textit{lebensraum}, from Ratzel through Haushofer.\textsuperscript{34} Indeed Haushofer himself was opposed to US and Australian immigration restriction, in defense of the Japanese (who like the Germans were oppressed and straitened by the Versailles Treaty) and because immigration restriction cut right across the natural law of the expansion of vital peoples.\textsuperscript{35} Many Malthusians fundamentally agreed with the population dynamic that informed the ideas of \textit{Geopolitiker} — crudely, the need for a population outlet — even as they disagreed with nationalist justifications for this, or belligerent manifestations of it: “The

\textsuperscript{32} “An international adjustment of the world’s surplus labour, white, brown, or yellow, a fair distribution of the tropical supply of food-stuffs and raw materials, with a general rule of equality of treatment and economic opportunity…will knit together different peoples by bonds of mutual economy and moralise inter-racial economic intercourse where greed has become the first law.” Mukerjee, \textit{Migrant Asia}, 241.
\textsuperscript{33} Mukerjee, \textit{The Political Economy of Population}, 449-50.
\textsuperscript{35} Karl Haushofer, “The Geopolitics of the Pacific Ocean,” Translated typescript, 1938, Fisher Library, University of Sydney.
force-system” as Thompson put it, was the problem, arguing for the need to “expand” people over land as a kind of natural, that is physical law, but against the military means of achieving this.

**Empty Lands and the Right of Occupation**

It was not at all uncommon for participants in interwar discussion of the world population problem to argue that the need of some nations/people for more land trumped other nations’ claims on land, when that land was demonstrably uncultivated, or undercultivated. In this simple but profound way, the population question became the sovereignty question: the basis of claim to land was up for discussion.\(^{36}\) As one geographer put it at the 1927 World Population Conference: “No nation has made the land it occupies, or has the right to prevent its adequate use.”\(^{37}\) It was an open question, ILO chief Albert Thomas thought, whether a nation should, or even could, claim sovereignty over territory “which it does not exploit and from which it is incapable of extracting the maximum yield.”\(^{38}\) These were significant twentieth-century expressions of long-established natural law argument, which defended European settlement outside Europe on the basis of the right to free and peaceful access to all parts of the globe, and on the principle that proper occupation required the cultivation of land.\(^{39}\) By the late nineteenth century, legal argument was being developed in terms of “effective occupation” — in relation to European presence in Africa and the Congo in particular — although quite what “effective” meant was often left unclear.\(^{40}\) The turnaround in this twentieth-century discussion, however, was that this natural law argument was brought to bear not on indigenous people and lands, but on white settler colonies — even

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\(^{36}\) That is, it was up for discussion in these terms by those engaged with international discussion on the world population issue, which included some international lawyers. Just how or whether this particular argument reached the field of international law itself, is the subject of ongoing research.


white nations — considered out of place, unwilling, and, as we shall see, even unable to cultivate the land in a way which demonstrated proper occupancy, and therefore, sovereignty.

When things got specific, Australia was not the only, but was often the first case in point. It was one of the least cultivated, and least dense continents on Earth, “apart from Antarctica,” as it was typically put, not hopefully as far as Australian governments were concerned. In the constant calculation of density that litters world population writing in this period, Australia looked either good or bad, depending on one’s Malthusian allegiances. National population densities ranged from 680 people per square mile in Belgium to 2.2 in Australia. For the Australian government, this looked decidedly worrying. To make matters worse, Australia was implementing daily one of the longest, most strident and public histories of race-based exclusions and regulations. Combined with the continent’s conspicuous proximity to far more densely populated regions of the globe, it is perhaps as unsurprising that effective occupation was up for question, as it is surprising that historians have for the most part not comprehended this.

Legal scholar Benedict Kingsbury has explained that “One of the many ironies of the Lockean system as applied in practice … was that sparse European settlement might underpin vast claims to imperium and dominium over lands the Europeans did not use.” It was precisely this irony that Malthusian writers named, and substantiated, often enough, through the Australian instance. But the real irony for Australian history was that the terra nullius argument was being used with respect to white settlers, not indigenous people: it was the sovereignty of the Australian government itself which became questionable. Harold Cox wrote in 1922: “If a Japanese Sir Thomas More were to draw the plans of a new Utopia he would justifiably declare that in Australia a vast area of ground was being held ‘voyde and vacaunt to no good nor profitable use,’ and that therefore Utopians from Japan would be morally justified

41 Also Canada, Siberia, and occasionally Brazil.
43 Benedict Kingsbury, “People and Boundaries” in Buchanan and Moore, 305.
in invading it.”45 Economist Radhakamal Mukerjee didn’t even bother filtering the argument through a Japanese Thomas More: “It is well known that Australia was first explored and mapped by the Dutch, but was later annexed by the English on the theory of non-use and non-settlement. The same argument may be used for the settlement by Indians, Chinese and Japanese of various islands of the Pacific, including Papua and Australia.”46 Not a few Japanese agreed. One delegate to the 1933 Birth Control in Asia conference argued that birth control was not a fundamental solution: while land was. “We all know that the doors of all the empty lands, which should be developed and cultivated are closed against Asiatic immigrants...it is a commonplace that the world is large enough to accommodate in comfort many more people than are in it today.”47 Perhaps more surprising is the articulation of a not dissimilar position by one of the Commonwealth of Australia’s most senior public servants, Sir George Knibbs. He questioned “what may be called the right of the occupants to hold a territory as against all comers, and equitably so from an international or world standpoint.”48 Knibbs considered that the whole problem of world population “concentrates one’s attention upon the nature of the right of occupation of territory,” querying the legitimacy of Australian claim over unused land, and essentially naming it as ineffective occupation.49 When the very claim to land was raised, the attacks on immigration restriction began to look mild, but the two implications of the “empty lands” discourse were linked. Geographer George Kimble in The World’s Open Spaces (1939) asked what justification there can be, for the continuance of the White Australia policy? “Are these arguments” [for immigration restriction] valid in a world suffering so acutely from overpopulation and for a continent which cannot, so it seems, hope to populate its tropics with people of

46 Mukerjee, Migrant Asia, 57
47 Birth Control in Asia: A Report of a Conference held at the London School of Hygiene and Tropical Medicine, (London: Birth Control International Information Centre, 1933), 22-23.
48 George Knibbs, The Shadow of the World’s Future, or the Earth’s Population Possibilities and the Consequences of the Present Rate of Increase of the Earth’s Inhabitants, (London: Ernest Benn, 1928), 76. “A supposed democratic people, occupying a relatively empty country, may often violently oppose the immigration of peoples who are prepared to work harder, and to live more thriftily and humbly. Such an attitude may also attempt to mask itself by profession of patriotism.” 85.
49 Knibbs, Shadow of the World’s Future, 76.
white stock.” For precisely these reasons, demographer Warren Thompson thought it both advisable and reasonable that Australia not only dismantle its immigration restriction regime, but also cede territory to Japan in the interests of world peace.

All this needs to be assessed in terms of a post-Versailles world where territorial redistribution was far from theoretical, in the “competing visions of world order,” and in the “Wilsonian moment.” It was argued not just that imperial nations should consider transferring colonial territories – the more familiar positions surrounding interwar international consideration of Germany — but also that nations consider transferring sovereign national territory as well. Geographer Isaiah Bowman said at one point that any major redistribution of territory, a modern-day Louisiana Purchase, would be unthinkable. “It would shake the world,” he said in a document significantly titled “population outlets in overseas territories.” But in fact, partly at his own hand such transfers of sovereignty had been advised and implemented after the First World War. This created an interwar context in which territorial and population redistribution, far from being “unthinkable,” was in fact in operation.

### Incapacity: the racial impossibility of effective occupation?

There was another aspect to this international interwar discussion that raised the question of the right to claim long-unused land. This concerned not whether land had been cultivated or rendered productive but whether it could be cultivated, that is properly or “effectively” occupied by those who claimed it. This

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51 Thompson, *Danger Spots in World Population*, 94.
54 Isaiah Bowman, “Population Outlets in Overseas Territories” in Charles C. Colby (ed.) Geographic Aspects of International Relations (Reprinted from private circulation in Bowman Papers, Milton Eisenhower Library Special Collections, Johns Hopkins University, MS.58, p. 16.
was a question not of the land per se, but of its relation to people via climatic environments. The
geography of racial physiology was raised, a twentieth-century manifestation of longstanding sciences of
the relations between climate and human constitutions, capacity, and difference: could white people
work and reproduce in the tropics? In the context of a discourse of growing population and planetary
limits, this question was at once physiological, geographical, and deeply political. And it was
simultaneously national, imperial, and international. Sir Arthur Salter, head of the Economic and Finance
Section of the League of Nations (the Section, incidentally, where “population” was mainly addressed)
and soon to be Professor of Political Theory at All Souls, Oxford, asked: “Should the admitted and natural
right of a country to limit immigration at least enough to retain its own racial integrity be regarded as
subject to qualification if it cannot, with its existing population, develop its own territory, or can develop
it only very slowly: and especially if some of its territory is for climatic reasons uninhabitable by its own
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it only very slowly: and especially if some of its territory is for climatic reasons uninhabitable by its own
nationals while suitable for those of another race?” Warren Thompson based much of his argument
about the need for a global redistribution of people on this basis. There was “not even a remote
probability that tropical Australia will be developed by Anglo-Saxon labour.” Indeed, he wrote, that “the
whole of the white man's tenure in the tropics has no vestige of right”: there was simply no evidence or
likelihood that the land had been or would be brought into proper productive use by white Australians.
“Its right to hold tropical lands is ... going to be contested.” In such a context, Thompson considered that
the contest for land would and could legitimately be made by those who needed it (in terms of the
biological need for food), not those who had a prior claim to it because of original occupancy (as in native
title).

Little wonder that Australian tropical medicine research boomed in these years. The
Commonwealth government’s brief to the new Australian Institute of Tropical Medicine was, explicitly:

58 Thompson, *Danger Spots in World Population*, 89.
“Is White Australia Possible?” This was researched systematically by pathologists and physiologists, who sampled and analyzed young, white, tropical laborers’ sweat, urine, bile, and blood for evidence of resilience, decline, or adaptation. Long interpreted by historians within a national, and occasionally imperial framework, in fact this physiological inquiry had a much larger global and international import. On the question: “can white man live and labor in the tropics?” many Australian scientists tended to answer “yes”, unsurprisingly. Viable tropical physiological and reproductive functioning was shown to be quite possible, Australian scientists concluded, a little too insistently. Internationally, however, many scientists retained the longstanding theory that tropical conditions were antithetical to white constitutions. Others indicated that the evidence was inconclusive, that much more research needed to be done.

This particular manifestation of environmental and racial determinism reached well into the mid twentieth century. The tenacity of the scientific connection between race and place is curious at one level, since biological “race” was being strongly unraveled by not a few scientists in the interwar period. But at another level the conflation of physiology and geography makes sense, because of the simultaneous uptake of early twentieth-century/interwar ecology. One effect of ecology was to highlight rather than diminish the deep connection between people and place, to naturalize humans, and conceptually to tighten humans’ (and different humans’) bodily relation to, and even determination by “climate” and “environment.”

Interwar writers on human population matters were not infrequently steeped in the new ecology: “the population problem” was often pitched directly as “an ecological problem;” the term “habitat” was deployed regularly with respect to humans, analytically framing discussion about how different people

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61 Elazar Barkan, The Retreat of Scientific Racism New York: Cambridge University Press, 1992). Many of the scientists involved in this “retreat” were also centrally involved in thinking through population density, Julian Huxley and Alexander Carr Saunders, for example.
62 Both Carr Saunders and Huxley were key to interwar British ecology. Peder Anker, Imperial Ecology.
could, and should, be better distributed around the globe. Mukerjee was one of the most explicit of the population writers in linking his work to ecology. Influenced by Patrick Geddes, ecologist Charles Elton, and the Chicago school, Mukerjee rethought the theory of optimum population (for humans) in these terms. “The Ecologic Optimum” was his innovation. In Mukerjee’s ecological vision, the barring of Indians from places like the Australian tropics was not just political but ecological nonsense, since the white Australians themselves — “Northern peoples from the West” as he put it — “are, and must remain exotics.”

Alexander Carr-Saunders’ work on human population inspired some of the key ideas of early British (plant) ecology, including the development of the ecosystem concept. His views were strongly influential in League and early UN framing of world population questions, cited, for example at the 1937 International Institute of Intellectual Cooperation meeting on population, colonies, and raw materials: “It would clearly be hard to defend the retention of regions by Europeans which they could not use.”

Different races of man, “like the different types of flora and fauna, can thrive and multiply only within limited climatic regions to which they have become especially adapted…If this theory is true, it obviously has an important bearing on the problem of peaceful change.” In fact Carr-Saunders was typically inclined to argue for human capacity to adapt socially and physiologically, but even he had to put the issue tentatively: “while there is no proof that white men can live and work in a healthy and vigorous way [in the Australian tropics], there was no evidence that they cannot do so either.” For some a question, for others a given, the apparent incapacity of whites to properly cultivate and therefore potentially even claim land out of their global place, raised the corollary of who, then, had that capacity.

66 This was being conceptualized on scientific expeditions to that particularly contested empty place in the 1920s and 30s, Spitzbergen. For the ecological expeditions see Peder Anker, *Imperial Ecology: Environmental Order in the British Empire, 1895-1945* (Cambridge: Harvard University Press, 2001). For the place of Spitzbergen in the history of the concept of *terra nullius*, see Fitzmaurice, “A genealogy of terra nullius.”
Capacity

Radhakamal Mukerjee was not going to miss this opening to argue for Asian advantage, twisting the racial/environmental determinism in some unexpected directions. Like so many studies, Mukerjee opened many of his books on the population question with a map of density, the distribution of World Population. The purpose was to show that “Asiatics” who represented half the human race, were artificially and confined to 4 per cent of the globe’s surface. Thus his immediate argument was that the problematic differences in regional population density was result of the barriers, the color bar. His map of world population distribution was followed quickly with a map of the Climatic Regions of the Continents. East and South Asian migrants had a huge physiological advantage, given the climate of many of the undercultivated areas of the Earth, he argued. Just as the “Northerners from the West” were exotics, there was an ecological fit between Indians and parts of Australia, East Africa, and tropical America. Similarly, there was a physiological fit between Japanese and northern Chinese and Canada and Siberia. Insisting on calling potential Asian migrants “the colonists,” Mukerjee argued that if the color bar were dropped, the potential of the Asian immigrant could be realized globally, in a kind of physiological free market. Far from racial specifics functioning as an automatic bar to movement, a scientific world population policy would consider racial physiology on its merits: the different basal and minimal metabolism of different peoples should sensibly be taken into consideration in immigration selection. This would recommend, rather than discount most Asians, “for the agricultural transformation of vast untenanted areas of the globe.”

Mukerjee went on to document this advantage in close physiological detail, though not quite at the cellular level that the tropical medicine studies of white men in Australia were conducted. The basal metabolism of the Asiatic peoples is 10-15 per cent below the English and American standards, he said.

70 Mukerjee, Migrant Asia: A Problem in World Population, 12.
They have smaller body surface and weight, needing less protein. This is an advantage over the European settler whose diet shows “an excess” of 50 per cent calories and 40 per cent protein “beyond what is physiologically indispensable in the tropical environment.” The Asiatic labourers’ skin pigment helped, he thought: “more sweat glands, smaller rate and volume of respiration, smaller blood fat and secretion of bile and urinary excretion.” In this discourse, thermal energy research on the calorie met medical geography’s longstanding research on climate and human constitutions. Nick Cullather has recently written of the “calorie’s universalist premise,” but in fact there was considerable discussion in the world population field of region-specific and race-specific calorie needs, determined by climate. In his *Food Planning for Four Hundred Millions* (1938) Mukerjee argued that at the very least there should be a different standard for northern and southern India. He did not accept Edward East’s calculation of the need for 2.5 acres/man, since food requirements were less in India, partly because of the warmth, he argued.

This physiology added up to enormous untapped economic potential in the “reconstruction of large uninhabited sections of the earth.” Indian agricultural laborers were a ready-made ecological package for any nation willing to overcome its baseless prejudice: they could bring not just energy-efficient bodies, but climate-appropriate crops and agricultural techniques. In this way, the immigration restriction system represented a “lack of normal adjustment in the field of the migration of labour” and systematically hindered world economic development, as well as the economic development of each

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74 Mukerjee, *Food Planning for Four Hundred Millions*, 4.
75 Mukerjee, *Migrant Asia*, 3.
particular excluding nation. Recognizing this physiological advantage, putting it literally to work rather than artificially limiting it through nonsense race-based exclusion acts, would mean, in Mukerjee’s mid-1930s view, nothing less than a “recovery of world economy.”

**Freedom from Hunger, Freedom to Move**

Others argued more in terms of need, than advantage. The significance of unproductive land was raised as part of a global moral as well as political economy. George Knibbs was deeply troubled by the principles of occupation in the light of a limited global food supply and its equitable distribution. What he significantly qualified as “this so-called right of occupation” became “relative rather than absolute,” when placed against the needs of people with “insufficient territory.” For Thompson, “unused land and resources in the world should be regarded as the means of satisfying human needs rather than as prizes to be kept solely for the profit of the peoples who happen to hold them at the present moment.” This included, for Thompson, both indigenous “owners” (there is no place for native title here, unless a food-based need could be demonstrated) and subsequent settlers.

These 1920s statements took on a new significance in the 1930s when the League of Nations began to take up global food needs, production, and distribution. Human nutrition was placed on the League of Nations’ agenda in the mid 1930s, as part of its deliberations over economic policy. In the high Depression years, members of the Assembly argued that unless the “primary necessities of life” were provided, there would be a rapid expansion of extreme politics: this was the famous challenge to marry health and agriculture, that set in train a new focus on nutrition and health. Indeed, insofar as population

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77 Mukerjee, *Migrant Asia*, 156.  
80 Thompson, *Danger Spots in World Population*, 314.  
81 The challenge posed by Australian ex-Prime Minister Stanley Bruce. Bruce considered that the 1933 Monetary and Economics Conference’s decision to restriction production in order to raise prices was “deplorable” “and that we were by our action creating a breeding ground for naziism [sic] and fascism.” Bruce agreed that these comments be struck at the time, but stated in 1946 that
was ever a “health” issue for the League, it was not via the issue of human reproduction, but the international sciences and politics of human nutrition.  

Late 1930s work on international health, nutrition, and population was galvanized in 1941 by Roosevelt’s Four Freedoms speech. If freedom from want was Roosevelt’s third freedom, “food is the first want or need of all men,” nutritionist Boyd Orr declared, just before his appointment as first Director General of the UN’s Food and Agriculture Organization. Food, indeed, was the “basis of world unity,” he argued, echoing and contributing to a “one world” theme that had long roots in population talk, and which was gaining a new audience, especially a US audience in wartime. Food was linked to the very meaning of freedom. “The man who suffers premature death for lack of the necessities of life has little interest in political liberty…Economic freedom is the first freedom for poverty-stricken people.” Political freedom was itself being jeopardized by hunger.  

In the early post World War 2 years, “freedom from want” gave internationalists a fresh and authorized language through which to continue to challenge the distribution of people and land, including the tenacious race-based immigration acts. UNESCO demographer Sripati Chandrasekhar captured this in his 1954 title Hungry People and Empty Lands: An Essay on Population Problems and International Relations. “These empty areas are under the control of peoples who do not desperately need them. In

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83 John Boyd Orr, Food and the People (Pilot Press: London, 1943), 5. This series “Target for Tomorrow” was edited by Sir William Beveridge, Julian Huxley and John Boyd Orr.
85 Boyd Orr, The White Man’s Dilemma, 73. See also “Nutrition and the New World,” Boyd Orr Papers, National Library of Scotland, 1.72.
86 This was the period and the context in which Third World and First World were coined by French demographer Alfred Sauvy, with reference of course to the Third Estate, recalling the politics of bread and famine from another era.
87 This book was published in 1954 by George Allen & Unwin, when Chandrasekhar was Nuffield Fellow at London School of Economics. Gaining his first degree in economics at Madras Presidency College, Chandrasekhar studied statistics, demography and sociology at New York University earning a PhD (1944) on India's population problem. Director of Demographic Research
some cases, the people who control them are unable to fill these lands, while the people who need them and can fill them are denied access to them.” 88 In the same year he broadcast for the BBC series “The Third Freedom: The Fight Against Hunger,” 89 linking the idea of “freedom from hunger” to the idea of “freedom to move.” The latter, he objected, “is not yet a right,” but was tied intimately to the realization of the former. He cast this ongoing block of some people’s global movement as creating a “land hunger” that would and had led to war. “The cause may not always be as simple and direct as it was in the case of German demand for lebensraum or Japan’s desire for emigration outlets,” he wrote, but the fundamental need for food and land endured, and intensified: “barring conquest of the moon and other planets apart from ours.” The discourse of limit was rendered not just global but universal in the 1950s, anticipating the Club of Rome.

In the postwar moment, the world population issue became increasingly public, apocalyptic, and connected to various foreign policies in the Cold War context. Any number of arguments and solutions were put forward for what was still as much the “world food and land” problem — the geography of hunger 90 — as the “world sex and reproduction” problem. World Food Plans, marxist critiques of food distribution, intensification of agriculture, 91 soil conservation, and new food production techniques, including, interestingly, both “soil-less” food, and even “foodless food,” 92 were pursued, alongside

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88 Chandrasekhar, Hungry People, 49. What was necessary was the granting of “rights to emigrate, cultivate and develop the potentially useful but unused arable lands of the world.” Chandrasekhar, Hungry People, 65.
89 Correspondence in Chandrasekhar Papers, Ward M. Canaday Center for Special Collections, University of Toledo, Box 1, Folder 16.
92 For example the Multi-Purpose Food, high-protein powdered supplement that the 1946 “Meals for Millions” organization created, that was to link to the postwar Freedom from Hunger organization. See Herbert R. Roberts, “Meals for Millions Foundation: Limits and Potential for International Aid.” International Journal of Comparative Sociology, 21 (1980): 182-95. Soil-less food production raised the possibility of converting inexhaustible solar energy into forms of energy for human consumption, momentarily promising to puncture tenacious geopolitics, to make production of energy all but placeless. “The Germans are said to have used a method for converting waste products, such as sawdust, into sugar solution for the culture of edible yeasts….And the goal of another of these projects would be the synthesis of chlorophyll, the substance which permits the
growing research and interest in new contraceptive technologies and the social sciences of fertility and modernization. But within this postwar international noise about food and people, critique of the global color line was sustained, argument more or less unchanged. The abandonment of the race-based acts was Chandrasekhar’s first recommendation when he promoted the need for a world population policy. The final quarter of Chandrasekhar’s fascinating intellectual and political career in population, that ranged across national and international, spatial and sexual, western and eastern politics, was based in the US, where he spent considerable time reassessing the history of world population and immigration restriction. *From India to America: a brief history of immigration, problems of discrimination, admission, and assimilation* was published in 1982. And one of his last books, the 1992 *From India to Australia: a brief history of immigration* was dedicated to Australian labor Prime Minister Gough Whitlam “for his courageous and progressive act of officially abandoning the “White Australia” policy.”

**Conclusion**

In one twentieth-century tradition of thought and practice the question of “who shall inherit the earth” certainly led to strident white claiming of land. Matthew Connelly has recently argued that this remained the driving politics of the struggle to control world population over the twentieth century, “from the yellow peril to the population bomb.” But there is another important tradition of population expertise that presented this nationalist and race-based response as a world problem, and sometimes as the world problem. Warren Thompson, for one, would disagree with Connelly: “when the question of who is to

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94 Connelly, “To Inherit the Earth,” 299-319.
possess the earth is looked at from a long-time point of view, it is perfectly obvious that people who are no longer “swarming,” [meaning European populations] who have low birth-rates steadily become lower, and now have lost the power of actually taking possession of new lands cannot expect to hold for any great length of time territories which they are not effectively using.”\footnote{Thompson, \textit{Danger Spots in World Population}, 17.} Far from solely perpetuating an “Asian overpopulation” discourse on the basis of which land was shored up via race-based immigration restriction, there is a tradition of Malthusian critique that argued for a dismantling of that very system. Indeed an anti-nationalism, and even anti-colonialism is evident, connecting demographers from vastly different colonial, national, and racial locations.

This position of critique is often overlooked because of the bad favor in which Malthusianism is often almost automatically held, politically and intellectually. But one does not need to agree or disagree with the politics, economics, or implications of Malthusian ideas, in order to analyze them historically. More interestingly, perhaps, this critical strand is overlooked because of the tendency to think about world population politics in sexual-health terms in this period, and to sidestep the geopolitical-economic terms that were in many ways more dominant and defining. Malthusianism turns out to be a most interesting, if unlikely domain in which the political and scientific question of human difference and identity was struggled over, and were connected to place, in which not just colonialism and racism as in the standard account, but also various forms of anti-colonialism were produced, and in which national and cosmopolitan governance of human population issues came up against pressing territorial issues of the twentieth century.