4 The (Non-)Insular History of Imperialist Worldmaking

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4.1 Introduction

In late summer of 1914, thousands of miles from the western front, world war was taking shape in the Pacific. On 29 August, British and New Zealand troops captured Telefunken's radiotelegraphy station in Apia, German Samoa (Droessler 2022: 157). On 7 September, Germany attacked the British telegraphy installation on Fanning Island. A few days later, the Allies struck back, as Australian soldiers captured the German wireless installation at Bitapaka, on the island of Neupommern (later, New Britain). Then, Japanese troops seized Yap from Germany, which had turned it into an important cable communications site. In November, Germany attacked the British cable relay on the Cocos Islands, in the Indian Ocean.

Apia, Bitapaka, Fanning Island, Yap, and the Cocos Islands are not the usual places we think of when we study World War I. But they point to how communications infrastructures were helping reshape world politics in the decades leading up to 1914. Telegraphy and wireless or radio telegraphy formed the first truly global high-speed communications systems. Telegraphy had also inspired the institutionalization of international cooperation in the form the International Telegraph Union, founded in 1865. But instead of heralding peace between states, by 1914 this connectivity had relayed a conflict begun in Southeast Europe into the Pacific and Indian oceans.

How did the spread of communications infrastructures like telegraphy and radiotelegraphy entail projections of capital and power far from imperial metropoles? What ramifications did this have on spaces and societies enmeshed in imperial communications structures? This chapter uses these islands as sites for eavesdropping on empires and their impact on world politics in the late nineteenth century and early twentieth century.

Conflicts had spanned oceans before, notably during the Seven Years' War; and modern warfare had arguably been inaugurated a century earlier, in Napoleon's mass-conscription armies (Baugh 2011; Bell 2007). Yet the simultaneity and scope of conflict across disparate spaces in World War I – both enabled by and encompassing communications infrastructures – revealed how important these seemingly remote islands had become to imperial metropoles. In contradistinction to earlier phases of imperialism, they had begun to matter not only as sites for exploiting labor and resources (as in longstanding plantation colonies in the Caribbean, e.g.), but also as infrastructurally dense nodes integral to metropolitan security (as Caribbean colonies would also become during the world wars, with British authorities intensifying the push to introduce wireless telegraphy there during World War I, and taking over fledgling voice broadcasting in Jamaica during World War II) (on the Caribbean, see Dunn 2014). Moreover, as historian Frances Steel has recently observed, globalization was not truly global until communications and transportation infrastructures made their fitful way across the Pacific in the mid- to late nineteenth century (Steel 2022: 514). Another way of saying this is that while worldmaking had happened phenomenologically or imaginatively since premodern times, worldmaking only became global, topographically speaking, through the expansion of infrastructures that drew previously independent regions and communities into political relation and economic interdependence. In this sense, places like the cable landing on Fanning Island (annexed by Britain in 1888) and the radio installation at Bitapaka (annexed by Germany in the mid-1880s) were not margins of world politics but were rather central to a broader transformation. This transformation was also felt in places like Midway (a previously uninhabited island annexed

by the United States in 1867, which became a crucial landing site for the first American transpacific cable) and Yap (annexed by Germany in 1899).

This chapter posits that in the entanglement of islands and communications infrastructures in the late nineteenth and early twentieth centuries, we can discern visions and aims for ordering the world that were shared across empires, despite competition between them: in other words, an imperialist worldmaking project (WMP). First, I situate the chapter in relation to existing scholarship on empire and communications. Then, the chapter discusses an emerging inter-imperial consensus around race and the deployment of racialized labor to construct and operate far-flung communications infrastructures. Next, the chapter considers how these developments entailed the exploitation of colonial natural resources as well as labor, bridging histories of ecological change with communications. Finally, I connect the imperial history of island communications to post-1945 and contemporary developments.

A focus on infrastructures – materially exigent and geographically situated – helps illuminate how empires, even as they competed, converged to bring about vast social and environmental transformations in the late nineteenth and early twentieth centuries. Massive numbers of laborers were mustered to harvest newly valorized tropical products, often under coercive or unfree conditions; these included products essential to communications and media such as gutta percha, a natural latex native to Southeast Asia used in undersea telegraphy, and camphor, a resin essential to the production of celluloid film derived from the camphor tree, found most abundantly in Taiwan. Roads and railroads were constructed to bring these commodities to ports and trading centers. Telegraphic and radiotelegraphy installations were built to provide administrators, planters, and traders with information about markets and security.[1] Increasingly, connectivity was becoming a matter of state, reflecting a 'general shift from economic to imperial

1 Besides gutta percha and camphor, other newly important tropical products included rubber, copra, shellac, chicle, and cinchona (Pretel 2023; Droessler 2022).

considerations in the building of communication lines at the turn of the twentieth century' (Droessler 2022: 150; Tworek 2016). Around 1900, the construction of insular communications infrastructures was bound up with imperial interventions that reached deeper than ever before into the world's landscapes and populations, seeding resistance to empires – as well as a mounting impulse to justify imperial power.

These infrastructurally marked and mediated transformations form key illustrations of what we have termed, in this volume, the 'infrastructural nexus': the thickening communications infrastructures that have both enabled and formed an object of interacting worldmaking projects since the late nineteenth century. The chapter suggests how a focus on insular communications infrastructures might offer fresh understandings of the past, present, and future of imperialism.

One, if empires (and anti-imperial struggle) long predated the emergence of the infrastructural nexus, the chapter argues that the globalization of communications infrastructures helped make imperial control an explicit, trans-imperially shared guiding principle of international governance after World War I, as victorious imperial powers collaborated in unprecedented ways to construct a world order divided by empires. As Werron emphasizes elsewhere in this volume, by the late nineteenth century-early twentieth century, legitimacy had become an increasingly important political bona fide, even for particularist and inegalitarian forms of governance such as empire. Thus when imperialism was institutionalized in the League of Nations Permanent Mandates Commission (PMC) after the war, it was wrapped in elaborate civilizational justifications.[2] The Pacific islands fell under the lowest, 'Class C mandate' categorization. In a comment characteristic of the racialized hierarchies of the mandates system, one high-ranking New Zealand official called Samoans a 'a simple and loveable race' that was unready for sovereignty or democracy, while another referred to them

2 The PMC was designed to oversee the administration of colonial territories stripped from Germany and the Ottoman Empire, with these territories handed over to victorious "mandatory powers," chiefly Britain and France but also Belgium, Japan, Australia, New Zealand, and South Africa.

as 'children' – deceptive claims, given that complex Indigenous systems of representative governance had survived colonization and the 1899 partition of the islands (Pedersen 2015: 170, 180).

Two, this moment represented not only the mature expression of an imperialist WMP. It also represented its temporary capture of the adjacent, but distinct, WMP of internationalism (an intersection explored further in Tworek and Lemberg's chapter). This volume postulates that world politics are not singular but are rather always constituted by the interaction of multiple WMPs, and that this dynamic multiplicity drives historical change. As historians including Erez Manela, Susan Pedersen, Matthew Connelly, and Mark Mazower have suggested, high imperialism was dialectically undone by its internationalization. League fora including the PMC, and, slightly later, UN institutions, provided openings for competing WMPs, notably anticolonialism and socialism, to internationalize their calls for global justice (Manela 2007; Pedersen 2015; Connelly 2002; Mazower 2009). Samoans, for instance, wasted little time in protesting their mandate status. Throughout the 1920s, they persistently appealed to the League for independence (Pedersen 2015: 3).[3]

Finally, the infrastructural histories of these islands might also point forward, to the continuation of imperial politics under another name after 1945. In her analysis of interwar Samoan politics, Pedersen includes an important caveat: '[The] Samoan islands had no great economic importance and were of strategic interest only to the United States Navy, which administered American Samoa next door' (Pedersen 2015: 169). Even after the discrediting of the imperialist WMP through anticolonial mobilization – and even after chemists had synthesized substitutes for tropical commodities like rubber and camphor – islands remained on the radar of powerful actors, if not always their publics, in part due to their significance for communications infrastructures. Historians of the United States after 1945, for instance, have referred to it as a 'pointillist empire' composed of military and communications hubs in the Pacific

3 On the pre-1919 emergence of cross-cultural solidarities among Samoan and other workers building communications infrastructures in Samoa and American Samoa, see Droessler 2022: chapter 4.

and elsewhere (Rankin 2016; Immerwahr 2019).[4] Samoa gained independence from New Zealand in 1962, but American Samoa remained American Samoa, a node in 1960s U.S. satellite mapping efforts. As Ruth Oldenziel notes, changing technologies did not necessarily '[result] in abandonment or restoration of sovereignty' (Oldenziel 2011: 31, see also 26–29 on 1960s satellite mapping efforts). Moreover, Donald Trump's recent comments regarding another island – Greenland – indicate how the persistence of this pointillist empire, which has had a node at the Thule/Pituffik base since the early Cold War, may have undergirded a resurgence of openly imperialist talk (Tekeli/Gettleman 2025). The conclusion of the chapter considers how the history of these islands might relate to the contemporary governance and exploitation of other putatively remote spaces, such as the polar regions and outer space (explored in more detail, respectively, in the chapters by Albert and by Tworek and Lemberg).

4.2 Communications infrastructures and the emergence of an imperialist WMP

Over four decades ago, media scholar James Carey identified the spread of long-distance telegraphic communications as marking a transition between colonialism and imperialism, defining the latter as 'a system in which the center of an empire could dictate rather than merely respond to the margin.' Similarly, around the same moment, historian Daniel Headrick numbered telegraphy among the 'tools of empire' that enabled western domination of the world in the age of high imperialism (Carey 1983: 312; Headrick 1981).

But if these arguments suggest the role played by technologies in the imperial globalization of the late nineteenth and early twentieth centuries, what can they tell us about empire as a self-conscious form of

4 On U.S. insular empire after 1945, see also Vine 2011; Oldenziel 2011. On the development of synthetic substitutes for tropical products in the United States and Germany, see Immerwahr 2019: chapter 16; Haid 2023.

governance over much of the world's population during the same period? Was the reach of communications infrastructures into the Pacific and Indian oceans chiefly the product of chaotic diplomatic and commercial competition, or did it reflect a common design? Were imperial states locked in a state of perpetual improvisation as they sought to capture resources, land, and labor, or is it possible to speak of a shared imperialist WMP by which these powers together sought to order the world? Our answers to these questions might vary based not only on the time and place we are looking at but also on our own methodological lenses.

An influential strand of scholarship has pushed back against center-periphery models of imperial power, emphasizing instead empires' decentralized and ad hoc qualities. British rule over vast areas of the world was not the product of top-down decision-making from London, as John Darwin (2009) argued in *The Empire Project*, but was rather a flexible 'world-system' shaped in the colonies and also by contingencies external to the empire itself. Nineteenth-century states were tiny compared to their twentieth century and twenty-first century descendants; worldmaking was always imaginatively possible, but the projection of influence from imperial centers proved more tenuous and scattershot, even after the advent of telegraphy and undersea telegraphy in the mid-nineteenth century. To wit: for over a century, London left one of its nationals and his descendants in charge of their own private state on the island of Borneo, the Brooke Raj of Sarawak (1841–1946), from which gutta percha became an important export. Similarly, from German unification until roughly the turn of the twentieth century, Berlin invested little in communications improvements in its own expanding empire, preferring to leave these to private capital (see Tworek 2016).

Looking at imperial rule from the perspective of human mobility or environmental change, however, might bring more than its eclecticism into focus. As Duncan Bell (2015: 989) comments regarding Darwin's *Empire Project*: 'The danger of placing so much explanatory weight on the contingency, heterogeneity, and chaotic pluralism of the empire – vitally important as these are – is that the visceral reality of its formation and functioning can be obscured.' In spite of the diversity of imperial governing forms, what had driven a great deal of state and commercial

expansionism since the early modern period was a common quest for resources and the labor required to extract or harvest them. In this regard the Brooke Raj in Borneo, however eccentric its form of government, looked a lot like other places (more on that momentarily).

The 'labor question,' to use a common nineteenth century formulation, was more than domestic or regional. It was colonial and global. Over time, it fueled a common Euro-American sensibility about work and workers – about who would administer and who would get their hands dirty, and about who was suitable for different kinds of labor – that entailed the sharing of formulations of race as well as class and gender across imperial and national lines. These ideas were both diffused by communications infrastructures and integral to the lumpy development of these infrastructures. In the intertwined production of race and the 'transformation of the global countryside' in the late nineteenth century and early twentieth century, we might see the seeds of a shared imperialist worldmaking project (Droessler 2022: 12; Pretel 2023).

4.3 Racialization

The history of imperial racialization may be most familiar in an Atlantic World context. In the Americas, colonizers' inability to consistently capture Indigenous labor encouraged the expansion of the transatlantic slave trade and, in the United States, the legal codification of hereditary Black slavery. This system marked a departure from systems of slavery common in the ancient world in that it was based on race; and from indentured servitude in that it was hereditary rather than contractual (Gordon-Reed 2018). Racial categories were not naturally occurring, but once institutionalized they had profound material and political consequences, feeding the imperial accumulation of wealth through Black enslaved labor and shaping who could access full citizenship in the emerging world of nation-states.[5]

5 On enslaved labor as a crucial component in the rise of industrial capitalism, see, *inter alia*, Baptist 2014; Beckert 2014; Johnson 2013.

After slavery was abolished in the United States (1865), Cuba (1886), and Brazil (1888), processes of racialization continued apace, both within national confines and across states and empires. The race laws erected in the post-Reconstruction United States included Jim Crow segregation in the South but also broader anti-miscegenation and racialized citizenship laws. These laws were models that traveled. Angela Zimmerman has shown how officials in German colonial Togo sought to import agricultural expertise from the segregated U.S. South on the grounds that Black people were uniquely capable of cotton cultivation, thereby mapping a North American racial identifier ('Negro') onto multiethnic and multilingual African populations (Zimmerman 2010: introduction; see also Whitman 2017).

Imperial racialization was not limited to the Atlantic World. By the early twentieth century, actors of many political stripes were commenting on the global purchase of what American sociologist W. E. B. Du Bois termed 'the color line.' Du Bois (1903: 13) suggested its oceanic reach when he wrote in *The Souls of Black Folk* that the color line encompassed 'the relation of the darker to the lighter races of men' not only 'in Asia and Africa, [and] in America' but also on 'the islands of the sea.' The United States had recently annexed the Philippines, Hawai'i, Guam, and American Samoa. Theodore Roosevelt likewise grasped the symbolism of race in international relations when he sent the U.S. Navy on a tour of the Pacific in 1905, a response to the Japanese victory in the Russo-Japanese War and a gesture of white brotherhood to distant Australians. Received in Sydney, U.S. Rear Admiral Sperry 'greeted his gratified hosts as a "white man to white men."'[6]

This is not to say that race alone determined the working worlds of empire. In many settings, the politics of racial division clashed with colonial demand for educated intermediaries. During the Orientalist-Anglicist debate over education in early nineteenth century British India, for instance, the Anglicist camp argued that Indians could and

6 On Du Bois and Roosevelt, see Lake/Reynolds 2008: 2–3. On Roosevelt's racialized worldview, see also Gerstle 2017: 14–43.

should be taught 'European literature and science' in European languages: By their lights, Indians were not naturally inferior but rather culturally deprived. Euro-American discussions of other societies reflected the ambiguous ways in which the concept of race was understood for much of the nineteenth century, often as a proxy for culturally or linguistically defined 'nations' or 'civilizations' rather than biological groupings or phenotypes (Adas 1989: chapter 5).[7] And although notions of immutable biological division – as opposed to cultural or environmental difference – were ascendant in the late nineteenth century, historian Chris Suh has recently pointed to relations between Tokyo and Washington as evidence of a countertrend: interracial collaboration between Japanese and U.S. elites in the service of a shared imperial order in the Pacific (Suh 2023). We might see in this collaboration evidence of an imperialist WMP, as well as of the pliability of western civilizational hierarchies, which accommodated Japanese power. (Interwar collaboration between Japan and other imperial powers at the League of Nations is further discussed in Tworek and Lemberg's chapter in this volume.)

Nor were empires the only scale at which race inflected turn-of-the-century politics. Racialization did not necessarily point towards imperial expansion. It could also point towards nationalist consolidation. What historians Marilyn Lake and Henry Reynolds call the 'project of whiteness' and international relations scholar Duncan Bell (citing Mark C. Jerng) 'racial worldmaking' was 'transnational in its inspiration' but often 'nationalist in its methods and goals' (Lake/Reynolds 2008). In the United States, Australia, and elsewhere, ideas about whiteness fed into highly restrictive immigration laws aimed at choking off flows of migrants from Asia in particular: These were Australia's 'White Australia' policy of 1901 and, in the United States, the restrictions beginning with the Chinese Exclusion Act of 1882 and culminating in the Johnson-Reed Act of 1924 (Lake/Reynolds 2008: 4; Bell 2020: 28).[8] Meanwhile, pro-

7 For an argument that class hierarchies (not race) dominated British perceptions of their empire, see Cannadine 2001.

8 On the intersection between white supremacism and anti-imperialism in the United States, see also Jacobson 2000.

posals for a political union of Anglo-Saxon states – Bell's 'dreamworlds of race' – ran aground over questions of sovereignty and how to treat colonies (Bell 2020: 2–3, 14–15, 17). As Werron's chapter in this volume shows, nationalist worldmaking flourished in the imperial metropoles of the late nineteenth century and early twentieth century, at times underwriting imperial expansion as being in the national interest, but at times confounding straightforward expansionism.

The case of Japan demonstrates the pertinence not only of race but also of class and gender to inter-imperial relations at the turn of the century. Participant in the Boxer Protocol and the sole imperial power outside the Euro-American axis, Tokyo protested when its nationals (hundreds of thousands of whom participated in labor migrations around the Pacific world between 1868 and 1941) were treated as racial inferiors. But its protests did not necessarily happen under the banner of antiracism. While in 1919 Japan proposed to insert a nondiscrimination clause into the Versailles settlement, in other instances its interventions were framed not in terms of racial equality but rather on the hierarchical grounds of Japan's civilizational accomplishments. Into the 1920s, Japanese immigrants to the United States protested their exclusion from citizenship by claiming whiteness. These episodes complicated, but did not destabilize, the racialized worldview of western governments. France wrote to Britain: Were Japanese people white? Meanwhile, Theodore Roosevelt, though a fervent advocate of Anglo-Saxon power, viewed Japan in terms of its imperial virility, as a kind of gendered exception to existing racial hierarchies (Lake/Reynolds 2008: 9–10; Merida 2020: 5).[9] Roosevelt actually pushed back against certain hardcore forms of immigration restrictionism, anxious about the response from Tokyo (Hsu 2021: 424–426). Again, we might interpret these diplomatic practices in terms of an emergent imperialist WMP, which aimed to divvy up the globe among deserving civilizations.

9 Takao Ozawa, who petitioned the Supreme Court for U.S. citizenship in the early 1920s, 'cited anthropology and ethnology that identified Japanese as Caucasian or white' (Ngai 2014: chapter 1, quotation on 44). For statistics on Japanese migration, see Azuma 2023: table 6.1.

Labor migrations after the end of de jure slavery – including those from Japan, but also from China, India, and elsewhere – shaped racialization in both national and imperial contexts. The new regimes of unfree and coerced labor that emerged in slavery's place entailed growing human mobility around and from Asia, even as the diversification of industrial capitalism from cotton toward 'jungle commodities' such as gutta percha from roughly 1850 onward transformed the places that many of these migrants were coming from and circulating around (Jung 2006; Pretel 2023; Droessler 2022).

The expansion of communications infrastructures offers a fruitful site for examining these social and environmental transformations. Over the course of the nineteenth century, imperial capacities to plan and execute long-term infrastructural projects thickened. The need for workers who could construct, operate, and maintain these infrastructures did not lead imperial states or commercial actors to become antiracist *avant la lettre*. Rather, in order to secure labor, they mustered race differently than the immigration restrictionists.

Installing and repairing telegraph lines entailed physically demanding, often dangerous work. In the late 1880s and 1890s, the Indo-European Telegraph Department (the IETD, a department of the British colonial state that managed cable connections from the Persian Gulf to Tehran and Karachi) formally divided workers into 'Europeans' and 'non-Europeans' as a mechanism for 'preserving hierarchies of control over those who were the subjects of imperial rule,' Sebastian James Rose observes (Rose 2024). The British cable station on Fanning Island relied on Gilbertese Islanders and Chinese laborers; while on Midway (a link in the first American transpacific cable from 1903 on) Japanese and Chinese workers were collectively present, if not individually acknowledged in American journalism about the cable station (Steel 2022: 530; Starosielski 2015: chapter 3). The construction of the wireless station at Apia on German Samoa, meanwhile, was achieved primarily by local Samoans and Chinese laborers. German administrators' commentary on Samoan workers reflected a civilizational worldview shared with their British and American competitors in the Pacific: They '[represented] the strange

type of the gentleman savage; good manners, wonderful grandezza, and pyramidal laziness' (Droessler 2022: 155).

Commercial actors likewise engaged in an imperial politics of race in order to secure workers. The Eastern Extension Australasia and China Telegraph Company (Eastern Extension) telegraph line connecting Java to Port Darwin in northern Australia was completed in 1871, linking England and Australia for the first time. Its officers envisioned Darwin, and later the telegraph station at Broome (1889), as part of the colonial Indian Ocean world and argued that their enterprise should be excepted from Australian restrictions on Asian labor, as the regional climate on Australia's northern coast was more like the tropical Indian Ocean than the rest of the Australian continent. These arguments, reflecting theories of environmental racism which claimed that whites were unfit to work in tropical climates, clashed with the newer white nationalism that had emerged in Australia, which considered colonial reliance on Asian workers degrading to white labor and white racial vigor. After the passage of the White Australia policy in 1901, years of negotiations between Eastern Extension and the Australian state ensued, with Liberal-led governments more sympathetic to the company's requests for exemptions to Asian exclusion (Martínez 2017).[10]

Processes of racialization were debated not only among white elites and publics. They were also subject to contestation from below. What W. E. B. Du Bois conceptualized as the global color line was also perceived by the Pacific islanders who built communications infrastructures in places like American Samoa. As strikes uniting Samoan and non-Samoan workers demonstrated, these workers experimented with new forms of solidarity, even as their labor formed part of accelerating imperial incursions into the surrounding environment (Droessler 2022: 141–143).

10 On Darwin see also Starosielski 2015: chapter 3, esp. 104.

4.4 Environmental transformations

The globalization of communications infrastructures was a driver of environmental change in the colonized tropics. From the jungles of colonial Malaya and Borneo came a substance that was for decades essential to the insulation of undersea cables: gutta percha. Gutta percha is a natural plastic derived from the sap of certain kinds of trees native to Southeast Asia. It was already used in a variety of tools and vessels there by the 1820s or 1830s, when an unnamed Malay worker showed its properties to a Scottish doctor named William Montgomerie, who soon began to publicize its medical applications. By the late 1840s, western scientists and engineers had realized gutta percha's potential to insulate telegraph wires from corrosive saltwater. It was gutta percha that protected the very first successful undersea telegraphic transmission, across the English Channel, in 1851 (Tully 2009: 566–567; Godfrey 2013: 150; also Godrey 2018). The insular Pacific was materially present in the infrastructures of the Atlantic.

Yet metropolitan engineers, champions of empire, and titans of industry would have been unable to realize their vision of a world girdled by telegraphs without the knowledge and skill of Indigenous forest-dwellers in colonial Southeast Asia. The contribution of Montgomerie's unnamed Malay interlocutor illustrates a point made by historian of technology David Pretel: 'Tropical botany developments regarding tree taxonomies and planting procedures, such as for lactic plants (rubber, chicle, and gutta-percha), relied on or were informed by local, [Indigenous] knowledge' (Pretel 2023: 207; see also Godfrey 2013).

The landscapes that produced gutta percha were not plantations but rather irregular patches of forest, often difficult to access, where trees were felled by axe and tapped for gutta percha, which was then washed, flattened, and compressed into blocks for shipping (Tully 2009: 566–567). The particulars of the substance shaped conditions for Indigenous gutta percha tappers, whose labor was unsupervised and uncoerced – like wild rubber tappers in the Amazon, and unlike coerced rubber workers slightly later in the Belgian Congo. Helen Godfrey indicates that, in the Sarawak region of Borneo, many Indigenous tappers

and communities actually enriched themselves during gutta percha's boom years in the mid- to late-nineteenth century: 'The *gutta percha* trade provided an entry for forest communities into the global economy, but to some extent on their terms' (Godfrey 2013: 170).

It was in transimperial efforts to rationalize commodity trades that we might see most clearly the workings of an imperialist WMP prior to World War I. Broadly speaking, the goal of these efforts was to incorporate forest-dwellers, shifting cultivators, and subsistence or noncash producers into cash crop production, thereby minimizing the leverage and capturing the labor of groups like the Sarawak. This process was not merely commercial; it entailed state-subsidized knowledge production and state-sanctioned coercion. In the nineteenth century, metropolitan botanical gardens such as the one at Kew became institutions of state, joined by tropical gardens and experiment stations in various colonies, including Buitenzorg in Dutch colonial Java. Despite inter-imperial competition for resources, knowledge tended to flow transimperially across research sites, helping to '[transform] tropical agriculture' not in one colony but across the global tropics more generally (Headrick 1996: 3; Wagner 2020).

By the turn of the twentieth century, massive exploitation had pushed the wild trees that produced gutta percha to the brink of extinction. European observers placed blame on local harvesting methods rather than on the pressures generated by Euro-American demand, which had intensified in the decade preceding the construction of two transpacific cables (the British 'All-Red Line' of 1902 and, the following year, the nominally American line, really underwritten by British capital). Imperial botanists and chemists pursued a variety of solutions to the shortage, eventually discovering a chemical treatment that enabled the extraction of gutta percha from the leaves of *Isonandra* bushes and trees, which could then be produced at scale on plantations (Tully 2009; Godfrey 2013: 155–156).[11]

Similarly, on the island of Taiwan, seized as a colony by Japan from China in 1895, colonial resource exploitation 'penetrated beyond hilltops

11 On British backing for the U.S. transpacific line, see Droessler 2022: 150.

into the mountain and forest "fastnesses" […] where tea and sugar did not go' (Inkster 2018: 65). Global demand for camphor, driven partly by demand for celluloid film (invented in 1889), reshaped social relations and landscapes in Taiwan, source of a large share of the world's camphor. In the late nineteenth century, Chinese authorities had attempted to wrest control of camphor forests from Indigenous Taiwanese, extracting their labor in camphor production under the menace of deadly punishment for disobeying the Qing monopoly. Japan was even more determined to make the camphor trade and the colony profitable and governable, and unleashed yet more violence, 'culminating in systematic bombardments of [Indigenous] residential areas between 1917 and 1926' (Haid 2023: 17; Adams 2022).

The so-called scientific management of resources and labor, coupled with the accelerating alienation of Indigenous land, were thus reaching deep into the world's interiors at the turn of the twentieth century, spanning commodities from cotton and coffee to chicle, caoutchouc, and camphor, and regions from German Togo to nominally independent El Salvador to Japanese Taiwan (Zimmerman 2010; Sedgewick 2015; Pretel 2023; Inkster 2018; Droessler 2022). Efforts to rationalize jungle production did not always work out as hoped: In the case of gutta percha, plantations had limited success, only ever serving a portion of worldwide demand (Tully 2009: 575, 578; n.a. 1920).[12] But western observers continued to associate progress with settled farming and cash cropping, viewing shifting cultivation and subsistence production as backwards. In Britain, interwar observers predicted that Sarawak workers would ultimately join the wage economy rather than continuing to exhaust wild gutta percha trees: The new 'rubber, coconut, and tapioca' plantations springing up in the region were 'well regulated… [and] will, therefore, undoubtedly attract the native and coolie labour away from the jungle', noted an article on gutta-percha in the *Journal of the Royal Society of Arts* (n.a. 1920).

12 Ultimately, substitutes (developed in the 1920s) helped dampen demand for gutta percha (Headrick 1996: 6–7).

If the racialization of labor and the commodification of the global countryside reflected shared imperial discourses and practices prior to World War I, the explosive global conflict of 1914–1918 points instead towards inter-imperial competition. In the war's immediate aftermath, another kind of struggle gained visibility, that between WMPs, as alternative visions for world politics gained visibility in the infrastructural nexus. Communications infrastructures served as channels for communicating anticolonial, socialist, and other ideas across borders, as in Sa'd Zaghlul's 1919 telegram to the British prime minister asserting Egyptian independence. These infrastructures also formed objects of these WMPs, as in subsequent anticolonial attacks on British telegraph lines in Egypt (Manela 2007: 141–142).

After the war, the victorious powers tried hard to reestablish an imperial status quo. Civilizational assumptions were baked into the operations of the League of Nations PMC, the creation of which reflected the incorporation of imperialist worldmaking into internationalism: Rather than granting the losing side's colonies independence, the victors instead placed them under the international supervision of the PMC (Pedersen 2015: introduction). Article 22 of the League Covenant described these territories as being 'inhabited by peoples not yet able to stand by themselves under the strenuous conditions of the modern world' and announced 'the principle that the well-being and development of such peoples form a sacred trust of civilisation.' The winning powers, in other words, responded to anticolonial and socialist calls for self-determination by reinforcing imperial control on the racialized grounds of civilization, envisioning the PMC as 'an organ of constructive co-operation on colonial matters' (in the words of one League official) (quoted in Pedersen 2015: 5).

Japan's mixed success at Versailles likewise points to the triumph of the imperialist WMP in 1919, as well as the significance of infrastructure to imperialist worldmaking. Tokyo had taken advantage of Europe's wartime distraction to wrest greater control of Japan's telegraphic communications from the European actors that had once monopolized cable traffic in Asia. Its demands to include a racial nondiscrimination clause in the peace treaty – which echoed the wishes of far-flung anticolonial

activists – were rejected. Instead, it received a seat at the negotiating table and major geopolitical concessions. Tokyo was recognized as controlling Shandong, where in 1914 it had seized an important cable landing site from Germany (Yang 2009; Manela 2007: 180–183). It also became the League's chosen mandatory power in Yap and the rest of Micronesia, where it would seek to profit from phosphate mines and sugar cultivation, paying little mind to how this impacted the local population (Pedersen 2015: 298, note 7).

Meanwhile, how did these events affect another one of the island locales where we began this chapter, Bitapaka in German Neupommern? An intervention that began there with communications infrastructure – the seizure of German wireless installations by Australian troops in the opening months of the war – segued into decades of Australian colonization. In 1920, Neupommern/New Britain became part of Australia's Class C mandate of New Guinea, and German possessions were expropriated. The radio equipment at Bitapaka was relocated to neighboring Papua and the western Australian mainland (Cahill 1997: 25).

The years surrounding the war featured continuities as well as ruptures, in other words. As with prior German merchants and administrators, a main concern of Australia's mandate administration in New Guinea was how to provision the colony's plantations and mines with indentured labor (at least initially, the Indigenous population had been considered too *uncivilized* to make reliable laborers; see Pedersen 2015: chapter 10; Biskup 1970). The interwar government also rewarded returning Australian soldiers with overseer posts: If domestically the White Australia policy aimed at national racial purity, in Australian New Guinea imperial racial hierarchies invited white migration. As the *Official Handbook of the Territory of New Guinea* put it in 1937, '[The] function of the white man in a tropical country [is] not to labour with his hands, but to direct and control a plentiful and efficient supply of native labour and assist in the government of the country, or to engage in opportunities for trade and commerce from an office desk in a bank or mercantile firm' (Cahill 1997; Riseman 2010: 167).

As Heidi Tworek (forthcoming 2026) observes, mandated territories were not only politically deprived of autonomy; they also had 'little to

no independence' when it came to the telegraphic news traveling across their borders, which continued to be in the hands of a small set of powerful foreign actors.[13] Communications infrastructures in Australian New Guinea were intended for the benefit of white settlers. By the late 1930s, the capital of mandate New Guinea, Rabaul, was served by a pair of wireless telegraphy stations, and residents could listen in to international shortwave voice broadcasts (Johnson/Threlfall 2023: 71). At the same time, settlers were experimenting with other technologies. *Pacific Islands Monthly* enthusiastically reported on the use of portable wireless stations that used 'power supplied by a native, who sits on a thing like a bicycle frame, and pedals lustily' (cited in Nelson 2015). This Indigenous labor powered sets intended for use by 'planters and traders', wrote *Pacific Islands Monthly*, while '[settlers] bear united testimony to the value of being able at any time to speak to persons in the centres of civilisation' (n.a. 1936: 44; n.a. 1938: 46).

As much as anything else, these offhand statements in a regional periodical were symptomatic of the imperialist worldmaking project, reflecting how little the globe-spanning communications infrastructures of the late nineteenth century and early twentieth century were intended for the people whose labor they depended on.

4.5 The legacies of imperialist worldmaking

The world of colonial New Guinea is not the world of today. Rather than being carved up between European empires, the island is now part of two postcolonial states, Papua New Guinea and Indonesia. Many of the islands that we opened this chapter with are likewise politically independent: German Samoa is now just Samoa; Fanning is part of the sovereign state of Kiribati; Yap is part of independent Micronesia. A powerful synthesis of anticolonial and nationalist WMPs, backed by the socialist bloc, durably reshaped the international system in the middle decades of the

13 On institutionalized communications inequalities in the British Empire, see also Potter 2007.

twentieth century, such that it became unacceptable to deny self-government on the basis of race or civilization. Imperialism as a self-conscious worldmaking project was discredited. Communications infrastructures were part of the reason why, a 'double-edged sword' (Headrick 2010) that helped unite previously disconnected groups under the banner of anti-colonialism, even as imperial elites sought to use these same infrastructures to reinforce imperial control.

Many of these islands are independent – but not all. We could enumerate others (American Samoa, Guam, the Australian Cocos Islands, French New Caledonia, etcetera) that remain non-self-governing territories according to the U.N. definition: 'territories whose people have not yet attained a full measure of self-government' ("The United Nations and Decolonization" 2024). In fact, the contemporary U.N. list of non-self-governing territories contains mostly islands. Why is this so, and what can the persistence of territorial empire in these spaces *after* the fading of the imperialist WMP tell us about the present and future of world politics?

Why? Because, as before, these islands are not isolated spaces. They remain crucial nodes in globe-spanning communications and defense infrastructures. The United States' contemporary 'pointillist empire' has already been mentioned. While Washington may be the biggest player, other former colonial powers have retained distant islands for similar reasons: France's Armée de l'Air et de l'Espace has bases on Reunion, New Caledonia, and Tahiti; while in 2025 Britain arranged to retain the UK-U.S. military base on Diego Garcia even as it negotiated the handover of the Chagos Islands to Mauritius. The Diego Garcia base is considered crucial for satellite communications in the Indian Ocean (Girelli 2024; AFP 2025; Charpentreau 2025).[14]

Why does it matter? Because islands continue to shed light on broader efforts to circumvent democracy and sovereignty on the part of powerful states and actors – what Werron calls in his chapter the rise of 'nationalist informal imperialism.'

14 On Diego Garcia, see also Vine 2011.

Islands are both sites of investigation and a metaphor for historian Vanessa Ogle, who has coined the term 'archipelago capitalism' to describe late twentieth century efforts to circumvent financial regulations through mechanisms such as 'tax havens… flags of convenience registries… offshore financial markets and banking institutions… and foreign trade or special economic zones.' Ogle argues that this archipelago of regulatory exception – which has encompassed islands ranging from the Cayman Islands in the Caribbean to Vanuatu in the South Pacific – ultimately reshaped global capitalism and welfare states from the outside in: '[The] offshore world contributed to the eventual demise of the mid-century state-based order' (Ogle 2017: 1457). Beyond the evasion of fiscal regulations, these developments were also bound up with efforts to circumvent labor regulations in the global North. For instance, the growth of the textile industry in the Northern Mariana Islands (United States) in the 1980s and 1990s resulted from the territory's lower wages coupled with its 'Made in USA' branding and importing advantages (Quimby 2013).

In other instances, islands are not metaphors or only nodes of otherwise dematerialized connection, but remain sites for extracting raw materials vital to infrastructures old and new. In the energy sector, many discern a renewal of imperial ambitions among the great powers. Donald Trump's 2025 comments about incorporating Greenland into the United States – only the latest in a string of such propositions emanating from Washington, incidentally – came alongside renewed attention to the island's mineral, oil, and gas deposits. French New Caledonia, with its strategically important nickel deposits, has been another recent site of contestation. The archipelago's 270,000 inhabitants are politically and ethnically polarized, with pro-independence Indigenous groups clashing with non-Indigenous residents who wish to retain political ties to France (Le Monde with AP 2024).

But contemporary political relations in the infrastructural nexus are not wholly predetermined by race or history. Western elites remain as flexible and opportunistic as when they welcomed Japan into the civilizational club at the turn of the twentieth century. The contemporary resurgence of imperial politics has at times taken the form of an

alliance between western and island elites, battling international regulation from without and democratic input from within. Independent Nauru and Tonga, for instance, have signed on to Trump administration efforts to circumvent U.N. deep-sea mining regulations. The chair of one Pacific NGO has referred to this collaboration as a 'recolonisation of our region' (Fuatai 2025). Rare-earth minerals may prove to be the gutta percha and camphor of the twenty-first century: raw materials that enable so-called clean infrastructures, and the demand for which projects political competition and cooperation into far-flung spaces that in turn require the extension of these infrastructures.

In a final twist, these minerals may not be so earthly, after all. They are thought to exist in quantity in outer space. In ongoing state and commercial ambitions to exploit resource frontiers and circumvent democratic and multilateral oversight on Earth and beyond, we can see that imperialist worldmaking is not an island relegated to the past (see, e.g., Deberdt/Le Billon 2023; Kilgore 2003). It continues to imprint political designs for resource extraction and militarized expansion – bolstering, finally, this volume's argument for a less insular relation between History, Sociology, and International Relations.