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The Necessities of Life: Japanese Colonial Policy as a Social Determinant of Ainu Health, 1876–1887

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Summary. In this paper, I reassess the Meiji period (1868–1912) Japanese public health and Indigenous management policies, focussing on the Karafuto Ainu in Tsuishikari, Hokkaido. Utilising Indigenised public health frameworks, I argue that colonial policies, including forced migration, sedentarisation and paternalistic management, were significant aetiological causes of disease in Ainu communities. This approach allows us to challenge received historiographical understandings of Ainu health, which often characterise the Ainu as having been disproportionately impacted by epidemic disease because they collectively possessed 'no immunity' to numerous contagions and/or an understanding of 'hygiene'. The latter especially reflects the views of colonial hygiene inspectors who visited Tsuishikari. Pathologising Ainu culture and domestic life, Japanese officials aimed to 'cure' the Ainu of their many afflictions through zero-sum assimilation measures. However, by disavowing the material impact of colonisation on Ainu health and wellbeing, this served only to further entrench those policies which rendered Tsuishikari residents vulnerable to the spread of epidemic disease.

Keywords: Ainu; Japan; Indigenous health; settler colonialism; public health

Introduction

In a 13-month period between January 1886 and February 1887, 319 people in the village of Tsuishikari, Hokkaido died as epidemics of cholera and smallpox swept across the island.[1] Ten years earlier, in November 1876, the Kaitakushi (the Japanese Colonial Office) had forcibly moved the residents—all of them Ainu—from the coastal Soya region in the island's northwest to Tsuishikari: an isolated, inland village northeast of Hokkaido's capital of Sapporo. Before this, the residents had freely lived in permanent villages spread out across hundreds of kilometres of coastline in southern Karafuto (Russian: Sakhalin),

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[1]Karafuto Ainu-shi Kenkyūkai (ed.), *Tsuishikari no ishibumi: Karafuto Ainu kyōsei iju no rekishi* (Sapporo: Hokkaidō shuppan kikaku sentā, 1992), 187. Combined with others who died of unspecified causes, a total of 366 people died in Tsuishikari during this period. This represents nearly half of Tsuishikari's population. See *Ibid*., 178.

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directly across the La Pérouse Strait from Hokkaido. Indigenous to this region, there they worked as maritime traders and fishers for countless generations. However, following the 1855 Russo-Japanese Treaty of Shimoda, Karafuto came under dual jurisdiction as the Russian Empire pushed south and the Tokugawa Japanese state north. With tensions mounting, in 1875, Japan's new Meiji government agreed to cede Karafuto to Russia in exchange for the adjacent Kuriles (Japanese: Chishima). According to the Treaty of St. Petersburg, Ainu living along the exchanged territories were obligated to choose between the Japanese and Russian monarchs and move to the territory of their sovereign within three years.[2] Heavily pressured by the Kaitakushi, 841 Karafuto Ainu from across the island made the (formally) free choice to recognise the Japanese emperor and were moved soon after across the La Pérouse Strait to Soya (see Figure 1).

Ueno Tadashi, a colonial administrator who managed Karafuto Ainu affairs in Tsuishikari, claimed that the Ainu who had relocated to Hokkaido did so because they 'yearned to come under our benign rule' and 'requested to come back to our territory'.[3] It is more likely, however, that most of those who accepted these terms did so because, the Kaitakushi promised, they would be allowed to freely resettle in Soya. There, they would not only be able to literally *see* their homeland across the narrow La Pérouse Strait but would, in fact, be permitted to visit on occasion. However, ostensibly worried that the 'coming and going' of the Ainu would, as Ueno put it, 'invite future conflict' with the Russian Empire, the Kaitakushi reneged on this promise and, against the protestations of Karafuto Ainu leaders, forcibly moved them to Tsuishikari.[4] Having been resettled into a cluster of huts, they were pushed into state-administered river fishing and rope-making industries under the watchful eye of Ueno. 'Devoting himself to their protection and management', Ueno worked to 'put them into a safe livelihood', according to biographer Okazaki Kanjirō. He thus became like an 'affectionate mother' for whom the Karafuto Ainu as 'babies' would 'yearn'.[5] Under the paternalistic management of state officials, there they eked out a living until the cholera and smallpox epidemics devastated Tsuishikari 10 years later.

In this article, I analyse the disproportionate impact of the 1886–7 cholera and smallpox outbreaks in Tsuishikari within the broader context of Japanese colonisation and colonial policy. This included settlement and land use policies which systemically produced significant health disparities between the Ainu and settler populations. Stripped of sovereignty, self-determination, their economic base, exposed to severe material deprivation, and, especially in the case of Tsuishikari, living directly under the administration of the state without rights to self-determination, Ainu across Hokkaido became increasingly vulnerable to the spread of communicable disease.

My analysis of the cholera and smallpox outbreaks in Tsuishikari is grounded in emerging public health frameworks which argue that colonialism is a key determinant of Indigenous health. As Lisa Boivin, Allison Crawford and Lisa Richardson argue of twenty-first century Canada, disparities between Indigenous and settler populations are

[2]Richard Siddle, *Race, Resistance and the Ainu of Japan* (Abingdon: Routledge, 1996), 63.
[3]Kōno Motomichi (ed.), 'Tsuishikari Ijū Kyū-Karafuto Dojin Enkaku', in *Ainu-shi shiryōshu (Abe Masaki Bunko-Hen 2)*, vol. 2/5 (Sapporo: Hokkaidō shuppan kikaku sentā, 1984), 8.
[4]Motomichi, 'Tsuishikari Ijū Kyū-Karafuto Dojin Enkaku'.
[5]Okazaki Kanjirō, *Hokkaidō jinbutsushi*, vol. 2 (Sapporo: Hokkaidō Jinbutsushi Hensanjo, 1894), 129. For details on feminised symbols of imperial sovereignty in Meiji Japan, see T. Fujitani, *Splendid Monarchy: Power and Pageantry in Modern Japan*, 1st ed. (Berkeley and Los Angeles: University of California Press, 1996), 171–73.

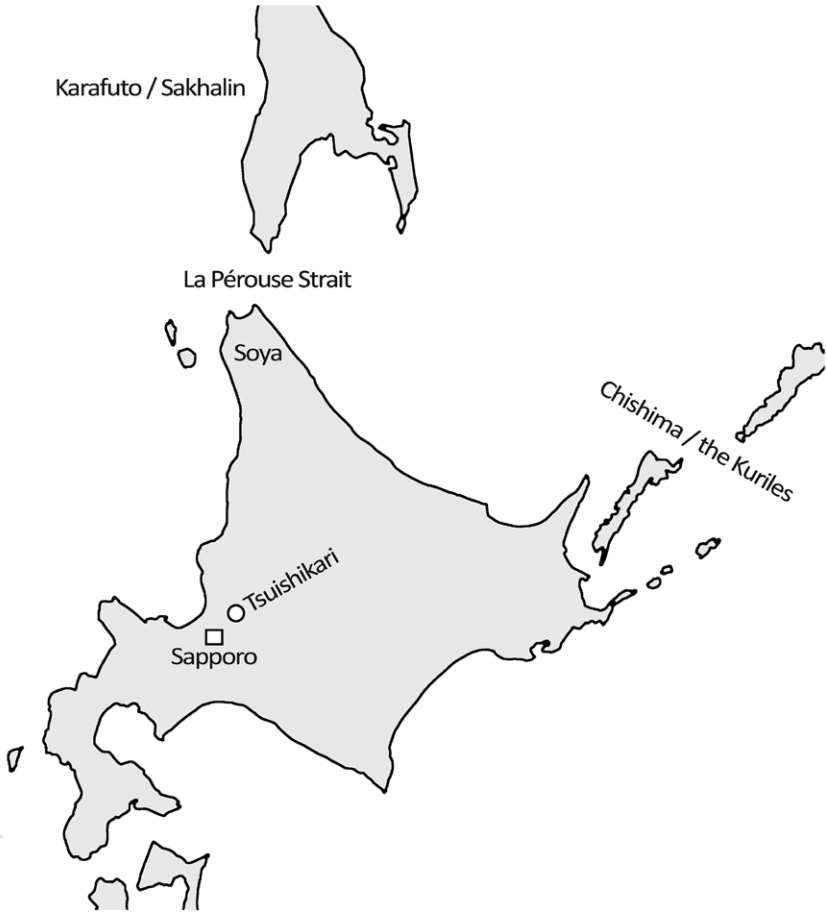

Figure 1. Map of Hokkaido and southern Karafuto/Sakhalin.

'created by a number of political-economic factors resulting from early contact, including disease, starvation, loss of life, the reconfiguration of social groupings (ethnogenesis), and economic adversity'.[6] The 'distal effects of colonial legislation', as Katrina

[6]Boivin Lisa, Allison Crawford and Lisa Richardson, 'Indigenous Health Humanities', in Paul Crawford, Brian Brown and Andrea Charise, eds., *The Routledge Companion to Health Humanities* (Abingdon: Routledge, 2020), 98. In analysing health trends in Ainu communities today, some, such as Uemura Hideaki, have made strides in applying social determinant of health (SDH) frameworks to the Ainu. While well-meaning, Uemura, however, makes only scant reference to colonialism, and, even then, refers strictly to what he calls 'white' or 'European' colonialism occurring overseas. The coloniality of Hokkaido is never addressed, and in describing health disparities between Ainu and settler populations, he makes only anecdotal references to allegedly high rates of alcoholism and depression within Ainu communities today as an effect of the 'discriminatory gaze of colleagues in the workplace'. Systemic or institutional structures of colonial racism are left undisturbed, as are the health disparities that may result therefrom. See Uemura Hideaki, '"Kenkō no shakaiteki kettei yōin" kara Ainu minzoku sabetsu wo kangaeru: senjū minzoku no kenkō mondai ni kan suru Nichigō hikaku kenkyū ni mukete (To Review Discrimination against the Ainu from the Concept, "Social Determinants of Health": Toward a Comparative Study on Indigenous Health between Australia and Japan)', *Keisen Jogakuen Daigaku Kiyō*, 2017, 29, 133–46.

Czyzewski elsewhere notes, continue to negatively impact the health and wellbeing of many Indigenous peoples into the present, leading to statistically higher rates of both communicable and non-communicable disease as well as higher instances of psychological trauma and mental illness in comparison to settler populations.[7] And so, rather than intrinsic biological or cultural traits to which poor Indigenous health is so often attributed, it is colonialism itself, Sadeem T. Fayed et al. argue, which becomes 'a collective risk exposure that is unique to Indigenous people'.[8]

Seemingly paradoxically, however, Crawford and Richardson argue that public health regimes that purport to respond to such disparities themselves frequently become 'an accompanying tool of colonization'. Imposed by settler governments, such things as the medicalisation of racialised Indigenous bodies as 'the antithesis of healthy', state-led medical interventions into Indigenous communities based on this premise, and the segmentation of Indigenous communities into zones of quarantine are inseparable from larger colonial structures which afflict them. Furthermore, by disrupting 'access to protective determinants' within Indigenous communities, such as language and traditional health-seeking practices, as well as by denying these communities rights to self-determination, those public health measures that are rooted in racism and paternalism may themselves further impact the health and wellbeing of Indigenous populations.[9]

Even while scholars of Indigenous health stress that colonialism should not be thought of as something strictly 'historical' but an ongoing practice, historians of nineteenth-century Hokkaido are often far less attentive to the impact of Japanese colonisation on Ainu health and wellbeing. While many detail Japanese colonial expansion and refer to statistics that show deep population losses in Ainu communities that followed, few consider the causes (much less the broader causes of causes) of this steep demographic decline. Troublingly, some, not straying far from what historian Tomiyama Ichirō calls the 'pathological gaze' of the colonial administrators, instead attribute devastation wrought to Ainu communities by Japanese colonisation to the Ainu themselves, either on the basis of biological or cultural determinism.[10] For example, reflecting broader trends in Anglophone and Japanese language scholarship, widely cited twentieth-century researchers such as Mary Inez Hilger and Okuyama Ryō respectively argued that what both characterised as the 'vanishing' Ainu collectively lacked immunity to epidemic disease and/or understandings of hygiene which might otherwise have saved them.[11] Or, to

[7]Karina Czyzewski, 'Colonialism as a Broader Social Determinant of Health', *The International Indigenous Policy Journal*, 2011, 2, 3.

[8]Sadeem T. Fayed et al., 'In the Eyes of Indigenous People in Canada: Exposing the Underlying Colonial Etiology of Hepatitis C and the Imperative for Trauma-Informed Care', *Canadian Liver Journal*, 2018, 1, 117.

[9]Lisa Richardson and Allison Crawford, 'COVID-19 and the Decolonization of Indigenous Public Health', *Canadian Medical Association Journal*, 2020, 192, E1098–100, doi:10.1503/cmaj.200852. Crawford and Richardson are careful to note that during the nationwide COVID-19 outbreak in Canada in the first half of 2020, Indigenous communities which had autonomy in executing their own emergency preparedness plans had significantly lower rates of infection than many settler-majority communities. Moreover, far from designating all public health measures inherently racist or colonialistic, they likewise note that emerging Western conceptions of health 'as a state of well-being rather than the absence of disease' may, in fact, better correspond with Indigenous understandings of health than biomedical models.

[10]Tomiyama Ichirō, 'Colonialism and the Sciences of the Tropical Zone: The Academic Analysis of Difference in "the Island Peoples,"' in Tani E. Barlow, ed., *Formations of Colonial Modernity in East Asia* (Durham, NC: Duke University Press, 1997), 210.

[11]Mary Inez Hilger, 'Mysterious "Sky People": Japan's Dwindling Ainu', in *Vanishing Peoples of the Earth* (Washington, DC: National Geographic Society, 1968), 92–113; Okuyama Ryō, *Ainu suibō-shi* (Sapporo: Miyama Shobō, 1966). For more by Hilger, see also M. Inez Hilger, *Together with the Ainu: A Vanishing People* (Norman: University of Oklahoma Press, 1971).

put it another way, they argued that it was due to causes intrinsic to the Ainu that they died in such large numbers, thereby occulting the effects of colonisation.

In arguing that Ainu health was impacted by such things as forced migrations and sedentarisation, paternalistic colonial management, poverty and overcrowding, social and economic exclusion, as well as malnutrition and famine, this article focuses on the Hokkaido Ainu in general and Tsuishikari-based Karafuto Ainu in particular. During the period described, Japanese colonial authorities treated Tsuishikari as a laboratory of 'scientific hygiene' and therefore of what Ruth Rogaski calls 'hygienic modernity'.[12] Geographically isolated and under the direct administration of the state, Tsuishikari provided authorities with a proving ground where public health policies then being developed for the Japanese metropole could be tested unfetteredly. Tsuishikari also provided a model of paternalistic Indigenous management later replicated across Hokkaido following the passing of the so-called Hokkaido Former Aborigine Protection Act in 1899.[13] Corresponding to Crawford and Richardson's observations on the coloniality of public health regimes, there, hygiene inspectors pathologised cultural difference between Japanese settlers and the Karafuto Ainu, characterising the latter as a pestilent race doomed to extinction as the inevitable result of cultural or racial inferiority. This simultaneously seemed to confirm the broader Japanese population as always-already more modern, 'scientific', and—perhaps most importantly—'hygienic', thereby calming lingering anxieties over Japanese responses to epidemic diseases that had been brought into the country through treaty ports such as Yokohama and Nagasaki on foreign ships.

With authorities locating the aetiological source of poor Ainu health not within colonial policy but within Tsuishikari itself, they took it upon themselves to biopolitically uplift the residents, making them live when, hygiene inspectors insisted, they would otherwise most certainly perish.[14] Nevertheless, in doing so, the state upheld precisely those dispossessive and exclusionary colonial policies which had most grievously impacted Ainu health and focussed its efforts instead on zero-sum assimilation policies. This served only to ensure that health inequities between the Japanese and Ainu communities would continue unabated, leaving Tsuishikari and other Ainu communities highly vulnerable to waves of epidemic disease.

Etiological Myths

Long a trading people in contact with not only the Japanese but other neighbouring peoples including the Chinese, Koreans, Russians and the various Indigenous

[12]Ruth Rogaski, *Hygienic Modernity Meanings of Health and Disease in Treaty-Port China* (Berkeley: University of California Press, 2004). See also Warwick Anderson, *Colonial Pathologies: American Tropical Medicine, Race, and Hygiene in the Philippines* (Durham, NC: Duke University Press, 2006).

[13]For details on the Hokkaido Former Aborigine Protection Act, see Komori Yōichi, 'Rule in the Name of "Protection": The Vocabulary of Colonialism', in Michele M. Mason and Helen Lee, eds., *Reading Colonial Japan: Text, Context, and Critique*, Michele M. Mason (trans.) (Palo Alto: Stanford University Press, 2012), 60–75.

[14]As Richard Siddle writes, authorities believed that by instigating such policies they could not only save the Tsuishikari Ainu but transform them into 'model citizens'. See Richard Siddle, 'From Assimilation to Indigenous Rights: Ainu Resistance Since 1869', in William W. Fitzhugh and Chisato O. Dubreuil, eds., *Ainu: Spirit of a Northern People* (Washington, DC and Seattle: Smithsonian Institution/University of Washington Press, 1999), 108.

Figure 2. Kakizaki Hakyō's late eighteenth-century portrait of Tsukione, an Ainu leader from Kunashir, an island off the coast of northeast Hokkaido. An exceptionally clear example of early modern Ainu cosmopolitanism, Tsukione is portrayed wearing a Russian coat and boots overtop of a Qing Chinese robe and is clutching a Japanese sword. From Wikimedia Commons.

peoples of Sakhalin, Kamchatka and the Amur River basin, it was simply never the case that the Ainu were collectively isolated from other human beings to the extent that they remained unexposed to epidemic diseases which otherwise spread throughout Northeast Asia. On the contrary, during much of the Tokugawa period (1603–1868), the Ainu acted as critically important intermediaries connecting the isolated Tokugawa *bakufu* to the Asian mainland (see Figure 2).[15] Nevertheless, Anglophone scholars

[15]See Tessa Morris-Suzuki, 'Indigenous Diplomacy: Sakhalin Ainu (Enchiw) in the Shaping of Modern East Asia (Part 1: Traders and Travellers)', *The Asia-Pacific Journal | Japan Focus*, 2020, 18; Brett L. Walker, *The Conquest of Ainu Lands Ecology and Culture in Japanese Expansion, 1590-1800* (Berkeley: University of California Press, 2001), 128–76.

frequently argue that the Ainu collectively lack (or, until some unspecified point in the past, *lacked*) immunity to infectious disease precisely as the result of prolonged pre-colonial isolation. To give but a few examples, the above-cited anthropologist Mary Inez Hilger claimed that the 'Ainu had no resistance to the strange diseases, such as tuberculosis, that appeared when the Japanese spread over Hokkaido in great numbers, and many fell victim to the new maladies'.[16] Anne B. Irish echoes this, writing that '[d]iseases—especially smallpox—contributed largely to the population decline. Ailments new to Ainu attacked them, from influenza to smallpox to syphilis, because these people had no immunity'.[17] David Day, in his popular macro-history *Conquest: How Societies Overwhelm Others*, similarly claims that '[b]etween 1624 and 1857, at least nineteen epidemics of smallpox swept across Hokkaido, taking a terrible toll of these Ainu who had no immunity to it'.[18] According to this widely perpetuated narrative, Ainu biology rather than Japanese colonisation was the primary driver of Ainu 'depopulation' throughout the nineteenth century.

While it is undoubtedly true that many Ainu died of infectious disease between the late eighteenth and early twentieth centuries, such characterisations of the Ainu, an Indigenous people, as possessing 'no immunity' to epidemic disease and this genetic deficiency, presented as self-evident, as superseding any other aetiological factors demands our attention. Not only does this obscure the impact of Japanese colonisation on Ainu health but is also troublingly similar to (and is no doubt inspired by) the so-called virgin soil epidemic theory; a concept popularised by historian Alfred W. Crosby. Building on a new wave of Americanist scholarship that sought to supplant once-fashionable narratives of violent, rapacious European conquest, Crosby argued that, be it for biological or cultural reasons, or some combination of the two, 'Indians' and 'Eskimos' collectively lack(ed) immunity to exotic European microbes.[19] On account of this, diseases such as smallpox, anthropologist Michael D. Olien grimly alleged, were 'as effective in eliminating the indigenous population as atomic bombs'.[20] According to these scholars, the vast majority of Indigenous people were simply wiped out by European diseases as a result (upwards of 90 per cent, Crosby claimed, or as high as 95 per cent, according to a more recent estimate by Jared Diamond).[21] This was, moreover, argued to have occurred following only limited and largely benign contact with European traders, missionaries and explorers. In many regions, such catastrophic 'depopulation' occurred even before first contact, with smallpox and other diseases 'introduced with Europeans', as Diamond writes, spreading insidiously from tribe to tribe.[22] As science writer Charles C. Mann dramatically puts it, these diseases 'shot out like ghastly arrows … to every corner of

[16]Hilger, 'Mysterious "Sky People": Japan's Dwindling Ainu', 104.
[17]Ann B. Irish, *Hokkaido: A History of Ethnic Transition and Development on Japan's Northern Island* (Jerrson, NC: McFarland and Company, 2009), 192.
[18]David Day, *Conquest: How Societies Overwhelm Others* (Oxford: Oxford University Press, 2008), 193.
[19]Alfred W. Crosby, 'Virgin Soil Epidemics as a Factor in the Aboriginal Depopulation in America', *The William and Mary Quarterly*, 1976, 33, 289–99, doi:10.2307/1922166.
[20]Michael D. Olien, *The Human Myth: An Introduction to Anthropology* (New York: Harper & Row, 1978), 227.
[21]Crosby, 'Virgin Soil Epidemics as a Factor in the Aboriginal Depopulation in America', 293; Jared Diamond, *Guns, Germs and Steel: The Fates of Human Societies* (New York: W.W. Norton & Company, 1999), 78.
[22]Diamond, *Guns, Germs and Steel: The Fates of Human Societies*, 78.

the hemisphere, wreaking destruction in places that never appeared in the European historical record'.[23]

In recent years, such claims have come under increasing scrutiny. This is in part because, as David S. Jones claims, these and other scholars greatly overestimate the populations of pre-colonial Indigenous groups, rendering such dramatic 'depopulation' estimates untrustworthy. Much more damningly, however, the virgin soil epidemic theory itself is predicated on what Jones calls 'fantastical assumptions about the state of Indian immunity' rather than clear documentary evidence.[24] Indeed, Crosby all but admitted this, writing that there is little to no medical evidence to support the claim that the Indigenous peoples of the Americas are, or had at any point been, physiologically any more vulnerable to European diseases than Europeans themselves. He, moreover, referred to his own sources as 'brief, vague … usually hearsay, [and] sometimes dated years after the events described'.[25]

Despite this, the virgin soil epidemic theory quickly spread to become a common-sense fact according to which the history of Euro-American settler colonialism could be rewritten. Amidst mid-twentieth century Indigenous rights movements which, as Roxanne Dunbar-Oriz observes, came to describe the 'extreme demographic disaster' which befell the Indigenous peoples of the Americas as 'genocide', the virgin soil epidemic theory offered scholars a moral panacea that allowed them to diminish, displace or, for some, entirely disavow the once-celebrated (though starkly violent) history of the European colonial invasion.[26] 'Conquest', as Yuma archeologist Michael V. Wilcox writes, could be reimagined as 'an accident'.[27] Genocide becomes 'depopulation'. Ruthless conquerors—be they Spanish *conquistadores* or American 'Indian killers'—could be rehabilitated as hapless witnesses of a tragic biological unravelling. And, indeed, Crosby obliquely referred to this very history of labelling epidemic diseases as the true 'Indian killers' of colonial America.[28] With histories of violence thus erased, 'Indians' could be assumed to have simply 'vanished' from the land as they were ravaged by unseen, unknowable pathogens; the 'virgin soil' to which their bodies returned laid bare for the 'peaceful conquest' of settlers.[29]

[23]Quoted in David S. Jones, 'Death, Uncertainty, and Rhetoric', in Catherine M. Cameron, Paul Kelton and Alan C. Swedlund, eds., *Beyond Germs: Native Depopulation in North America* (Tucson: University of Arizona Press, 2015), 21.
[24]*Ibid.*, 26.
[25]Crosby, 'Virgin Soil Epidemics as a Factor in the Aboriginal Depopulation in America'. 290–91.
[26]Roxanne Dunbar-Ortiz, *An Indigenous Peoples' History of the United States* (Boston: Beacon Press, 2014), 40.
[27]Michael Wilcox, 'Marketing Conquest and the Vanishing Indian: An Indigenous Response to Jared Diamond's Guns, Germs, and Steel and Collapse', *Journal of Social Archaeology*, 2010, 10, 100, doi:10.1177/1469605309354399.
[28]Crosby, 'Virgin Soil Epidemics as a Factor in the Aboriginal Depopulation in America', 290.
[29]The narrative that Indigenous death by disease preceded and enabled European colonisation remains commonsensical today and is often taken as self-evident, requiring little in the way of explanation (or citations). Nevertheless, while long criticised by Indigenous scholars and activists, a growing number of non-native historians, too, challenge this narrative by demonstrating the material impact of colonisation on Indigenous bodies. For example, Andrés Reséndez writes that 'between 1492 and 1550, a nexus of slavery, overwork, and famine killed more Indians in the Caribbean than smallpox, influenza, and malaria'. Profit-seeking Spanish settlers wiped out virtually the entire native population of Hispaniola and other Caribbean islands in the decades before the very first outbreaks of diseases such as smallpox are known to have occurred. Jeffrey Ostler similarly finds that in territories currently occupied by Canada and the United

While enduringly popular in Anglophone scholarship, few Japanese historians of Hokkaido have adopted the virgin soil epidemic theory as their analytic framework. Many influential twentieth-century Japanese scholars have instead propagated culturally deterministic (which is to say, social Darwinist or, in some cases, outright eugenicist) framings of Ainu health. These largely replicated the views of late nineteenth-century colonial administrators, as is outlined in detail below. Much of this scholarship blamed poor Ainu health on an alleged lack of hygiene. For example, writing in 1973, Matsuki Akitomo—a trained medical doctor and accomplished historian in his own right—claimed that the cause of what he called 'the downfall of the Ainu' was their being 'successively assimilated into the superior culture possessed by the Japanese'. Moreover, 'their mortality rate', he wrote, 'was extremely high due to their exceedingly poor hygiene'.[30] Despite obvious differences in tone, such narratives likewise served to obscure the impact of the settler colonial invasion on the Ainu.

With this said, in contrast to Anglophone writing on Ainu health, such nakedly racist viewpoints have become exceedingly niche in Japanese scholarship. Indeed, recent generations of historians—many of them responding to Ainu activists' denunciations of Japanese academic scholarship on their communities on the Ainu—have actively challenged this long-accepted narrative, pointing instead to the significant impact of dispossession, displacement and exclusion on Ainu health and wellbeing. As Emori Susumu and Kosaka Yōsuke demonstrate, many of the policies which were most harmful to Ainu health were foundational to Hokkaido's colonization, having been put in place in the decade immediately following Japan's annexation of the island in 1869. It was then that the Kaitakushi laid claim to Ainu territories across Hokkaido on the basis that they were empty, ownerless *terra nullius* ('no man's land'). This rendered the Ainu categorically incapable of possessing property and thereby endlessly disposessable. Simultaneously, Hokkaido's flora and fauna were transformed into state-owned commodities to be exploited for profit by settlers. The Kaitakushi then banned unlicensed hunting and fishing, requiring Ainu—who relied on animal products such as venison and salmon both as the most important sources of protein then available as well as valuable trade items—to compete with settlers for paid seasonal licences. Often proving difficult, and with 'poaching' strictly prohibited (and actively policed), such ordinances forced Ainu across Hokkaido to contingently enter

States, outbreaks of smallpox often did not precede but followed European colonisation, sometimes decades after first contact and amidst devastation wrought to Indigenous communities through their invasion, displacement and enslavement by settlers. While Reséndez cites the extreme unlikelihood that a smallpox carrier would survive the long trip across the Atlantic without fully recovering as responsible for the significant gap between the earliest Spanish genocides and the first deadly outbreaks which followed, Ostler identifies the cause of the sheer severity of such outbreaks in colonisation itself. As the very premise of settler colonialism, 'dispossession', he writes, 'meant poverty, and poverty meant malnutrition, depression and stress, poor health care, low fertility, high infant mortality', and, ultimately, 'vulnerability to a host of diseases', of which smallpox is but one example. See Andrés Reséndez, *The Other Slavery: The Uncovered Story of Indian Enslavement in America* (Boston and New York: Houghton Mifflin Harcourt, 2016), 17; Jeffrey Ostler, *Surviving Genocide: Native Nations and the United States from the American Revolution to Bleeding Kansas* (New Haven: Yale University Press, 2019), 22.

[30]Matsuki Akitomo, *Hokkaidō no ishi* (Hirosaki: Tsugaru Shobō, 1973), 153.

the Japanese labour market. The worst affected communities, however, fell into states of famine.[31]

This significantly impacted the ability of many Ainu to resist disease. For example, referring to their family's fight against tuberculosis, an unnamed Ainu informant ('an old Ainu') interviewed by Hilger explained that before colonisation, '[w]e were healthy … We ate much meat and could stand winters. Then that all changed'.[32] While Hilger, in arguing that the Ainu were simply 'vanishing', opted not to dwell on what, exactly, may have changed following colonisation, her anonymised subject almost certainly alluded to malnutrition. Moreover, as Ainu scholar Kitahara Jirōta notes, the livers and oils of fish and mammals, too, were vital sources of vitamins and fats that helped many survive Hokkaido's long, often bitterly cold winters.[33] Being abruptly cut off from these resources was catastrophic and had a significant impact on the health of many Ainu.

Even as the worst of the famines subsided, many continued to languish in deep poverty as a result of these policies. This continued to have a protracted and often deadly impact on Ainu across Hokkaido into the twentieth century. For example, Kayano Kitarō, a resident of the village of Nioi pointed to both poverty and the encroachment of Japanese settlers as the causes of high rates of tuberculosis in his community. The disease was first spread to his village, he recalled, by a local Ainu woman who worked as a live-in housekeeper for one of the Japanese families who had settled nearby. Becoming ill with tuberculosis, she was sent home and died soon after. However, with her return, the disease rapidly spread throughout the village and into Kayano's childhood home. He bluntly explained, 'If you don't have money, you can't even go to hospital. So, you just lie down in bed at home. But our house was small, so all the kids squeezed together to sleep. So, first mum and then five out of eight kids died of tuberculosis'.[34] In her memoirs, Ainu elder Sunazawa Kura similarly described the disintegration of her own family after the Hokkaido government dispossessed their land in Chikabumi in 1907 and, under the terms of the Hokkaido Former Aborigine Protection Act, forcibly relocated them into a one-room shack built for them by the state. Overwhelmed by the work of clearing 'wasteland' and barely subsisting on what little she could gather or farm, her mother could not afford to feed her children, much less bring them to hospital when they fell ill. This directly led to the death of both of Sunazawa's younger siblings when a contagious disease spread throughout the village.[35]

[31]Emori Susumu, *Ainu minzoku no rekishi* (Urayasu: Sofūkan, 2007), 392–99; Yōsuke Kosaka, 'Revival of Salmon Resources and Restoration of a Traditional Ritual of the Ainu, the Indigenous People of Japan', in Gerald Roche, Hiroshi Maruyama and Åsa Virdi Kroik, eds., *Indigenous Efflorescence: Beyond Revitalisation in Sapmi and Ainu Mosir* (ANU Press, 2018), 70–71; Michael Roellinghoff, 'The Ainu and Japanese Settler Colonialism', *Oxford Research Encyclopedia of Asian History*, 30 January 2024, doi:10.1093/acrefore/9780190277727.013.806. For more on the impact of Japanese hunting, fishing and land use regulations on the Ainu, as well as Ainu resistance thereto, see Yamada Shin'ichi, *Kindai Hokkaidō to Ainu minzoku: shuryō kisei to tochi mondai* (Sapporo: Hokkaidō Daigaku Shuppankai, 2011). For details on Ainu immiseration and contingent labour during the mid-Meiji period, see also David L. Howell, *Capitalism from Within: Economy, Society, and the State in a Japanese Fishery* (Berkeley: University of California Press, 1995), 134.

[32]Hilger, 'Mysterious "Sky People": Japan's Dwindling Ainu', 104.

[33]Kitahara Jirōta, 'Ainu bunka wo denshō suru: seikatsu to kenkōkan', *Nippon kangoka gakkai-shi*, 2011, 31, 84.

[34]Quoted in Emori, *Ainu minzoku no rekishi*, 429–30.

[35]Sunazawa Kura, *Ku sukuppu orushipe: watakushi no ichidai no hanashi* (Sapporo: Hokkaidō shinbunsha, 1983), 96–97.

Referring to Kayano's experience, though equally applicable to Sunazawa's, Emori writes that—far from being biologically or culturally determined—'the deterioration of their physical condition and their ability to resist [disease] was due to their impoverishment and malnutrition which themselves were due to the destruction of their means of living'.[36]

'Scientific Hygiene' in Tokyo

While greatly exacerbated by Japan's state's zero-sum dispossession of Ainu land, waters and resources during the Meiji period, Okuyama Ryō, in his widely cited 1966 book *The History of the Decline and Fall of the Ainu* (*Ainu suibōshi* アイヌ衰亡史), observed analogous patterns of violence and disease in Ainu communities throughout the late eighteenth-mid nineteenth centuries, well before formal colonisation commenced in 1869.[37] At this time, Japanese direct rule was limited to an enclave centred around Hakodate in the southwest of the island, known to the Japanese as Wajinchi (和人地). Except for periods of Russian encroachment, the Tokugawa *bakufu* formally recognised Ainu villages/village federations (Ainu: *kotan*) outside of Wajinchi as autonomous political communities and largely did not attempt to culturally or linguistically assimilate the residents. Nevertheless, the Matsumae Domain militarily occupied Hokkaido's coastline and, enabled by this occupation, severely exploited the Ainu. As described by Ainu writer Kayano Shigeru, many, including his own grandfather as a child, were pressed into labour in Japanese commercial fisheries as 'slaves' (*dorei* 奴隷).[38] *Bakufu* official Matsu'ura Takeshirō, moreover, reported that many Ainu women and girls were forced into a system of sexual slavery as the unwilling 'local wives' of Japanese soldiers, merchants and fishery workers.[39] According to Okuyama, this spread disease, and especially syphilis, into Ainu communities.[40] At first, Wajinchi became the nexus of such epidemics. However, they spread gradually into Ainu territories (Japanese: Ezochi 蝦夷地) and, eventually, into inland regions populated by Ainu but entirely outside of Japanese influence.[41]

Despite his candour in describing deadly pathogens spreading into Ainu communities through systematised sexual violence, Okuyama ultimately deemed the sheer severity of these and other epidemics to be the fault of the Ainu themselves. He argued that the Ainu

[36]Quoted in Roellinghoff, 'The Ainu and Japanese Settler Colonialism'.

[37]This title is perhaps a reference to Edward Gibbon's similarly titled book on the Roman Empire, published in Japanese as *Rōma teikoku suibōshi*. See Edowādo Gibon [Edward Gibbon], *Rōma teikoku suibōshi*, trans. Yūzō Murayama, vol. 1 (Tokyo: Iwanami Shoten, 1951).

[38]For details, see Kayano Shigeru, *Ainu no ishibumi* (Tokyo: Asahi Shinbunsha, 1980), 28–45.

[39]Okuyama, *Ainu suibō-shi*, 16. See also Brett L. Walker, *The Conquest of Ainu Lands Ecology and Culture in Japanese Expansion, 1590-1800* (Berkeley: University of California Press, 2001), 189; Siddle, *Race, Resistance and the Ainu of Japan*, 44–46; Ann-Elise Lewallen, *The Fabric of Indigeneity: Ainu Identity, Gender, and Settler Colonialism in Japan* (Albuquerque: School of New Mexico Press, 2016), 131–32.

[40]Ainu Women's Association chairperson Tahara Ryōko notes that some women subjected to such violence often committed suicide while others who become pregnant were 'forced … to procure abortions'. Some who were infected with smallpox or syphilis were abandoned without food or medicine by their Japanese abusers, with their bodies 'left to decay on a mountain'. See Ryoko Tahara, 'Ainu Women in the Past and Now', in Gerald Roche, Hiroshi Maruyama and Åsa Virdi Kroik, eds., *Indigenous Efflorescence: Beyond Revitalisation in Sapmi and Ainu Mosir*, Hiroshi Maruyama (trans.) (ANU Press, 2018), 152.

[41]Okuyama, *Ainu suibō-shi*, 146–48.

of the seventeenth century were 'totally ignorant of and without resistance (*muteikō* 無抵抗) against' smallpox, syphilis and other communicable diseases. Bespeaking an inability to historically progress, this, Okuyama claimed, had 'not changed at all' by the early Meiji period, some 200 years later.[42] This was not, however, necessarily to suggest that the Ainu lacked immunological resistance. Rather, they possessed an ingrained passivity, he claimed, simply 'fleeing into mountain valleys' whenever beset by waves of infection. They were otherwise unable to mount any sort of organised strategy to protect themselves against the spread of disease, much less Matsumae slave hunters, and died in large numbers as a result.[43] In this, Ainu critic Yūki Shōji later alleged, Okuyama had characterised Hokkaido's colonised people as an inherently 'self-destructive' (*jimetsu* 自滅) race which, irrespective of the violence of colonisation, is simply 'wasting away'.[44]

While Okuyama's starkly negative assessment implicitly marked the Japanese as always-already more civilised and rational than the Ainu, Japanese leaders themselves struggled to mount effective public health-based responses to cholera and other novel diseases which swept throughout the empire through newly opened treaty ports during the early Meiji period. Cholera re-appeared in Japan in July 1877 when, according to Japan's Central Hygiene Board (*Chūō eisei-kai* 中央衛生会), a British warship entered port in Nagasaki to bury the body of a deceased crewmate in the foreign cemetery. This landing led to an outbreak in Kyushu. A second outbreak of the waterborne disease occurred in Yokohama when 'two old women had been engaged in heating tea leaves … in the Foreign Settlement'.[45] Cholera appeared in Hokkaido later that same year when members of the Tondenhei (屯田兵, an occupying army of farmer-soldiers) returned to the island from Kagoshima in southern Kyushu where they had helped suppress the Satsuma Rebellion. Two of these soldiers were mildly sick with cholera. However, their return led to an outbreak in which 127 people fell ill and 93 died (=73 per cent mortality rate). Rumoured to have been the result of a curse, cholera was dubbed 'Saigō disease' (*Saigō-byō* 西郷病) after Saigō Takamori, the charismatic Satsuma leader who had died during the fighting.[46]

[42]Okuyama, *Ainu suibō-shi*, 144.
[43]*Ibid*., 144–45.
[44]Yūki Shōji, *Ainu sengen* (Tokyo: San'ichi Shobō, 1980), 167. To be sure, many Ainu traditionally *did* escape to the mountains during outbreaks of communicable diseases such as smallpox. Ainu elder Kaizawa Toroshina explained to Hilger that her father's family successfully avoided epidemics by doing just this. Yūki Kōji, Shōji's son, likewise acknowledges this practice and notes that Ainu language toponyms sometimes signified places of refuge, such as Kirakotan, a mountain just north of Kushiro, which literally means 'village (*kotan*) of escape (*kira*)'. In other cases, Ainu used toponyms to warn travellers of places where the disease was prevalent. The very land can thus be read as a text aimed at preventing the spread of disease. All of this is to suggest that, while Okuyama was not entirely inaccurate in describing Ainu responses to outbreaks of disease in their communities, he may have greatly underestimated the efficacy of this strategy for avoiding the spread of infection. Regardless, as Brett Walker notes, many Ainu fled to the mountains, too, when Tokugawa officials arrived in Ainu villages in the late 1850s to administer smallpox vaccines. While Walker interprets this as the result of fear of a 'foreign medical procedure', this reaction may itself have been the result of traumatic experiences with Japanese slave hunters who, until recently, had arrived in these same villages to kidnap local Ainu, including women and children. See Hilger, *Together with the Ainu: A Vanishing People*, 114; Yūki Kōji, 'Gendai wo ikiru Ainu ga korona to iu ekibyō wo kangaete mita', *Shakai undō (Social Movements)*, 2020, 440, 58; Brett L. Walker, 'The Early Modern Japanese State and Ainu Vaccinations: Redefining the Body Politic 1799-1868', *Past and Present*, 1999, 163, 121–60.
[45]Committee of the Central Sanitary Board, 'A Report on the Investigations Made into the Cause of Epidemic Cholera in Japan', *Naruikai geppō (The Sei-I-Kwai Medical Journal)*, 1891, 10, 22.
[46]Karafuto Ainu-shi Kenkyūkai, *Tsuishikari no ishibumi*, 172.

Cholera again broke out in the Kyushu and Kanto regions in 1879. From there, the disease spread nationally and, again, into the northern colony of Hokkaido. This time, however, the national government took what were then the unprecedented steps of removing those who fell ill from their homes and placing them into isolation hospitals, quarantine or so-called disinfectant stations (*shōdokujo* 消毒所).[47] Despite this proactive response, the results of this outbreak were devastating. Nationally, a staggering 105,784 people died out of 162,637 reported cases (=65 per cent mortality rate).[48] With so few coming back from government-run facilities alive, conspiracy theories which claimed that nefarious doctors working for the Meiji regime were simply murdering their patients spread.[49] With many having already formed a strong association between cholera and the American presence in nearby Yokohama, some came to believe that it was more than just a coincidence that the second deadly outbreak coincided with Ulysses S. Grant's 1879 visit to Tokyo. That is, the former American president had come 'to procure the liver of a Japanese cholera victim'.[50]

Such rumours trickled down, together with cholera-infected water, into low-lying, working-class *shitamachi* (下町) neighbourhoods across Tokyo, sparking a panic.[51] This led to riots, not unlike those which had occurred with the first waves of cholera decades earlier in Russia and Great Britain, which soon grew so fierce that the Japanese government mobilised troops to suppress them.[52] Following this unrest, authorities initiated what Rogaski describes as a campaign of biopolitical 'indoctrination' so that, in the name of fighting both cholera and sedition, the masses would come to accept 'scientific hygiene' as an essential facet of their daily lives as modern citizens and, with it, would welcome the state into the once-private spaces of their homes.[53] To achieve such goals, authorities encouraged the creation of formally autonomous civil society groups which would aid in inoculating into the masses the concept of 'scientific hygiene', ostensibly from below.

[47]*Ibid.*, 173.
[48]*Ibid.*
[49]Akihito Suzuki and Miki Suzuki note that isolation hospitals were 'alien to the majority of Japanese people'. Moreover, many of those who fell ill were sent into the 'wretched conditions' of what were in reality 'cheap and makeshift buildings', never to return home. Akihito Suzuki and Mika Suzuki, 'Cholera, Consumer and Citizenship: Modernisations of Medicine in Japan', in Hormoz Ebrahimnejad, ed., *The Development of Modern Medicine in Non-Western Countries* (London: Routledge, 2009), 188, doi:10.4324/9780203891605-15.
[50]Ruth Rogaski, *Hygienic Modernity Meanings of Health and Disease in Treaty-Port China* (Berkeley: University of California Press, 2004), 152.
[51]As Ueno Masayuki notes, a strong association formed during the Meiji period between slums and the spread of infectious disease. This was on the basis that poor people themselves were collectively seen as 'unclean'. This occurred amidst the 'overwhelming wave of [the] civilisation and enlightenment [movement] (*bunmei kaika* 文明開化)' in Japan, which included the adoption of biomedical understandings of disease and public sanitation. Contrary to the findings of the present study, Ueno argues, however, that elites' established views of impoverished metropolitan Japanese as unhygienic thereafter influenced broader Japanese views of Ainu as having 'no concept of hygiene'. See Ueno Masayuki, 'Kindai Ainu sabetsu no hassei ni tsuite no kōsatsu', *Waseda daigaku daigakuin kyōikugaku kenkyūka kiyō: bessatsu*, 2012, 19, 45.
[52]Rogaski, *Hygienic Modernity Meanings of Health and Disease in Treaty-Port China*, 152. While such conspiracy theories may appear outlandish, we should be careful not to take them as evidence of Japanese backwardness. Indeed, amidst earlier cholera riots in Britain, a mob destroyed an entire anatomy college, believing that the college's doctors were murdering cholera patients not just for their livers but to claim their entire bodies. See Samuel Kline Cohn, *Epidemics: Hate and Compassion from the Plague of Athens to AIDS* (Oxford: Oxford University Press, 2018), 201.
[53]Rogaski, *Hygienic Modernity Meanings of Health and Disease in Treaty-Port China*, 152.

Despite the apparent clarity and rationality of the government's efforts, the Japanese term *eisei* (衛生)—a calque of the French *hygiène*—was, in the late 1870s, still little more than a floating signifier with no widely accepted definition.[54] Precisely because of this, *eisei* was endlessly malleable and was therefore a boon for authorities as it could be made to describe any sort of 'modern' or 'civilised' behaviour that the Westernising Meiji regime hoped to instil in its citizenry. Crusading Japanese hygienists quickly came to realise that the 'truth' of hygienic science as understood by their Euro-American colleagues was, too, 'diverse and rapidly changing'.[55] Indeed, amidst ever-multiplying theories of contagion, as Bruno Latour wrote, European hygienists conceded that disease could be 'caused by almost anything'. Accordingly, '[n]othing must be ignored, nothing dismissed'. This meant that '[i]f anything can cause illness … it is necessary to be able to act on everywhere and on everything at once'.[56] And so, as little was then known about the ecology of the Vibrio cholerae bacterium and nearly half a century before Alexander Fleming's discovery of antibiotics in 1928, health authorities' strategies for fighting cholera were necessarily haphazard, improvisational and overwhelmingly ineffectual.[57]

Beyond quarantine or dousing suspected sources of infection with phenol, Japanese hygienists struggled to develop strategies to halt the spread of the disease. In Hokkaido, the Kaitakushi banned the sale of unripe vegetables and spoiled fish and meat, believing these foods to have been responsible for the cholera's spread.[58] Early efforts aimed at disseminating discourses of 'scientific hygiene' likewise failed to halt the spread of seditious rumours of murderous doctors. Indeed, following the same vectors of the disease itself, these rumours spread from person to person, soon filtering into Hokkaido where, in 1882, Japanese settlers, too, rioted against quarantine. As records show, others hid cholera-stricken family members out of the sight of health inspectors while some, not unlike Okuyama's imagined Ainu, fled to the mountains in a panic.[59]

'Scientific Hygiene' in Tsuishikari

It was in 1879 that cholera deaths are known to have first occurred in the Karafuto Ainu community. Out of a group of approximately 140 fishers working seasonally outside of the village, 70 became ill and 30 died (=42.8 per cent mortality rate).[60] That same year, the Kaitakushi dispatched hygiene inspectors to Ainu communities to assess

[54]*Ibid.*, 149.
[55]*Ibid*.
[56]Bruno Latour, *The Pasteurization of France*, Alan Sheridan and John Law (trans.) (Cambridge, Massachusetts: Harvard University Press, 1993), 20.
[57]For details on Japanese understandings of the ecology of Vibrio cholerae, see William Johnston, 'Cholera and the Environment in Nineteenth-Century Japan', *Cross-Currents: East Asian History and Culture Review*, 2019, 8, 107–12, doi:10.1353/ach.2019.0005; Suzuki and Suzuki, 'Cholera, Consumer and Citizenship: Modernisations of Medicine in Japan', 189–91.
[58]Karafuto Ainu-shi Kenkyūkai, *Tsuishikari no ishibumi*, 173. For details on dietary regimens enforced by the Meiji government in response to cholera, see Suzuki and Suzuki, 'Cholera, Consumer and Citizenship: Modernisations of Medicine in Japan'. While these scholars' characterisations of the Meiji state's responses to cholera are accurate, a compendium of Kaitakushi policy published in 1885 indicates that, even without an understanding of bacteriology, at least some authorities were concerned that undetectable 'poisonous substances' (*yūdokubutsu* 有毒物) were contaminating well water through the excreta of cholera patients. See Ōkurasho, ed., *Kaitakushi Jigyō Hōkoku Dai'nihen*, vol. 2 (Kannō-doboku) (Tokyo: Ōkurasho, 1885), 889.
[59]Karafuto Ainu-shi Kenkyūkai, *Tsuishikari no ishibumi*, 176.
[60]*Ibid.*, 174.

local conditions, perhaps anticipating the spread of cholera into the countryside. One such inspector, Takabatake Toshiyoshi, visited Tsuishikari. While the village was loosely protected by blockaded roads, Takabatake arranged for other measures such as having one of the thatched huts converted into an isolation hospital-cum-disinfectant station: essentially a rudimentary sanatorium. The hut, sterilised with phenol and lime, would serve the village of over 800 people. With no antibiotics then available, patients were to be treated with smelling salts—a mild stimulant.[61] Critically, while few Ainu had died of cholera in Tsuishikari proper, in surveying the town, Takabatake nevertheless concluded that 'the former aborigines'—that is, the Ainu—'are easily infected (*densen shiyasuki* 伝染し易き)'. They 'have no conception of hygiene, take no care in their eating and drinking, and are completely indifferent to being infected (*eisei shisō naku, inshoku ni chūi sezu, sukoshimo kansen mo kaerimizu* 衛生思想なく、飲食に注意せず、少しも感染も顧みず)'.[62]

No doubt prompted by this and other disparaging reports, in 1883, Sapporo Prefecture's Department of Hygiene (*Eisei-ka* 衛生課) ordered a more thorough study of the living conditions of the Ainu population throughout the region, including though not limited to the Karafuto Ainu in Tsuishikari. Conducted by local officials, the report aimed to determine key factors, particularly as related to hygiene, which could explain the yearly decrease in the Ainu population. To these ends, inspectors observed such things as Ainu housing, diet and bathing habits. Or, in other words, they focussed on the domestic. In doing so, they treated Ainu villages as hermetic spaces entirely undisturbed by the grinding rhythms of colonisation occurring all around them while pathologising whichever aspects of Ainu domestic life they deemed incommensurable with those of Japanese settlers.

The inspector(s) argued that the hopelessly retrograde, inferior Ainu culture had proven inherently unhygienic and was thereby wholly responsible for the population decline in Ainu communities at present. Accordingly, even while observing conditions which suggest depravation rather than depravity—that is, dirty latrines, diets consisting of what the inspector(s) deemed 'bad food', and 'inferior' housing—they condemned such things not as the result of colonisation but as 'old customs' (*kyūkan* 旧慣) which required immediate outside 'improvement' (*kairyō* 改良).[63] Indeed, referring to the Karafuto Ainu who, it bears repeating, were forcibly resettled onto land laid out for them by the Kaitakushi, the inspector(s) dispatched to Tsuishikari alleged that it was precisely because of their supposed 'custom' of 'building houses on uncleared swampland' that the Karafuto Ainu residents suffered from high rates of malarial infection.[64]

The inspector(s) placed much of the blame for poor Ainu health on racialised gender divisions. Understanding Ainu women primarily as agents of biological reproduction, they attributed low birthrates to the allegedly 'crude' living conditions to which these women were subjected. For example, the inspector(s) dispatched to Sapporo District wrote that pregnant Ainu women,

[61] *Ibid*.
[62] *Ibid*., 175–76.
[63] Kōno Motomichi, 'Ainu sōsetsu (1)(2)', in *Ainu-shi shiryōshū dai 2-ki Abe Masaki bunko-hen (2)*, vols. 5–4 (Sapporo: Hokkaidō Shuppan Kikaku Sentā, 1984), 15.
[64] *Ibid*., 20.

> unlike during normal times, live an extremely meagre existence and just barely escape from starvation. And, despite being pregnant, they struggle to make a living and do not have the free time to make decisions about their own health. Sometimes they go to the mountains to gather kindling. Sometimes they brave the elements out in the fields to gather taro shoots. Sometimes they fish on the seashore. You could probably call this exploitation (*gekirō* 激労).[65]

Working throughout their pregnancies, such things as going barefoot or being exposed to the cold air, they claimed, had damaged the uteri of many Ainu women. Compounded by a lacking proper bedding and their being forced to breathe the miasmatic air of earthen-floored houses, this caused them to frequently miscarry. '[A]s this race is unable to reproduce', the inspector(s) stated, 'their population is gradually declining'.[66] While it is questionable just how different this lifestyle, at least as presented, was from, for example, Japanese peasant women, the inspector(s) nevertheless claimed that the Ainu—unlike their colonisers—were 'entirely neglectful of the necessities of life (*ishokujū kotogoto mono ni sono tabi wo kashitsu shi* 衣食住事々物二其度ヲ過失シ)' and were thereby undergoing catastrophic demographic collapse as a direct result.[67]

Critically, the inspector(s)—under the shadow of Tokugawa era sexual violence—thereby characterised non-reproductive Ainu women not as the victims of the settler colonial state but of Ainu men. And, perhaps on account of the large numbers of Japanese bachelors then settling in Hokkaido, they heaped praise upon these long-suffering women, describing them as tenderly cherishing their children 'even more than ordinary people (*jōjin* 常人)' and nurturing them 'even if they don't grow up to be virtuous'.[68] Insinuating that it was not simply damage to their reproductive organs that caused Ainu birthrates to drop, the inspector(s) hinted, too, that the conditions in Tsuishikari were such that Karafuto Ainu women were being pushed into the arms of settler men. 'Once a woman becomes social with Japanese people', they noted, 'they grow to hate other aborigines'. Because of this, 'there are many men and women who are spouseless'.[69]

To purge the Ainu of these conditions of filth and exploitation which allegedly caused the disease to surge and birthrates to plummet, the inspector(s) dispatched to Tsuishikari stated that the Karafuto Ainu must be made to, 'learn the value of human life, to give the sick medicine, to improve their homes, and to improve their diets'.[70] With palpable satisfaction, they noted, however, that the government had already established a program of racially uplifting biopolitical care in Tsuishikari, referring to the mutual aid union that managed the daily life of the Karafuto Ainu residents. 'Within four of five years', they predicted, the residents 'will become civilised to the level of ordinary people. (*tsūjō jinmin no ichi ni itari kaika suru* 通常人民ノ位置二至リ開化スル)'.[71]

[65] *Ibid*., 14.
[66] *Ibid*., 15.
[67] *Ibid*.
[68] *Ibid*., 14. Indeed, as a November 1892 *Yomiuri shinbun* newspaper article argued, while racially 'inferior', Ainu women could become suitable mates for racially 'superior' Japanese settler men, at least if removed from pestilent, exploitative Ainu communities. Assimilation into Japanese norms through intermarriage, the article alleged, could mean the biological salvation of these women. See 'Ainu jinshu genshō no koto', *Yomiuri shinbun*, 7 November 1892.
[69] Kōno, 'Ainu sōsetsu (1)(2)', 20.
[70] *Ibid*.
[71] *Ibid*.

The Impact of Cholera and Smallpox

Far removed from this narrative of self-annihilation, a petition the Karafuto Ainu submitted to the Kaitakushi at the time of their forced relocation to Tsuishikari suggests that they had traditionally planned their settlement patterns precisely to avoid the spread of disease. Prior to colonisation, the Karafuto Ainu had lived in a network of small fishing and trading communities spread out along the southern coastline of the island. After being moved to Soya, they again autonomously regrouped into twelve individual hamlets.[72] And, while Karafuto Ainu leaders primarily opposed the Kaitakushi's plan to move them to Tsuishikari on the grounds that being relocated to the inland village would effectively nullify their maritime economy, they presciently added that 'we aborigines are worried that we will be overcrowded if we are moved as a group. Above all, if there is a smallpox outbreak, every one of our lives will hang in the balance (*Watashidomo narisama dojindomo taninzū ijū sōrōte wa konzatsu gyōmatsu no kenen sukunakarazu, dai'ichi tōsō ryūkō kakari sōrōte wa ichinin mo zonmei obotsukanashi* 私共様成土人共多人数移住候テハ混雑行末ノ懸念不少、第一瘡癒流行係リ候テハ一人モ存命無覚束)'.[73]

Just as the petitioners feared, just three years after the Sapporo Department of Hygiene study was published, cholera and smallpox devastated Tsuishikari, killing nearly half of the residents and causing survivors to scatter. Even as interest in Ainu hygiene only continued to grow, with numerous government reports and academic treatises alike largely replicating the findings of the 1883 study well into the twentieth century, curiously little is known about how, exactly, the 1886–7 cholera and smallpox outbreaks affected the Karafuto Ainu in Tsuishikari. Indeed, while records show the numbers of those who died, in which month they died, and which of the two diseases they died of, it remains unclear how many individual cases of cholera or smallpox there were, what the mortality rates for either disease may have been, how many residents were infected with both diseases and what other comorbidities may have impacted the residents' health outcomes.[74] Nevertheless, as incomplete as extant records are, they starkly demonstrate significant disparities in how cholera and smallpox impacted the Tsuishikari Ainu and general Hokkaido and national populations (see Figure 3).

In 1886, the prefecture-wide smallpox mortality rate (including in Hokkaido Ainu communities) was 31 per cent.[75] By 1887, however, this number had risen to 40 per cent, perhaps as the result of an overtaxed medical system or the spread of smallpox into impoverished rural communities, including not only Ainu villages but marginalised settler communities as well. In Tsuishikari, assuming the population at the beginning of 1886 was approximately 800 people and subtracting the 32 who are reported as having died of cholera, 37.4 per cent of the 768 residents are recorded as having died of smallpox. Based on prefecture-wide statistical averages which show a mortality rate of 35.5 per cent between 1886 and 1887, this suggests that either the entirety of the Karafuto Ainu

[72]Karafuto Ainu-shi Kenkyūkai, *Tsuishikari no ishibumi*, 85. The largest of these hamlets established in Soya was home to 186 people and the smallest was home to only seven individuals. See *Ibid*.

[73]Yamada Shin'ichi and Ogawa Masahito, eds., *Ainu minzoku no kiroku* (Tokyo: Sōfūkan, 1998), 15.

[74]Karafuto Ainu-shi Kenkyūkai, *Tsuishikari no ishibumi*, 187.

[75]This is very slightly higher than the statistically average mortality rate of untreated smallpox, 30 per cent. For details, see Roy Guharoy et al., 'Smallpox: Clinical Features, Prevention, and Management', *Annals of Pharmacotherapy*, 2004, 38, 440–47, doi:10.1345/aph.1D272.

Population	1886 Cholera	1887 Cholera	1886 Smallpox	1887 Smallpox
Japanese national population (including Hokkaido)	155,928 cases 108,405 deaths (≈69.5% mortality rate)	1,228 cases 654 deaths (≈53.3% mortality rate)	78,887 cases 18,676 deaths (≈23.8% mortality rate)	39,779 cases 9,967 deaths (≈25% mortality rate)
Hokkaido population (including Ainu)	2929 cases 2155 deaths (≈73% mortality rate)	0 cases	3034 cases 929 deaths (≈31% mortality rate)	3330 cases 1327 deaths (≈40% mortality rate)
Karafuto Ainu in Tsuishikari	Unknown cases 32 deaths (≈1.5% of all Hokkaido deaths)	0 deaths	Unknown cases 187 deaths (≈20% of all Hokkaido deaths)	Unknown cases 100 deaths (≈7.5% of all Hokkaido deaths)

Figure 3. Adapted from 'Condensations'. *Naruikai geppō (The Sei-I-Kwai Medical Journal)*, 1891, 10, 175; Karafuto Ainu-shi kenkū-kai, *Tsuishikari no ishibumi*, 177, 186.

population of Tsuishikari contracted smallpox or that the mortality rate of those who fell ill was significantly higher than in surrounding communities.[76]

In either event, as the result of this immense trauma suffered by the community in the aftermath of these outbreaks, the deaths of many important elders, the resulting economic collapse as much of the workforce was wiped out, and deep distrust in the colonial government by those who remained, survivors abandoned Tsuishikari entirely.[77] While some blended into surrounding communities, 203 survivors—approximately half of the remaining population—abandoned not only Tsuishikari but Japan itself and, in the years immediately following, illegally crossed back across the La Pérouse Strait to what had become the Russian-administered penal colony of Sakhalin.[78] And so, even as the settler colonial state took it upon itself to teach the Karafuto Ainu the 'value of human life', as a direct result of its own Indigenous management policies, Tsuishikari was left a ghost town.

[76]'Condensations', *Naruikai geppō (The Sei-I-Kwai Medical Journal)*, 1891, 10, 174–83; Karafuto Ainu-shi Kenkyūkai, *Tsuishikari no ishibumi*, 186. Cholera, while affecting far fewer in Tsuishikari, can nevertheless be shown to have disproportionately impacted the Karafuto Ainu in comparison to larger Japanese populations in Hokkaido and across the empire. The 32 deaths in 1886 represented 1.5 per cent of all cholera deaths in Hokkaido and 0.03 per cent of the 108,405 Japanese citizens who died of cholera in 1886. A fraction of a percent of total deaths, this number may appear unremarkable. However, at roughly 800 people, the Karafuto Ainu population in Tsuishikari represented merely 0.37 per cent of Hokkaido's 1886 population of 215,298 people and a miniscule 0.002 per cent of Japan's national population of 38,151,217 people. In other words, even this comparatively minor outbreak suggests significant health inequities in between the Karafuto Ainu in Tsuishikari and the larger ethnic Japanese populations. For details, see 'Condensations', 175; Naimushō sōmukyoku, *Nippon zenkoku minseki kokouhyō* (Tokyo: Naimushō sōmukyoku kosekika, 1887), 1.

[77]Sentoku Tarōji, *Karafuto Ainu sōwa* (Tokyo: Shikōdō, 1929), 40.

[78]Bronisław Piłsudski, *The Collected Works of Bronisław Piłsudski*, Alfred F. Majewicz (ed.), vol. 1: The Aborigines of Sakhalin (Berlin and New York: Mouton de Gruyter, 1998), 290.

Conclusion

In this article, I have argued that the disproportionate impact of the 1886–7 outbreaks of cholera and smallpox in Tsuishikari were part of a broader trend according to which Japanese settler colonial practices of dispossession, displacement and exclusion gravely affected Ainu health and wellbeing. As the Japanese colonisation of Hokkaido was premised on the dispossession of Ainu land, water and resources, and the forced displacement of Ainu from their territories, the culturally deterministic framing according to which authorities understood Ainu health was thus, as Tomiyama Ichirō writes of similar efforts in Japan's Micronesian colonies, nothing less than a 'denial of practical relations'. Pathologising cultural differences allowed inspectors to disavow the impact of Japanese colonisation on Ainu health even while pushing for stringent, zero-sum assimilation strategies to 'cure' the Ainu race of supposedly barbaric cultural traits which afflicted them, rendering them more vulnerable to communicable disease. The Ainu were thus transformed into 'objects to be reformed', devoid of self-determination and subjectivity.[79] Based on this premise, the government-administered village of Tsuishikari became something akin to a petri dish, within which a purely biologised Ainu race could be made to not only survive but grow. This would thereby prove the efficacy (if not the inherent benevolence) of the paternalistic settler state. By pathologising Ainu culture and grossly exaggerating the cultural differences between the Ainu and their Japanese colonisers, inspectors could, by contrast, render the latter more rational, modern, 'scientific' and civilised in their approach towards health and hygiene, even while metropolitan populations—distrustful of the same Meiji state which had colonised Hokkaido—continued to openly resist the most basic public health measures imposed upon them.

In the name of promoting 'scientific hygiene', campaigns in the Japanese metropole aimed at eradicating cholera and novel diseases (or at least halting their spread) were generative of a new kind of social relationship between the state and 'modern' citizen. The same public health structures in Hokkaido, however, pathologised Ainu cultural life, treating it as primarily responsible for Ainu death and requiring the immediate intervention of the Japanese state. Particularly following the passing of the Hokkaido Former Aborigine Protection Act, the settler colonial state assumed the mantle of the saviour of a self-destructively barbaric Ainu race, thereby legitimising its own presence on Ainu land. Placing the blame for poor Ainu health on the Ainu themselves, however, all but ensured that colonial practices that had proven harmful would not only continue unabated but, in fact, would be accelerated through stricter and stricter assimilation schemes. Far from leading them to salvation, these schemes aimed to erase the Ainu as a distinct people. As a result, not limited to Tsuishikari, Ainu communities across Hokkaido were stripped of rights to self-determination, leaving them more and not less vulnerable to the spread of epidemic disease. Based on 'common sense' disavowals of the material effects of colonisation on the Ainu, the failure of public health measures could itself be used, as Wispelwey et al. write of settler colonialism more generally, to 'justify further colonisation and sedimentation of hierarchies'.[80] The settler colonial state's solution for the catastrophic impact of colonisation was, then, more colonialism.

[79]Tomiyama, 'Colonialism and the Sciences of the Tropical Zone: The Academic Analysis of Difference in "the Island Peoples"', 206.

[80]Bram Wispelwey et al., 'Because Its Power Remains Naturalized: Introducing the Settler Colonial Determinants of Health', Frontiers in Public Health, 2023, 4.

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