Fuji Hachitaro likely grabbed a bucket. As a steward aboard the *uss Trenton*, he was responsible for overseeing food and kitchen supplies, so he knew where to find one. The officers and seamen had by now lost their appetites. All this rocking and rolling on the waves. The tempest had ripped their ship to shreds—*nahaha* ("broken up" or "smashed to bits"), as the Hawaiian-language press later put it.¹ The hause pipes had flooded. The boiler fires were extinguished. Everyone was bailing water.² And there was Fuji Hachitaro, a Japanese worker on an American ship in a Sāmoan harbor in the midst of a massive tropical cyclone on March 16, 1889.³

On that same day, Mālietoa Laupepa, former "king" of Sāmoa, lingered on Jaluit Atoll in the Marshall Islands, over one thousand miles northwest of Sāmoa. He had no idea that a cyclone was then bearing down on his homeland. One and a half years earlier, the German Navy had captured and deported Mālietoa, sending him on a long exile that ranged across the world’s many oceans. As prisoner of the German Empire, he visited ports in Africa, Arabia, and ultimately Micronesia. When the cyclone hit, Mālietoa was on Jaluit Atoll and had been there for four long months.⁴ That a Japanese cabin steward experienced Sāmoa’s most famous hurricane, while an Indigenous leader of those islands did not, says something about the messy nature of Pacific environmental history. This is a history both in the ocean and outside of it; it is a history of environments at home, at work, and in exile; it is a history both Native and foreign and uniquely and incessantly mobile. As
revealed in these two stories that circled the eye of a hurricane, Pacific environmental history is a history of many movements and diasporas. Studies of the Pacific Ocean represent a rapidly growing subfield of global environmental historiography. As a field, Pacific environmental history encompasses a broad compendium of stories. Here lie tales of goods, germs, and God—of both ideas and materials in transit. Here also lie tragic tales of enclosures of seas and lands, the dispossession of Indigenous peoples, and the militarization and securitization of the world’s greatest oceanscape, encompassing one-third of the earth’s surface. There is not much pacific in the history of this ocean. But workers’ stories and Indigenous perspectives reveal new ways of thinking about human relationships with nature. Behind such unpacific tales of dispossession, depopulation, and victimization, there are histories of
working-class and Indigenous resistance to economic and ecological injustices. To unlock these tales, we need to tell a bottom-up environmental history of the Pacific.

But what would this look like? Bottom-up histories of the ocean abound in various corners of the academy, although not specifically focused on the environment. Maritime and labor historians such as Marcus Rediker, Peter Linebaugh, Jeffrey Bolster, and Paul Gilje have written of an Atlantic proletariat, that floating world of eighteenth- and nineteenth-century migrant workers who set goods and ideas in transit. They made revolutionary history on the waves. They were slaves, sailors, commoners, and artisans. Rediker writes of seamen who experienced environments through work; they developed unique epistemological understandings of wind and waves through bodily experiences of shipboard nature. Others have written of work and workers in the Pacific—from South America to North America and throughout the Pacific’s many islands, from the coolie trade to blackbirding, historians Margaret Creighton, David Chappell, Ted Melillo, Lissa Wadewitz, and others write of a Pacific Ocean animated by histories of work and migration.

For workers of the world’s oceans, environment was not so much a place fixed in situ but rather a constellation of experiences accumulated over a lifetime of journeys among islands, over continents, and on the waves. Fuji Hachitaro experienced a tropical cyclone in Sāmoa as a worker. He left Japan, worked for the US Navy, and visited several ports throughout the Pacific Ocean before arriving in Sāmoa. Mālietoa Laupepa was not a worker; but as an Indigenous ruler, he experienced firsthand the consequences of global imperialism, what Vladimir Lenin later termed “the highest stage of capitalism.” Germany, the United States, and Great Britain all fought over access to Sāmoan ports and economic resources. Sāmoan historian Mālama Meleiseā likened it to “three large dogs snarling over a very small bone.” Eventually, they broke the bone. In this context, Mālietoa experienced environments as diverse as Cameroon, Yemen, and the Marshall Islands due to his steadfast refusal to comply with German economic and ecological demands. So they captured him, shipped him around the world, and eventually held him prisoner in Micronesia.

Environment to these men was not a place; it was an experience. The combined effects of capitalism and colonialism were to uproot Indigenous peoples, destabilize local economies, and send millions of workers
to sea, into economic exile and sometimes political exile. Pacific peoples formerly “rooted” in place became “routed,” to use James Clifford’s terms, along global circuits of commodity production and empire. In this way, Pacific migrants encountered environments as diverse as ships’ holds, mines, plantations, and prisons; they came face-to-face with strange peoples, plants, and animals. These natures altogether, amid the incessant movements of life in diaspora, shaped cosmopolitan biographies, the stuff of an environmental history from below completely different from that experienced by continental power brokers and landlubbing elites.

Migrant Peoples, Migrant Natures: Three Stories of Work and Environment

The following three stories reveal the nineteenth-century Pacific Ocean as a basin of bottom-up environmental histories. First, in the 1810s, workers of various ethnicities, speaking discordant languages, converged on Spanish California in the hunt for sea otters (Enhydra lutris). They were Russians and Aleuts plying the waters of Bodega and San Francisco Bays while Spaniards and Miwok watched from onshore. Euro-American ships staffed with Kanaka (Native Hawaiian) crews sailed up and down the coast, seeking these marine mammals. Three decades earlier, in the wake of Captain Cook’s third and final voyage, news of the profitability of sea otter pelts at Guangzhou (Canton)—the great emporium of Qing China—reached Atlantic shores. This set Atlantic workers in motion, as New England ships made their way around Cape Horn to engage in a transpacific fur-and-tea trade with the Qing Empire.

Sea otters are gregarious and intelligent animals, known for their ability to use tools and engage in play. They are also wily creatures. Historian of the fur trade Adele Ogden compiled some of the resistance strategies of nineteenth-century sea otters: when hunted, they dove down in the opposite direction, swam underneath ships, and then resurfaced on the other side; they swam into the wind, leaving sailing vessels in their wake; they swam into breakers and rocks, where ships could not follow. Some accounts even suggest otters ripped arrows out of their bodies with their own teeth!

Workers on both sides of the Pacific came to know these animals. In California’s Channel Islands, Hawaiian workers earned sixteen
Fig. 2. Tsimshian ceremonial garment with Chinese coins (detail), American Museum of Natural History, New York City. Photograph by the author, 2011.
dollars per month serving Euro-American employers. On Santa Rosa Island, American marksmen from the eastern United States shot at otters from the shore, as if they were hunting in Appalachia. Hawaiian workers were tasked with swimming out among the surviving otters to retrieve the corpses.\textsuperscript{18} Aleut and Kodiak hunters from Russian Alaska imported their own technologies for sea otter hunting into California. Aleuts hunted in kayaks that resembled the body of a marine mammal: constructed with whalebone beams and whale or sea lion sinews, covered with seal or sea lion skins, and smothered with marine mammal oil to make the craft waterproof. These were structures designed for the Arctic, yet they were seen along the coasts of Alta and Baja California.\textsuperscript{19}

In Guangzhou, boatmen on “chops” collected sea otter furs off European and American ships and transported them from Huangpo Island (the anchorage for foreign vessels) up the Pearl River to Guangzhou. Eventually these furs were worn by northern Chinese elites, far from oceanic scenes of labor and toil.\textsuperscript{20} Yet the sea otter’s body connected these peoples, places, and resources in a grand dance of Pacific environmental transformation. Hawaiian otter hunters, for example, ate local salmon while hunting for furs on the Northwest Coast of North America. They brought their love of salmon home with them to Hawai‘i, so by the 1840s salted salmon, a product of the Hudson’s Bay Company (the employer of hundreds of Hawaiian men), was a profitable commodity in Honolulu markets. Today, \textit{lomilomi} salmon (“massaged” salmon) is a popular Hawaiian dish—part of a long history of Indigenous and working-class environmental encounters across the waves.\textsuperscript{21} Meanwhile, visitors to the American Museum of Natural History in New York City today can view a ceremonial garment stitched by a Tsimshian artist from the British Columbia or Alaska region over one hundred years ago. This garment includes Qing dynasty metallic coins dangling from its threads. It is a beautiful object, and it speaks volumes to the transoceanic worlds made by Indigenous and mobile workers.\textsuperscript{22}

In 1848 a second industry—bowhead (\textit{Balaena mysticetus}) whaling—emerged in \textit{nā kai anuanu o alika} (“the cold seas of the Arctic”), the most northern of the world’s oceans. American whalers employed thousands of Hawaiian men in these waters. Workers left ports such as Honolulu and Lāhainā for seasonal voyages to such icy climes, sailing as far north as seventy degrees latitude and beyond.\textsuperscript{23} Hawaiian whale workers left behind an incredible legacy. A point on the southeast cor-
ner of Wrangell’s Island in the Chukchi Sea—in the Russian Far East—was dubbed Cape Hawaii. Hawaiian loanwords also entered the Arctic soundscape. Terms such as pau (“not” or “none”), hana-hana (“work”), puni-puni (“sexual intercourse,” based on the Hawaiian panipani), and wahini (“woman,” based on the Hawaiian wahine) entered the trading pidgin of European, Eskimo, and Pacific Islander workers on Alaskan shores. The North came home to Hawai‘i, too, with fantastical stories—printed in Hawaiian-language newspapers—of whale hunting and even blubber-eating in the Islands. Native whalemens came home and rampaged through city streets, visited taverns and brothels, and ultimately spent the night in jails that were designed expressly to contain them.

Arctic whaling stories traveled across the nascent Hawaiian diaspora, as well. Workers in California goldfields and on equatorial guano islands subscribed to Native-language newspapers and followed the nū hou (“news”) of fellow workers in the Arctic whale fishery. They read of nā makani ino (“storm winds”) and nā makani gale (“gale winds”).
They learned of ice so strong that “the metals of the bow of [a] ship were all completely unfastened, and also on one occasion, were completely [torn off] with the wood because of the clinging of the ice.” This ice was so powerful that even “the Whales were truly frightened by the ice.”28 They read the story of Charles Kealoha, who, stranded among the Eskimo of Alaska’s North Slope for an entire year, wrote of his incredible tale of survival, quoting from a Hawaiian mele (“song”) the following lyrics: “Famous is the cold of the Arctic, completely overwhelming the skin.”29 And it was a famous cold, because workers came home and told stories about it in print and in song.

Of course, like sea otters, whales had a mind of their own. Bowhead and right whales gravitated to Arctic waters because there, centered on the Bering Strait, is the world’s greatest concentration of zooplankton. Marine scientists call it a zooplankton hot spot. Bowhead whales lack teeth; so instead, they use their baleen to filter the ocean of its smallest creatures: shrimp, krill, and other crustaceans. It is said that zooplankton—those tiny drifting animals on the bottom of the food chain—comprise the largest percentage of total biomass of all living things on Earth. Pacific Islanders came face to face with this environment because of the unique ecology of bowhead whales and their feeding practices.30 Other behaviors, such as seasonal migrations, show how whale movements shaped workers’ experiences. Thousands of Hawaiian men pursued sperm whales in the nineteenth century, chasing them across the ocean from one whaling ground to another: off the coast of Japan to the west of Peru to the Line Islands along the equator.31 Workers experienced the power of cetacean mobility when a harpooned whale, furiously attempting to break free, swam away at high speeds, carrying the men on what Yankee migrants termed a “Nantucket sleighride.” Whales were powerful movers and shakers in Hawai‘i, too. J. M. Kalanipoo learned this firsthand one day boating offshore in 1858 when he found himself surrounded by five whales. One suddenly surfaced underneath his vessel. “[W]e jumped up on top of a certain big Whale completely [on] its body,” he wrote, “almost perhaps two fathoms [about four yards] up from the surface of the sea.” When the animal submerged again, “it was like the sound of the cannon . . . breaking the waves on all sides.”32 Polynesian mythology tells the mo‘olelo (“story”) of Paikea, the “whale rider,” who discovered new lands on the back of a whale. Nineteenth-century Polynesian workers were like modern-
day whale riders, exploring and discovering new corners of the Pacific Ocean in pursuit of whales and wages.\textsuperscript{33}

Third, any bottom-up environmental history of the Pacific Ocean must include the transoceanic food fights that broke out among capital and labor in the nineteenth century. Sea otters were hunted for their fur; bowheads were hunted for their baleen—used in the production of everything from chair springs to women’s corsets, the “plastic” of the nineteenth century.\textsuperscript{34} But the people who hunted these animals and extracted these commodities also had to eat.

Ships, interestingly, had their own food ecology. Fuji Hachitaro knew this. As steward on an American naval vessel, he oversaw the diets of hungry men. To feed mobile workers meant procuring food and water in prodigious quantities. This consequently produced localized environmental impacts across the ocean, as the nutritional needs of maritime workers set Pacific Ocean nature into motion. For example, when Captain Cook first arrived on Polynesian shores in the 1760s and 1770s, he deposited goats, sheep, and numerous seeds in places such as Tahiti and Hawai‘i. He sought to alter the agroecology of these archipelagoes to make rest stops in the middle of the ocean for the convenience of future passing ships. On the Island of Kaua‘i in 1778, he sent men ashore with wooden barrels to collect freshwater. In the coming decades, Hawaiian and Tahitian political economies were transformed as Native chiefs demanded commoners produce food items for export, such as pigs for salt pork. In this way, local ecologies were hitched to global markets by means of migrant workers’ bellies.\textsuperscript{35}

By the middle of the nineteenth century, an article in the Hawaiian-language press remarked on the “happy laughter” of local sweet potato farmers buoyed by the demands of the growling stomachs of returning whale workers. But the first line of this article noted ominously that “the number of whaling ships is presently very quickly diminishing,” hinting that such agricultural bounty was now tied to the ups and downs of a globalizing economy.\textsuperscript{36} Indeed, as petroleum replaced whale oil in the decades following 1859, fewer migrant workers came to ports such as Lāhainā and Honolulu to consume local food. During the height of the California gold rush, circa 1850, Hawaiian farmers sold everything they could to keep up with Californian demands for meats and fresh fruits and vegetables. Workers’ stomachs connected continental and island food ecologies like never before, but this also meant that local ecologies
were destabilized by outside changes in production, labor recruitment, and workers’ diets.37

Sailors, Indigenous and foreign, ate together aboard ship. For workers, food was a commons.38 They ate salted meats, hardtack, and duff (a sort of flour pudding).39 But Hawaiians missed traditional foods such as poi. In California goldfields, Hawaiians tried to make a poi palaoa (“flour poi”) out of wheat, to mimic the taste (or at least the texture) of their favored food. They were smarter than those twelve Hawaiians who, upon visiting Mexico in 1819, ate a plant they mistook for kalo (“taro”) and died of food poisoning.40 The struggles of life aboard ship, including over food, brought workers together in interracial solidarity. Sometimes Pacific Islanders joined with fellow sailors in mutinous revolts against their captains. But they were also divided from comrades by stark differences in pay and promotion that cleaved along lines of race and nationality. Hawaiian whale workers rarely served as officers; most received barebones compensation and fell quickly into debt to the ship’s store, which sold them clothing, tobacco, and other items—all on credit.41

As economic winds of change shifted Pacific modes of production from extractive industries (hunting, whaling, mining) to plantation monoculture (cotton and sugar, most notably), the food ecology of ships was traded in for the food ecology of plantations. Here workers struggled again in epic food fights against employers. On Hawaiian sugar plantations, company managers tried everything to reduce the cost of feeding labor. They imported beef from neighboring islands and salmon and mackerel from distant shores, and they even purchased “poi machines” and brought in poi-making specialists to simplify and rationalize the management of workers’ stomachs.42 It may seem counterintuitive that companies would rely on such a global network of food production and distribution to cut costs, but their modus operandi was to compel plantation workers into debt. The way to do this was to restrict workers’ abilities to grow and harvest their own food and to make them reliant on the company store and its global selection of foodstuffs.

But company managers could never get the right rice for their Chinese coolies or the right pa‘i‘ai for the Hawaiians. In response, plantation workers used bad food as a pretense for slowdowns, desertions, and everyday acts of resistance.43 In New Caledonia, migrant workers from the Solomon Islands engaged in food theft and desertion. When put on trial for walking off the job, these workers said they left due
to extreme hunger. In Sāmoa about two hundred workers, mostly I-Kiribati migrants, walked off the job and kept on marching for thirty miles until they reached the seat of Sāmoan governance; there they complained of poor housing and insufficient food. In Hawai‘i one plantation manager said that hungry workers simply “scatter[ed] in search of food.” By finding food on their own terms, including through theft, workers turned their backs on the plantation economy in favor of a moral economy.

Whenever possible, Pacific workers returned to the sea. They fished in rivers and in the ocean to supplement meager wages and reduce reliance on a globalized food marketplace. The practice of fishing also reconnected Pacific Islanders with familiar environments and the flavors of home. On barren equatorial islands over one thousand miles away, Hawaiian guano miners under American employ fished for trevally, shark, flagtail, and snapper in the evenings whenever they got pau hana (“off work”). “The fish are truly similar with Hawaii’s,” one worker penned in a letter home. Meanwhile, in California, washed-up Hawaiian miners of another sort—gold, not guano—turned to fishing on the outskirts of Sacramento. They ate what they could out of the Sacramento River and sold the rest at the city’s market. A community of Hawaiians in Vernon, California, caught pike and sturgeon, harvested berries, and tried their best to live off the land, even as “that side and this side of the entire River is held by haole [white men],” as one community member put it. The capitalist enclosure of rivers and seas limited migrant workers’ ability to feed themselves, thereby forcing them to sell their labor instead.

Pacific workers found themselves increasingly “enmeshed in the capitalist net” of nineteenth-century globalization; and in this context, food fights among capital and labor took center stage in the region’s bottom-up environmental history. Caught between a disappearing commons on the one hand and ruthless proletarianization on the other, working peoples fed themselves (or were fed) in increasingly complex and contested ways.

Environmental History from Below, Past and Present

From Hawai‘i to Sāmoa and beyond, Indigenous peoples, commoners, and migrant workers together made the nineteenth-century Pa-
cific Ocean a theater of tremendous economic and ecological transformations. Their experiences of environment were not just situated in one place but rather encompassed myriad peoples, animals, plants, and commodities in transit. A global environmental history from below must acknowledge that for working peoples, nature is often experienced on the move, because jobs move. Opportunities come and go. Native and working-class peoples historically responded to global changes in production by actively putting themselves on ships; fighting to get off them or get control of them; and traveling the seas as workers, encountering environments near and far. These are people who cared about getting paid, eating good foods, and seeing the world; on another level, they cared about justice and liberty, sovereignty and nationalism. Perhaps there was no “Pacific proletariat” to match Rediker and Linebaugh’s Atlantic articulation, but there were tens of thousands of Pacific Islanders on the move in the nineteenth century. They were the lifeblood of nations and Indigenous economies. They were global storytellers, setting in print and in song tales of sea otters, cyclones, whales, and foreign lands that brought the world to the Pacific and the Pacific to the world.

Bottom-up global environmental histories also provide a new lens for examining our contemporary predicament. Primitive accumulation, the globalization of labor flows and markets, the dispossession and proletarianization of Indigenous peoples—these continue apace in the twenty-first century. From garment workers in Bangladesh to oil workers in Nigeria, from construction workers in Dubai to child migrants at the American border, hundreds of millions of people engage in migrant labor (and militant labor organizing and resistance) in our globalized economy. Oceans connect people, places, and processes today as never before in human history. Notice the hundreds of Fujianese migrants discovered in the hull of the ship *Golden Venture* off New York City in the 1990s. Meanwhile, Pacific Islanders continue to work in global shipping, as historian Alastair Couper has shown in his poignant study of I-Kiribati workers on twenty-first-century container ships. Working peoples are rocked by waves and storms or languish in becalmed waters, from the Mediterranean Sea to the Indian Ocean, seeking economic opportunity and refuge in Western economies. And of course, navies—from Fuji Hachitaro’s time to the present—employ hundreds of
thousands of sailors worldwide, giving working-class peoples access to global environmental experiences.

Working peoples and those on the margins of the global economy experience environment differently than elites do, but there is more to this than just “knowing nature through work.” Environmental historians often focus on places, privileging the experiences of those who put down roots and actively shape a place. Models of in situ colonization, exploitation, and victimization, as well as narratives of in situ resistance and anticolonial struggle, tell the stories of poor people from the inside looking out, but these models do not account for those millions who moved, and continue to move, then and now, in search of wages, safety, and community. Such an in situ, place-based approach ignores the circuits and pathways of the uprooted, as well as the diverse “routed” lives that workers live in a globalized economy.53 Many working-class and Indigenous peoples struggle for what Joan Martinez-Alier has called the “environmentalism of the poor.” In a broad sense, this is an environmentalism advocating for the protection of lands and seas as a commons and opposing wanton resource extraction and ecological pollution that harm workers’ health and safety. This is an environmentalism animated by common people’s resistance to foreign domination and the colonization of local resources.54 But this “environmentalism of the poor” framework, while helpful in explaining in situ Indigenous and working-class resistance, does not make sense of the environmental experiences and environmental imaginaries of workers in diasporic formation, fanning out across the world’s oceans.

I suggest that nineteenth-century Pacific workers experienced a cosmopolitan proletarian environmentalism. This is to say that “environment” was not so much a place but rather a constellation of experiences—a relationship. Workers shared and negotiated relationships with the natural world amid an unsteady life of movement and mobility propelled by the disruptions and economic opportunities of global capitalism. Environment was the food they ate on ships and on shore, the smell of boiling blubber, the foreign insects and animals that frightened or amazed them, the cold of Arctic sea ice, their many dreams and romanticizations of home, and the stories and songs that they shared about their new experiences abroad. Cosmopolitanism is not always a privilege; the proletarian character of workers’ lives reveals the larger economic and ecological forces that compelled them to work and move,
just as their own movements and labors exposed them to environmental experiences and values that go well beyond the in situ perspectives of the “environmentalism of the poor.” To take a contemporary and pressing example, thousands of migrants have capsized and drowned this year in boats at sea, while governments continue to turn away precarious sojourners because they are “economic migrants” rather than bona fide war “refugees.” Capitalism is an unacknowledged war, and migrant workers are paying for it with their lives. To be uprooted is to risk the darkest environmental experience of all: to end up at the bottom of the sea.

But there is hope. When Pacific workers take collective action, as they did so often in the nineteenth century, they can shape global environmental futures. In the Pacific, Indigenous peoples are currently involved in the fight against climate change, blockading ports with traditional vessels and speaking out on the world stage in resistance to narratives of inevitable extinction or forced removal. And just last year, dockworkers on the North American Pacific Coast engaged in an organized slowdown, reminding world leaders that their labor is the engine of all economic growth. Workers of the world’s oceans are powerful agents of, and successful interlopers in, global narratives of work and environment. To tell their stories is to tell global environmental history from the bottom up.

ABOUT THE AUTHOR


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NOTES


27. “Make ke o kohola ‘Hae Hawaii’” [Destruction of the whaler ‘Hae Hawaii’], Ka Nupepa Kuokoa, October 31, 1868.

28. “Nu hou mai Atika mai” [News from the Arctic], Ka Nupepa Kuokoa, August 29, 1868.


31. Matthews, Natural History of the Whale, 70–72, 126–27. For detailed records of one such voyage, see Adeline (ship) logbook, New York Public Library.


40. M. Nahora, “He poi palaoa” [Flour poi], Ka Hae Hawaii, March 16, 1859; Barman and Watson, Leaving Paradise, 60, 99–100.

41. Chappell, Double Ghosts, 71; Couper, Sailors and Traders, 129–32. Ship-level data on workers’ compensation is in “Shipping Articles 1864,” box 1, folder 1; “Shipping Articles 1862–1863,” box 5, folder 1; “Shipping Articles 1864, 1866, 1867,” box 5, folder 2; and “Shipping Articles Jan–Dec 1868,” box 5, folder 3, in Harbormaster’s Shipping Articles, 1862–1900, record group 89, Hawai‘i State Archives, Honolulu. For a detailed case of workers’ indebtedness, see Italy (ship) account book, 1854–1857, New-York Historical Society. Also see “Seamen Discharged before Harbor Master under the Act of June 25, 1855,” in vol. 2, October 1853–August 1866, RG 88.


48. Kameʻeleihiwa, Native Land and Foreign Desires, 140.


Migration has tallied over three thousand migrant deaths in the Mediterranean Sea in the year 2015.

