The Walrus and the Bureaucrat: Energy, Ecology, and Making the State in the Russian and American Arctic, 1870–1950

BATHSHEBA DEMUTH

At the Bering Strait, less than sixty miles of ocean separates Russia's Chukchi Peninsula and the northwest coast of Alaska. Each winter, these narrows are bridged by ice. The Bering Sea appears to go still beneath its lid of frozen water. But the bergs and slush shelter colonies of hardy algae, and with spring, melt frees their photosynthetic potential, just as newly liquid water churns nutrient-heavy currents to the surface. The resulting bloom of phytoplankton nourishes creatures from minuscule crustaceans to giant crabs, fish from salmon and sole to cod and herring. By summer, the Pacific Flyway brings birds by the millions to feed where whale dives froth krill to the surface. Among this riot of life are over 100,000 *Odobenus rosmarus divergens*, the Pacific walrus.¹ Even in summer, enough ice remains to provide refuge for the walrus herds, floating them close to the seafloor mollusks that bulk their bodies to a ton or more.

A walrus can live as long as forty years. Thus a pup born in the 1870s came of age in a Bering Strait newly divided between the United States and Imperial Russia, and gave birth to her last pups in the years before Lenin came out of exile. Both generations bore half-submerged witness to human revolutions onshore. The United States and Imperial Russia began patrolling the Bering Strait, the First World War came and went, a new Soviet state arrived in Russia, a second world war began and then dwindled to its frigid aftermath. But the walrus were more than witnesses. In Beringia, the herds became the literal fuel of revolutions. As the thin line of sea between Russia and the United States became a hard line separating economic and ideological projects, walrus were ensnared in capitalist and communist attempts to make their visions of the future into present reality.

The walrus's involvement was a result of Beringian ecology meeting the material

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¹ For a discussion of ice in the Bering Sea ecosystem, see S. Sakshaug, "Primary and Secondary Production in the Arctic Seas," in Ruediger Stein and Robie W. Macdonald, eds., *The Organic Carbon Cycle in the Arctic Ocean* (Berlin, 2004), 57–81; Kevin R. Arrigo, "Primary Production in Sea Ice," in David N. Thomas and Gerhard S. Dieckmann, eds., *Sea Ice: An Introduction to Its Physics, Chemistry, Biology and Geology* (Oxford, 2003), 143–183; and Alan M. Springer, C. Peter McRoy, and Mikhail V. Flint, "The Bering Sea Green Belt: Shelf-Edge Processes and Ecosystem Production," *Fisheries Oceanography* 5, no. 3–4 (1996): 205–223.

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expectations of modern states. Ecosystems are communities of organisms within an abiotic context, knit together through the movement of energy from primary producers photosynthetic life—to other living things.² The Bering Strait's Arctic and subarctic ecosystems have a different pattern of primary productivity than temperate regions, where photosynthetic organisms on land and at sea are roughly equal in their capacity to turn sunlight and nutrients into calorie-dense tissue. On Beringian land, snow and icy soils curtail the fixation of solar energy, restricting growth to low plants and lichens. But the seas around the Bering Strait are some of the richest ecosystems in the world. Walrus, through their feeding, concentrate energy originating in phytoplankton in their flesh. Their bodies are roughly 30 percent fat by volume.³

American capitalism and Soviet communism were energy-acquisitive economic visions. Born in temperate climates, both systems were reliant on agriculture and industry. Agriculture and industry are, fundamentally, ways of making more calories—be it from corn or from coal—available for human use. Harvesting energy was also both a material practice and critical to American and Soviet understandings of the human past and the laws governing the future. Proponents of both systems saw human distinctiveness in what Marx called the "[s]ubjection of Nature's forces to man."⁴ Like capitalism's many theorists, Marx did not usually employ the word "energy," but each of the revolutions in the Enlightenment teleology from hunting and gathering to farming to fossil-fueled mechanized production was defined by increased energy use. Energy enabled growth in production, and thus buoyed people above dependence on unpredictable nature. Increasing energy use, as the fuel for productive growth, allowed history to change for the better. As a result, the material basis and ideological hopes of capitalist democratic liberty and socialist equality rested on substantial and increasing energy consumption. In both conception and practice, as Dipesh Chakrabarty argues, since the Enlightenment, "[m]ost of our freedoms so far have been energy-intensive."5

In imagining and enabling this caloric harvest, both the United States and the Soviet Union were what Adam Rome calls "environmental management states," where governing the non-human was as critical to modern state formation as national security and social welfare.⁶ In both countries, such management included policies to protect spaces or species, and in some areas to decrease pollution.⁷ But environmental management was,

⁵ Dipesh Chakrabarty, "The Climate of History: Four Theses," *Critical Inquiry* 35, no. 2 (2009): 197–222, here 208. See also Jean-François Mouhot, "Past Connections and Present Similarities in Slave Ownership and Fossil Fuel Usage," *Climatic Change* 105 (2011): 329–355, here 331–332.

⁶ Adam Rome, "What Really Matters in History? Environmental Perspectives on Modern America," *Environmental History* 7, no. 2 (2002): 303–318, especially 304–305. See also Bruce J. Schulman, "Governing Nature, Nurturing Government: Resource Management and the Development of the American State, 1900–1912," *Journal of Policy History* 17, no. 4 (2005): 375–403; and Paul S. Sutter, "The World with Us: The State of American Environmental History," *Journal of American History* 100, no. 1 (2013): 94–119.

⁷ On Soviet nature protection, see Douglas R. Weiner, *A Little Corner of Freedom: Russian Nature Protection from Stalin to Gorbachev* (Berkeley, Calif., 1999). The literature on American conservation is

² On the basics of ecosystems, see Michael Begon, Colin R. Townsend, and John L. Harper, *Ecology: From Individuals to Ecosystems* (Malden, Mass., 2006), pt. 3; on energy, see James H. Brown with James F. Gillooly, Andrew P. Allen, Van M. Savage, and Geoffrey B. West, "Toward a Metabolic Theory of Ecology," *Ecology* 85, no. 7 (2004): 1771–1789.

³ Peter Whitridge, "The Prehistory of Inuit and Yupik Whale Use," *Revista de arqueología americana*, no. 16 (January–June 1999): 99–154.

⁴ Karl Marx and Friedrich Engels, *The Communist Manifesto*, trans. Samuel Moore (Chicago, 1910; original German ed. 1848), 18. On capitalist ideas of growth, see Donald Worster's recent survey *Shrinking the Earth: The Rise and Decline of American Abundance* (New York, 2016), pts. 1 and 2.

from Progressive Era laws about coalfields to Soviet industrial farming, also part of each state's facilitation of growth in energy consumption.⁸ In Beringia, where agriculture was impossible and industry was made difficult by the cold, the lack of local fossil fuels, and the difficulty of moving supplies, such growth was a challenge. Walrus were a rare creature able to bring the productivity of the seas within human reach, holding in their calorically dense bodies the possibility of profits in the United States or fulfilled Soviet plans.

Read as a source of biological energy, the Pacific walrus sits at the intersection of two substantive historiographies: those by energy historians and those by historians of environmental management. Examining how the United States and the Soviet Union used walrus for food and industrial fats—small as that contribution was in a national sense—expands energy history away from the tendency to focus on individual fuels, turning instead to animals, and the ecosystems that supported them, as sources of energy.⁹

Pacific walrus also offer a chance to examine energy not derived from fossil fuels as an element of modern environmental management across two different economic systems. Studies of environmental management are increasingly well developed for the United States, and extend to the transnational exchange of experts and practices, including recent work on the U.S. and Canadian Arctic and subarctic.¹⁰ Yet the default environmental management state remains capitalist, as does the market orientation of much energy history.¹¹ This conceals the fact that for much of the twentieth century, capitalist

vast, from Samuel P. Hays's classic Conservation and the Gospel of Efficiency: The Progressive Conservation Movement, 1890–1920 (Cambridge, Mass., 1959) to Sara M. Gregg, Managing the Mountains: Land Use Planning, the New Deal, and the Creation of a Federal Landscape in Appalachia (New Haven, Conn., 2010).

⁸ Much energy history focuses on energy as part of geopolitics, including Daniel Yergin's *The Prize: The Epic Quest for Money, Oil, and Power* (1990; repr. with a new epilogue, New York, 2011) and Timo-thy Mitchell's *Carbon Democracy: Political Power in the Age of Oil* (London, 2011).

⁹ This is far less true before the nineteenth and twentieth centuries, but as Christopher F. Jones notes, energy histories of the modern period tend to focus on single fuels, and above all oil; Jones, "Petromyopia: Oil and the Energy Humanities," *Humanities* 5, no. 6 (2016), https://doi.org/10.3390/h5020036. A notable exception is Richard White's *The Organic Machine: The Remaking of the Columbia River* (New York, 1995).

¹⁰ For examples from U.S. historiography, see Sarah T. Phillips, *This Land, This Nation: Conservation, Rural America, and the New Deal* (New York, 2007); Marsha Weisiger, *Dreaming of Sheep in Navajo Country* (Seattle, Wash., 2009); Paul S. Sutter, *Let Us Now Praise Famous Gullies: Providence Canyon and the Soils of the South* (Athens, Ga., 2015). Transnational works favor places touched by—and speaking the language of—the British Empire. See, for example, Thomas R. Dunlap, *Nature and the English Diaspora: Environment and History in the United States, Canada, Australia, and New Zealand* (New York, 1999); Gregory A. Barton, *Empire Forestry and the Origins of Environmentalism* (New York, 2002); and Jessica B. Teisch, *Engineering Nature: Water, Development, and the Global Spread of American Environmental Expertise* (Chapel Hill, N.C., 2011). On the Arctic and subarctic, see Liza Piper, *The Industrial Transformation of Subarctic Canada* (Vancouver, B.C., 2009); Ryan Tucker Jones, *Empire of Extinction: Russians and the North Pacific's Strange Beasts of the Sea, 1741–1867* (New York, 2014); and Andrew Stuhl, *Unfreezing the Arctic: Science, Colonialism, and the Transformation of Inuit Lands* (Chicago, 2016).

¹¹ Kate Brown's Plutopia: Nuclear Families, Atomic Cities, and the Great Soviet and American Plutonium Disasters (New York, 2013) and the last chapter of Andy Bruno's The Nature of Soviet Power: An Arctic Environmental History (New York, 2016) are exceptions. Examples of the capitalist emphasis include Sean Patrick Adams, Old Dominion, Industrial Commonwealth: Coal, Politics, and Economy in Antebellum America (Baltimore, 2004); Mitchell, Carbon Democracy; Matthew T. Huber, Lifeblood: Oil, Freedom, and the Forces of Capital (Minneapolis, 2013); Christopher F. Jones, Routes of Power: Energy and Modern America (Cambridge, Mass., 2014); and Paul Sabin, Crude Politics: The California Oil Market, 1900–1940 (Berkeley, Calif., 2004).

production had an open and viable challenger in the Soviet Union, and later in China. Environmental management has not, in other words, always involved an emphasis on individual liberty, private property, the open use of markets, or debate over the state's regulatory role.

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The Soviet Union provides a particularly rich point of comparison with the United States, in part because it so clearly defined its difference from American-and globalcapitalism by how it organized energy consumption, that fundamental mediating relationship between humans and non-humans, while requiring energy-intensive growth to further its ideological commitment to the freedom of radical equality. The promise of comparing U.S. and Soviet environmental management is evident in the few works that do so either implicitly or directly. Jenny Leigh Smith shows that Soviet industrial agriculture was no more preposterous and no more widely condemned than similar attempts in the United States.¹² Like Smith's, Andy Bruno's comparison of the USSR with the United States is mostly implied, but the environmental damage he chronicles among reindeer herds and nickel mines on the Kola Peninsula came from a shared desire "to extract greater economic value from the natural world by manufacturing evermore products," showing how capitalism "has neither been the exclusive cause of, nor a good solution to, modern environmental problems."¹³ Kate Brown, the most precise ethnographer of American and Soviet environmental management, documents cities eerily parallel in the two countries' treatment of nuclear waste, and towns drawn on mirrored grids where "both expanding American corporate power and expanding Soviet partystate power etched an anti-revolutionary conservatism" onto the steppes and plains.¹⁴

For historians of the twentieth century, a major contribution of these authors is their ability to show capitalism as no more inevitable, stable, or inherently rational than Soviet economic and social life: their comparisons denaturalize the market and assumptions—particularly for Brown—of American exceptionalism. These authors also add to environmental historians' longstanding attempt to detail nature "speaking back," in Richard White's phrase, particularly by documenting state failures, from seeping nuclear waste to altered reindeer migrations to other "non-human actors [that] helped direct change."¹⁵ Yet what agency nature has is often the result of human provocation, a response to farming, mining, damming, splitting the non-human world to the atom. The same is regularly true of energy histories that detail the consequences of regions "sacrificed to meet the world's desires for kerosene and lubricants."¹⁶ Nature speaks back, but

¹² Jenny Leigh Smith, Works in Progress: Plans and Realities on Soviet Farms, 1930–1963 (New Haven, Conn., 2014).

¹³ Bruno, The Nature of Soviet Power, 191, 274.

¹⁴ Kate Brown, "Gridded Lives: Why Kazakhstan and Montana Are Nearly the Same Place," *American Historical Review* 106, no. 1 (February 2001): 17–48, here 47; Brown, *Plutopia*. All of these authors depart from Paul R. Josephson's perspective, which critiques the ecological consequences brought by both capitalist and communist development, but finds the "Marxist industrial imperative" uniquely irrational and destructive. Soviet failure seems to have been inevitable, particularly in the Arctic. Josephson, *The Conquest of the Russian Arctic* (Cambridge, Mass., 2014), 6. See also Josephson, *Resources under Regimes: Technology, Environment, and the State* (Cambridge, Mass., 2005).

¹⁵ Richard White, "Discovering Nature in North America," *Journal of American History* 79, no. 3 (1992): 874–891, here 876; Bruno, *The Nature of Soviet Power*, 9.

¹⁶ Jones, Routes of Power, 116. See also Timothy J. LeCain, Mass Destruction: The Men and Giant Mines That Wired America and Scarred the Planet (New Brunswick, N.J., 2009); and Brian Black, Petrolia: The Landscape of America's First Oil Boom (Baltimore, 2000). Thomas G. Andrews's Killing for Coal: America's Deadliest Labor War (Cambridge, Mass., 2008) is an important exception to this tendency.

it does so in a conversation usually started by people, retaining for the human a narrative place of independence and an ability to transcend nature.

What follows is an attempt to pull together—and push further—scholarship on energy and environmental management by showing how the United States and the Soviet Union were deeply involved in finding and processing biological calories, and how doing so made them part of an ecological conversation that they did not start so much as join.¹⁷ In other words, the need for energy made market growth or planned production inherently metabolic: states function by ensuring flows of energy through their economies and citizens. And no metabolism is self-reliant. Humans, like all living things, are not the original source of the calories they eat and burn. All calories ultimately come from the sun, either through photosynthesis or through the consumption of photosynthetic organisms or the muscles of animals themselves fed by plants; fossil fuels are old photosynthesized carbon concentrated by geological time.¹⁸ Accessing energy thus can make governance and the economic practices it supports dependent on local primary production. Modern, growth-oriented states do not just change or provoke nature. They themselves function ecologically, sunk into and thus governed by the distributed agency of entire ecosystems.

In the Bering Strait, where the options for caloric gain were limited, walrus were the contact point, the site of management, between states with their ideals and the ecosystem that fed them. Each state began this management in a gory extravaganza of industrial hunting. But by the end of the 1950s, both had curtailed such killing with laws that allowed only limited walrus consumption. It was a consequence of dynamics that Ryan Tucker Jones observed about the eighteenth-century North Pacific, where the migrations of marine mammals conditioned human lives and political decisions.¹⁹ If anything, this is even truer in the twentieth century, with its increased appetite for energy. In pinning hopes of state-making on walrus, both the United States and the Soviet Union became subject to the animals' rules of being: their migratory routes, choices of food, and ability to learn the dangers of human predation. Most of all, concentrating calories from the Bering Sea is not fast work; walrus have a slow reproductive rate, the females birthing four or five pups in a decade, and take years to mature. Situated in their particular material world, the herds offer a view into how modern governance changes not just in response to internal and international politics, but also through unavoidable entanglements with local ecology. The state of nature conditions the nature of the state.

¹⁷ I am here following Timothy Mitchell's observation of social sciences in the Enlightenment tradition that reduce to the social things that are more than social. Mitchell, *Rule of Experts: Egypt, Techno-Politics, Modernity* (Berkeley, Calif., 2002), 50–51. This is a departure from most energy histories, which as noted above usually focus on particular fossil fuels and the infrastructures of their extraction, rather than thinking of the state per se as needing energy, including energy drawn from ecosystems. Even Timothy Mitchell's analysis in *Carbon Democracy* of the ties between oil as a material substance and certain kinds of politics and the role of the state is quite disengaged from ecological context. Jones, *Routes of Power*, and Andrews, *Killing for Coal*, come closer to what I hope to do here, in their granular attention to local change, but are less concerned with animals or with states and their ideological preoccupations.

¹⁸ William Cronon argues this in *Nature's Metropolis: Chicago and the Great West* (New York, 1991), 148–151. On the wider role of energy in the Pacific environment, see Ryan Tucker Jones, "The Environment," in David Armitage and Alison Bashford, eds., *Pacific Histories: Ocean, Land, People* (New York, 2014), 121–142.

¹⁹ Ryan Tucker Jones, "Running into Whales: The History of the North Pacific from Below the Waves," *American Historical Review* 118, no. 2 (April 2013): 349–377.

PACIFIC WALRUS LIVING IN the early decades of the nineteenth century played no role in constituting modern states. More than 200,000 were scattered among Beringia's ice floes in bellowing, snorting herds. Part of the day they slept on the ice, pups resting on their mothers, with the occasional flipper waving to cool some individual body wedged in the pile of wrinkled flesh. Like other large mammals with few offspring, walrus compensate for the slowness of their breeding with care; they guard their pups from the circling threats of polar bears or orcas or the occasional human, a strategy that for most of walrus history allowed the majority of infants to survive. Keeping a watchful eye out for predators, they alternate between sleeping and diving off the ice to eat. Holding themselves on the seafloor with their tusks, they suck in clams and other small creatures. This act of living does work for the sea, as the diving and feeding stirs up nutrients critical to other organisms. The presence of walrus enriches and expands the ability of energy to move through marine ecosystems, making them more productive.²⁰

For Indigenous residents of the Bering Strait—the Chukchi and Yupik in Eurasia and the Yupik and Iñupiat (sing. and adj. Iñupiaq) in Alaska—part of the work walrus did was, and remains, dying. Along with whale and seal fat, walrus blubber filled bellies, and walrus hides became tents, sleds, and boats. The importance of the herds was more than material. In some communities, walrus are part of family ancestries.²¹ Stories across the Strait interwove the lives of humans and walrus, the latter often saving the former with gifts of blubber. In return, hunters and their families extended ritual thanks to the herds, treating them as sentient, moral beings.²²

A walrus-being born in 1870 entered a different world than one born in 1830—a world where not all human hunters observed such rituals. Commercial whaling ships from New England had entered the Bering Strait twenty years before, and spent those two decades killing bowhead whales for their oil. By the 1870s, so many bowheads had died that the fleet turned to walrus blubber to fill their barrels. It took many walrus to substitute for a whale, so crews killed hundreds at a time. A walrus born in those years would have learned to do what it could to avoid the ships; the herds began attacking whalers' boats and charging hunters across the ice, or diving into the water to escape.²³

²³ On walrus behavior, see David Wilkinson, *Whaling in Many Seas, and Cast Adrift in Siberia: With a Description of the Manners, Customs and Heathen Ceremonies of Various (Tchuktches) Tribes of North-Eastern Siberia* (London, 1906), 94; William Fish Williams, "The Destruction of the Whaling Fleet in the

²⁰ Francis H. Fay, *Ecology and Biology of the Pacific Walrus*, Odobenus rosmarus divergens *Illiger* (Washington, D.C., 1982), 171–172; G. Carleton Ray, Jerry McCormick-Ray, Peter Berg, and Howard E. Epstein, "Pacific Walrus: Benthic Bioturbator of Beringia," *Journal of Experimental Marine Biology and Ecology* 330, no. 1 (2006): 403–419.

²¹ Roger Silook, quoted in William W. Fitzhugh, Julia Hollowell, and Aron L. Crowell, eds., *Gifts from the Ancestors: Ancient Ivories of Bering Strait* (Princeton, N.J., 2009), 217.

²² The literature on, not to mention the lived experience of, Chukchi, Iñupiat, and Yupik conceptions of the non-human is substantial and vital, as is new Indigenous scholarship articulating the salience and politics of conceiving of nature as a space of social creation, obligation, and governance of both human and non-human. For a small sampling of the latter, see Sarah Hunt, "Ontologies of Indigeneity: The Politics of Embodying a Concept," *Cultural Geographies* 21, no. 1 (2014): 27–32; Kyle Whyte, "Critical Investigations of Resilience: A Brief Introduction to Indigenous Environmental Studies and Sciences," *Daedalus: Journal of the American Academy of Arts and Sciences* 147, no. 2 (2018): 136–147. For a brief review of Indigenous Beringian cosmologies and hunting practices, see Waldemar Bogoras, *The Chukchee* (New York, 1904); Chie Sakakibara, "*Kiavallakkikput Agviq* (Into the Whaling Cycle): Cetaceousness and Climate Change among the Iñupiat of Arctic Alaska," *Annals of the Association of American Geographers* 100, no. 4 (2010): 1003–1012; Ann Fienup-Riordan, ed., *Ciulirnerunak Yuuyaqunak/Do Not Live without an Elder: The Subsistence Way of Life in Southwest Alaska*, trans. Alice Aluskak Rearden (Fairbanks, Alaska, 2016).

But most could not flee the southern edge of the pack ice, where frozen water brought seafloor grazing close to open-air rest. And it was on the ice that walrus were most vulnerable to rifle fire, the sound of gunshots so mimicking cracking ice that the animals did not even know to scatter in fright. By the turn of the twentieth century, over 100,000 had become lamp oil and ivory umbrella handles and buttons and walrus-hide bicycle seats.²⁴ Thus even when what the market desired was not itself caloric—when it was walrus hide or ivory, not blubber, that fed profits—sating that desire killed walrus and removed energy from the local ecosystem.

The slaughter drained away the source of much Bering Strait life. Indigenous famine followed the commercial hunts, compounding the diseases imported by whaling crews. In some coastal settlements, more than half of the adult population died. Communities moved and merged as refugees from especially affected regions fled, sometimes hundreds of miles.²⁵ Yupik, Iñupiat, and Chukchi knew that the whale ships were the cause of their impoverishment. Some communities exiled Americans from walrus beaches and prohibited Indigenous use of firearms.²⁶ Others learned English and joined the commercial hunt in exchange for flour and ammunition, or turned to trapping foxes. The two sides of the Bering Strait, long a united ecological space crossed by Indigenous trade and warfare, were now increasingly united by their experience of American maritime commerce, as distant markets filtered away the calories in walrus and replaced them with imported sugar.

The creeping dependency on imported calories and tools was new in Beringia. But the depredations of ecological transformation were familiar to the U.S. government, whose policies had recently helped incite a similar revolution on the Great Plains as the bison grassland ecosystem was hunted away.²⁷ The question was how to respond to the reports of Indigenous starvation and shrinking walrus herds that began appearing in congressional hearings and national newspapers in the 1880s.

Some missionaries, traders, and officials saw little to mourn. The conversion of raw nature into monetary wealth was the defining action of the capitalist frontier, the core of

Arctic Ocean in 1871," in Harold Williams, ed., One Whaling Family (Boston, 1964), 221–228; Charles Madsen with John Scott Douglas, Arctic Trader (New York, 1957), 198; and Charles M. Scammon, The Marine Mammals of the North-Western Coast of North America, Described and Illustrated; Together with an Account of the American Whale-Fishery (San Francisco, 1874), 178–179.

²⁴ For estimates of bowhead whales and walrus killed by New England ships, see John R. Bockstoce, *Whales, Ice, and Men: The History of Whaling in the Western Arctic* (Seattle, Wash., 1986), 346–347. For commercial uses of walrus, see John Miller and Louise Miller, *Walrus* (London, 2014), 93–95.

²⁵ There are territorial differences in the severity of epidemics and famines, which emerged at the intersection of imported disease, commercial marine mammal harvesting, and a general decline in caribou herd numbers. In general, the number of Indigenous people in Chukotka declined by 50 percent between 1800 and 1890, while the communities in northwestern Alaska went from about 5,000 people to around 1,000 in the same period. See Igor Krupnik and Michael Chlenov, *Yupik Transitions: Change and Survival at Bering Strait, 1900–1960* (Fairbanks, Alaska, 2013), 36–37; and Ernest Burch Jr., *The Iñupiaq Eskimo Nations of Northwest Alaska* (Fairbanks, Alaska, 1998), 325.

²⁶ Gosudarstvennyi arkhiv Rossiiskoi federatsii (State Archive of the Russian Federation), Moscow [hereafter GARF], f. 3977, op. 1, d. 811, l. 125. Russian archival material is cited by a standard system, from the *fond* (collection), *opis'* (inventory), *delo* (file), and finally the *list* (page) numbers. See also Joseph F. Bernard, "Local Walrus Protection in Northeast Siberia," *Journal of Mammalogy* 4, no. 4 (1923): 224–227.

²⁷ On the bison, see Andrew C. Isenberg, *The Destruction of the Bison: An Environmental History*, 1750–1920 (New York, 2000); and Theodore Binnema, *Common and Contested Ground: A Human and Environmental History of the Northwestern Plains* (Toronto, 2004), chaps. 1–2.



FIGURE 1: Dead walrus on deck, between 1890 and 1900. Image courtesy of the New Bedford Whaling Museum.

American national advancement. If walrus or any other animal became a source of profit in death, the disappearance was, as one geologist in Alaska wrote, "but an evidence of the progress of civilization."²⁸ The ability to satisfy market demand by producing a profit pulled the nation forward. As part of building a universal, progressive human history, walrus deserved no exception; if Native Alaskans disappeared as a consequence, that too was inevitable.²⁹

For others, the transformation of walrus blubber and ivory into currency could play a role in a different kind of Indigenous disappearance: the assimilation of Native Alaskans into Americans. After the United States purchased Alaska from Russia in 1867, the legal status of Yupik, Iñupiat, and other Alaska Natives was ambiguous: either they were "uncivilized tribes" analogous to Native Americans, with land claims and legal status requiring federal negotiation and funding, or they were "other 'inhabitants of the ceded territory," who would eventually become citizens.³⁰ By the 1880s, federal policy was moving toward the "uncivilized tribes" interpretation, making Native Alaskans, to paraphrase Patrick Wolfe, subject to what might be called "elimination by assimilation": the twinned settler-colonial ideals of eradicating Indigenous difference and sovereignty.³¹ In the 1880s, assimilation rested on conversion to Christianity and the national

²⁸ Alfred Hulse Brooks, *Blazing Alaska's Trails* (Fairbanks, Alaska, 1953), 74.

²⁹ Lieut. P. H. Ray, "Ethnographic Sketch of the Natives of Point Barrow," pt. III in *Report of the Inter*national Polar Expedition to Point Barrow, Alaska, in Response to the Resolution of the House of Representatives of December 11, 1884 (Washington, D.C., 1885), 37–60.

³⁰ David S. Case, *Alaska Natives and American Laws* (Fairbanks, Alaska, 1984), 6. On Alaska education policy, see Carol Barnhardt, "A History of Schooling for Alaska Native People," *Journal of American Indian Education* 40, no. 1 (2001): 1–30.

³¹ Patrick Wolfe, "Land, Labor, and Difference: Elementary Structures of Race," *American Historical Review* 106, no. 3 (June 2001): 866–905, here 881.



FIGURE 2: Indigenous walrus hunters, early twentieth century. Albert Johnson Photograph Collection, 1905–1917, UAF-1989-166-398-Print, Archives, University of Alaska Fairbanks.

productive culture; the "natives," one congressional report on Alaska argued, needed to learn "our ways of labor."³² For the Bureau of Indian Affairs (BIA), missionaries, and not a few ivory traders, this meant profitable engagement with the market.

The need to make Indigenous peoples into modern, productive Americans was particularly acute in Alaska. The territory was part of a settler colony, but without many colonists. In contrast to the Great Plains, or even the arid West, there was little hope that Alaska's "impassable deserts of snow" would lure agricultural settlers. This lack of caloric potential led one newspaper to conclude that Alaska was "absolutely useless."³³ But if "the native" became "useful to the white man by supplying the markets," wrote one missionary, "he has not only assisted the white man in solving the problem of turning to the use of civilization the vast Territory of Alaska, but he has also solved his own problem," by transforming into "a self-respecting and industrious citizen."³⁴ Assimilated Yupik and Iñupiat needed to be both settlers and colonized; walrus products, which could be sold for "a great profit," could help them do so in a land with limited

³² G. T. Emmons, "Condition and Needs of the Natives of Alaska: Message from the President of the United States, Transmitting a Report on the Condition and Needs of the Natives of Alaska Made by Lieut. G. T. Emmons, U.S. Navy, Retired," January 19, 1905, S. Doc. No. 106, 58th Congress, 3rd session (Washington, D.C., 1905), 6.

³³ "What We Get by the Treaty," New-York Tribune, April 11, 1867.

³⁴ Sheldon Jackson to W. T. Harris, January 11, 1904, Interior Department Territorial Papers, Letters Received Relating to the District of Alaska, January 14–December 23, 1904, Record Group [hereafter RG] 48, M-430, roll 10, National Archives and Records Administration Branch, San Francisco, California [hereafter NARA CA].

prospects for generating wealth.³⁵ For boosters along the northwest coast, killing walrus for commercial sale could redeem Alaskan cultural backwardness and economic barrenness simultaneously.

By the closing decades of the nineteenth century, however, ungoverned commercial demand for walrus hide, blubber, and ivory was clearly causing periodic intense. uncivi*lized* famines along the northwest coastline. As one typical newspaper report argued, "the advent of the white man in Alaska has impoverished the native," who for years "has been allowed to die for the lack of proper care and food."³⁶ Unless the state was to abdicate all responsibility toward Native Alaskans, the absence of walrus threatened to make them dependent on government aid. And "the experience of the Government in feeding the Indians of the West," Alaska's superintendent for education, Sheldon Jackson, argued, was not a recommendation for similar action in Alaska, for "if the natives find that they can be relieved by the Government, they will cease to do what they can to help themselves."³⁷ Federal dependence was expensive. It also prevented dependents from achieving economic self-sufficiency, which was generally assumed to be critical to political freedom and material well-being. The state's local representatives valued walrus for sustaining both Indigenous life, in the sense of providing for basic caloric needs, and liberty, in the sense of freedom from the dole. Indigenous independence from the state thus required walrus, but keeping walrus alive required the state.

The walrus had other defenders. The Boone and Crockett Club, a group of conservation-minded elites organized by Theodore Roosevelt in 1887, was particularly invested in protecting game animals and wilderness as a sign of America's "general intelligence and enlightened love of nature."³⁸ With the frontier closed in the continental United States, Alaska was the last place where "primitive conditions approximating those of the whole country when first settled" could endure.³⁹ Keeping that frontier alive—literally, in the case of animal species—led Boone and Crockett members to support the 1902 Alaska Game Act. Charismatic animals like the walrus were codified as game, and game in the Boone and Crockett ideal could be killed for sport primarily, for food secondarily, but for profit never.⁴⁰

The Game Act was in many ways a typical piece of legislation by early conservationists, who were appalled by the excesses of an unrestricted market. But it was also

³⁵ Conrad Siem to Secretary of the Interior, May 1903, Interior Department Territorial Papers, Letters Received Relating to the District of Alaska, January 7, 1902–December 15, 1903, RG 48, M-430, roll 9, NARA CA.

³⁶ "Plea for the Eskimo," New York Times, November 5, 1900.

³⁷ Sheldon Jackson to W. T. Harris, December 6, 1899, Interior Department Territorial Papers, Letters Received Relating to the District of Alaska, January 5–December 24, 1899, RG 48, M-430, roll 6, NARA CA.

³⁸ Henry Fairfield Osborn, "Preservation of the Wild Animals of North America," in George Bird Grinnell, ed., *American Big Game in Its Haunts: The Book of the Boone and Crockett Club* (New York, 1904), 349–373, here 351.

³⁹ Madison Grant, "The Vanished Game of Yesterday," in George Bird Grinnell, Kermit Roosevelt, W. Redmond Cross, and Prentiss N. Gray, eds., *Hunting Trails on Three Continents: A Book of the Boone and Crockett Club* (New York, 1933), 1–22, here 2.

⁴⁰ Hal K. Rothman argues that Roosevelt and the Boone and Crockett Club created a moral and ethical language for hunting in America; Rothman, Saving the Planet: The American Response to the Environment in the Twentieth Century (Chicago, 2000), 30. For a discussion of the aristocratic hunting tradition, see Matt Cartmill, A View to a Death in the Morning: Hunting and Nature through History (Cambridge, Mass., 1993); and on the Boone and Crockett case, see Douglas Brinkley, The Wilderness Warrior: Theodore Roosevelt and the Crusade for America (New York, 2009).



FIGURE 3: Harvesting walrus, northwestern Alaska, likely early twentieth century. Alaska State Library Collection, Wickersham State Historical Site Photographs, ASL-P277-009-068.

operating in an environment very unlike that in the contiguous United States. Alaskan planners often compared walrus to bison, but bison could be replaced with settler agriculture, and agriculture could, in theory, assimilate Native populations, while sport hunters could be restricted to game preserves with bag limits.⁴¹ The walrus had no domestic analogue to aid assimilation or to replace kills for profit and food. Alaska was stuck outside the teleology leading from hunting and gathering to agriculture—there would be no energy transition to amber waves of grain—so any profits were important. The Game Act had to temper the market without causing a massive caloric deficit in Yupik and Iñupiaq communities. So the act made the sale of walrus ivory, skins, and blubber illegal, but allowed Indigenous subsistence hunting along with a limited number of trophy permits. All hunting was restricted to September and October. No person, no matter how hungry or in need, could kill more than two walrus in a year. Walrus, valuable as a rare source of energy on the coast, could not be assessed in monetary terms.

Not everyone was satisfied with this federal attempt to manage walrus, seeing it as an impediment to assimilation, as Indigenous hunters suddenly had little or no entry

⁴¹ In this respect, Alaska added challenges to the dynamics Samuel Hays discussed in *Conservation and the Gospel of Efficiency*, although the policies and many of the actors present in Alaska were the same as in the contiguous United States. The policies adopted by the federal government, in trying to both assist and restrict access to commercial opportunity by turns, are similar to those discussed by Joshua L. Reid in *The Sea Is My Country: The Maritime World of the Makahs* (New Haven, Conn., 2015). That conservation and assimilation were sometimes at odds appears also in Karl Jacoby, *Crimes against Nature: Squatters, Poachers, Thieves, and the Hidden History of American Conservation* (Berkeley, Calif., 2001), particularly the final chapters; and Theodore Catton's *Inhabited Wilderness: Indians, Eskimos, and National Parks in Alaska* (Albuquerque, N.Mex., 1997).

into the once-thriving walrus trade.⁴² And while the Game Act should have been good news for the walrus—a chance to breed and feed in peace on the near-shore ice—it was a national law protecting an international animal. In Chukotka, Imperial Russia's few local bureaucrats also worried about Indigenous starvation, and called for further regulation of international hunting.⁴³ Missionaries and biologists in the U.S. agreed. In 1914, the deputy commissioner of fisheries noted that since walrus "go to sea on the ice floes, real protection would be accomplished only in an international agreement." He anticipated that talks with Russia would start soon.⁴⁴

Tsar Nicholas II, however, had more pressing concerns than walrus internationalism. Preoccupied with a war with Japan in 1905 and ongoing rumors of revolutionary agitation, he failed to formalize even imperial legal protections for the walrus. Russian navy ships patrolled Chukotka sporadically, but the territory was effectively ungoverned. Thus American vessels sailed out of U.S. territorial waters to kill walrus on international or Russian ice, selling the hides and ivory in Seattle and San Francisco. During the First World War, the United States bought some of the hides, to be used in buffing munitions, from commercial hunters working beyond the territorial limit of the Game Act. Olaf Swenson, one of those hunters, described how "the American government wanted us to carry on [killing walrus] because they were using these oils in the manufacture of explosives."⁴⁵

Bureaucrats on both sides of the Strait thus recognized by 1914 that state goals, from assimilation to basic sovereignty, were threatened by the absence of walrus calories. They also saw a solution to these national problems in international legislation. But with the exigencies of world war commanding attention, none could be spared to manage the walrus herds.

IF THE WALRUS BORN IN 1870 survived into the First World War, she gave birth to her last pup around the end of the conflict. That baby, pink and creased, learned to swim in waters good for her species. What gave the walrus room to breathe and breed unmolested in Russian waters was not international or even imperial regulation, but decreased market demand and political stability. In 1919, American traders in Chukotka began hearing rumors of socialists coming north. Four years later, the Bolsheviks finally took control of the peninsula. "We tried to carry on," Swenson wrote, "but the revolution . . . was constantly getting in our way."⁴⁶

⁴² "Conditions in Alaska," S. Rep. No. 282, pt. 2, 58th Congress, 2nd session (1904), 29, 149; "Alaska Indians Starving; New Game Laws Prove Disastrous to Natives of the Far North," *New York Times*, October 8, 1903.

⁴³ Rossiiskii gosudarstvennyi istoricheskii arkhiv Dal'nego Vostoka (Russian State Historical Archive of the Far East), Vladivostok [hereafter RGIA DV], f. 702, op. 1, d. 275, l. 20. The U.S. and Russia successfully negotiated fur seal protections in the early twentieth century, but did not manage to create a similar treaty for walrus.

⁴⁴ E. Jones, Deputy Commissioner of Fisheries, to Secretary of Commerce, January 16, 1914, RG 22: Wildlife Service Reports and Related Records, 1869–1937, Entry 91, National Archives and Records Administration, College Park, Maryland [hereafter NARA MD].

⁴⁵ Olaf Swenson, Northwest of the World: Forty Years Trading and Hunting in Northern Siberia (New York, 1944), 94–95; "Walrus Catch Largest Known," Los Angeles Times, October 1, 1915. Whale and walrus oil were both used to make nitroglycerine; Charlotte Epstein, The Power of Words in International Relations: Birth of an Anti-Whaling Discourse (Cambridge, Mass., 2008), 33.

⁴⁶ Swenson, Northwest of the World, 158.

By the time Bolshevik "missionaries of the new culture and the new Soviet state" arrived in Chukotka, the Russian Revolution was five years old.⁴⁷ But late was better than never when it came to transforming "politically backward elements" into civilized socialists.⁴⁸ This was no small task. Any good Bolshevik missionary had learned from Marx, as interpreted by Lenin, that the Yupik and Chukchi were benighted twice: first because history had not advanced them from primitive hunting to feudalism to the capitalist mode of production, thus paving the way for socialism; and second because American capitalists had pillaged the base of the economy. The result, as G. G. Rudikh, one of the first Soviets to arrive on the coast, recalled, was that "the usual food was the meat of seals, walrus, whales—often raw. It was blatantly unsanitary . . . and [people were] hungry."⁴⁹ Another Bolshevik described Chukotka as a communist territory at risk of having no communist people. Without "proper organization of supplies and other measures" to ensure food production, the Soviets would be unable to "maintain the border [*krai*]."⁵⁰ Caloric sovereignty was a necessary ingredient of Soviet civilization.

The theoretical path to plenty was clear: Marxist economic reorganization. This meant exiling capitalist traders, then collectivizing production, as collectives were the way "to liberate the toiling native masses from backward economic forms" like hunting and gathering and dependency on American trade, and bring economic and cultural life "to a higher level."⁵¹ The fundamental promise of collectivization was a material base sufficient to fuel "transformation . . . in social consciousness and psychology."⁵² Proper organization of the economy would allow the Chukchi and Yupik to produce more, increased production would liberate them from the capriciousness of nature in the Arctic, and nature transformed into material plenty would convert unconscious people into conscious socialists. Human history would supplant the constraints of natural history.

In the 1920s, however, the grip of natural history on Chukotka and its people seemed, to the newly arrived Soviets, too strong to allow rapid transformation. Instead, a slow revolution was planned by the Committee of the North, the group of ethnographers and other academics tasked with Arctic development. They began by organizing *artely*, small workshops that made traditional manufacturing communal. In time, these could become *kolkhozy* or collective farms, where members owned the increasingly industrial means of production, before being converted to *sovkhozy*, where the state owned the means and products. Regardless of the form, the goal was more production, and no ecological space was exempted from producing. "Collectivization in the North," one committee member wrote, would "fully increase the productivity of the indigenous economy."⁵³

While Committee of the North members came to Chukotka certain of their collectiv-

⁴⁷ V. G. Bogoras, "Podgotovitel'nye mery k organizatsii malykh narodnostei" [Preparatory Measures for the Organization of the Small Peoples], *Sovetskaia Aziia*, no. 3 (1925): 40–50, here 48.

⁴⁸ B. I. Mukhachev, ed., Bor'ba za vlast' sovetov na Chukotke (1919–1923): Sbornik dokumentov i materialov [The Struggle for Soviet Power in Chukotka (1919–1923): Collected Documents and Materials] (Magadan, 1967), 104.

49 Ibid., 133.

⁵⁰ GARF, f. 3977, op. 1, d. 11, l. 17. A. Bonch-Osmolovskii, who surveyed the Chukotka coast in 1924, went so far as to argue for an international accord to protect the walrus; ibid., l. 19.

⁵¹ Kommunisticheskaia partiia Sovetskogo soiuza v rezoliutsiiakh i resheniiakh s"ezdov, konferentsii i plenumov TsK [Communist Party of the Soviet Union in Resolutions and Decisions of the Congresses, Conferences, and Plenums of the Central Committee], vol. 2: 1917–1922 (Moscow, 1983), 367.

⁵² V. N. Uvachan, The Peoples of the North and Their Road to Socialism (Moscow, 1975), 149.

⁵³ RGIA DV, f. R-4559, op. 1, d. 1, l. 117.

ized ends, they were challenged by northern means. Learning to travel by dogsled, communicate in Yupik or Chukchi, find shelter, and prepare local foods left little time for explaining Marx. Many Bolsheviks left after a single frustrating year. And there was the question of what could possibly be collectivized on an icy, wind-torn coast where agriculture was impossible and industry was a distant prospect. But as ethnographers surveyed Yupik and Chukchi villages, counting every reindeer killed and whale harpooned, they concluded that along the coast, walrus could supply "up to 500 kilos" of blubber each. "This colossal supply of fat" was being "used totally unproductively in our current moment" but "could be used for industrial purposes. Specialists calculate that establishing handicraft manufacture among the local population presents no difficulties."⁵⁴ Walrus, with their copious blubber, could support the local collective economy. Making the communist future in Chukotka required maximizing the barrels of oil rolled off the ice.

Initially, however, the herds bellowing and breeding offshore were protected from these Soviet designs. Organizing the hunt was the Committee of the North's assignment, as its members had little knowledge of sea ice or walrus. Conducting the communist hunt was rightfully the task of new Yupik and Chukchi believers in the Soviet way of production. However, finding people to convert into socialists proved as difficult as finding nature to convert into a surplus. The lack of Indigenous interest was as much material as ideological. In the 1920s, the vision of Marxism that stumbled through language and cultural barriers into Chukchi and Yupik villages did not signal a radical or objectionable change to local life. The central Soviet proposition was to collectivize hunts that were already collective by tradition. But for the Chukchi and Yupik, the new state also offered few tangible benefits for attending Soviet meetings or providing tallies of walrus killed to the local Soviet leadership. Yupik and Chukchi hunters wanted guns, ammunition, flour, alcohol, sugar, wooden boats, metal tools, and tea-all previously supplied by American traders. And at first, the Soviets had none to offer. In 1925, the president of the local revolutionary committee wrote to Moscow frustrated by "the absence of ammunition, without which there is little to keep [the native people] from starving."55 Years of civil war turmoil had left few Soviet ships to haul freight from Vladivostok. As one comrade told a grumbling Yupik audience, "our artel lacks equipment, motors, whaleboats. We have made a request, but the answer is still no."56

In the 1930s, the answer from Vladivostok and points west started to be *yes*. Soviet control over the means of survival—the newly arrived motors, guns, and ammunition—was an excellent tool for recruiting *kolkhoz* members. Once a hunter joined a collective farm, the shift to state-mandated annual hunting targets and plans for catch distribution was not an unbearable intrusion into community life. The coastline saw none of the open violence that met collectivization among tundra reindeer herders just a few miles inland and among peasants across the country.⁵⁷ A few Yupik and Chukchi men and women were charged with practicing shamanism, since the Soviets were ideologically

⁵⁴ GARF, f. 3977, op. 1, d. 11, l. 40.

⁵⁵ GARF, f. 3977, op. 1, d. 811, l. 85b.

⁵⁶ RGIA DV, f. R-2413, op. 4, d. 974, l. 11.

⁵⁷ The reindeer-herding Chukchi who lived on the Chukotka Peninsula tundra fought collectivization through the 1940s. See Bathsheba Demuth, "More Things on Heaven and Earth: Modernism and Reindeer in Chukotka and Alaska," in Dolly Jørgensen and Sverker Sörlin, eds., *Northscapes: History, Technology, and the Making of Northern Environments* (Vancouver, B.C., 2013), 174–194.

committed to replacing spiritual belief with communist rationality, and traditional leadership with party fealty. Rituals meant to honor and appease walrus souls went underground. Parents kept traditions from the eyes of their children, some of whom became devoted communists.⁵⁸ By the late 1930s, virtually all of the villages along the Chukotka coast had organized their economic life along Soviet lines.

As the Yupik and coastal Chukchi moved into collectives, the state mission for the collectives went from gradual improvement to radical transformation. The new urgency came from Moscow. Joseph Stalin, now the leader of the USSR, called for cultural revolution—a rapid conversion of all peasant and nomadic economies into collectives, and all peasant and nomadic customs into scientific, rational, communist norms. In Chukotka, as one Committee of the North member wrote, there was no longer space for people who, "because of their extreme backwardness, cannot keep up either economically or culturally with the breakneck speed of the emerging socialist society."⁵⁹ Plans for gradual progress were abandoned in the era of Stalin's Five-Year Plans, because of the necessity of keeping up.

Keeping up meant producing more. Neither Marx nor Lenin offered a precise description of what real existing socialism would look like. As peasants, factory workers, and walrus collectives alike scrambled to prove their commitment, ever-expanding annual production became a concrete, quantifiable way to indicate progress. Walrus harvests were no exception. Through the 1920s, collectives killed fewer than 1,500 walrus per year on average.⁶⁰ By the mid-1930s, local leaders and national planners alike were underwhelmed. Party meetings devoted endless minutes to plotting how to increase, standardize, and routinize walrus oil production. A typical report noted that *kolkhozy* needed to "streamline and strengthen the fisheries' ability to harvest raw materials . . . especially with powerful motors."⁶¹ Two small ships, the *Temp* and the *Nazhim*, began hunting walrus at sea in 1934 to assist shore-based collective brigades. The goal was efficiency; one party official worried that "60% of sea animals killed—seal, bearded seal, walrus—remain in the sea, especially in spring and summer," when they were hunted from open boats, which wasted useful fat and needlessly killed animals.⁶² Traditional methods of processing left walrus unbutchered, reducing "the quality of the products (hides and meat)."63 What blubber was salvaged often went for dog food, which diverted fat from use in more sophisticated, mechanical "technological applications."⁶⁴ Even walrus were called upon to lubricate the Stalinist drive to industrialize.

By the late 1930s, new equipment and new commitment made progress toward communism appear to be a numerical fact. Collectives did not just meet their annual targets,

⁵⁸ Andrei Kukilgin interview in Igor Krupnik, Pust' govoriat nashi stariki: Rasskazy aziatskikh eskimosoviupik, zapisi 1977–1987 gg. [Let Our Elders Speak: Stories of Asian Yupik Eskimos, Records from 1977– 1987] (Moscow, 2000), 267.

⁵⁹ Anatolii Skachko, "Problemy severa" [The North's Problems], *Sovetskii sever*, no. 1 (1930): 15–37, here 33.

⁶⁰ The records from these years are incomplete, unlike later Soviet walrus tallies. For the summarized counts of walrus harvested, see Igor I. Krupnik and Ludmila S. Bogoslovskaia, *Ecosystem Variability and Anthropogenic Hunting Pressure in the Bering Strait Area* (Washington, D.C., 1998), 109.

⁶¹ RGIA DV, f. R-2413, op. 4, d. 974, l. 128. These collectives also hunted other marine mammal species.

⁶² Gosudarstvennyi arkhiv Magadanskoi oblasti (State Archive of the Magadan Oblast'), Magadan, Russia [hereafter GAMO], f. R-12, op. 1, d. 14, l. 8.

⁶³ GARF, f. A-310, op. 18, d. 329, l. 51.

⁶⁴ GARF, f. 3977, op. 1, d. 11, l. 40.



FIGURE 4: Cooperative store in Naukan, Chukotka, between 1927 and 1929. Peter the Great Museum of Anthropology and Ethnography (Kunstkamera), Russian Academy of Sciences, *II*-115-101.

they exceeded them. In their open boats, Chukchi and Yupik brigades became heroes of socialist labor. Onshore, communism appeared in other ways: schools opened along the coastline, filled with students who, as one early pupil recalled, initially "didn't understand a word" of Russian but learned to read in old traders' cabins with "nothing more than a blackboard."⁶⁵ Party members discussed the need for hospitals, apartment blocks, and electricity. Marxist study replaced public hunting rituals. But at the base of all this giddy change, for the communist missionaries and perhaps for their converts, was the capacity to "hunt, slaughter, and process marine mammals, and render fat."⁶⁶ Over 5,000 animals were killed in 1935 by *kolkhoz* members hunting from shore, and nearly 1,500 more at sea.⁶⁷ By 1938, the catch grew to more than 8,000 walrus, a number not seen since the commercial hunts of the nineteenth century.⁶⁸ If production signaled progress toward utopia, the missionaries of the revolution had, it seemed, remade the world on their terms. Each new gallon of fat made it evident—irrefutable, even—that communist history was escaping the dictates of nature.

⁶⁵ V. Veyi, "Razkaz Veyi" [The Story of Veyi], in N. B. Vakhtin, *Iazyk sirenikskikh eskimosov: Teksty, grammaticheskie i slovarnye materialy* [The Language of the Sireniki Eskimos: Texts, Grammar, and Dictionary Materials] (Munich, 2000), 16.

⁶⁶ RGIA DV, f. R-2413, op. 4, d. 974, l. 87.

⁶⁷ Krupnik and Bogoslovskaia, Ecosystem Variability and Anthropogenic Hunting Pressure in the Bering Strait Area, 109; Francis H. Fay and C. Edward Bowlby, comps., The Harvest of Pacific Walrus, 1931–1989 (Anchorage, Alaska, 1994), 20. Walrus hunting in particular and marine biology in general do not appear to have been inflected by the "Stalinist environmentalism" in the 1930s that Stephen Brain identifies in Song of the Forest: Russian Forestry and Stalinist Environmentalism, 1905–1953 (Pittsburgh, 2011), although the rapaciousness credited to Soviet planners by Josephson in The Conquest of the Russian Arctic conceals the more complex nature of utopian desires, best discussed by Bruno in The Nature of Soviet Power.

⁶⁸ Fay and Bowlby, *The Harvest of Pacific Walrus*, 20.

By THE MIDDLE OF THE 1930s, the walrus born on the eve of the Russian Revolution was bringing her own small contribution of calves into the world. When migrating through Soviet waters, she and her progeny faced the dangers of the collective hunts. As they had with capitalist threats, this new generation of walrus learned to flee boats and the smell of gunpowder. Soviet biologist P. G. Nikulin described how "the whole mass of the herd" on the beach at Inchon fled toward the water "when hunters approached them," and on the *Nazhim* he saw females and their calves swim away from the sea ice "when the first shot was fired."⁶⁹ Planners noted that carcasses left on beaches "partially deterred walrus" from returning.⁷⁰ But in the 1930s, even a clever and fast cow could not shield every pup. To feed and breathe, the herds had to stay close to the edge of the sea ice or onshore near beds of clams, where they were vulnerable to becoming a bloody trail on the ice and a bloodless statistic in a *kolkhoz* account book.

In the Soviet Union, the value of a walrus was clear: when it was dead, it could be counted toward making communism. In the United States during the 1930s and 1940s, how states and markets should manage walrus was a more open question. Where the Soviet Union expected the plan's numerical goals to keep increasing, marking the upward material climb toward utopia, many BIA bureaucrats and local teachers were struggling with how to make the metabolic ideas imported from temperate places and industry work in Beringia. The BIA saw the ability to make a profit in the market as a prerequisite for individual progress. Profit allowed for personal material security and liberty, and enabled people to contribute to thriving national abundance by providing things needed and desired by a growing nation. But the options for making profits remained as limited for Yupik and Iñupiat in the 1930s as they had been for the previous fifty years: there was trapping, plus some reindeer-herding or mining work, and there were walrus tusks—only a few hours of butchering away from cash.

Legally, however, hunters could sell the tusks only of animals they killed for food, and they could do so only in years when the federal bureaucrats did not ban ivory exports from the Alaska Territory altogether. The government valued the energy in walrus bodies for its sovereign and fiscal utility: the calories that kept the Native soul and body together without federal subsidies. "To take away their walrus," one report noted, "would require placing them on a dole."⁷¹ In managing walrus energy in order to ensure its continued presence, federal law was curtailing most hope for profits. But death and its products were open to interpretation: Who could say whether or not a piece of ivory came from a subsistence kill? The Coast Guard lacked the personnel to certify that every animal was eaten. So along unpatrolled stretches of the shore, hunters ignored the Game Law. A small, partly illicit trade turned Native-harvested ivory into profit throughout the 1920s and 1930s, allowing families to buy necessities—the rifles, ammunition, and motorboats that had become critical to the hunt.⁷²

Thus some people subverted the Game Law out of practicality. For others, dissent

⁶⁹ GARF, f. A-310, op. 18, d. 191, l. 10.

⁷⁰ GARF, f. A-310, op. 18, d. 329, l. 51.

⁷¹ F. A. Zeusler to Claude Hirst, August 19, 1936, Alaska Reindeer Service Administrative Correspondence, 1934–1953, RG 75, National Archives and Records Administration branch, Anchorage, Alaska [hereafter NARA AK]. (This branch has since closed, and the records were relocated to Seattle.)

⁷² Statement of John Buckland, October 9, 1914, Reports and Related Records, 1869–1937, RG 22, Entry 91, NARA MD; Statement of Ira Rank, October 31, 1928, Reports and Related Records, 1869–1937, RG 22, Entry 91, NARA MD.

was ideological. There was not a robust federal presence along the Alaska coast, but a small number of traders, teachers, missionaries, and bureaucrats tended to stores, schools, and sovereignty. Many valued how walrus connected the Yupik and Iñupiat with the market. Much as blubber helped make Yupik and Chukchi part of the communist project, walrus could inspire Native Alaskan participation in the national capitalist rites of commerce. The BIA in particular wanted to make Natives into capitalist citizens. Self-sufficiency through the production of commercial profit was critical to both. Without access to some facet of economic growth, Alaska's northwest coast might never enter the flow of American progress. One teacher reported that he could justify "the killing of large numbers of walrus because they form a large part of the livelihood of these peoples."⁷³ Benedict Lafortune, a Catholic missionary, wrote that "were it not for [the ivory] all the King Islanders would have to be put on relief. The seals give them their food and fuel, and the walrus give them their clothes and ammunition and outboard motors etc. etc."⁷⁴ In this view, strict conservation risked starving the Yupik and Iñupiat both physically and politically, preventing them from being independent Americans.

By the 1930s, the need for walrus commerce was creeping into policy. In 1936, the Indian Reorganization Act, which brought New Deal programs to the BIA, was extended north with the Alaska Reorganization Act (ARA). Along with ARA initiatives to foster self-government and bring services to remote areas, another New Deal program, the Indian Arts and Crafts Board (IACB), began operation in Alaska. Tasked with connecting Indigenous ivory-carvers and other artisans with consumers outside Alaska, the IACB was able to sell "very high quality" carved ivory "at prices which we first doubted would be received," one letter to King Island's store reported, especially statues "of the bear scenes" or dogs, which "are always in demand."⁷⁵ The raw material in these carvings was supposed to come from subsistence kills. But the ability to turn a bearhunting scene into credit at the local BIA store reinforced the value of ivory as separate from the need for walrus blubber and meat. By 1945, sales of carved tusks from Alaska had climbed from \$30,000 in the early 1940s to about \$100,000.⁷⁶

The federal agencies in charge of surveying the walrus herds—the Bureau of Biological Survey and later the Fish and Wildlife Service (FWS)—responded with alarm. "The Indian Service," one report noted, "has been endeavoring to stimulate natives to carry on their old crafts more extensively"; the result "has increased the killing of these great animals over that which took place when the natives killed for meat and skins, with ivory more or less a secondary consideration."⁷⁷ The historical experience of market hunting and contemporary ignorance abetted these concerns. While the Soviet Union tallied every walrus killed and the disposition of its parts into blubber, hide, and tusks, the U.S. kept no such records. Some bureaucrats assumed "the propensity of the Eskimo to shoot at anything he sees."⁷⁸ In the 1930s and 1940s, reports of headless wal-

⁷³ C. Sullivan to Claude Hirst, September 17, 1936, Alaska Reindeer Service Administrative Correspondence, 1934–1953, RG 75, NARA AK.

⁷⁴ B. Lafortune to Claude Hirst, August 18, 1939, Alaska Reindeer Service Administrative Correspondence, 1934–1953, RG 75, NARA AK.

⁷⁵ Don Foster, General Superintendent, to Peter Mayne, June 23, 1949, Bureau of Indian Affairs, Juneau Area Office, RG 75, Decimal File 997.4, file: King Island Native Store, NARA AK.

⁷⁶ James W. Brooks, "The Pacific Walrus and Its Importance to the Eskimo Economy," *Transactions of the North American Wildlife Conference* 18 (1953): 503–511, here 506.

⁷⁷ Untitled report, no author or page numbers, 1946, RG 22, Entry 246, NARA MD.

⁷⁸ Albert Heinrich to Clifford Presnall, March 20, 1945, RG 22, Entry P-285, NARA MD.

rus found along the coast prompted "investigations of the killing of walrus apparently for the ivory tusks only," wasting the energy and future of the herds.⁷⁹

The results were far from conclusive. Privately, Native hunters learned from their parents to kill with prudence and respect; an excessive hunt would send surviving walrus "to their own kind to report on how they had been treated," and the herds would abandon people altogether.⁸⁰ To their government questioners, Yupik and Iñupiat denied killing more walrus than they needed. But the definition of need varied. The Yupik of Gambell, on St. Lawrence Island, passed a local ordinance to limit their kills, while one teacher reported that "natives from King Island and Diomede" seemed "rather boastful" about large harvests of ivory that let "tons and tons of meat go to waste."⁸¹ Alaska's assistant superintendent for education disagreed. "Eskimos do not promiscuously kill walrus, or any other Arctic animal," he wrote. "They hunt for food and the ivory is only incidental."⁸²

In the 1940s, this concern and confusion intensified. With the bombing of Pearl Harbor and Japanese landfall in the Aleutian Islands, military personnel filled remote villages. The market "for both carved and uncarved ivory" surged, "and thus stimulated the harvest of walruses."⁸³ The federal government remained uncertain whether this development was a boon or a tragedy, as world war gave way to cold war, which only increased the need for good capitalist citizens on the margin of American territory. J. Edgar Hoover worried about the loyalty of Bering Strait residents.⁸⁴ Ideological fealty of the few people able and willing to live along America's closest border with Russia took on new urgency.

Thus walrus herds were a potential solution to the twinned missions on the capitalist frontier. American progress turned on selling the surplus manufactured by personal labor for profits—profits that freed individuals from outside influence and thus allowed them to fully participate in democratic politics. It was the open presence of markets and the minimal presence of the state that distinguished capitalists from communists. Walrus were the raw stuff of such freedom, a source of value in a place that did not surrender much to commerce. Better, they surrendered that value best to people who the state believed most needed the civilizing influence of market participation. Selling ivory was a critical part of rolling back Indigenous otherness. This was an argument for unrestrained hunting, for letting the perceived wisdom of the market lead Yupik and Iñupiaq villages to a better life.

Yet the habits of walrus made this difficult. They breed slowly, taking years to siphon enough energy from the Bering Sea to reach maturity. This energy in turn had a role

⁷⁹ Harry Slattery to the Secretary of State, December 17, 1938, Alaska Reindeer Service Administrative Correspondence, 1934–1953, RG 75, NARA AK.

⁸⁰ Margaret Seeganna, quoted in Lawrence Kaplan and Margaret Yocom, eds., *Ugiuvangmiut Quliap-yuit—King Island Tales: Eskimo History and Legends from Bering Strait* (Fairbanks, Alaska, 1988), 25. Seeganna was born in 1914 and spent her childhood on King Island.

⁸¹ Henry G. Ramsey to C. W. Hawksworth, February 27, 1939, Alaska Reindeer Service Administrative Correspondence, 1934–1953, RG 75, NARA AK.

⁸² C. W. Hawksworth to W. Zimmerman Jr., March 13, 1939, Alaska Reindeer Service Administrative Correspondence, 1934–1953, RG 75, NARA AK.

⁸³ John L. Buckley, *The Pacific Walrus: A Review of Current Knowledge and Suggested Management Needs* (Washington, D.C., 1958), 2.

⁸⁴ On Cold War diplomacy and its aftermath, see Michael Krauss, "Crossroads? A Twentieth-Century History of Contacts across the Bering Strait," in William W. Fitzhugh and Valérie Chaussonnet, eds., *An-thropology of the North Pacific Rim* (Washington, D.C., 1994), 365–379.

not just as an abstract commodity, but as immediate, necessary calories for human consumption. Many remote Native villages were "so dependent on the walrus for food . . . ," one biologist wrote, "that they probably could not exist without this resource unless substantial government assistance were provided."⁸⁵ Since no citizen in beggar's bondage to the state could be free, avoiding the federal dole was critical ideologically. It was also fiscally prudent. Thus, independent Yupik and Iñupiat needed walrus for food. Killing walrus for food, by the middle of the twentieth century, required money. Money meant selling walrus ivory. Too much walrus ivory sold meant not enough walrus to eat. In the 1950s, as in the 1930s, as in the 1910s, the state struggled to articulate a relationship with animals that balanced energy for food and energy—or ivory—for profit. Walrus were both the basis of personal freedom through market participation and the cause—if hunted again to rarity—of unfree federal dependence. The herds and their killers had to be both of the market and outside it.

In 1941, Congress attempted to resolve this tension by replacing the Game Law with the Walrus Act.⁸⁶ The new legislation retained the Natives-only restriction on walrus hunting, but walrus were no longer considered to be game; instead they existed in a middle place between full participation in and full exclusion from commercial valuation. While selling raw ivory was illegal, carved ivory could enter the marketplace. Later amendments allowed Yupik and Iñupiaq hunters to sell hides as well, but never fat or meat: walrus calories were not for the market, only walrus byproducts. It was a legal innovation meant to privilege both particular uses and particular users of walrus, and thereby limit the possible appetite for their fatty bodies.

Not all observers were comfortable with making an exception for the herds or their hunters. "Are we giving the natives the fairest chance to improve their social and civil status by denying them the obligations inherent in citizenship?" biologist James Brooks wondered, arguing that the walrus legislation created "racial classes" without solving the underlying economic conditions that provoked hunting for cash and the "waste [of] tons of valuable meat and oil."⁸⁷ But the compromise between the universal aspiration of democratic capitalism to include all citizens in profitable production and the constraints of walrus life remained the law. It was an admission that faith in supply and demand had not, historically, worked in Arctic waters. The market asked more than the ocean could give, leaving caloric absence instead of growth. To curtail the energy extracted from northern seas, Yupik and Iñupiat were made different in order to participate in the civic and economic sameness of commerce.

OVER THE COURSE OF a year, an adult walrus and her cubs move with the ice: north through the Bering Strait in summer, back south with the advancing pack ice in winter. Their course follows currents and winds, and places for rich feeding, with no consciousness of human borders. By the middle of the twentieth century, walrus migrated through the uneven geography of risk that Soviet and American policy drew onto the Bering

⁸⁵ Brooks, "The Pacific Walrus and Its Importance to the Eskimo Economy," 506.

⁸⁶ The legislation was amended in 1956 to give the BIA and FWS additional control over hunting quotas and enforcement.

⁸⁷ G. Collins, "Report on the Pacific Walrus," 1939, Juneau Area Office, 1933–1963, RG 75, NARA AK. See also James W. Brooks to Honorable E. L. Bartlett, February 2, 1956, ibid.

Sea. In any given year, they passed from the comparative safety of capitalist waters, where killing walrus was a limited privilege, into communist space, where the Motherland needed every kind of body.

The communist need for energy was particularly acute after 1941. Hitler's invasion of the Soviet Union left, as the commander of the Soviet whaling fleet N. A. Egorov described it, "an insufficient supply of fat in the country."⁸⁸ Calories were at a premium, for fuels and for food. Egorov's solution was to increase the marine mammal kill. It was not an easy plan to realize. By the onset of the war, the Chukotkan walrus harvest was in decline from its 1938 high. Hunters managed to kill only about 4,500 animals in 1940, and almost a thousand fewer the following year.⁸⁹ In 1942, *kolkhozy* in Chukotka harvested less than half the number of walrus dictated by the plan.⁹⁰ Kolkhoz managers did not ascribe this to overharvesting, blaming instead motors that were "not designed for continuous operation with a heavy load" or that had been exposed to "rain and damp, not to mention the storms that happen so frequently in the northeastern sea."91 Other reports complained about faulty or insufficient ammunition, boats so old they had been purchased from American traders in the prior century, or outdated methods of rendering blubber. While Moscow mulled over what equipment to send north, hunting brigades continued to go out to the ice—rarely satisfying the directives of their kolkhoz plans, but always with the expectation that they could.

The idea that technological backwardness was impeding the inevitable walrusfueled future only intensified after the war. In the early 1950s, especially after the death of Stalin, the Arctic became subject to economic and social reforms meant to integrate the cold periphery into the Soviet body politic. Nikita Khrushchev closed most of the Gulag, the Stalinist method of peopling much of the Far North, and enticed settlers from southern Russia with high salaries. Economic production was also reorganized. Small *kolkhozy* merged into larger, and in communist terms more advanced, *sovkhozy*, where the state, rather than the local collective, was the final owner of all infrastructure and production. Chukotkan collectives contracted from forty-six farms to twenty-six in the 1950s. Some of these villages were likely closed to make the border less permeable.⁹² All along the coast, Yupik and Chukchi were uprooted and moved to new villages, sometimes several times in the course of a decade.

The reason for the *ukreplenie* (consolidation) was to further the advance of communism, and with it to increase production. Among Chukotka's walrus brigades, the language of Khrushchev's economic reforms borrowed from industrial factory work, with awards given to hunters who applied "Stakhanovite work practices by exceeding the annual production plans."⁹³ Some Yupik and Chukchi hunted from shore with new motors and harpoons and metal boats, launching from the new and unfamiliar shorelines of new and unfamiliar villages. Other coastal people no longer hunted at all. A new pelagic

90 GAMO, f. P-22, op. 1, d. 122, ll. 4, 81.

⁸⁸ GARF, f. R-5664, op. 46, d. 1137, l. 2.

⁸⁹ Fay and Bowlby, *The Harvest of Pacific Walrus*, 20.

⁹¹ GAMO, f. P-22, op. 1, d. 213, l. 71.

⁹² That security was on the minds of planners seems especially likely given that the two villages with the most connections and the closest historical ties to Alaska—Naukan and Chaplino—were closed. Krupnik and Chlenov make a similar observation regarding the lack of open discussion of security by the state in *Yupik Transitions*, 271.

⁹³ GAMO, f. P-12, op. 1, d. 84, l. 107. Stakhanovites were exceptionally productive workers.



FIGURE 5: Butchering walrus on the ice, near Uelen, Chukotka, 1965. Peter the Great Museum of Anthropology and Ethnography (Kunstkamera), Russian Academy of Sciences, И-2090-076.

vessel killed walrus by the hundreds, the mostly non-Native crews hauling blubber to mechanized rendering facilities staffed by former Yupik and Chukchi hunters.⁹⁴ The results left Indigenous Chukotkans feeling, as Vladimir Tagitutkak recalled, that "nothing was as it should be" because "I didn't hunt anymore."⁹⁵ But for the Soviet state, concerned with raw production, not raw feelings, the post-Stalin policies substantiated the logic of socialism: the early 1950s saw a surge in the number of walrus killed. Over 5,000 animals were harvested by ships and collectives in 1955 alone.⁹⁶

As the second decade of intensive Soviet harvests passed into the early years of a third, the Bering Strait walrus were in precipitous decline. By the mid-1950s, Soviet blubber production had likely cut the herd in half.⁹⁷ While American scientists fretted over their incomplete catch statistics, blamed Native Alaskan hunters for killing too many walrus, and worried about the lack of information about walrus migration through international waters and the "probably substantial hunting pressure" on the Soviet side of the border, Soviet marine biologists knew both the extent and the cause of the decline.⁹⁸ They had begun observing Chukotka's walrus in the 1930s, and they had

⁹⁴ See Krupnik and Chlenov, Yupik Transitions, 282–283.

95 Krupnik, Pust' govoriat nashi stariki, 218.

⁹⁶ Krupnik and Bogoslovskaia, Ecosystem Variability and Anthropogenic Hunting Pressure in the Bering Strait Area, 109.

⁹⁸ James W. Brooks to Alaska Native Superintendent, April 7, 1952, Juneau Area Office, 1933–1963, RG 75, NARA AK.

⁵⁷ Francis H. Fay, Brendan P. Kelly, and John L. Sease, "Managing the Exploitation of Pacific Walruses: A Tragedy of Delayed Response and Poor Communication," *Marine Mammal Science* 5, no. 1 (1989): 1–16, here 4.

thorough catch records; the count of dead walrus, like the count of anything else associated with production, was documented in *kolkhoz* records. As early as 1939, biologists had warned that the "weak rate of reproduction" by female walrus meant that "intensive fishing may lead to rapid depletion of the herd."⁹⁹ Almost two decades later, hunters found fewer walrus on the sea ice. Habitual beaches were empty, because of either low numbers or the animals' learned fear of the brigades; "out of 33 former coastal concentrations on the Chukotsk Peninsula only 3 were [still populated] in 1954."¹⁰⁰

Walrus had stopped doing their part to fulfill the promise that socialist production would continue to grow. It was an uneasy position ideologically. Marx had promised utopia when humans bent the non-human world to serve human needs. Soviet practice conflated increased production with serving people, whether the products were needed or not.¹⁰¹ Falling productivity signaled communist retreat.

Yet, by the mid-1950s, even as walrus kill totals increased with the use of postwar equipment, the Soviet Union began to actively consider changing its walrus management. A thaw in international communication helped boost the growing concerns of local hunters and biologists to the status of a federal managerial issue. In 1954, a year after Stalin's death eased restrictions on Soviet scientists' travel, a delegation went to the annual meeting of the International Union for the Protection of Nature (IUPN). For American biologists, still hoping that a treaty would "protect the perpetuation of [the walrus] resource," the meeting was a chance to advocate for a complete census of the herd and more basic research.¹⁰² For the Soviets, it showed that concern about Arctic species was global, and perhaps even worse in parts of the capitalist Arctic, making conservation an issue of "high urgency and not just internal, but international, importance."¹⁰³ Walrus conservation offered a chance to make the USSR a world leader in "a matter of economic and scientific concern."¹⁰⁴

Thus, while socialism generally meant more production, it could also mean comparatively *smarter* production. The IUPN report showed that "capitalist and colonial countries" had experienced "the profound and irreversible depletion of natural resources . . . before they realized the need for conservation. The Soviet Union cannot and should not

ing. ¹⁰¹ See, for example, Karl Marx, "Economic and Philosophic Manuscripts of 1844: Selections," in Robert C. Tucker, ed., *The Marx-Engels Reader* (New York, 1978), 66–125, here 76; and Marx, "*Capital*, Volume One," ibid., 294–438, here 345.

¹⁰² James W. Brooks to Alaska Native Superintendent, April 7, 1952, Juneau Area Office, 1933–1963, RG 75, NARA AK; "Arctic Fauna: Proceedings of Meeting," in International Union for the Protection of Nature, *Proceedings and Papers of the 5th Technical Meeting at Copenhagen, 1954, on Arctic Fauna and Effects of Modern Insecticides on Mammals, Birds and Insects* (Brussels, 1956), 15–16. The International Union for the Protection of Nature, as it is known today.

¹⁰³ Rossiiskii gosudarstvennyi arkhiv ekonomiki (Russian State Archive of the Economy), Moscow [hereafter RGAE], f. 544, op. 1, d. 32, l. 1. Douglas Weiner shows how the ability to collaborate with foreign colleagues helped boost the community of conservation-minded scientists and others interested in environmental protection after 1953; *A Little Corner of Freedom*, chap. 12.

¹⁰⁴ International Union for the Protection of Nature, *Proceedings and Papers of the Fourth General Assembly Held at Copenhagen (Denmark), 25 August to 3 September 1954: Statutory Meetings* (Brussels, 1955), 63.

⁹⁹ GARF, f. A-310, op. 18, d. 191, l. 8b.

¹⁰⁰ S. E. Kleinenberg, "Ob okhrane morzha" [On the Protection of Walrus], *Priroda*, no. 7 (1957): 101–103; English trans. by D. E. Sergeant, Fisheries Research Board of Canada Translation Series No. 199 (1959), http://www.dfo-mpo.gc.ca/Library/148781.pdf, quote from 5. Soviet production numbers are voluminous but unreliable, but it is clear from all reports, American and Soviet, that herds were decreasing.

repeat this path."¹⁰⁵ To achieve this, "the indiscriminate hunting and unjustified destruction of valuable fauna by the employees of polar expeditions, research stations, and residents of industrial settlements" would have to cease.¹⁰⁶

But walrus, and a select group of other wildlife, were an exception in the Soviet 1950s and 1960s. Khrushchev's reforms in particular came with intensified impact on both agricultural land and industrial space across the Soviet Union.¹⁰⁷ When Yupik hunters and marine biologists recommended restraint, they hardly represented a movement. Nor was it simply the power of transnational scientific communication: connections with foreign experts did not allow Soviet cetacean biologists to press their case for reduced whale harvests.¹⁰⁸ But whereas whales could be-and mostly were-killed in the ocean far from Soviet waters and citizens, walrus were international animals that brought their energy to national shores. And on those shores, the results of everexpanding Five-Year Plans risked undercutting caloric sovereignty. The state metabolism was stuttering, as "the significant reduction in the number of walrus," the Academy of Sciences reported to the Council of Soviets, was having "a very painful impact on the condition of the local indigenous population of the Chukchi and Eskimo, for whom walrus hunting provides necessary food and household items."¹⁰⁹ As in the United States, the Soviet options in the absence of walrus were subsidies or regression to the sort of dire poverty that the socialist state had defined itself by eliminating. If Soviet civilization required keeping Chukchi and Yupik villagers fed, if keeping them fed required walrus, and if walrus reproduced slowly, then Soviet civilization in Chukotka rested on a curbed appetite for blubber.¹¹⁰ The role of the state became setting rather than transcending limits.

In 1956, at the urging of the Academy of Sciences, the Soviet ministers of the Russian Soviet Federative Socialist Republic, the largest of the USSR's constituent polities and generally the leader in legislation, passed a decree prohibiting industrial pelagic hunting. On land, only Yupik and Chukchi *kolkhozy* could kill walrus, and only for subsistence purposes. The purchase of fat, hide, and raw ivory by other organizations was prohibited, as was killing nursing females. It was a successful piece of Soviet environmental legislation, both enforced and effective. By the 1960s, only about a thousand walrus were being killed per year, and only by Indigenous hunters.¹¹¹ At the end of that

¹⁰⁵ RGAE, f. 544, op. 1, d. 60, l. 3. "Conservation" is an American term; Soviets generally used "nature protection."

¹⁰⁶ RGAE, f. 544, op. 1, d. 32, l. 13.

¹⁰⁷ The walrus were an early case of industrial expansion hitting limits, something Bruno identifies as a general trend in the 1970s; *The Nature of Soviet Power*, 174–175. On agriculture, see Aaron Hale-Dorrell, *Corn Crusade: Khrushchev's Farming Revolution in the Post-Stalin Soviet Union* (New York, 2019). Soviet walrus conservation prefigures some of the economic arguments used in the later, and much more influential, movement centered around protecting Lake Baikal; see Nicholas B. Breyfogle, "At the Watershed: 1958 and the Beginnings of Lake Baikal Environmentalism," *Slavonic and East European Review* 93, no. 1 (2015): 147–180.

¹⁰⁸ Indeed, Soviet factory ships killed whales at unprecedented rates beginning in the same years in which walrus harvests were reduced, despite Soviet participation on the International Whaling Commission. See Yulia V. Ivashchenko, Phillip J. Clapham, and Robert L. Brownell Jr., "Soviet Illegal Whaling: The Devil and the Details," *Marine Fisheries Review* 73, no. 3 (2011): 1–19; and Clapham and Ivashchenko, "A Whale of a Deception," *Marine Fisheries Review* 71, no. 1 (2009): 44–52.

¹⁰⁹ RGAE, f. 544, op. 1, d. 32, l. 13.

¹¹⁰ Kleinenberg, "Ob okhrane morzha," English trans., 4.

¹¹¹ Krupnik and Bogoslovskaia, *Ecosystem Variability and Anthropogenic Hunting Pressure in the Bering Strait Area*, 109.

decade, Soviet biologists could report that such "scientifically based . . . rational utilization of animals is indeed the most important way of conserving them."¹¹² On the shores of the Bering Sea, capitalist and communist environmental management states had evolved to resemble each other: the place of walrus in the Soviet Union mirrored, in everything but its rhetorical scaffold, the place of walrus in the United States.

IT TOOK TWO FORTY-YEAR walrus lifespans for the great ideologies of the twentieth century -the capitalist and communist visions of progress-to converge in their treatment of Pacific walrus. U.S. citizens began hunting walrus along the Bering Strait aggressively by the 1870s, only to have the state conclude early in the new century that however desirable the blubber stored in the great smelly bodies, the slowness of its creation necessitated conservation. The Soviets pulled walrus into their plans for the communist dream gradually in the 1920s, rapidly in the 1930s, and by 1960 had determined that not even socialism could make the herds infinitely productive. In the United States, with its devotion to productive liberty, not all were free to kill walrus; in the Soviet Union, where equality was ideologically paramount, not all had equal access to the hunt. Across the Bering Strait, capitalism and communism neither fully instituted their visions of endless growth nor simply failed. Around walrus bodies, they evolved. In 1972, this joint evolution became joint law in the Agreement on Cooperation in the Field of Environmental Protection, a framework for managing shared U.S.-USSR Arctic regions and wildlife. The agreement made bilateral a set of policies already extant on both sides of the Strait, restricting the walrus harvest to Indigenous subsistence, with limited sale of worked ivory.

The reasons for the confluence in policy were multiple, involving everything from Indigenous norms to networks of marine biologists. But it was also critically linked to the particular ecology of Beringia through the state's quest for energy. Ecological relationships are based on moving energy through space and across time, from the phytoplankton that fixes carbon, to the clam that filters plankton into its fatty stomach, to the walrus that eats the clam, to the people who consume the walrus. To use energy on the earth is to be alive. To use energy is also to enter into a state of dependence on other things: on plankton, sea ice, blubber; or on pasture, sunlight, steak. So while the United States and the Soviet Union began their projects of creating states and citizens in Beringia with different visions, their convergence was born out of a recognized mutual reliance on a shared ecology. No environmental management state could make walrus breed quickly enough to satisfy the Soviet plan or the American market at their most demanding.

As a result, rather than providing freedom from nature—a teleological escape through calorically intensive production and profit—the United States and the Soviet Union managed their respective visions of freedom in this particular case *with* nature. This adjustment was in small part the result of walrus exercising the kind of intentional agency that is often highlighted in animal histories, with the herds actively striving to save themselves from industrial hunting by fleeing or attacking.¹¹³ But more came from

¹¹² International Union for Conservation of Nature, *Eleventh Technical Meeting, Papers and Proceedings, New Delhi, India, 25–28 November 1969, 2 vols.* (Morges, 1970), 1: 119.

¹¹³ Excellent animal histories in this vein include Ryan Tucker Jones, "A Whale of a Difference: Southern Right Whale Culture and the Tasman World's Living Terrain of Encounter," *Environment and History* (2018), https://doi.org/10.3197/096734018X15217309861540; James Beattie, Edward Melillo, and Emily



FIGURE 6: After a walrus hunt, location unknown, 1962. Bob and Marie Logan slides, Archives and Special Collections, Consortium Library, University of Alaska Anchorage.

a kind of ecological agency, from Beringia's way of fixing and allotting energy among organisms, which curtailed the herds' ability to abandon the edges of ice and land where they fed, and circumscribed states' ability to feed on walrus.¹¹⁴ The trophic opportunities and limits of energy moving through Beringian space eventually shaped each state's environmental management.

In temperate places rich in fossil fuels or those not so distant from agriculture and industrial production, such metabolic dynamics are less obvious—or at least, their limiting implications are. To the south of Beringia, it has proved easier, thus far, to maintain the everyday lived illusion that human economies grow from the raw stuff of nature but separate from it, to let ecology recede behind new oil wells or hybrid seed crops. But Arctic extremity shows that modern energy-intensive states exist in a paradox: their modernity depends on managing environments for expanding human need, but the very act of extracting energy—the act of being an environmental management state—brings their ideals under the sway of the non-human.

For historians, this says something about states and nature both: namely, the two cannot be fully understood separately. Instead, states are ecological processes as much as ideological ones, shaped by an energy context that includes but is hardly confined to the use of particular fuels. This also offers a new angle on Soviet and American parallels. Historians and political theorists have long identified similarities in the Soviet and American projects—what Kenneth Pomeranz terms a "developmentalist" outlook.¹¹⁵ But in the Bering Strait, the convergence between capitalist and communist relationships with walrus emerged over time as the states adapted to their Beringian environments. Their similarity did not originate in a common Enlightenment faith in material progress, or not in that alone. Nor was it simply due to geography, in the sense that cold

O'Gorman, "Rethinking the British Empire through Eco-Cultural Networks: Materialist-Cultural Environmental History, Relational Connections and Agency," *Environment and History* 20, no. 4 (2014): 561– 575; and, more theoretically, Erica Fudge, "A Left-Handed Blow: Writing the History of Animals," in Nigel Rothfels, ed., *Representing Animals* (Bloomington, Ind., 2003), 3–18; and Zakiyyah Iman Jackson, "Animal: New Directions in the Theorization of Race and Posthumanism," *Feminist Studies* 39, no. 3 (2013): 669–685.

¹¹⁴ This idea of ecological agency comes, for me, from years of being taught to pay attention to the role of the non-human in human lives by Indigenous hosts around the Arctic, and the written work of Anders Apassingok Sr. and other Yupik and Iñupiaq elders. See, for example, Anders Apassingok, Willis Walunga, Raymond Oozevaseuk, and Edward Tennant, eds., *Sivuqam Nangaghnegha: Siivanllemta Ungipaqellghat/Lore of St. Lawrence Island: Echoes of Our Eskimo Elders*, vol. 1: *Gambell* (Unalakleet, Alaska, 1985); and Harry Brower Sr., *The Whales They Give Themselves*, ed. Karen Brewster (Fairbanks, Alaska, 2004). I make no claim to speak on their behalf in this essay or to represent the fullness of their worldviews, only to acknowledge, following Zoe Todd, my intellectual debts. See Todd, "An Indigenous Feminist's Take on the Ontological Turn: 'Ontology' Is Just Another Word for Colonialism," *Journal of Historical Sociology* 29, no. 1 (2016): 4–22. For academic readers who find Western theoretical traditions more accessible, see Bruno Latour and his idea of the "assemblage" in *Reassembling the Social: An Intro-duction to Actor-Network-Theory* (New York, 2005). Jane Bennett's vision in *Vibrant Matter: A Political Ecology of Things* (Durham, N.C., 2010) is also a useful starting place, although neither work is particularly concerned with the ethical implications of non-human relations (which are often at the core of Indigenous views), or about the movement of energy through ecosystems. For that, look to the ecologists.

¹¹⁵ Kenneth Pomeranz, "Introduction: World History and Environmental History," in Edmund Burke III and Kenneth Pomeranz, eds., *The Environment and World History* (Berkeley, Calif., 2009), 3–32, here 4. See also Susan Buck-Morss, *Dreamworld and Catastrophe: The Passing of Mass Utopia in East and West* (Cambridge, Mass., 2000); James C. Scott, *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed* (New Haven, Conn., 1998); and David C. Engerman, *Modernization from the Other Shore: American Intellectuals and the Romance of Russian Development* (Cambridge, Mass., 2003).

vastness conditions an authoritarian bent in Russian leaders, as Richard Pipes once argued, or enables American progress, in Fredrick Jackson Turner's frontier thesis.¹¹⁶ Geography as destiny, as in Pipes's argument, suggests that there will only ever be one way to live. Ecology as co-creator suggests instead that there are many ways—that, in fact, even universal aspirations splinter and re-form under the influence of the morethan-human world. The result is a diversity of capitalisms or communisms.

Capitalism and communism, diverse as they might have been in Beringia, still sent ripples outward into the lives of other beings, including walrus. After 1972, the Pacific herds took the space given by governmental concessions and filled it with new bodies. Over the next decade, new births returned the walrus population to the numbers that likely existed before the onset of commercial harvesting. Yet humans have not ceased to inveigh on the ice floe. Winters in the Bering Strait are now several degrees Celsius warmer than when whalers first killed walrus. Summers are longer. In 2018, open water appeared along the Bering Strait in February, three months early. It is another consequence of the global appetite for energy that revolutionized human and walrus life over the prior century, an appetite that has trailed tons of fossil fuel carbon into the atmosphere in service of a vision of human liberation from natural constraints. Yet here, where the retreating sea ice threatens the walrus, that vision again seems dubious. The question of the next decade is whether the remaining industrial ideology—capitalism—will recognize ecological particularity in time to make a new environmental policy, one able to salvage the basis of life melting from beneath the herds.

¹¹⁶ Richard Pipes, *The Russian Revolution* (New York, 1990); Pipes, *Russia under the Old Regime* (New York, 1974); Frederick Jackson Turner, *The Significance of the Frontier in American History* (Madison, Wis., 1894). I wish to thank one of my anonymous readers for pointing out this pairing. Douglas Weiner updates Pipes's sense of geological density and inverts Turner by arguing that Russian governance has been driven by the ability to always expand eastward, leaving a trail of destruction in its wake; see Weiner, "The Predatory Tribute-Taking State: A Framework for Understanding Russian Environmental History," in Burke and Pomeranz, *The Environment and World History*, 276–316.

Bathsheba Demuth is Assistant Professor of History and Environment and Society at Brown University, and has lived and worked across the North American and Russian Arctic. Her first book, *Floating Coast: An Environmental History of the Bering Strait*, is forthcoming from W.W. Norton in 2019. She holds a B.A. and M.A. from Brown University and an M.A. and Ph.D. from the University of California, Berkeley. Currently, she is working on a history of the Yukon River watershed.