

Breathing Room:

Climate Displacement, Biopolitics, and Indigenous Sovereignty in Northwest Alaska

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Abstract

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This dissertation is a critical, engaged ethnography of climate change displacement and contemporary Indigenous politics in the context of an intergenerational struggle for environmental justice, self-determination, and a future in Kivalina Alaska. It seeks to understand the impacts of climate change in historical context, especially in relation to settler and welfare colonialism. But it also broadly considers the question of what political options and practical strategies are being created by frontline Indigenous communities, like Kivalina, whose desires and needs exceed the capacity of existing institutions to adequately plan or provide, in the midst of unprecedented environmental change. Conversant with the environmental social sciences and the environmental humanities writ large, the dissertation offers a critique of prevailing approaches to climate risk, displacement, vulnerability and adaptation in the Arctic, while also articulating community-based modes of knowledge production grounded through a commitment to Indigenous sovereignty. It does this while also theoretically situating the bodily risks and structural violence of climate change in the context of contemporary Indigenous political theory and the particular genealogy of colonial biopolitics in Northwest Alaska. Above all, this dissertation is a testament to the strength and creativity of Kivalina's people who have, time and time again, maneuvered within, against, and beyond the entanglements of colonialism so as to hold open the possibility of a just, healthy, and self-determined collective future.

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This dissertation is dedicated to
the memory of
Lona Nasalik Swan,
“Momu” to all...

Preface

This project began with a question—not so much a “research question,” as a question of ethics, praxis, and right relationship. I was sitting around a large table in San Pedro de Macoris, at a conference center operated by the Episcopal Diocese of the Dominican Republic. The occasion was a theological dialogue on “climate justice” that I had organized during my tenure as Environmental Justice Missioner in the Bishop of California’s office in San Francisco. Gathering representatives of Episcopal and Anglican churches from across the Americas, we had envisioned an encounter around the question of how the relationships already present in our ecclesiastical communion, which was global in scope, could become the basis for projects of solidarity and mutual aid in the face of global climate change. Given the radical unevenness of climate impacts and disproportionate responsibility for those impacts between the Global South and North, how could we continue to be in spiritual communion with one another without also taking strides toward justice in our respective relationships to carbon pollution? What was our “climate debt” to one another?

One of our colleagues from Brazil had just given a presentation about a hydroelectric dam project where he was employed. The project was largely considered a “green energy” success, yet had untold negative impacts on local Indigenous communities. Knowing full well the human cost of even the most “sustainable development,” he shamed us of our own overconsumption by switching off the air conditioner, turning off the lights, and throwing the windows wide open. The heat was stifling, but our proximity to one another was heightened.

I had been ordained an Episcopal priest a few days before the gathering; I had also just applied to doctoral programs, where I proposed to pursue questions of climate ethics and justice in conversation with “frontline” communities. I envisioned my future scholarship as a

continuation of my commitments to liberation theology and environmental justice, but I hadn't yet settled on a geographical area or developed a relationship with any particular communities. Lynette Wilson, a journalist from the Episcopal News Service, had been dispatched to cover our meeting and brought with her the trailer for a film she was producing about a small Iñupiaq village on a barrier island in the Alaskan Arctic that was being displaced by climate change (Valdivieso and Connor 2010). The trailer included interviews with the Rev. Enoch Adams Jr. and Colleen Swan, two longtime leaders of this Iñupiaq community's relocation project—and also leaders in the Kivalina Epiphany Episcopal Church. Between interviews, the camera made long, slow pans of the island, interspersed with zoomed-in close ups of children's faces. The National sang, mournfully: "Leave your home, change your name..." I was captivated.

In spite of its soundtrack, the film portrayed a community that could not be reduced to its vulnerability. During her presentation Lynette spoke not only of Kivalina's relocation effort, but of the community's groundbreaking attempts to raise the hundreds of millions of dollars needed to accomplish the feat: a lawsuit against the global fossil fuel industry. Here was a community that was not only experiencing firsthand the world-altering affects of climate change, but was drawing a straight line between the harms they were experiencing and the beneficiaries of fossil fuel capitalism. Climate justice indeed! After her presentation, I asked Lynette about the time she had spent in Kivalina and what she knew about the lawsuit. "Actually," she said, "there will be a hearing in San Francisco soon and a group from Kivalina will be coming"

Once I returned home, I emailed Enoch and Colleen, introduced myself, and asked how the Diocese of California could support their upcoming visit. I also expressed my interest in discussing more long-term strategies for the Episcopal Church to support Kivalina's efforts. Though I would soon be leaving my position in the diocese to begin doctoral studies at the

University of Washington, I proposed a series of meetings while the delegation was in San Francisco. In November 2011 I flew to San Francisco from Portland, where I was living at the time, the same day the Kivalina delegation would be arriving. I met up with Bishop Marc Andrus and the late Michael Tedrick, a longtime Episcopal missionary and friend who had been a close collaborator on the Dominican meeting. We brought two pans of lasagna and a giant bowl of Caesar salad to a downtown hotel and set up the spread in small room off the main lobby. We ate together as the Bishop welcomed the delegation and offered a blessing for the work they had come to do. That evening I met Colleen and Enoch for the first time in person, as well as Janet Mitchell, Frannie Douglas, and Lucy Adams.

The next afternoon, after the morning's hearing at the 9th Circuit Court of Appeals, I had arranged meetings for the delegation with climate campaigners from 350.org, Rainforest Action Network, and Interfaith Power and Light. Attending these meetings gave me greater insight into the significance of what climate change had already done in Kivalina. In addition to threatening the barrier island, ice-dependent springtime whaling practices had become dangerous to say the least. I also learned of the decades of frustration Kivalina's leadership had experienced in working with federal and State governments and how climate change was what some scholars call a "threat multiplier," intensifying existing social challenges, political inequalities, and emerging on top of already existing environmental risks.

Seven months later I would travel to Kivalina for the first time, visiting these same leaders and working on a resolution to express solidarity with Kivalina at the General Convention of the Episcopal Church held that year in Indianapolis.¹ During that first trip, in June of 2012, I visited the friends I had met in San Francisco and introduced myself to several other

¹ See: https://www.episcopalarchives.org/cgi-bin/acts/acts_resolution.pl?resolution=2012-B023

community leaders. I spent my time following Reppi to check net; cutting fish with Janet, Marilyn, and Frannie; watching Colleen and Momu scrape the blubber from one ugruk (bearded seal) skin after another; laughing with Papa Joe; drinking coffee with Enoch, exploring the sea ice with Dennis and Ida; getting good coffee water from atop the sea ice with Uncle Jerry; and eating hotcakes made by Bertha at Aunty Lucy's. Through the conversations that accompanied all of these, I was also discerning whether there might be some way that a dissertation project could contribute to Kivalina's collective effort to build a flourishing, self-governing future in the face of climate change. I left Kivalina unsure of this, although these relationships would become the bedrock for future visits.

The formal context for my return to Kivalina began to construct itself about a month after I returned to Portland from that first visit. I received a phone call from Michael Gerace, an Anchorage-based architect and artist who was organizing a new project through the Alaska Design Forum. He was in Portland and wanted to know if I could meet for lunch—Colleen had told him to get in touch with me. "Sure," I said, realizing only in retrospect that several weeks earlier, Colleen had looped me into an email thread between herself, Michael, several city council members, and some of Michael's other collaborators. The project was called "Re-Locate," which among other things, sought "to provide context for and encourage dialog about culturally specific and community-led futures in Kivalina." Michael was assembling a group of "social artists" to travel to Kivalina in August and invited me to come along. I felt our meeting was providential and I later wrote my friends in Kivalina that I was "really impressed with his work, ideas, vision, and most of all his character and spirit." But having just returned from Alaska, I had to decline his invitation, though I pledged my interest in continuing the conversation. Later that month I had coffee with Jen Marlow, affiliate professor at the University

of Washington School of Law and founder of the climate justice project, Three Degrees Warmer. She had been my instructor for a climate justice seminar I had taken that winter and had a profound interest in supporting Alaskan village relocations. Michael had reached out to Jen, also on Colleen's recommendation, and she was trying to decide whether this was the right context for visiting Kivalina, a trip she had long wanted to make. She ultimately attended Re-Locate "Camp I" that August, and soon joined Michael as a co-lead curator of the project.

Over the next year, it became clear that Re-Locate was the collective undertaking that could provide context for my return to and ongoing engagement with Kivalina. I started working closely with Michael and Jen and returned to Kivalina for Re-Locate "Camp II" in July of 2013— this time as a project curator. In keeping with Re-Locate's effort "to make the social, political, and environmental issues related to relocation visible to global audiences," I also became attuned to the ways in which regional social, economic, and political dynamics that would effect Kivalina's future were already playing out everyday life—as well as how Kivalina's people were contesting, refusing, or navigating these entanglements. Over the last 8 years, I have returned to Kivalina 17 times, either with Jen, Michael, other Re-Locate collaborators, my wife Elizabeth, or on my own. This dissertation is but a glimpse—a way marker in the midst of these unfolding and ongoing relationships and collaborations. There is so much more to come.

Introduction: Arctic Anthropology at the Frontlines of Climate Change.

Papa Joe places his palms flat on the kitchen table and turns away from the map we've been annotating. Rising from his seat, he walks slowly down the short hall that connects the main living area of his house to four small bedrooms. I follow him as he directs my attention to a grainy printout of a color photo tacked to the wall. An overhead glimpse of the village in the 1960s shows the barrier island covered in grass and glowing a vibrant green. Two paths run the length of town with a few houses and tents scattered on each side. "When we first come to Kivalina," he explains, "you [were] free to build your house anywhere you wanted to."

Joe walks back to our map on the table where he traces the lines of seemingly arbitrary institutions: city, state, and corporate boundaries now make a convoluted jigsaw of Kivalina's homeland territory. He describes how he filled up his lot entirely, building houses for two of his ten living children, and how each of those homes is now packed with three generations. Joe shares his own house with a rotation of grandchildren and great-grandchildren. Nowadays, he tells me, "You cannot build, you got no more room for housing, nothing. If we don't expand or relocate... we have to move [away], that's the only choice that I think we have."

With that he takes a long, deep breath.

"Well... I'm still alive... but I need a breathing room... if we going to be living in this small village, [it's] just like there's no future for us."



Figure 0.1. Kivalina, 1960s



Figure 0.2. Papa Joe, January 2015

Kivalina today is a 500-person Iñupiaq community in Northwest Alaska located 83 miles above the Arctic Circle and perched atop a narrow, seven mile-long barrier island running between the Chukchi Sea and the Kivalina Lagoon. The village consists of about 90 homes, a school, store, post office, two churches, two small office buildings, a health clinic, and an airport—all packed together tightly with no room for young families to build a place of their own. Joe Swan Sr. has spent the better part of his life working for “breathing room”—not just for himself and his family, but also for the very future of Kivalina. In his lifetime he’s experienced the emergence of new colonial entanglements, economic forces, and jurisdictional boundaries that today attempt to limit the possibilities available to local decision makers: be they government officials, hunters, or youth. And he’s also seen how global climate change is intensifying these conditions, while creating unprecedented new challenges.



Figure 0.3. Kivalina, October 2016

For Joe, breathing room has both a literal and figurative dimension. Literally, he’s

speaking in a spatial sense. He wants to expand the village, to alleviate overcrowding, gain adequate housing, running water, and basic sanitation services. But figuratively, he's speaking in temporal terms: he's talking about Kivalina's widely shared desire to build a culturally specific, resilient, and self-determined future. Joe wants to create the conditions for his community to grow and to thrive: sustainable ecosystems, a healthy built environment, and opportunities for Iñupiaq young people to continue to learn from those who came before them.

This dissertation is a critical, engaged ethnography of climate change displacement and contemporary Indigenous politics in the context of an intergenerational struggle for environmental justice, self-determination, and *a future* in Kivalina. It is based on a cumulative 9-months of fieldwork over 17 visits to Kivalina between June 2012 and May 2019. Fieldwork has been grounded in my role as co-curator of Re-Locate, a collective of transdisciplinary scholars, artists, and professionals working with Kivalina's community leaders and local institutions to support a community-led and culturally specific village relocation.²

In 1905, through compulsory schooling, the U.S. Bureau of Education began a multi-decadal process that forced the semi-nomadic Kivallīñigmiut from their 2,180 square mile homeland territory and onto a seasonal hunting camp that remains the current site of the 27-acre village (Burch 1998). One hundred years later, another arm of the federal government would unwittingly concede failure in this project of spatial consolidation, assimilation, and “simplification” (Scott 1998). In 2006, the U.S. Army Corps of Engineers concluded that severe coastal erosion—radically accelerated by global climate change—would render Kivalina uninhabitable by 2021. With landfast sea-ice forming later and later each year, Kivalina's

² See: relocate-ak.org

coastline is no longer protected from seasonal fall storms. “We’re an adaptable people,” Colleen Swan once told me, “but since 2004, we just can’t adapt *this fast*.”³ That was the year pieces of the island began sheering off into the sea.

Kivalina is one of 31 Alaskan Native villages severely threatened by climate-related flooding and erosion (GAO 2009a), all in the context of enduring colonialism and neoliberal disinvestment. While longstanding federal recognition of Kivalina’s “imminent danger” (GAO 2003) has affirmed local experience, it has also failed to capacitate the community’s enduring desires and demands. Time and again, since the construction of the first school by the federal government, State and federal agencies with the obligation to ensure a basic standard of living in the region have cited the cramped and shrinking barrier-island itself as an obstacle to bringing running water, toilets, and “breathing room” to the overcrowded community. Within, against, and beyond existing constraints, the people of Kivalina have continued to pursue a self-determined and environmentally just future for themselves and their children.

In 1981, years before climate change became the primary driver of village relocation planning, a City of Kivalina survey affirmed the widespread desire to pursue a new village site as a strategy to meet these basic needs. After millions of dollars spent on decades of state-led planning, it is clear that relocation not a “technical” problem (cf. Li 2007) to be managed, but a political challenge requiring unheard of transformations. For all the ways that the “slow violence” (Nixon 2011) of climate change compounds the challenges of everyday life in Kivalina it has also presented an opportunity to renegotiate the political and economic constraints that have undermined local wellbeing for generations. The future that Joe and many others desire will requires creativity on many simultaneous horizons. Beyond moving buildings and infrastructure

³ Colleen is a globally recognized climate change expert and environmental justice advocate with nearly 20 years of experience in tribal governance.

away from the threats of climate change, relocation has also become a strategy to reclaim traditional territory, renegotiate unequal relationships, and to bolster locally specific land-based modes of life. As such, relocation planning can be understood as an expression of Indigenous sovereignty and a project of “collective continuance” (Whyte 2018).

This dissertation seeks to understand the impacts of climate change in historical context, especially in relation to multiple forms of colonialism, but especially the biopolitical logics of “welfare colonialism” (Paine 1977; Stevenson 2014) that have historically operated throughout Arctic North America.⁴ It also takes up the question of what political options and practical strategies are being created by frontline Indigenous communities, like Kivalina, whose desires and needs exceed the capacity of existing institutions to adequately plan or provide in the midst of unprecedented environmental change. Conversant with the environmental social sciences and environmental humanities writ large, the dissertation offers an ethnographic critique of dominant approaches to climate risk, vulnerability, and adaptation. Yet, beyond critique (TallBear 2014; Latour 2004), and with other scholars working from within spaces of governmental or social “abandonment,” it develops a mode of community-based knowledge production at the unarticulated “thresholds” of new forms of life (Povinelli 2011, 2012). It does this while also theoretically situating the bodily risks and structural violence of climate change in the context of contemporary Indigenous political theory and the particular genealogy of biopolitics in Northwest Alaska. Above all, this narrative is a testament to the strength and creativity of

⁴ My use of “biopolitics” and the “biopolitical” follows Lisa Stevenson, who uses Foucault’s concept to describe “a form of care and governance that is primarily concerned with the maintenance of life itself, and is directed at populations rather than individuals” (2014: 3). The logic of preserving life in minimal terms, she shows, has been a defining characteristic of colonial welfare regimes throughout the North American Arctic (see also Foucault 2003).

Kivalina's people who have, time and again, maneuvered within, against, and beyond the "entanglements" (Dennison 2012, 2017) of colonial intervention. Through the pursuit of "breathing room," Kivalina's people continue to hold open the prospects of a just, healthy, and self-determined future.

Critical Climate Adaptation and the Environmental Humanities

Throughout the last decade of rapid and charismatic environmental change around the world, the Arctic has come to be viewed in both popular and scholarly discourse as a region of novel global importance. Some scholars note that climate change has created new venues of geopolitical engagement for pan-Indigenous organizations like the Inuit Circumpolar Council (Fabbi 2012), still others have emphasized the ways in which the transformative potential of these new moments of recognition for Arctic Indigenous peoples have been structured or undermined by colonial tropes of vulnerability and risk (Martello 2008; Cameron 2012; Haalboom and Natcher 2012). At first glance, widespread global attention to the "plight" of Indigenous communities living with the melting Arctic might be seen as a welcome buffer against the forces of settler-colonial erasure that continue to imagine the region as a vast ahistorical wilderness absent of a truly civilizational humanity. However, such projects struggle to escape the "double-binds" that have historically constrained other "need-based" claims to Indigenous sovereignty in settler societies (Cattelino 2010). In other words, the participation of Arctic Indigenous peoples in the spaces created by settler institutions to address the twin issues of climate change mitigation and adaptation often requires the continual performance of Indigenous disempowerment—the figure of the "climate refugee" is only the most extreme example.

Prevailing interdisciplinary approaches to the "human dimensions" of climate change

have been challenged in recent years for their systematic exclusion of the kinds of interpretive and situated standpoints offered by the humanities and critical social sciences (Castree et al. 2014; Palsson et al. 2013). The scholarship of climate adaptation in the Arctic has been especially limited by its rapid assessment methods and positivist approaches to community “vulnerability” that fail to take seriously the lived experiences, histories, and creativity of local communities (Cameron 2012; Haalboom and Natcher 2012). In both popular and scholarly narratives, the complex lifeworlds of Arctic communities are very often problematically flattened, as Indigenous peoples are held up as mere bellwethers of the risk and loss stemming from global climate change (Bjørst 2012; Bravo 2009). Anthropologists, however, have called for a new kind of critical and collaborative “climate ethnography” that would approach community climate adaptation in light of local “perceptions, understandings, and responses” (Crate 2011: 185), and pay particular attention to local histories and politics of migration, settlement, or resettlement (Farbotko and Lazrus 2012; Marino 2012).

This project affirms and extends these approaches through a critical-participatory interpretation of local history (Chapters 1-3) that draws on a digital archive being designed and assembled in collaboration with Kivalina’s people and my Re-Locate colleagues (kivalinaarchive.org). In dialogue with this “living archive,” the dissertation situates contemporary climate risk and village relocation in Kivalina within a legacy of environmental violence, including land theft, nuclear testing, and toxic discharge from world’s largest lead and zinc mine. Although each of these has been a traumatic and “cumulative” threat (Peña 2011) to community wellbeing, the local endurance of, and constructive engagement with such threats has also given rise to an intergenerational consciousness and strategic practice that has pursued “relocation” as a collective struggle for political autonomy (cf. Peña 2005). The project,

therefore, both asks and demonstrates how critical social science and humanistic inquiry can beneficially augment the scholarship and practice of climate change adaptation.

Biopolitics After Recognition

Indigenous vulnerability to climate change, especially climate-induced displacement, raises several key questions for the analysis of Indigenous politics today. Village relocation projects throughout Native Alaska can be understood within wider trends of colonial governance in the United States, Canada, and other settler states around the world. Indigenous political theorists and critical anthropologists point to a contemporary shift whereby Indigenous “cultural difference and alterity” is now very often governed *through* “recognition” and multicultural inclusion, provided it “does not pose too appalling a challenge to norms of... settler society” (A. Simpson 2014; see also Povinelli 2002 and Coulthard 2007, 2014). Likewise, Indigenous communities are now widely consulted by climate scientists, adaptation planners, and policy makers for their intergenerational knowledge of environmental change, but these outside professionals too often attempt to isolate “traditional ecological knowledge” as a value-free dataset, cleansed of the normative principles, values, and practices that produce it, and to which it is connected (Cameron 2012; Nadasdy 2005; see also Wilson 2009). The substantive inclusion of Indigenous peoples in state-led climate adaptation or risk mitigation planning is often undermined when Indigenous communities are represented and regarded as being “at-risk,” rather than as experts with their own authoritative knowledges and principles (Martello 2008).

This project offers a critical analysis of the biopolitics of recognition in Kivalina, especially the tenuous relationship between community efforts to ensure a collective future and state-recognition of local “vulnerability.” Through Chapters 1-3, I trace a parallel logic operating within the colonial interventions that annexed and absorbed Native Northwest Alaska into the

United States over a hundred years ago, the limitations of state and federal environmental regulation, and state-led approaches to village relocation and climate adaptation planning since 1981. In each case, governmental response to local needs, desires, and demands has failed to go beyond the minimal life-preserving measures typical of welfare colonialism in the North American Arctic, yet local leaders continue to maneuver within, against, and beyond these limitations to create a future all their own.⁵ Moving outward from this historical analysis, Chapters 4-6 turn to the biopolitics of everyday life in contemporary Kivalina. In the cases of hunting and fishing rights for example (Chapter 4), state recognition of Indigenous peoples in the region remains structured around a standardized logic of *mere survival*, yet community members regularly exceed the horizon of such logics as they lay claim to a culturally specific and sovereign future. Chapter 5 and 6 critique dominant social science approaches to economic life and climate change in Arctic Indigenous communities and attempt to reframe such scholarly engagements through lenses of collective continuance and sovereignty.

Indigenous Sovereignty and Collective Continuance

Throughout the relocation process, Kivalina's leaders have worked for breathing *space* within the constraints of colonial institutions, but have also sought to expand the very boundaries of what is possible. One way to understand "breathing room" in Kivalina is as a metaphor for Indigenous sovereignty. Scholars of Indigenous governance address sovereignty in American Indian, Native Alaskan, or Hawaiian communities in at least three ways. First, there's what is often referred to as "the inherent sovereignty" of Indigenous nations prior the European invasion of North America and persisting through today. In settler-state law, aspects of "inherent

⁵ This project builds on Lisa Stevenson's attention to "the psychic life of biopolitics" in the North American Arctic (2014), by tracing to material forces, spatial impacts, as well as concurrent possibilities and practices of territorial reinhabitation by Kivalina's people.

sovereignty” have been recognized through principles of “aboriginal title,” or “occupation and use rights.” Second, sovereignty refers to the formal relations between political entities, or “sovereigns.” In the US context, this includes the “government to government” relations between the federal government and tribal nations. These involve formal mechanisms of tribal recognition, Native governance of reservations as “Indian Country,” and the mutual obligations enshrined in treaties (See: Pevar 2012: 20-27 and 81-84). These may be the most common understandings of sovereignty, but contemporary scholars are also interested in a third definition, or what might be called the everyday “lived sovereignty” of Native peoples and communities who actively refuse or seek to transform existing colonial structures.

Ojibwe political theorists Heidi and Kekek Stark situate sovereignty within a “relational paradigm” that both “animates... [human] relationships with the land, water, animals, and plants,” *and* honors the obligations set forth through mutual agreements between political sovereigns, such as treaty rights (2018). Similarly, the anthropologist Jean Dennison, an Osage citizen, approaches sovereignty as a relational concept; namely as “an inescapable web of negotiation, contention, and concession.” Sovereignty, she writes, “is an insistence of one’s authority without the illusion of full control,” which for many Native nations “operates as an ongoing process of engagement with other [non-Native] authorities.” It is through these contested relations, even with colonial institutions, that Native polities carefully pursue “the authority to control [their]... own affairs.” The “authority of the settler state,” notes Dennison, “is far from absolute in practice” (2017). In much the same way, the Mohawk anthropologist Audra Simpson develops a theory “nested sovereignty” wherein “Indigenous political orders prevail [both] within and apart from settler governance” structures (11). Her work in New York-Quebec borderlands considers the everyday practices by which Haudenosaunee (or Iroquois) citizens enact a lived sovereignty in

“refusal” of settler-state boundaries. Simpson reminds us that local Indigenous perceptions and practices of “territory” do not always conform to official, institutional governance structures when “a place... [is] divided and administered without... consent” (2014).

These contemporary approaches to Indigenous sovereignty can help us understand Indigenous politics, and especially the complex nature of village relocation, in Northwest Alaska in three ways. First, relocation has been an entangled struggle for more equitable relationships with existing settler institutions. Second, relocation has represented a “refusal” of the limits inscribed by these institutions (Simpson 2007 and 2014). And third, relocation has been an effort to recover and sustain a healthy and resilient future through remaking these relationships and institutions, or what might be called “territorial reinhabitation.”⁶ Similarly, a lens of sovereignty can inform the scholarship and practice of climate adaptation in Indigenous communities more broadly.

Kyle Whyte is a Potawatomi environmental philosopher working at the intersection of Indigenous studies and community sustainability. He approaches climate adaptation from within a values tradition, defining adaptive capacity in terms of what he calls: “collective continuance.” Whyte defines “collective continuance” as a society or community’s overall “capacity to maintain its members cultural integrity, health, economic vitality and political order into the future, and [to] avoid its members from having to experience preventable harms.” At the core of this capacity are both social and multi-species relationships. For Whyte, collective continuance is a productive way to think through both climate change and colonialism. He theorizes settler colonialism as a form of domination that assaults the collective continuance of Indigenous communities by targeting “the relationships that create [and sustain their] collective capacities.”

⁶ I am indebted to Michael Gerace for this term.

For Whyte colonialism and climate change are each “metascale forces” that pose significant challenges to collective continuance and therefore must be addressed together (Whyte 2018). For Indigenous communities, he writes, “collective continuance can be seen as a community’s aptitude for making adjustments to current or predicted change in ways that contest colonial hardships and embolden comprehensive aims at robust living” (Whyte 2013:518). Theorizing adaptive capacity as “collective continuance,” allows us to identify, develop, and support responses to climate change that also support longstanding Indigenous desires for collective self-determination, health, and wellbeing.

June 2012: An Impasse.

In June 2012 I traveled to Alaska for the first time. From Portland, I took an Alaskan Airlines jet through Anchorage to Kotzebue. With just over 3,000 people, Kotzebue is a regional hub community on the coast of Northwest Alaska. From there I boarded a small Cessna and flew northwest along the coast toward Kivalina. Except for the few hunting camps on the other side of Kotzebue Sound and along the coast, there were no buildings below until we passed the Red Dog Port Site, where a metal docking station juts out unexpectedly into the Chukchi Sea. A few hundred meters inland stood a one-story warehouse-like building, its roof patterned in red, white, and blue. The seventeen miles of coast northwest to Kivalina from the Port Site pass quickly: a thin gravel beach separates a chain of inland lagoons from the Chukchi Sea until a channel breaks through, signaling the southern tip of the island of Kivalina. On our descent, we buzzed by McQueen School, the rock revetment wall, water tanks, and the tightly clustered houses I feel I already know from the mass reproduced overhead photos which have become iconic of the community’s exposure to climate change and status as potential “climate refugees.”⁷ We landed

⁷ For a critique of the “climate refugee” framing, see Chapter 6.

on an airstrip that extends parallel to the shore, northwest from the village. It is nearly as wide as the island itself. At the end, just before the dump, the plane circled around and we rolled along the runway back toward town. I could almost touch the frozen ocean on my right.

In the gravelly clearing that is Kivalina's airport, a ring of Hondas (i.e. ATVs) and one beaten up Dodge Ram truck circled the plane. There stood Janet, in her unmistakable red and black jacket. She shook my hand and loaded my exorbitantly large frame pack on the front of her Honda. I offered once again to stay in the "old jailhouse" she had mentioned over email, but the last person who stayed there, she explained, had mistakenly taken the key back to Anchorage. Besides, her grandfather, the late Rev. Clinton Swan always had a packed house at Easter time—she was used to hosting visitors. Janet's house was a cozy three-room, one-story, that Clinton had built on the site of the sod house where she had been raised. After seeing that I was settled, Janet headed back to work for the afternoon. For the rest of the day, I walked around the village. With school out for the summer, kids were playing outside. Some made layups through a basketball rim screwed to a wooden backboard, while others navigated the giant puddles around town with the homemade wooden toy boats they steered with a small wand connected with string. A group of teenagers were hanging out along the handrail that runs along a wooden ramp leading to the Post Office door. I met a young man who was about to go check his grandfather's set net in the Kivalina Lagoon and he invited me to follow. That evening I brought two Dolly Varden trout home to Janet, who was quite pleased with her new houseguest.

The next afternoon, I stood shoulder to shoulder with Jerry Norton, an elder and Episcopal priest. As we looked out at the Chukchi Sea, he explained he was "waiting... waiting for it to go out." He gestured past the gravel beach and beyond the open water, as if to push away the sea ice that was floating a few hundred yards away. "And when it returns," he said, drawing

his arm back toward us, “it will bring the ugruk.” When I arrived, Kivalina was in a posture of waiting. It was early June and the sea ice had not yet gone out. From the air I could see it—a crackled white glaze over bright deep blue—still clinging to the gravelly coast. Over email, I had been told I would arrive at the peak of ugruk (bearded seal) season, but the orangey-pink flesh of the Dolly Varden trout was all that hung from the wooden drying racks. The ice was broken up plenty, but the wind still needed to shift if it was going to sheer the ice away from shore.⁸

In June of 2012, Kivalina was waiting for several winds to shift. Seven months earlier, a delegation of community leaders had traveled to San Francisco for oral argument in a landmark climate justice lawsuit that had been filed in 2008 by the lawyers serving Kivalina’s IRA and municipal councils. Alleging that the 24 largest greenhouse gas polluters in the U.S. were liable for damages resulting from severe coastal erosion and other local impacts of global climate change, the lawsuit sought up to 400 million dollars under public nuisance doctrine—a sum sufficient to fund the relocation of the village to a less vulnerable location. “Kivalina’s existence as a community depends on the sea ice that forms around the village in fall, winter, and spring and that protects it from the coastal storms that batter the coast of the Chukchi Sea,” read the opening complaint. Because of “global warming,” the complaint continued, “this landfast sea ice forms later in the year, attaches to the coast later, breaks up earlier, and is less extensive and thinner, subjecting Kivalina to greater coastal storm waves, storm surges and erosion” (*Native Vill. of Kivalina v. ExxonMobil Corp., et al.*, 2008). In September 2012, the US 9th Circuit Court of Appeals refused to grant “standing” to Kivalina, thus preempting a consideration of the

⁸ Waiting may be a strategic disposition in Kivalina, but it is no passive posture. In early June, a time of 24 hour sunlight, “waiting for ugruk” consisted of constantly checking one’s set nets in the lagoon, cutting and hanging fish, repairing old outboard motors, or fetching the last of the season’s good coffee water from the pools of fresh water that gathered atop the sea ice. It was a busy time of year.

merits of the lawsuit itself. Determining that climate-induced community relocations gave rise to political questions at scales beyond existing state-based legal precedents, the court also appeared to disavow its decision when it acknowledged that: "...[o]ur conclusion obviously does not aid Kivalina, which itself is being displaced by the rising sea" (*Native Vill. of Kivalina v. ExxonMobil Corp.*, N.D. Cal. 2009). Kivalina appealed the decision to the US Supreme Court, which in May of 2013 declined to hear the case.

Many communities on the frontlines of climate change have found themselves at an impasse when they attempt, through existing institutions and policies, to redress the inequalities of disproportionate exposure to environmental harms and pursue their own environmental self-determination. Because of its spatial and temporal complexity, legal theorists and philosophers have described climate change as a "super wicked problem" (Lazarus 2009) or a "perfect moral storm" (Gardiner 2011). But as Kivalina's experience demonstrates, the impasse of climate politics and policy is not without consequence. Although they appear to go on indefinitely, Lauren Berlant observes that an impasse is "decompositional." Like a cluster of sea ice, an impasse is "a delay that demands activity"—that activity can be productive of as of yet unknown "impacts and events" (2011:199-200). As an enduring yet unstable structure, rather than a singular event, settler colonialism may also be described as an impasse—and as such, its institutions are open to contestation, not having the last word.

Chapter Summaries

For generations, the Kivallinīgmīut lived semi-nomadically throughout their homeland territory and moved their dwellings seasonally in anticipation of animal migrations, weather conditions, and proximity to regional social networks. With the construction of the first mission school in 1905, the U.S. federal government began a multi-decadal process of forced-

sedentarization that was intended to permanently transform local ways of life and gain political control over Kivalina's land. Over the last one hundred years, Iñupiaq individuals and families in Kivalina have responded to these colonial projects by refusing, resisting, or by seeking to transform them into something all their own. Through the story of one family's arrival at Kivalina in 1943, Chapter 1, "Wasted Education," addresses some of the diverse ways in which Kivalina's people have pursued individual and collective sovereignty amid the structural violence of settler and welfare colonialism. Through an account of the historical processes by which the contemporary village of Kivalina came to be located on an eroding barrier island, the chapter also situates climatic risk in a wider political context. Finally, it builds on existing critiques of "welfare colonialism" in the North American Arctic by interrogating the humanitarian discourses and biopolitical policies of the U.S. settler state. Above all, this chapter attests to the fortitude of Kivalina's people, their sovereign struggle amid and against colonialism, and their pursuit of a collective future beyond externally imposed constraints.

In Chapter 2, "We had our own territory," I consider the history of land use and "ownership" in Kivalina's homeland territory with a particular focus on the transformations brought to the region through the 1971 Alaska Native Claims Settlement Act (ANCSA). Through the attempted marketization of Indigenous sovereignty, ANCSA was an experiment in neoliberal governance that enabled new projects of extractive capitalism across the State of Alaska. Through the creation of the NANA Regional Corporation, ANCSA facilitated the opening of the Red Dog Mine, which has disrupted key animal migrations through Kivalina's territory and contaminated Kivalina's main source of drinking water and primary fishery with the toxic byproducts of lead and zinc mining. This chapter describes the transformation of one particular hunting camp from a site of intergenerational land-based abundance to a zone of extractive

development. Through a close reading of lawsuits filed by several residents of Kivalina who were seeking to protect the Wulik River, this chapter also critiques the biopolitics of environmental law and regulation in the U.S. and argues that state and federal laws are often more concerned (if at all) about the minimal preservation of life, rather than the enduring quality of those lives—especially in Indigenous communities.

In Chapter 3, “The Biopolitics of Village Relocation Planning,” I describe the formal processes through which generations of Kivalina’s residents and leaders have used relocation planning as an attempt to improve community health, strengthen longstanding land-based practices, endure climate change, and renegotiate a host of unequal relationships with federal, State, regional, and corporate institutions. More than thirty-five years ago Kivalina first turned to relocation as means of securing a village site where running water and sanitation infrastructure could be provided. In the decade that followed, the desire to deal with overcrowding and stimulate economic development would also grow to animate the relocation planning process. 2004 was an inflection point in for the process, as severe coastal erosion—radically exacerbated by climate change—would seem to undermine the future viability of the barrier island and bring new urgency to relocation planning. In the context of the multigenerational environmental justice struggle described in Chapter 2, this chapter argues that the politics of climate change have both hastened and encumbered Kivalina’s long quest for “breathing room.” With relocation stalled, local leaders have achieved significant, if not partial, protections by working within the structures of regional, State, and federal governance. For many in Kivalina, and throughout Northwest Alaska, comprehensive, community-led village relocation remands a demand and desire that both exposes and refuses the logics of colonial biopolitics.

Chapter 4, “The Taste of Fullness and the Politics of Care,” demonstrates how Kivalina’s hunting, fishing, and other land-based practices are the grounds of intracommunity care, political-economic autonomy, and an expression of individual and collective sovereignty. Through hunting, care is linked to sovereignty through the material networks and affective relations of individuals, families, neighbors, and friends. Such practices are also public enactments of self-determination through the lived claim to a homeland territory. For many families and individuals in Kivalina, these land-based practices are a continuance of an intergenerational way of life, supporting the transmission of normative ethical principles, taste memory, and ecological knowledge. The networks of intracommunity care and recognition enabled by these land-based practices are also buffers against the precarity produced through global economic entanglements and ecological uncertainty. Through government regulation, the whimsical management of private property, and competition from non-Native land users, these forms of care have become subject to all manner of pressures, including outright criminalization, and yet: Kivalina’s people refuse, resist, and actively renegotiate these constraints. The chapter concludes with a critique of the concept of “subsistence” and analyzes the particular interplay of biopolitics and recognition that structures and attempt to delimit Indigenous sovereignty in Northwest Alaska after ANCSA.

Chapter 5, “Enduring Economies,” builds upon the previous chapter to consider some of the ways in which these life-giving land-based practices are entangled with non-local economic forces, value systems, and labor logics. It pays particular attention to the ways in which Kivalina’s people pursue “collective continuance” (Whyte 2018) in the midst of environmental uncertainty and economic precarity. The chapter also challenges the dominant ways in which social scientists, policy discourses, and bureaucrats represent Arctic Indigenous economic life. In

particular, I argue that the notion of the “mixed-economy” relies on a pseudo-scientific and teleological framing of cultural evolution that shelters a settler-nostalgia for Indigenous “authenticity” and contributes to the logic of elimination. Today, under climate change and its associated discourses, the danger of this concept is only intensified. This chapter situates the scholarship of Indigenous Arctic economies in the context of colonialism and capitalism by focusing two themes that are often avoided in the literature: precarity and normativity. Where it has grown preoccupied with the size and shape of elimination, I argue, Arctic social science must instead join with communities to take up a situated, invested inquiry centered on the questions, methods, and means of Indigenous survivance and collective continuance.

Chapter 6, “Beyond Vulnerability,” considers how a lens of Indigenous sovereignty might augment the interdisciplinary praxis of climate adaptation. I offer a critical assessment of prevailing approaches to climate adaptation in the Arctic and argue that the use of vulnerability and/or resilience assessments must be situated within values-laden frameworks that center the experiences and concerns of Indigenous communities themselves. Since late 2012, I have co-curated Re-Locate—a transdisciplinary collective working to support the institutions and community leaders pursuing village relocation in Kivalina.⁹ Through long-term community immersion and relational commitment, Re-Locate curators and team members have worked with local colleagues to co-develop systems, strategies, and infrastructures which are intended to honor local history, support enduring cultural practice, amplify and bring action to the longstanding desires and demands of Kivalina’s people. Alongside collaborators specializing in architecture, physical science, and law, I bring engaged ethnographic and social science methods to a wide range of projects, but this chapter focuses on the two ongoing projects (the Kivalina

⁹ See: relocate-ak.org

Archive and the Kivalina Food Sovereignty Project) in which I have been most closely involved, as examples of how climate adaptation might be refocused through a lens Indigenous sovereignty.

The “Conclusion” asks what forms of ethnographic engagement might contribute to global solidarity, social wellbeing, and political transformation in the context of our uneven exposure to risk and uncertainty today. Readers most interested in issues of Indigenous history, politics, land-based practice, culture, and colonialism will find Chapters 1 and 4 of particular interest. Chapters 2 and 5 may also be read in dialogue with each other, as they address the interplay of settler colonialism and capitalism at varying scales. Finally, Chapters 3 and 6 are the chapters most closely connected to the interdisciplinary scholarship of climate change.

Chapter 1. “Wasted Education:” Welfare Colonialism, Spatial Simplification, and Indigenous Refusal in Kivalina, 1905-1981.

During the first week of May 1943, Louis and Martha Swan loaded six of their children onto sleds and began a long overland journey with three dog teams. They had been living at Kuutchiaq, a camp some 30 miles down the coast of Pt. Lay, from where they would first travel over 100 miles down the coast of Northwest Alaska to the village of Pt. Hope. They stayed at Pt. Hope through spring, including whaling season, while their son Oscar made a sled run back north for more of their belongings. In early summer, once the ocean ice conditions allowed them, Louis, Martha, and their kids made the second leg of the journey: by skin boat through coastal Chukchi waters 70 miles south to Kivalina. Their daughter Lucy was 12 years old.

Seventy-three years later Lucy Adams shared with me the story of her family’s journey to Kivalina as we sat together at her wooden kitchen table. It was the same table where, over the years, I have enjoyed countless stacks of sourdough hotcakes, plates of baked fish, and bowls of caribou soup. It was the spot where her son Enoch Jr. taught me to develop my taste for seal oil by drizzling it on rice or mashed potatoes, more and more each meal, until I could eat it straight. Sometimes Lucy’s table would be covered with platters of food, or sticky with jam from the homemade biscuit of an eager grandchild. Other times, like that morning, it had been wiped clean: spotless except for a lamp, address book, T.V. remote, and her sewing tools. Though she often sits on the floor to scrape caribou skins or crimp ugruk skin for her hard-bottom mukluks, she also works at the table when she needs the light of her lamp to thread a fine sewing needle, or when using her sewing machine to trim an atigluk with rick rack.

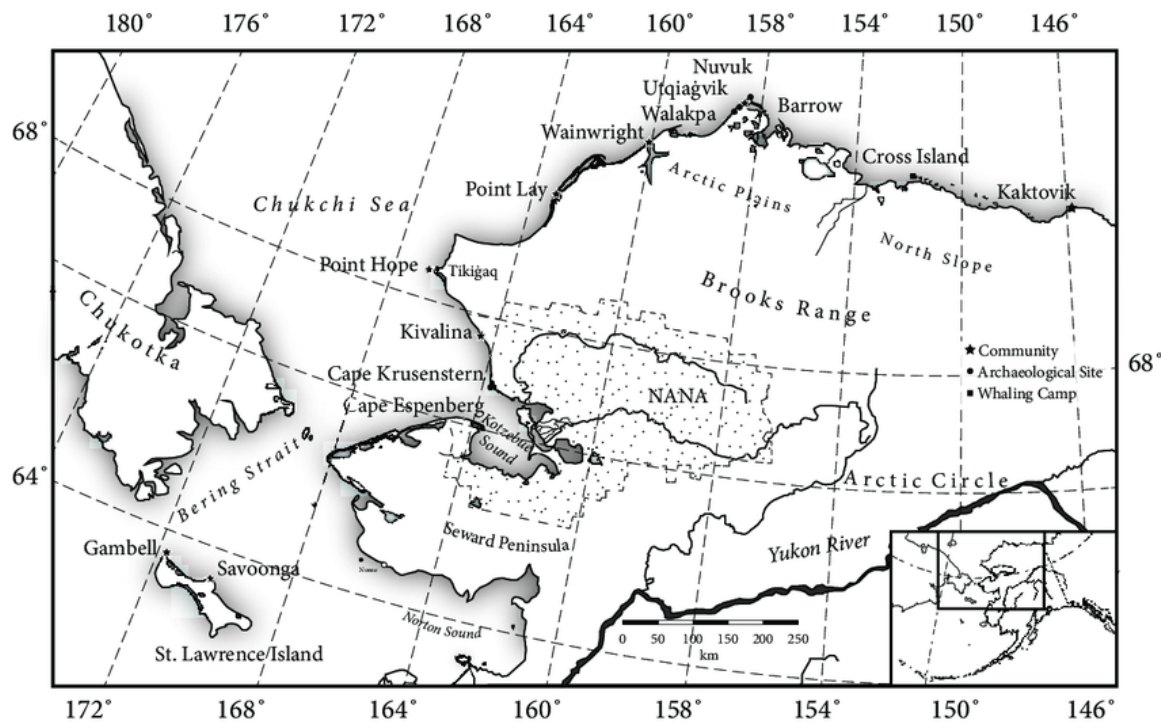


Figure 1.1. Northwest Alaska (map by John Darwent; reproduced from Jensen 2012).

Lucy was used to me dropping by, especially on Sunday mornings after church, or just around suppertime on days when I first arrived to town, but today we had an appointment. I spent the month of July 2016 in Kivalina and when she learned I was recording some interviews about local history, she was eager to speak with me. Lucy insisted that she would share with me only what she *knew*, that is: what she had experienced herself. I had heard parts of her family’s story before, both from her and her brother Joe Swan Sr., yet I was excited and grateful for her willingness to share what she had seen and knew firsthand about her family’s journey to Kivalina.

The spring of 1943 was a time of dramatic change throughout the Pt. Lay region. As Lucy told me:

Pt. Lay village people were moving—some to Barrow, Wainwright, Pt. Hope, [and] Kotzebue, because there was no teacher available for their children to go to school under BIA. They lacked teachers, so they start moving out in order for their children to go to school.

While Lucy's family had been living at Kuutchiaq, two of her older brothers were staying with families in Pt. Lay where they had attended school. But like other families of the region, Louis and Martha would soon face a difficult decision. As Lucy's mom explained to her, they had been planning to remain at Kuutchiaq until a government teacher issued them a warning:

We were not moving anywhere, but the teacher, his name is Tony Joule—that Native teacher. He was being transferred to Pt. Hope or Kotzebue at that time. When he was leaving Pt. Lay, he told my dad, "If you never let your children go to school, we could just put you in jail."¹⁰

While Louis and Martha may have preferred the camp life for themselves and their youngest children, given these warnings, the risks of staying at Kuutchiaq was simply too great. "If he just keep us in the camp," Lucy reiterated, "they will just put him in jail for not letting us go to school." Under those conditions, the family decided to move.

Louis was originally from Shishmaref, on the Seward Peninsula, but he had relatives all throughout Northwest Alaska, including a cousin in Kivalina. His cousin was getting along in years and had previously encouraged Louis to come to Kivalina while he was still alive. It was a place Louis would have remembered, for as a boy, he was among a group of people who migrated North from the Seward Peninsula and passed through the Kivalina territory, where a few of their number had stayed.¹¹ Louis took up his cousin's proposal: the kids could go to school, and besides, Kivalina was well known for its access to abundant lands, rivers, and sea. "So my dad decided to move to Kivalina," Lucy said, "'Where there's fish,' he say."

Lucy's younger brother Joe was also on that long journey south. "I was just a little boy," he told me, "but I remember." The first leg, a springtime journey to Pt. Hope by dog sled, was

¹⁰ For some of Joule's story, see Morgan (2008), especially pages 47-48.

¹¹ Sometime between 1897 and 1890 Louis was among a group of Shishmaref people who traveled north to Kivalina. Some stayed and lived among the original people in the region (Burch n.d.).

arduous—especially the river crossings. Looking back, more than seventy years later, Joe marveled at his dad’s ingenuity and especially how he would collect willows, bind them together in tight bundles to make a temporary bridge that could hold hundreds of pounds and allow the family’s sled to pass safely. “There’s only willows between here and Pt. Lay,” Joe recalled. “There’s no tall ones, there’s only short. How did he collect [them] all?”

That summer, with one skin boat of their own and another sent by Louis’ cousin, Louis and Martha brought their family south from Pt. Hope through the coastal Chukchi waters to Kivalina. They paddled at times, but where the topography of the shore allowed, they harnessed their dogs, let them run on the land, and pull the boat through the ocean behind them. The family reached Kivalina by late August 1943. That fall, their younger children, Lucy and Joe included, would go to school for the first time.

The village that Louis Swan returned to would have looked considerably different than when he passed through as a boy in the late 1890s. All throughout the 19th century, a network of autonomous Iñupiaq nations governed Northwest Alaska.¹² Through trade, collaboration, and periodic conflict, they formed a complex and interconnected system, with each polity holding a distinct territorial homeland (Burch 1998: 8 and 2005). Among these nations, the Kivalliniġmiut governed a 2,180 square mile territory that included “a small portion of the upper Kukpuk

¹² Throughout his extensive writings on the histories and social life of 19th century Northwest Alaska, Ernest S. Burch Jr. (1998) refers to the Iñupiaq polities of this era as "nations." He used this concept, he wrote, both "in deference to the elders" who had instructed him, but also because he viewed them as "analogous to countries, or nations, in the modern world," albeit "at the hunter-gatherer level of complexity." I agree with Burch, and the elders he learned from, that these social and political formations are to be described as “nations,” yet I disagree with Burch (and other environmental anthropologists) who describe societies that are based primarily on hunting, fishing, and gathering as any less “complex” than agricultural, industrial, post-industrial, or information-based societies. There are different forms and kinds of complexity in any human social world.

(*Kuukpak*) valley, the drainages of the Kivalina and Wulik Rivers, and approximately 50 miles (80 km) of the Chukchi Sea coast adjacent to the mouths of those rivers” (Burch 1998:23).

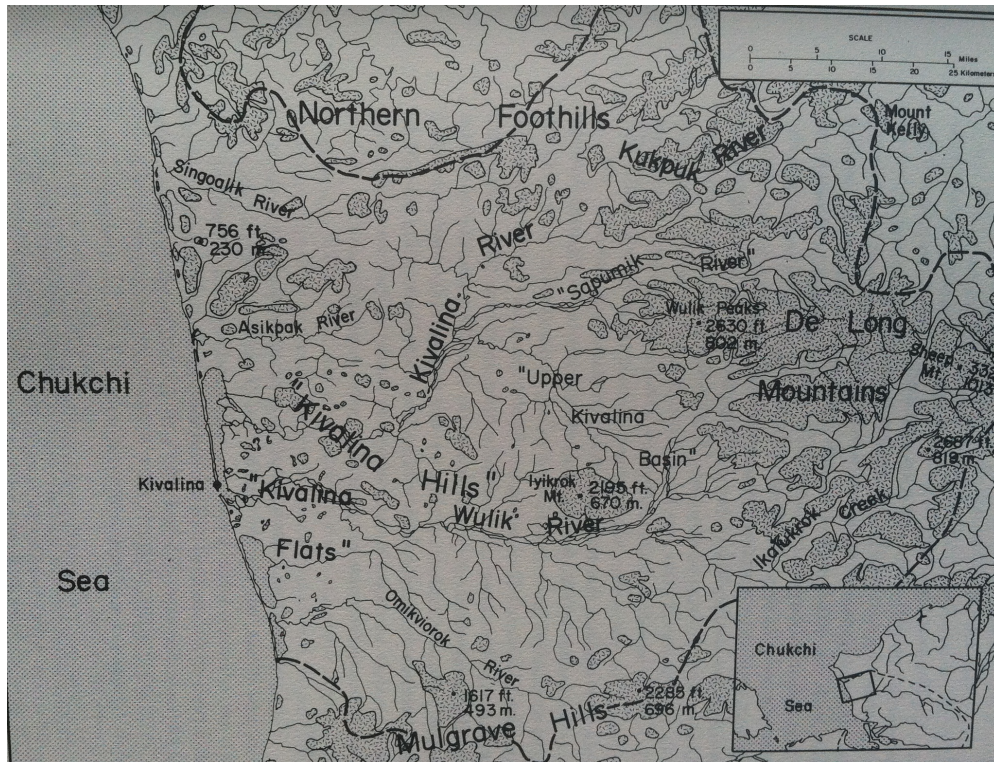


Figure 1.2. Kivallini Territory approx. 1860 (Reproduced from Burch 1998:25)

At the time, the Kivalina people, like many of their neighbors, lived semi-nomadically, moving seasonally in anticipation of animal migrations, social gatherings, and changing environmental conditions. Winter dwellings along the Wulik and Kivalina rivers offered good fishing and caribou hunting to compliment they cache of sea mammal meat they would preserve and store from the prior spring and summer. Each spring, families returned to the coast in anticipation of the bowhead whale hunt; crews would make whaling camp miles out from land, at the open lead, where solid ice met the liquid sea. The ice began to break up in June, bringing the ugruk and eventually herds of walrus. Summers were spent along the coast—including at Kivalina, but also

at Kijiktuuraq.¹³ It was an opportune time and place for beluga hunting and other fishing and gathering opportunities. During high summer, some members of the community traveled to the big trade fair just north of Kotzebue. Fall time signaled the annual return inland to upriver dwellings and the renewal of this yearly cycle (Burch 1998: 33-47).

According to Ernest S. Burch Jr., the “world system” of Iñupiaq nations began to undergo a great transition at the turn of the 20th century, which was attributable to the influx of commercial shore whaling, disease, and cyclical food shortages. Relying on archival sources and the accounts of elders he worked with in the 1960s and 70s, Burch describes a period of grave food insecurity affecting Northwest Alaska, including the Kivalliñigmiut, in the early 1880s. At that time, many Kivalina people left their homeland territory in search of food, with a good number settling at Pt. Hope, Barrow, and Cape Lisburne. By the early 1890s, however, approximately 10 Kivalliñigmiut families had returned to their homeland where several Iñupiaq families from the Seward Peninsula and Noatak would also join them (Burch 1998: 47-56). The U.S. federal government viewed the late 19th century transformations taking place throughout Iñupiaq Alaska as a strategic opportunity to exert greater control over the lives and futures of Iñupiaq peoples. Throughout the region, colonial administrators created three interconnected projects that would affect the trajectory of the region for generations to come. The construction of village schools, introduction of reindeer herding, and religious education by Christian missionaries would transform the social, political, and spiritual lives of Native communities

¹³ In 1838, the Russian explorer A.F. Kashevarov encountered “a small summer camp” at Kivalliik and “a fairly sizeable camp” of approximately 260 people at Kijiktuuraq (Kashevarov 1977; cited by Burch 1998: 31).

across Alaska. Anthony Urvina, whose mother was born in Buckland in 1910 and quickly taken from her family by missionaries, writes:

As the mission societies began to occupy Alaska, their purpose was to capture the land in the name of Christ and to bring civilization to Native people. As they began to instill their own unique version of truth on the hearts and minds of the indigenous population, contradictions began to emerge.... The American government, in collaboration with the American Church, had merged Christian ideology with Anglo-American culture to define the terms of “civilization”; the merger would characterize an Alaska Native pathway to citizenship. For an entire generation of Iñupiat, that new path in life would lead to personal loss and destruction... (2016:13)

Seeking to annex and absorb the Indigenous nations of Northwest Alaska into the domain of U.S. governmental and social power, the federal government attempted to justify these imperial incursions through a thin humanitarian veil: its professed concern for both Iñupiaq bodies and souls.¹⁴

Drawing on several conversations with Kivalina’s elders and on archival material, this chapter considers the diverse ways in which Iñupiaq individuals and families responded to these colonial projects by refusing, resisting, or by seeking to transform them into something all their own. This chapter also situates contemporary climatic risk in the context of settler colonialism. At Kivalina, the introduction of missionary schools by federal administrators initiated a multi-decadal process of forced-sedentarization on a barrier island that is today vulnerable to climate

¹⁴ Miriam Ticktin has defined “humanitarianism” as “among other things, an ethos, a cluster of sentiments, a set of laws, a moral imperative to intervene, and a form of government” (2014). In this sense, I use the concept “humanitarian” not to define something morally good, but rather to describe and analyze a diverse set of colonial practices that, on the part of colonial administrators and bureaucrats, were justified (at least to themselves) and carried out under the pretense of contributing to the welfare of others. In Northwest Alaska, as elsewhere in the world, settler governments, churches, and other institutions would mobilize the discourse of “saving” Indigenous bodily and spiritual lives to enact and justify great physical, psychological, and spiritual violence against Native peoples.

change.¹⁵ While these policies have not been followed by a mass invasion of white settlers into the villages of Northwest Alaska or the surrounding region, they were informed by the settler colonial logics that many of these same administrators had been implementing in the Lower-48. Initially this included the federal government’s attempt to eliminate Native languages, disrupt intergenerational relationships, and replace longstanding land-based practices and cultural economies. Decades later, these consolidated inhabitation patterns throughout Native Alaska—centralized around “permanent” villages—would make it far easier for government and corporate actors to open up vast tracts of Indigenous homelands for industrial development and capitalist resource extraction (see Chapter 2). Finally, by interrogating the humanitarian discourses of the U.S. settler state, this chapter builds on existing critiques of “welfare colonialism” in the North American Arctic.¹⁶ Above all, however, this history attests to the fortitude of Kivalina’s people, their sovereign struggles amid and against colonialism, and their pursuit of collective futures beyond these externally imposed constraints.

Mission Schools and Reindeer: “Welfare Colonialism” in Iñupiaq Alaska

In 1885, the U.S. Secretary of the Interior appointed the Presbyterian minister Sheldon Jackson as the first General Agent of Education in Alaska, a position he would hold until 1907.¹⁷

¹⁵ This story is similar up and down the Northwest Coast of Alaska; for the case of Shishmaref see Marino 2012 and 2015.

¹⁶ In 1977, Robert Paine developed the concept of “welfare colonialism” to describe what he viewed as a contemporary turn in Canadian Arctic policy toward a “non-demonstrative” form of colonialism. It was a form of colonialism that, to many non-Native observers, appeared as “solicitous rather than exploitative” and “liberal rather than repressive.” In the eyes of many in the settler population, the provision of “expensive educational and health programmes” to Inuit people, served to mask the truly colonial nature of the “centre-periphery” relations in Canada.

The task for social science, as Paine understood it, was to demonstrate how “an administration that apparently wishes to increase Inuit control of their own affairs is, nevertheless, colonial” (3-4). Lisa Stevenson (2014) takes up the concept from Paine and I have adapted it from Stevenson.

¹⁷ Jackson had previously served as the superintendent of the Rocky Mountain Region of the Presbyterian Board of Home Missions where he “participated in the founding of fourteen schools

Jackson assumed his new post during a transitional period in U.S. Indian policy. In 1871, the federal U.S. government had unilaterally ceased its treaty making with the Native nations whose land it occupied and government officials were now looking for new tactics to support the appropriation of Indigenous territory. Jackson's ideological commitments were forged amid the so-called Indian "reform" movement that was gaining prominence among lower-48 settlers, especially within Evangelical Protestant denominations and churches (Haycox 1984). In the wake of the U.S. Civil War, cloaked in terms of humanitarian concern, these "reformers" pursued an end to the overt bloodshed of open warfare with Native nations while developing new strategies for opening Indigenous territory for white settlement, agricultural production, and mineral extraction, such as the General Allotment Act of 1887. Jackson was among those colonial administrators who believed that the peoples of the Indigenous lands claimed by the United States needed to be "civilized" and that this could be accomplished through formal institutional education. With other 19th century colonialists, he viewed a properly human "civilization" as inclusive of particular "habits of hygiene and dress, education for literacy, the achievement of economic self-sufficiency...[and] conversion to Christianity" (Haycox 1984).

Jackson adopted the system of using federal contracts for mission schools in Alaska, but his approach also departed from national trends in several ways. In the Lower-48, for example, "boarding schools were key components in the process of cultural genocide against Native cultures, and were designed to physically, ideologically, and emotionally remove Indian children

and numerous churches" throughout the Western United States. In 1877 Jackson became enamored after his first visit to the "Alaska Territory"—the vast Indigenous lands the United States had (from the skewed perspective of European-settler governments) acquired from Russia just ten years earlier. In the years that followed he worked in Southeast Alaska before securing his post as general agent for the entire Alaska Territory (Haycox 1984).

from their families, homes, and tribal affiliations” (Archuleta et al 2000: 19). As Tsianina

Lomawaima writes, these institutions:

...were designed to create a new kind of American Indian person: detribalized, fluent and literate in English, economically self-sufficient, hard working, and self disciplined. The schools’ academic curriculum, trades and domestic training, military discipline, and regimentation of student life all fit together to achieve these federal goals (2000b: 56).

One strategy of colonial planners, writes Lomawaima, was the creation of “civilized spaces,” which were intended to exert a normalizing, or assimilative, force through both bodily discipline and the performative charade of federal benevolence:

At the beginning of the twentieth century, social engineers believed that appropriate architectural forms could contribute to the “civilizing process,” and federal school planners deliberately chose a style of institutional architecture that would impress and uplift students. Grand physical plants on boarding school campuses served two purposes: They stood as symbols to the surrounding American society of the “good works” undertaken by the government’s Indian Service, and they were designed to shape the tastes and values of Indian students. By some mysterious alchemy, large, multi-story buildings supposedly would transform students living within their spaces (2000a: 50).

If the architects of the boarding school system sought to eliminate Native peoples in the U.S. through breaking up families and communities through the physical removal of young people, Jackson would rely on a different spatial intervention: the attempted consolidation of Indigenous families around mission schools and reindeer stations in centralized villages.¹⁸

The idea to introduce domesticated reindeer to Northwest Alaska originated with William T. Lopp, a mission teacher at Cape Prince of Wales who would later become the Bureau of Education administer in Alaska (Peterson 1940). But, with modest government funding and strong support from East Coast allies in the progressive and Evangelical movements, it was

¹⁸ The forced centralization of Indigenous settlements by settler governments attempting to consolidate their power over the North American Arctic was not unique to Alaska. In the 1950s, the Canadian government would undertake a policy of forced-centralization of Inuit communities (Tester and Kulchyski 2011). Around the world, notes James Scott, projects of “spatial simplification” and legibility have been used as governmental techniques of “authoritarian high modernism” (1998).

Sheldon Jackson who would turn the concept into a reality. In the summer of 1890 Jackson sailed with Michael Healy, a captain with the U.S. Revenue Cutter Service, to the Alaskan Arctic and across the Chukchi Sea to Siberia. As Burch notes, it was a lean time for many Alaskan Iñupiat who were navigating a shortage in regional food supplies, in large part due to cyclical variation in migratory caribou herds. With little interest or understanding of Indigenous intelligence and capacity to negotiate environmental uncertainty, Jackson and Healy became convinced that local communities were “starving” and in need of “a consistent food source, which, at such extreme northern latitudes, only herds of reindeer could provide” (Willis 2006: 281). As a justification for intervening in the North, Jackson and his collaborators deployed the discourse of “Eskimo starvation,” which appealed to wealthy funders from the East and ecclesial partners interested in saving both body and soul alike. If the reindeer program had been justified as a way to save a “starving” people, it was also envisioned by Jackson as “a means of bringing Alaska natives into the modern world” (Willis 282): a material practice intended to guide a region of “hunter-gatherers” along the so-called ladder of civilization through pastoralism to eventually to become laborers and entrepreneurs in a global capitalist market.

Sheldon Jackson was committed to a perverse form of settler-humanitarianism. With many of his contemporaries, writes Roxanne Willis, he believed that that “the only way to help Native peoples was to get them to abandon their traditional cultures in favor of white, modern ways.” And yet, “his experience in the North had convinced him that the situation of Alaska Natives was [also] unique” (2006: 282). While Jackson’s “objectives differed little from other reformers,” argues one prominent historian of Alaska, his methods “departed significantly from accepted theory and practice” (Haycox 1984). In Jackson’s view, writes Stephen Haycox, the federal assault on Indigenous self-sufficiency had “impeded” the “advance toward civilization”

in the Lower-48. Instead, he sought methods of colonial education that would keep Native people “in their own villages, where they would live and work after the process of civilizing was completed” (1984). If Jackson was fascinated by the autonomy of Iñupiaq peoples, he was no less interested in assaulting their social, political, and spiritual existence. The centralization of a seasonally mobile and widely dispersed Indigenous population around a central village school, combined with the introduction of domestic reindeer, all staffed by missionaries, was a combination that seemed to address all of Jackson’s objectives at once.

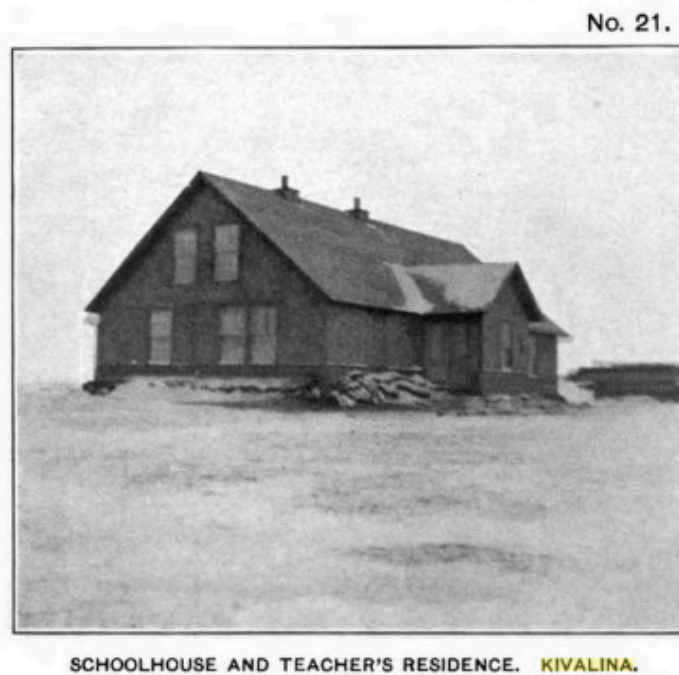


Figure 1.3. Kivalina Schoolhouse and Teacher's Residence (from Jackson 1906)

No. 19.



ONE END OF GOVERNMENT SCHOOLHOUSE, WITH GROUP OF PUPILS. KIVALINA.

Figure 1.4. Kivalina Schoolhouse with Students (from Jackson 1906)

The practice of reindeer herding came to the Kivalina territory in December of 1904 when two apprentice herdsmen, Electroona and Otpelle—along with the 220 deer they held between them—were transferred from Kotzebue (Jackson 1906). The following summer, in 1905, the Bureau of Education constructed its first schoolhouse at the southern end of a barrier island between the Chukchi Sea and the Kivalina Lagoon. It was a convenient place to drop off lumber. As throughout the region, the school at Kivalina was a site of colonial trauma through the institution of disciplinary norms and the violent repression of Iñupiaq culture, language, and spirituality (see: Urvina and Urvina 2016). These colonial impositions, backed by the force of law, would also initiate a radical reorganization of territorial inhabitation patterns throughout the Kivallinīgmīut homeland. And yet, as elsewhere in the U.S., the Indigenous peoples of Northwest Alaska would negotiate these entanglements in diverse ways: through refusal,

resistance, and by taking elements of what had been forced upon them and attempting to build a future all their own.

Indigenous Refusals

In the fall of 1943, Lucy and her three younger siblings all started school at Kivalina. The schoolhouse was a two-story building, she recalls, with a teachers' quarters upstairs and one big classroom on the lower level for first through eighth grades.¹⁹ There were two Native teachers, a husband and wife named Eunice and Daniel Stalker. Having never been to school before, Lucy was "amazed" at her abilities. "Somehow I know how to read those first grade books," she explained, "maybe from listening to church service I learn how to read from those Bible and prayer books." Lucy remembers enjoying school that fall and being especially thrilled when the teachers' cat kittens. For the most part things ran smoothly, though on occasion the coal-burning generator would break down, or run out of fuel, and school would be cancelled for lack of lights. But that all changed around Christmas.

"We were really enjoying the school," Lucy said, until "our school building starts smelling [like] smoke." She described what happened next in detail:

...there's lots of children, all of us always be quiet from first grade to eighth grade. Nobody make noise, they're so obedient with the teacher... because our parents always tell us to respect the teacher. And then the teacher said, "Everybody line up. Go pick up your parkees, your gloves, whatever you have, line up, put your parkees on and go back to the line." It was getting smoke inside the building. She never tell us there's fire. We make long line, she control us what to do. And... when we were ready to go out, we put our clothing on, everybody line up, that's when she tell us and say our school building is on fire, everybody have to go out. "No, don't push, walk!" All of us start walking outside. There was lots of people outside the school building, the smoke was heavy already when we go out. Everybody was carrying water, snow to turn off the fire.²⁰

¹⁹ Secondary education was available at boarding schools throughout the Alaska Territory, most notably at Mt. Edgecumbe in Sitka.

²⁰ The fire occurred either just before Christmas in 1943, or just after Christmas in early 1944.

Nearly forty years after it was constructed, Kivalina's first school building burned to the ground along with all the supplies and materials that eager students, like Lucy, would have needed to support their attempt to apply themselves within this new institutional context. And after that, Lucy told me, "We have wasted education, wasted education under BIA."

After the fire, Lucy explained, basic school supplies, like workbooks, were in short supply and for a long time the BIA could not be bothered to send any more.²¹ It was demoralizing for many students. "We never change workbooks, or reading books, or math books four years straight. We use same books," Lucy remembered, "when we get tired of 'em we no more work on 'em... we just start playing around in the school building... and Daniel Stalker, the husband, show these older students how to make sled, how to make things." Many of Kivalina's elders who are still alive, she explained, were affected by these insufficiencies. "That's why we don't know how to speak English," she added, before saying again, "We have wasted education."

For those students and families who sought to take what they could from the colonial education system, the failure of federal officials to provide even the most basic resources in Kivalina, as it was elsewhere, was a grave injustice.²² Lucy explained:

We never change workbooks four years straight when we should learn *something*. That's how we were... We just use same workbooks that never change until one man complain to whoever he complain to—that wake up the BIA people.

²¹ This problem was not unique to Alaska. In their history of colonial boarding schools in the Lower-48, Archuleta et al. note that: "Congress never appropriated enough funds to fully support the schools, and so student labor and the products of student labor were critical to keep the schools going from year to year" (2000: 35).

²² Lomawaima writes: "Indian students and Indian parents brought their own intentions, plans, and hopes into the boarding school system and influenced the institutions that had been created to transform them. Bureaucratic indifference triggered parental outcries; discipline triggered student resistance; and regimentation triggered rebellion... students took what little their was and made something better of it" (2000b: 56-58).

One local resident who had worked outside of Kivalina and traveled widely across Alaska began to speak up and through his advocacy things began to change, but not for long. “That’s when they start building school building down there,” Lucy said, motioning to the south side of the island. But by the time Lucy was 15 or 16 there was no longer any reason for her to stay in school. “That’s when I start babysitting for teachers,” she said, “I no more school. I drop out ‘cause there’s no books to learn from, nothing.” A few years after she quit, the new school building also burned to the ground. “Everything burned again,” she told me, repeating again, “we have wasted education in Kivalina.”

As a boy, Joe spent even less time in school than his older sister. After coming to Kivalina, his father, Louis, took up reindeer herding, which required him to spend most of the year out in the tundra living with the animals in camps alongside other herdsman and their families. For a few weeks at a time, when his parents were back in town, Joe did go to school, but rather than stay behind with extended family, he preferred to follow them. Joe lived with his family in the reindeer camps for three or four seasons after his family came to Kivalina. He just “loved it” out there, he told me. And although he was too small to do much of the work, he helped out where he could, and he aspired to learn the skills needed to care for the herd. When I asked Joe to tell me about those days, he marveled at much of what he had witnessed, including the ways animals were used to assist the herders in their tasks. Joe remembers fondly a dog his father had, a Lapland, he recalled, “All they have to do is just raise their arm and the dog would take off and go around the caribou and put them together.” In another impressive feat, Joe explained to me how some herders would harness one or two reindeer to a sled and travel long distances to neighboring villages. “They have to have a reason to go to Kotzebue,” he added, “to

bring something, or bring back something, [or]... if they need to pick up somebody somewhere from Pt. Hope or Kotzebue.”

Living with the reindeer was a full time commitment. “All year round,” Joe’s family would camp out with the herd and two or three other families. While they favored the places where they could find wood for their woodstove, they moved around “everywhere up in the river.” After spending a month here and there, they often settled for the winter at Sivutchiaq, Joe told me, as he pointed out his window inland toward the mountain bearing that name. “My dad always watch... reindeers, [for] a dollar a day [and] one reindeer a month... But he work for many years.” In August, the *North Star* ship would arrive from Seattle and the herders would bring their animals to corrals at Kinjktuuraq, just south across the channel from Kivalina. After butchering the animals, Joe explained, the herders would “keep the skin and they ship out the meat.” Although living with the herds would keep some families out on the land even as other families moved their kids to town, reindeer herding also limited their ability to participate in some longstanding seasonal practices, such as camping and fishing up the Wulik River at fall time. Reindeer herding was a compromise in this regard, but through participating, Joe’s family could continue some aspects of their lives at Kuutchiaq and Joe would have an opportunity to learn the Kivalina territory—a homeland to which he has been committed ever since.

By the mid 1940s, all across Alaska, the federal reindeer program was in decline. This was in large part, writes Willis, because many of the reindeer herds had “gone caribou” (2006: 301). At the time when he was living in the reindeer camps, Joe told me, there were no caribou in the region, but eventually, “one by one” during mating season, male caribou attempted to join the reindeer herd. At first, it was just one or two caribou and the herders could remove them from the rest by hunting them. But soon “they start to get more and more caribous mixed up with

reindeers, and they couldn't control them anymore. They always leave the reindeers somewhere," Joe said. He threw his hands above his head as he added, "I think they get tired and say 'Shit, I quit!'" We both started laughing before Joe concluded, "That's when the caribou take away all the reindeers."

Even after the reindeer went away, Joe continued to spend much of his youth out on the land rather than regularly attending school. "[E]very fall," he told me, "never miss. You always just can't wait to go upriver," to "camp out and do all the fishing." Each fall after the *North Star* ship arrived from Seattle and families had loaded up with staples like coffee, tea, sugar, flour, salt, and baking soda, many would head upriver in skin boats to make camp for two or three weeks. At that time, Joe estimates at least ten to twelve families made the trip. They would fish for Dolly Varden trout and age their catch in "nests" of willows that they could return to all winter when they wanted the food. It was hard work and sometimes it was "hard times," Joe explained. When the supplies ran out, they had to survive on fish broth. "No food stamp, no money, no job, dollar a day, or one reindeer a month. Would you survive on that?" he asked me.

"Maybe if I had you watching out for me," I said. Joe began to laugh and I exclaimed, "You did!"

"That's why when you're living off the land you have to depend on land and sea," he added. "That's why we always fight for the land and sea to make sure they don't disturb the wild animals..."

"It seems like throughout your life," I noted, "like you've said, you've been consistently fighting for these rights, to have rights to the land?"

"Yes," Joe confirmed, "I have to, because I experienced [it] from a little boy... all the way up to adult... we depended on land and sea."

Whether herding, hunting, or fishing, Joe's boyhood on the land had been an education in and of itself.²³ He learned a great deal by observing his father and the other herdsman, but hands-on experience was perhaps his greatest teacher. When I asked if he had ever driven reindeer himself, he shared with me the story of one particularly hard luck lesson he would never forget:

I was too young, I never drive reindeer. That's why I wanted to get a reindeer with dad's lasso, [or] whatever they call em.' So, they were by the [Wulik] river up there, they were on the sandbar just standing around and my dad... had something to do in town. [So I say,] "Ok, it's my time." 'Cause... I can't ask my dad if I could catch a reindeer, he won't let me. So, he's gone, it's my chance to catch the reindeer by the rack. I'm thinking of stopping it, cause I always see them... [And] I thought I would do that [too].

So I get closer to the reindeer—big bunch. And I look at a female, and throw it, and I get *two* of 'em! Oh my God, I can't, I can't [lose]... the rope, my dad's rope. So I have to hang onto it and get 'em off the reindeer. So they both took off, I hang onto the rope, I could feel my skin was peeling off on the rocks. The speed never change cause there was two of them, so I just let 'em go. When I look [down]... no skin on both sides [from] rubbing on the rocks and I say, "What did I try to do? I'll never do that again."

I never, I never did try again... When dad come back, I don't know what to tell 'em. So he look where's his rope. And I told 'em, "I get two reindeers and the reindeers take the rope away." And he just do nothing and start to look for it. And he find it from inside the reindeer herd—a female with a rope—and he grab it and take it off...

Unable to contain ourselves any longer, we both burst out laughing. The image of Joe as a little boy being dragged by two reindeer up a gravelly creek bed and refusing to let go of the rope... It was just too much. As we composed ourselves, Joe continued, "That was a big mistake I made, man I was suffering. No skin..." I started to chuckle again as Joe egged me on, "Tore up my shirt, tore up my pants, 'cause they were running on the rocks on the sandbar... Oh my god, I say 'Why did I try to hang on? I should have just turn 'em loose cause I won't stop the two of 'em.'"

"And your dad just walked up and got the rope?" I asked, gasping for air between belly laughs. Neither of us could stop laughing at the young boy's determination in light of his father's knowing confidence.

²³ For a contemporary Indigenous approach to the "land as pedagogy" see: L.B. Simpson 2014.

When we finally settled down, I took a sip of tea. Joe put his feet on the table, leaned back in his chair and looked assuredly to the ceiling, “Yeah, a lot of times I make mistake. That day I’ll never forget, I never try it again...”

One time I asked Joe how he felt about spending all that time with the reindeer herds, or camping upriver, rather than being in school. “When I wanna leave Kivalina to be with my family,” he explained, “I have to go no limited time. As long as my family’s out there I have to stay with them.” The teachers, he recalled, “They understand the lifestyle that we live.”

It seemed, I replied, like what he learned upriver might have been even more important to him than what he didn’t learn at school. “It is, it is,” he answered. “It is important because if I only stay in school, I’m gonna starve.” But, Joe explained, this way of living was more than mere bodily survival (see Chapter 4). “It’s something you depend on, like water and fish. It’s important,” he continued. “The river is important because from the beginning of life it feeds us. I have to protect it until I die, even though life is getting easier. I survive from the river, fishes, and some vegetables” that grow there.

Joe’s hands-on education in the country would become a firm foundation for a boy who would grow up to become a successful hunter, whaling captain, and advocate for Kivalina’s waters, lands, and their hunting and fishing rights in regional, state, and federal contexts. During those first few years in Kivalina, Joe would learn the Kivalina territory and grow up to love the tundra, rivers, and ocean that fed his family and sustained his community. It was a way of life for which he has never stopped fighting. He’d know defeats along the way, but like that young boy, Joe would get back up and dust himself off. When Kivalina’s future was at stake, the elder I’ve come to know, could be as tenacious as that young boy holding onto the rope.

Like her brother, Lucy too would continue to learn her most valued lessons outside the schoolhouse walls. When she described her experience of the structural neglect at the heart of federal educational policy, I asked Lucy if she thought this “wasted education” had impacted Kivalina’s people into the future. In response, she described an older, intergenerational, land-based pedagogy. “We just learned how to live, how to survive,” she said. “We learn lots from our parents, not to be lazy and work for living. They show us. They show us how to live, not to be lazy, how to hunt and put away food, everything. How to sew, everything, they know. They teach us...”

In sharing these stories, Lucy and Joe attest to some of the diverse ways in which Kivalina’s people have pursued both individual and collective sovereignty amid the ongoing structural violence of colonialism. To support the continuance of key social and interspecies relationships, they have refused, resisted, or sought to transform aspects of the projects and institutions imposed on them toward their own goals. Although federal administrators intended their policies to do so, they could not replace Kivalina’s intergenerational forms of education and land-based practices. In spite of federal reeducation efforts, Iñupiaq families continued to teach their children, as Lucy attests, “how to live” in their own way. Family-based forms of education continue today in supporting diverse modes of life grounded through locally specific, land-based practices in Kivalina (see Chapters 4 and 5). *Wasted education*—Lucy’s phrase takes on a second meaning: the federal government’s assimilationist ambitions were in fact “wasted,” squandered in the face of Iñupiaq refusal, resistance, and creativity.

Settler Biopolitics

The history of U.S. colonialism, writes Kevin Bruyneel, might be characterized by a deep-seated strategic “ambivalence,” in that the federal government, through the dual assertions

of ultimate “plenary power” and “trust” obligation, simultaneously claims to be “both conqueror and guardian of indigenous people.” When taken either “singularly or in tandem,” writes Bruyneel, these two doctrines at the heart of the Euro-settler legal tradition have been used “to justify almost any U.S. Indian policy” (2007: 18).²⁴ The contradictions at the heart of the settler state have been especially evident in cases of Arctic welfare colonialism. The history of welfare colonialism in Northwest Alaska demonstrates the extent to which colonial professions of “care” or concern are routinely invoked in an attempt to mask broader agendas of Indigenous erasure and dispossession. Even as Native communities have refused, resisted, and co-opted these interventions, welfare colonialism, like other colonial forms, has remained an expression of settler hostility toward Indigenous desires, modes of life, and sovereignty in the Alaskan Arctic. Reflecting on his mother’s removal from her Iñupiaq family to the Teller mission station, Urvina writes: “It is difficult to comprehend why anyone would believe that purposely denying a child the love of a family can somehow be connected to a greater good. Much treatment of the Natives at the hands of well-intentioned missionaries was of a similar vein and equally perplexing” (2016: 11-12).

The U.S. colonial project in Northwest Alaska has been rife with contradictions, but throughout this history, it has been Native families and individuals themselves skillfully working to transform these entanglements into tools for their own collective continuance. It is worth returning to the literal meaning of the “wasted education” Lucy describes. Compelled as they were to attend school, a generation of Iñupiaq children were offered just enough “education” to

²⁴ Like many observers, Bruyneel traces the way in which U.S. federal policy has vacillated between assimilation and separation of Native peoples, yet he views these inconsistencies as coherent within a “prevailing” colonial effort to continually define and redraw U.S. political boundaries in a way to “both contain and fracture indigenous sovereignty and political life” (2007:12).

assault their social worlds without being afforded the resources required to make good on their efforts—efforts to learn new skills that they might one day apply toward more favorably negotiating the uneven power dynamics embedded in federal, State, and corporate entanglements. At its root, colonial humanitarianism, or welfare colonialism, is a project of erasure and assimilation that seek to dispossess Indigenous peoples of their land and absorb Native nations into settler polities. Not only are these intrusions hostile to Indigenous understandings of the past, present, and future, but they are also antagonistic toward the intergenerational social and ecological relationships that bolster Indigenous economic autonomy, political sovereignty, and collective continuance (see Chapter 4). Once established, colonial welfare institutions are often marked a “bureaucratic indifference” (Lomawaima 2000b: 56-58) that is, at best, apathetic to the demands of Indigenous actors seeking to transform these projects.

In her critique of Canadian welfare colonialism in the Arctic, Lisa Stevenson describes the bureaucratic and colonial forms of “care” that have operated in the lives of Inuit people throughout the 20th and 21st centuries.²⁵ While Inuit communities and individuals continue to care for one another through robust, historically grounded, and future oriented relationships, colonial forms of “care,” she writes, are more “concerned with the maintenance of life itself,” than the particular modes of life desired and practiced by Indigenous peoples. Colonial forms of “care” may be described as “biopolitical” in that they are “directed at populations rather than individuals” and reflect “a kind of indifference on the part of the Canadian state.” Under regimes of welfare colonialism, writes Stevenson, “it often seems to make no difference for *whom* the

²⁵ Taking a phenomenological approach, Stevenson defines “care” as: “the way someone comes to matter and the corresponding ethics of attending to the other who matters.” This definition is meant to shift the anthropological analysis of care away “from its frequent associations with good intentions, positive outcomes, or sentimental responses to suffering,” so as “to make visible the suffering” produced through “colonial forms of care” (2014:3).

state cares.” The violence of this settler humanitarianism is “couched by the state in terms of benevolence and concern” (4).

Biopolitics can be a useful analytic for interrogating the practice of welfare colonialism by settler governments throughout the North American Arctic, as well as the persistent logics, structures, and entanglements that have been produced through these colonial incursions. As in Arctic Canada, the interventions of the Bureau of Education, reindeer administrators, and Christian missionaries in Iñupiaq Alaska reveal a biopolitical process at work. While the last hundred years of federal, State, and regional incursions into Kivalina’s homeland territory have been galvanized by diverse interests, justifications, and mandates, these have also demonstrated a common posture towards the management of local communities (as generalized populations). When not openly hostile or assimilative, settler humanitarianism remains, at best, indifferent to the continuance of myriad social and land-based relationships, which are so deeply valued by Iñupiaq peoples themselves. Whether through colonial welfare, environmental protection (Chapter 2), or community planning (Chapter 3), non-local institutions continue to display modes of “concern” that fail to take seriously Kivalina’s most enduring self-identified needs and desires. Throughout the last century, even when offering assistance, regional, State, and federal engagements with Kivalina have remained austere: characterized by a minimal interest in the preservation of bodily life, rather than in supporting locally defined conditions for present and future flourishing. And yet, Kivalina’s people continue to pursue a sovereign future far beyond these biopolitical logics.

Unsettling Kivalina:

For Bruyneel, attending to the “ambivalence” within a colonial project is to acknowledge that such interventions are rarely ever total. To reveal cracks and inconsistencies in historic

and/or ongoing colonial practices can help identify new potentials within contemporary conditions, but our histories must also attend to the ways in which Native actors have refused, resisted, or sought to transform these colonial incursions. If Stevenson has focused in large part on the psychological dimensions of colonial biopolitics in the Arctic, this dissertation especially attends to its spatial dynamics, material forces, and concurrent possibilities and practices of territorial reinhabitation by Kivalina's people. In the first half of the 20th century, the federal project of village schooling, backed by the force of law, created a new arrangement of centralized year-round settlement at Kivalina, but Kivalina's people would never fully allow themselves to be settled at the barrier island site chosen by the Bureau of Education.

Although U.S. federal policy failed to eradicate the everyday land-based practices, principles, obligations, and ethics through which Kivalina's people have continued to sustain themselves and one another, the creation of a "permanent" village was effective in beginning to reshape the spatial and temporal coordinates of daily life. Likewise, federal interventions across Iñupiaq Alaska would radically alter regional settlement patterns through the spatial consolidation of semi-nomadic nations into centralized villages (see also Marino 2012, 2015). The unilateral selection of "permanent" village sites reflected a hostility, often manifested through indifference, on the part of colonial administrators to the values, norms, and practices of Iñupiaq life throughout the territory. The interventions of the U.S. federal government at Kivalina around the turn of the 20th century initiated a multi-decadal, non-linear, process of forced-sedentarization: in less than 50 years, year-round dwelling sites in the Kivalina territory would be consolidated from an expansive homeland territory to a shifting barrier island. And the consolidation of a semi-nomadic Iñupiaq nation within a 27-acre municipality would eventually

open this territory to aggressive capitalist resource extraction and toxic industrial contamination (Chapter 2).

At the time that the first schoolhouse was constructed, around 150 people were living throughout the Kivalina territory. They were Kivalliñigmiut who had returned to their homeland, joined by Iñupiaq immigrant families from Shishmaref, Noatak, Barrow, and Kotzebue (Burch 1998:55-56).²⁶ Burch estimates that at freeze-up in 1906, just under half of the territory's residents remained at the site of the new school. While some families spread out along the coast, others continued their longstanding seasonal migration to upriver dwellings for winter. Back in Washington D.C., Sheldon Jackson had his critics and the selection of Kivalina's first school site would become a point of contention among federal administrators. Frank Churchill was commissioned by Congress to audit Jackson's work, and traveled to the region, including to Kivalina, in the summer of 1905. Reporting back to the U.S. Congress, he wrote:

After a personal inspection [of Kivalina] nothing was seen nor heard to warrant the establishment of a school at this place. There is no village... Carrying out the declared policy of the Bureau of arbitrarily establishing deer stations so as to make a complete chain on the Arctic coast, must be the only excuse for putting in this school... It is possible that the establishment of the school may result in a few Eskimo Families building huts in the vicinity, but it is hardly probable, for a long time at least (Churchill 1906: 52-53).

Dana Thomas, a missionary in Kotzebue who was also subject to Churchill's scrutiny, challenged this assessment, writing: "Pray how could Mr. Churchill or anyone else judge the winter population by the summer tents. Natives rarely live in the summer where they congregate in the winter; in the summer they are at the trading points." Visiting Kivalina himself in the

²⁶ As heirs to this homeland territory, these families would form a new polity, often calling themselves "Singaqmiut" (channel people), "Kivalina Iñupiaq," or quite simply "Kivalina." In spite of contemporary property regimes, these same lands continue to be recognized, regarded, and treated by many local residents as Kivalina's collective homeland territory.

winter of 1906, Thomas claims to have counted “14 native houses at the school there, or near enough to attend school” (Jackson 1908:61). Defending his life’s work and administrative legacy, Jackson later referenced Thomas’ account, but also contradicted his missionary colleague. As to the whereabouts of the Kivalina people during Churchill’s visit, Jackson wrote, “the native population were inland drying fish for the winter. They returned to their homes in time to place the children in school at the opening in September. However the 14 houses were there at the time of Mr. Churchill’s visit” (1908: 25-26).

What is clear from this debate is that settler administrators were well aware of the semi-nomadism practiced by Iñupiaq families, even if they had contradicting explanations to account for Native absence during Churchill’s visit to Kivalina. What also emerges from this archive is the extent to which the project of colonial schooling was understood and carried out as an intervention against these seasonal migration patterns. Over time, the settler colonial “problem” of space would need to be managed. In the earliest days of his work in Iñupiaq Alaska, Jackson himself noted the need for some “pressure to oblige [Iñupiaq parents]... to keep children in school regularly” (1886: 23). At Kivalina in particular, school attendance was seen as such a problem in 1910 that the annual report from the village schoolteacher implored his superiors to advocate for a compulsory education law (York 1910). By the early 1940s, legal threats against non-compliant parents were being used to leverage Iñupiaq families from outlying settlements into centralized villages. And yet, in spite of these colonial impositions—through refusal, resistance, and creative co-optation—Native families held open the spaces they could, the breathing room, to create their own individual and collective futures.

With government officials threatening to enforce truancy laws, Kivalina families were increasingly compelled to settle at the barrier island where the community remains today, but

they also continued to make fall, spring, and summer camps upriver, out on the ice, or along the coast. Even after the reindeer went away, the *North Star* returned each fall with supplies and foodstuffs, and to fill its stores with pristine Wulik River water for the long journey back to Seattle. (Joe remembers how the captain himself would come to shore with candy for all the children.) As soon as they got their supplies, families would paddle their skin boats up the Wulik or Kivalina rivers to camp and fish for weeks at a time. Throughout the 1970s and 80s, long after the ship stopped coming around, many Kivalina people continued to spend extended periods seining upriver at fall time, spread out along the coast for ugruk at spring, or waiting for beluga in the summer. Today, Kivalina's people hunt, fish, gather plants, and travel throughout the entirety of their homeland territory (see Chapter 4). Families still make occasional camping or cabin trips during summer or fall, while spring whaling crews spend as much time as possible out on the ice—though such prospects are increasingly uncertain with climate change (see Chapter 5).

At fall time, just five years after the founding of the new village of Kivalina, we read in the schoolteacher's annual report that south winds were bringing "some uneasiness" to the barrier island. After three or four days of "water... splashing up over the bank in places," he wrote, residents "were beginning to talk of moving." The teacher concurred that, "to move would be the wiser if not the safer plan" (Replogle 1911). In the late 1930s, forty-two residents of Kivalina petitioned the federal government for a new school be constructed up the Wulik River, a few miles from the coast (Burch 1965). Coastal erosion reignited discussion of a community-led relocation throughout the 1950s and 60s, but most votes were cast in favor of remaining at the current village site. Some 20 years later, however, the issue reemerged over severe deficiencies in the built environment (see Chapter 3). In 1981, the City Council circulated a

survey to the community assessing collective interest in village relocation as a means to address the desire for adequate water and sanitation, to ameliorate severe overcrowding through the construction of new homes, and to create economic opportunity. By the early 2000s, rapid environmental change, brought on through global warming, would transform Kivalina's interest in relocation from a strategy to meet these "basic needs" to way of enduring these increasingly urgent coastal threats. Entangled with many of these same institutions and logics today, the people of Kivalina continue their struggle to determine the spatial and temporal quality of their lives—their own collective horizon.

Chapter 2. “We had our own territory”: Uneven Development and the Politics of Environmental Risk.

One Sunday afternoon, I was enjoying a meal around the big table at Papa Joe and Momu’s house. Their weekly after church dinners have always been delightful feasts of Iñupiaq food: whatever was freshly caught or recently aged to perfection. Over the course of the meal, family members came in and out of the house, often taking a plate back home to their spouse or kids. About five of us remained when one of Joe and Momu’s daughters began to clear the used plates and oily cardboard. That was my cue to start serving tea, beginning with Momu and Joe. Because of a few recent events in town, our conversation that day turned to the history of hunting and fishing rights in Northwest Alaska. It was a frequent topic with Joe, as throughout his life, he has been a relentless advocate for the protection of Kivalina’s lands and land-based ways of life. A retired whaling captain and formidable hunter, over the years he has advised State regulators, negotiated whaling quotas, and served on State, federal, and corporate “subsistence” committees. At 80 years old he was still being flown to Kotzebue for advisory meetings with the State of Alaska Department of Fish and Game. Looking back on this distinguished career, he remembers a time before the State of Alaska and other non-local institutions interjected their own values into the environmental governance of Kivalina’s lands. It was a time when decisions were made locally, as were the laws, norms and customs of hunting, fishing, and the distribution of food and furs from the land, sky, and sea. “We had our own territory,” he told us.

This chapter considers the transformations of land ownership and land use within Kivalina’s homeland territory that were brought about through the 1971 Alaska Native Claims Settlement Act (ANCSA). ANCSA had profound effects throughout the State of Alaska, as it purported to extinguish “aboriginal title” and formalize State and federal seizure of the majority

of Indigenous homelands that the U.S. had *de jure* acquired from the Russian Empire 100 years earlier. From the perspective of the settler state, ANCSA was an experiment in neoliberal governance: an attempt to subsume Indigenous sovereignty under market forces by initiating a shareholder relation to new corporately held lands. For the Native leaders involved in negotiating the settlement, it was an effort to preserve as much Indigenous land ownership as they felt was possible and to pursue forms of economic self-determination beyond the paternalism of the BIA. What is common to both a favorable or critical assessment of ANCSA, is that the settlement, in actual practice, wedded Indigenous political and economic self-determination to extractive capitalism, a form of uneven development that has historically created surplus value through zones of toxic sacrifice. Since the opening of the Red Dog Mine in 1989, Kivalina has found itself on the wrong side of that industrial sacrifice. Local efforts to defend land and water have had limited success, while also further marginalizing the community in relation to its neighbors, the region, and the State of Alaska. This chapter considers the biopolitics of environmental risk and regulation in the U.S. in light of Kivalina’s intergenerational efforts to protect community health and regional ecologies in the context of ongoing mining operations and impacts.

In 1989, the Northwest Alaska Native Association (NANA) Regional Corporation—one of the 13 regional corporations established by ANCSA—teamed up with Cominco Alaska,²⁷ a Canadian mining company, to begin extracting lead and zinc from the Red Dog Mine. The mine is located on a tributary of the Wulik River, Kivalina’s main fishery and formerly pristine water source. Joe’s father-in-law, a distinguished whaling captain and elder, maintained a set net up the Wulik. Once the mine opened, he and other fisherman began to see fish, including their prized Dolly Varden trout, turn “belly up” as if they’d been “cooked” by the river itself. Even the

²⁷ Later called Teck Cominco, and now Teck. See: <https://www.teck.com/>

mudsharks (burbot) had sores on them. The old man told his family, “If they gonna mine, [you] better find another way of life.” For at least two decades, the toxic byproducts of lead and zinc mining flowed through Red Dog Creek into the Wulik River, well in excess of permitted levels. Even when discharge levels have been in compliance with State and federal permits, residents report that their water is not the same; many refuse to drink even filtered water from the contaminated Wulik. The long term, cumulative consequences of thirty years of mining discharge (both within and outside permitted levels) on human and environmental health are still unknown. To this day, Red Dog operations continue to disrupt sea and land mammal migrations through Kivalina’s homeland territory. Access to key hunting grounds is now managed through a matrix of non-local landowners and decision makers (See Chapter 4).

In 2002 the Kivalina Relocation Planning Committee (KRPC) initiated a lawsuit in an effort to protect their water and main fishery from mining pollution (*Kivalina Relocation Planning Comm. v. Teck Cominco Alaska, Inc.* 2004).²⁸ In 2006 and 2008, US District Court (Alaska District) determined that Red Dog Mine had committed 827 violations of the Clean Water Act by discharging toxic contaminants in excess of its 1998 permit. A 2008 settlement between required Teck to pay a fine and to investigate rerouting its discharge through a pipeline to the Chukchi Sea. In 2014, however, the mine elected to pay an additional \$8m penalty rather than construct the pipeline desired by many local advocates. Today Red Dog Mine is in the process of expanding (Rosen 2018). This chapter considers the biopolitics of environmental regulation in the U.S., especially where it intersects with the logics of settler colonialism.

Building on existing environmental justice literature, I argue that environmental regulation in the

²⁸ The KRPC is a local planning group established in the mid 1990s to coordinate Kivalina’s village relocation process (see Chapter 3). Six KRPC members refilled the initial lawsuit in March of 2004 as private citizens; the initial complaint was amended several times between 2004-2008.

U.S. has been more concerned with the minimal preservation of life itself than with the enduring quality and long term health of those lives. Such policies are inadequate for protecting Native communities from the negative impacts of industrial development. This is a particularly troubling situation in Alaska where, through ANCSA, Indigenous political and economic futures have been so radically tied to extractive capitalism. Nevertheless, having endured generations of environmental violence, communities like Kivalina persist and struggle for environmental health and justice, and for a future on their own terms.

The Alaska Native Claims Settlement Act

With the discovery of oil at Prudhoe Bay in 1968, an array of settler institutions, colonial logics, and capitalist forces would find themselves concerned with newfound urgency about an issue for which Native Alaskan nations, activists, and advocacy organizations had long sought a resolution. One hundred years after the U.S. purchased 586 thousand square miles of stolen Indigenous homelands from the Russian Empire, U.S. federal, state, and, corporate institutions finally had a vested interest in resolving the burgeoning land claims that were being organized by a diverse statewide movement of Indigenous peoples. Maria Shaa Tláa Williams has situated this particular moment of collective struggle within the broad history of Alaska Native solidarity and civil rights. Based in Southeast Alaska, the Alaska Native Brotherhood and Sisterhood (ANB/ANS), she writes, was the only pan-Indigenous political organization in Alaska until the 1960s (Williams 2009a: 206).²⁹ Alaska statehood in 1959 initiated a formal process for the newly formed state to select, for its ownership and administration, a portion of lands that the U.S. federal government had seized from Indigenous Alaskans. At this moment, new local and regional Native organizations emerged to contest this new round of land theft, as well as to

²⁹ The ANB/ANS were initially formed (in 1912 and 1915 respectively) to fight segregation and secure voting rights for Native people throughout the Alaska Territory.

address violations of aboriginal hunting and fishing rights, and other significant social and environmental concerns. Throughout the decade, Native villages and regional associations began to organize across the state and in many cases initiated formal land claims processes with the U.S. Secretary of the Interior. By 1967, Williams notes, the total number of land claims in Alaska “exceeded the actual size of the state by 20 percent” (2009a: 215). In 1966 the Cook Inlet Native Association called a meeting of Native associations from across the state. That October, more than three hundred participants from seventeen organizations gathered in Anchorage to deliberate a way forward for Indigenous land claims in Alaska and created a new organization: the Alaska Federation of Native Associations (AFNA). The following year, the group came together again, changed its name to the Alaska Federation of Natives (AFN), and began to pursue a rigorous agenda beginning first by calling for a freeze in transfers of federal land to the State of Alaska, and the eventual pursuit of a comprehensive land claims settlement (Williams 2009a: 214-15).

In 1969, Willie Hensley, an Iñupiaq organizer from Kotzebue, explained before a conference in France that Alaska Native “land has never been specifically taken by act of the United States Congress, or in battle, or by abandonment,” and that “we declare—indeed proclaim—that by reason of historic use and occupancy, this is our land” (2009:193).³⁰ Tracing the history of Russian and U.S. imperial incursions, Hensley noted that 1867 Treaty of Cession provided for “no confirmation of title to lands used and occupied by the Native people.” At the time of U.S. purchase, he affirmed, “Alaska was still Native land but encumbered by the law

³⁰ An Iñupiaq leader from Kotzebue, Hensley began his public career as a scholar-activist involved closely with the land claims process. Among other positions, he would later serve as a state representative; state senator; founder and president of AFN; founder, director and president of the NANA Regional Corporation; and founder of Maniilaq, a regional health and social services nonprofit serving the NANA region.

between [outside] nations” (195). European exploitation of furs, whales, gold, and minerals had caused great suffering among Alaska’s “Eskimo, Indian, and Aleut” peoples, he noted, and “unless a change is brought about through federal legislation,” the same “will be true of the oil era” (197). Throughout Alaska’s history, Hensley observed, “economic development has taken place but little benefit has accrued” to the Native people. This has been, at least in part, he argued, because “of the inability of the Native to hold title to land, or to acquire title” (197). By 1969 AFN was already engaged in negotiations with the federal government to achieve a land claim that would provide “an alternative to wardship” and enable Native people, in Hensley’s words, to “live longer and more decently without having to stoop in indignity because of a degrading welfare system” (201). Hensley further explained that the position of Native land rights organizers had been “been to go for what we feel is within reason—but not to buckle when pressure is brought to bear before we reach Capitol Hill.” Alaska Natives, he summarized, “have had to be realists in dealing with the State and Federal officials concerning the land issue” (200). Finally, Hensley warned that “no settlement or a poor one” would “prevent us from becoming an integral part of Alaska’s social and economic development” (201).

On December 18, 1971 Richard Nixon signed The Alaska Native Claims Settlement Act (ANCSA) into law. On paper, the bill traded the inherent sovereignty, or “aboriginal title,” of diverse Indigenous communities across the state of Alaska for \$962.5 million and 44 million acres that would be administered through a constellation of Native-owned for-profit corporations. As an experiment in neoliberal governance, ANCSA sidestepped questions of territorial sovereignty for Native nations and failed to formally protect the ongoing practice of intergenerational land-based modes of life. As Roy Huhndorf and Shari Huhndorf write, ANCSA’s “failure to adequately address vital sovereignty and subsistence rights engenders

conflicts between Native, state, and federal interests that occupy the center of contemporary Alaska Native politics, making these the most actively litigated Native issues” (2011:386).³¹ In 1983, the Inuit Circumpolar Council appointed the Canadian Jurist Thomas Berger to lead a commission tasked with reviewing the impacts of ANCSA on the lives of Alaska’s Indigenous peoples. Berger concluded that the elevation of corporate over tribal governance was an intentional tactic by the U.S. congress, which had long “considered tribal governments to be an impediment to assimilation” (1985: 6). By forcing Native Alaskans “to place all of their ancestral lands in the corporation,” he wrote, the settlement ultimately puts “...[a]ll of their land at risk” (36). Here, Berger is referring to the ways in which ANCSA would render collectively held territory as alienable property, but his assessment also foreshadows the ways in which capitalist profit so often depends on “externalizing” the costs of socio-ecological risk (Bellamy Foster et al 2010).

Rosita Kaaháni Worl and Heather Kendall-Miller have described what they see as the “conflicting” goals embedded within ANCSA. For the Native leaders involved, they write, the “ultimate goal was self-determination.” Seeing the limitations of the reservation system, Native advocates sought “a new approach to land management” beyond the “heavy hand” of the BIA. In this way, the conveyance of fee-simple land title through state-chartered corporations offered a promising form of political-economic independence and influence, while also meeting the state and federal governments goal “to establish clear title to Alaska lands to allow for unimpeded economic development” (2018: 40-41). In codifying land as a commodity and the promotion of individualism, ANCSA “clearly favored Western values over Native ones,” but what Congress intended as a tool of assimilation could not overcome “the cultural persistence of Alaska Native

³¹ See also: Anderson 2016; Berger 1986; Peter 2009.

societies” (41 and 47). Over the years, Alaska Native leaders have achieved important amendments to ANCSA, which have demonstrated their commitment to culture, intergenerational social obligation, and relational approaches to the land. Alaska Native Corporations have very often been the financial and institutional means for cultural preservation, education, and advocacy initiatives (Worl and Kendall-Miller 2018).

Similarly, Eve Tuck reads ANCSA in terms of the contradictions it reveals between settler and Indigenous futurities. She theorizes the settlement as an “x-mark,” which Scott Lyons defines as “a contaminated and coerced sign of consent made under conditions that are not of one’s making” (2010:3 in Tuck 2014). For Tuck:

ANCSA represents both a) settler desires to alienate Native peoples from land, and b) Alaska Native desires for the proliferation of land and people. The settlement process required Alaska Native leaders to negotiate in terms of land as property and people as land owners. These represent significant departures from the ways in which Alaska Native peoples have described their relationships to land and place (262).

While ANCSA was an “ideological invasion” of settler colonialism, remaking land into property and tribal citizens into corporate shareholders, for those Native leaders involved it was viewed as a “strategic necessity”—if not the only way to retain ownership of their land. In presuming to settle land claims once and for all, the act assumes the permanence of the settler colonial state.

While ANCSA was “constructed in a way that hopes to preempt any future x-marks,” Tuck points out that it “will no doubt be reorganized and legislated.” There are “future x-marks to be made,” she writes, “potential x-marks to defragmentize land, place corporations under tribal governance, [and] allow for the expansion of Alaska Native corporations to acquire more land” (266).³²

³² Such realignments of tribal and shareholder governance are not without precedent in contemporary Native nations. For example, in 2006, the creation of the Osage Mineral Council

For many analysts, ANCSA’s legacy has been perhaps most contradictory when it comes to hunting and fishing rights for Alaska Native people. Worl and Kendall-Miller have observed that while ANCSA “abolished [inherent] subsistence hunting and fishing rights,” in the decades since, these same “subsistence rights may have been more seriously undermined had it not been for the political and financial support of” the Alaska Native Corporations (45). And yet, they continue, while some “regional corporations have adopted policies that address protection of land and resources against development impacts,” and even opposed financially profitable extractive development schemes, “tensions between resource development and subsistence land use have arisen throughout almost every region” (46). In spite of numerous amendments and revisions to ANCSA, writes Bob Anderson, “the failure to affirmatively recognize Native governmental authority over land, or to protect Native hunting, fishing, and gathering rights under federal law are glaring deficiencies in the settlement” (2016; see also Chapter 4).

These critical-legal analyses point to the ways in which ANCSA has radically shaped political, economic, social conditions throughout Native Alaska. They also focus our attention to the ways in which Native Alaskans continue to renegotiate the gaps and contradictions of the legislation. Likewise, my task in this chapter is not to render a conclusive assessment of the settlement as a whole, or to pass judgment on the efforts of those Indigenous leaders who fought for ANCSA. Rather, the remainder of this chapter will address the particular material transformations that ANCSA—through the creation of the NANA Regional Corporation—has enabled in Kivalina, and the ways that local leaders have nevertheless pursued collective continuance, environmental self-determination, and community health, especially through the effort to sustain longstanding land-based practices.

brought the Osage Mineral Estate into some overlapping jurisdiction with the Osage Nation (Dennison 2012: 102-128).

NANA and the Red Dog Mine

The implementation of ANCSA would require new bureaucratic innovations and created administrative challenges across the state. *Village Journey: The Report of the Alaska Native Review Commission* (Berger 1986), describes a highly irregular and often ad hoc process. Among the challenges the Berger report identified was how the new law would impact those born after 1971, when the original distribution of corporate shares occurred, and what would happen when Native shares could be sold to non-Natives. Implementation of ANCSA would shift longstanding political and economic control from many local communities because, as Berger notes, it required forms of legal and administrative expertise that were not available within these communities. ANCSA also created new political complexities including two kinds of corporations: village-based corporations, which held title to surface lands, and regional corporations, which held title to sub-surface.³³ One strategy to deal with these complexities was to do away with them entirely through the subsumption of village corporations by regionals—it was a policy pursued in earnest in Kivalina’s region. The process of corporate mergers would involve the transfer to the regional corporation of village corporation (surface) land selections, and the initial funds the village corporation had received through ANCSA. Subsequently, those people who held shares in a village corporation would gain the same number of shares in the regional. Across the state, many regional leaders supported the merger process, which was in some cases motivated by their own concerns over losing these newly designated corporate lands to non-Natives.

In Kivalina, ANCSA created an independent village corporation, the Kivalina Sinuakmeut Corporation, while also drew Kivalina into broader regional entanglements through

³³ Tuck describes this distinction as an “arbitrary (except to fossil fuel companies) absurdity” and as “one of the specific false logics of settler colonialism in Alaska” (2014: 252).

the NANA Regional Corporation. Initially, both entities would select lands from within Kivalina's territorial homeland and count Kivalina people among their shareholders. In late 1973, NANA convened a gathering of village corporations throughout the region to discuss the possibility of merging.³⁴ But the process by which the merger took place is widely contested in Kivalina. "That's why they want us to merge," Joe explained to me, "they knew Cominco was coming." Another elder put it this way: "They actually bamboozled all the villages to join." The reason for these promises, I asked? "Red Dog Mine," the elder said. "You see, NANA and the corporations, they all knew about Red Dog Mine way back."

Opened in 1989, the Red Dog Mine is an open-pit lead and zinc mine located in the hills and flats Northeast of Kivalina. It is a partnership of Teck, a mine operator based in Vancouver, BC, and the NANA Regional Corporation, which owns the land. The mine site includes the main pit, mill, storage facilities, airport, worker housing, waste rock pile, and a 3.5 billion gallon tailings reservoir. Beginning each spring, which now means earlier and earlier each year, and continuing through the fall, the mine discharges approximately 1.2 billion gallons of treated wastewater into Red Dog Creek—a tributary of Kivalina's Wulik River (Teck Alaska 2016). A 52-mile gravel haul road connects Red Dog Mine to a port site on the Chukchi coast. This shipping infrastructure, together known as the DeLong Mountain Transportation System (DMTS) is a project of the Alaska Industrial Development and Export Authority (AIDEA) and provides considerable revenue to the State of Alaska.³⁵ Current ore deposits are expected to last until 2031, but Red Dog is in the process of applying for the permits to expand its operations significantly. In 2017, over 4 million tons of ore were extracted from Red Dog, which produced 541,900 tons

³⁴ See: <http://nana.com/regional/news-and-press/press-releases/from-many-to-one/>

³⁵ See: <http://www.aidea.org/programs/infrastructuredevelopment/delongmountaintransportationsystemdmmts.aspx>

of refined zinc, 111,300 tons of lead, and \$1,752,000,000 in revenues.³⁶ Of this, \$325 million was paid as royalties to NANA (with about 63% of that going to revenue sharing with other Alaska Native Corporations) and approximately \$25 million annually to the Northwest Arctic Borough (NWAB) as a “Payment in Lieu of Taxes,” and as contributions to a grant-based community development fund (Teck Resources Ltd. 2018). With over half of its permanent workforce (approx. 450) coming from NANA shareholders, the mine is the biggest employer in the region.

After the Kivalina Sinuakmeut Corporation and NANA Regional Corporations had made their land selections, the issue arose as to who would control the mine’s access to global markets and therefore its profits. Before Kivalina’s village corporation merged with NANA, it had selected lands which were inclusive of today’s port site, and had historically belonged to the Kivalliñigmiut nation. The mine would “have to go through” it, one elder explained to me, because they needed “to connect to the ocean for the barges.” Before the merger took place, the village corporation would have been in a position to decide if they wanted to deny access, sell, or lease access to the land. In that instance, the elder continued, “NANA would have no control, ‘cause it was our land picked by the community.” At the time, most people had “no idea” that the merger would cede so much local power to regional, state, federal and global institutions. “The only thing we know,” the elder explained, “is they were trying to scare us.” Kivalina shareholders were warned if they ever went bankrupt, they could lose everything. They were told: “If you have no money, you have to sell your land... to bail out your people.” But, if they merged, they were assured, “You don’t have to worry about losing where you stay.” NANA

³⁶ See: <http://dnr.alaska.gov/mlw/mining/largemine/reddog/> and <https://www.teck.com/operations/united-states/operations/red-dog/>

would handle it. While NANA initially represented itself as a path to financial solvency for village assets, the corporation has experienced its own financial difficulties (Forgey 2014, Oliver 2016). Among these has been assuming debts and liabilities that have only further entangled Kivalina's economy in the whims and exigencies of global markets, including responsibility for the deaths of three Filipino workers who were killed from an explosion at one of their subsidiaries' (Grand Isle Shipyard) oil platforms in the Gulf of Mexico (Cockerham 2013). What's more, the financial security promised through the merger has not materialized, leaving some to wonder what the future holds, especially if NANA were subject to another lawsuit of similar magnitude to what happened at Grand Isle, "If it happen I think we will be more in debt and never get our shares for long time," one elder told me. "Or we'll maybe still have to sell the land."

A young person in Kivalina once shared with me what they had learned about the merger process, which had occurred at least two decades before they were born:

From what I hear, from elders long time ago—[the ones] that were here back then—they said we'd be getting yearly checks and running water from port site and Red Dog. I heard this story from a couple elders before, and we're still on honey buckets...

Throughout the State of Alaska, Red Dog, along with North Slope oil development, is often held up as an exemplar of ANCSA's success.³⁷ But the view from Kivalina tells a very different story. Through massive extractive development projects like Red Dog, ANCSA created new global entanglements across Native Alaskan communities. Specifically, the NANA region has been integrated into global markets for lead and zinc, logistics, shipping, equipment, and more. But such forms of capitalist development are inherently uneven (Harvey 2006). While many in the

³⁷ See, for example: http://www.akleg.gov/basis/get_documents.asp?session=30&docid=39857

region have experienced Red Dog as a source of jobs and revenue for government services or community development projects, to date, Kivalina has been uniquely forced to bear untold ecological, cultural, and health burdens that will affect the community for generations, long after the last deposits are exhausted. As the only downstream community, and whose territorial homeland overlaps with mining operations both on land and in the ocean, Kivalina has a singular relationship to the Red Dog Mine, Teck Cominco, NANA, the Northwest Arctic Borough, and the State of Alaska: that of a “sacrifice zone.” Kivalina’s unique position vis à vis these institutions has affected the its standing in the region, marginalized the community, and has made it more difficult to secure basic rights to health, sanitation, water, food, cultural self-determination, and territorial sovereignty (see Chapters 3 and 4). Through both cooperative and confrontational means, Kivalina’s community and governmental leaders have sought, and continue to seek, to transform these conditions.

Boat Ride

It was a blistering day in late June 2016—blistering for the Arctic anyway. With the 24-hr sunlight, it was the kind of day when you wear sunglasses from the minute you wake up until you go to bed at night. After we finished dinner, my friend turned to me saying, “We’re gonna take a boat ride.” I was tired from the all day travel from Seattle, but knew better than to sit this one out. The destination was Red Dog port site. A tugboat captain who had been working in the region for some decades had gotten to know several families in Kivalina. He too had just arrived from Seattle and was carrying 10 pounds of sugar and at least as much flour for my friend’s mom, an avid baker. It wasn’t *just* a joy ride, we *had to* pick up the gift. Plus, we might see belugas my friend reminded me. My eyes lit up.

At the edge of the lagoon we loaded into my friend’s skiff—with five adults I was lucky to be invited along. As we approached the channel and made our way to the ocean I pulled an extra layer from my backpack. It billowed wildly in the wind as I tried to slip my arm into one of the sleeves. My friend’s wife started laughing as she helped to steady the jacket so I could gradually get it on. Already cold before we hit the ocean, I had been fooled by the sun again.

Once we were through the channel, we cruised south, hugging the shore. There was a light breeze and the water gently lapped the sand and gravel along the coast. The sea was teeming with life, mostly seabirds and porpoises. As a flock of ducks passed overhead I quickly covered my ears just before a shotgun went off and one fell from the sky. We motored to where it landed and placed it in the boat—it would be perfect for soup. A young grey whale surfaced just fifty yards out from us. My friend slowed down and the whale swam alongside us for a while. Concerned it might be getting too close to us, he throttled the outboard and put us up on plane again.

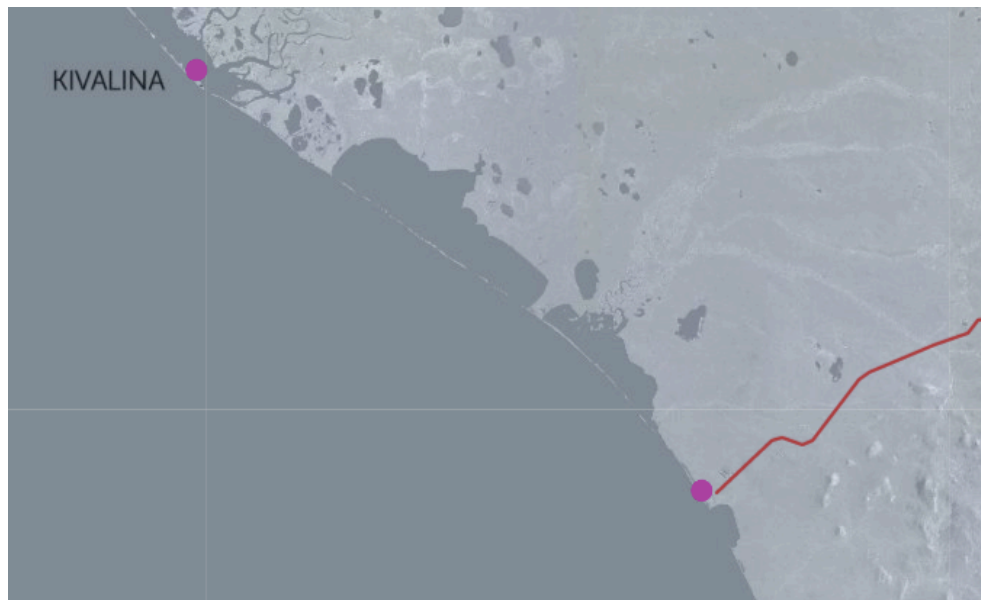


Figure 2.0. Kivalina (upper dot) and Red Dog Port Site (lower dot).

As we neared the port, the barge terminal grew steadily in the sky. Several ships were anchored off shore, waiting their turn to unload supplies and load ore from one of the barges. On the distant horizon, a few more ships streamed slowly out of sight. We circled around the far side of the hulking metal dock that was suspended, like a bridge, on huge pilings. On the other side we came to a tugboat, which seemed tiny in comparison to the dock. When we pulled up along the stern, the captain leaned over the side and hung a short ladder down for us. My friend handed the captain our bowline, which he cleated. One by one we boarded. The captain greeted each of my friends with a bear hug, before warmly shaking my hand. We walked around the deck and climbed the narrow steel stairs to the bridge. The inside was decorated with a well-worn yet shiny wood paneling, several swivel chairs, various instruments for navigation and communication, and a stainless metal steering wheel. From our perch some 50 feet above the water we could see two forklifts stacking and sorting shipping containers at the base of the barge terminal. Workers in day glow yellow vests stood outside directing them, while others milled about at the entrance of a broad low building several hundred yards inland. Looking inland, a gravel road swerved in and out of sight until it disappeared at the top of a hill several miles in the distance.

After my friends and the captain had caught up on all the news from home, we headed down below to continue our tour. A member of the crew was watching TV and relaxing in a small dining area adjacent to a tiny galley. Another tinkered in the kitchen, before handing us a few cups of coffee and cans of pop. It was a good visit for old friends and a new experience for most of us. We'd need to be heading home but couldn't leave without seeing the engine room first. As we headed back up toward the daylight the captain disappeared. Once we reached the deck he emerged again with hats bearing the logo of the shipping company he worked for and a



Figure 2.1. DeLong Mountain Shipping Terminal (aka “Red Dog Port Site”)

stack of white pillows. “Don’t ask me how,” he said, “but we ended up with a bunch of extra pillows this run. If anyone could use them...” Tired of stuffing my down jacket in a tee shirt each night, I took one with glee. It smelled of engine oil and diesel. Then I noticed a few cardboard boxes stacked up over where our boat was tied—the flour and sugar. We passed these one by one to my friend who arranged them in his skiff for proper ballast. After more hugs and handshakes we were off.

After circling a bit wider around the end of the dock this time, we headed slowly toward the shore and while turning parallel to it, began the journey back to Kivalina. A few hundred yards North of the Port Site, before we had reached our cruising speed, I noticed two weathered posts rising from the tall grass on shore. Eyes wide, I turned to my friend and pointed enthusiastically, “Old racks!?” I shouted, so he could hear me over the motor.

“Clinton’s,” he responded, nodding. The whole way home the ocean glinted with the illusion of surfacing belugas.

Clinton's Camp: From Abundance to Extraction



Figure 2.2. Remnants of Clinton Swan's Camp

Becky Norton came to Kivalina during her first or second year of grade school. It was the late 1950s when her uncle, Clinton Swan, ran his dogs to Noatak to gather Becky, her older brother, and their grandparents. She came by plane with her brother and grandmother, while her grandfather traveled with Clinton by sled. Becky is a distinguished elder now, a leader in her church, and a longtime IRA councilmember who was recently serving as council president. We met only briefly during my first trip to Kivalina in 2012, but in the years since we have shared meals, discussed community projects at council meetings, and jigged side by side for trout through the Wulik River ice. Growing up, she learned much of Kivalina's deep history from her grandmother and she herself has witnessed a great deal of change in the local environment.

I remember as we were growing up, over on the south side, the grasses were so tall. Rain or not, we'd be playing over there in the summertime, playing hide and seek in the grasses... because the grasses were so tall. We grew up here, and notice in summer time, especially in July, everyone would be on alert twenty-four seven for belugas... because

they always came from the south just right along the coast. They could even hunt them right from the beach.

Kivalina's historical position as a prime beluga hunting ground is well known but like many things, this too has changed. "Right now," Becky continues, "ever since Red Dog, the migration pattern has changed..."

Before the construction of Red Dog Port Site, pods of beluga would pass right by Kivalina, approaching the village from the south (Huntington et al. 2016). Now the community is lucky to see a few strays. Historically in summer, Kivalina's people would spread out along the coast, both north and south of the current village site. Living in tents, Kivalina families would hunt and put away the year's worth of ugruk, then wait for the belugas to come next. Becky described to me one former campsite located just across the channel south: "Every summer they would go spend over there, that's where they would hunt belugas too over there, real close. Because the belugas used to come that way from the south, but now we don't even see them." Her Uncle Clinton had a well-known hunting camp on the southern edge of a lagoon about 15 miles south of the Kivalina, at Ipaġaqvik, about a mile and a half north of the current Port Site. Clinton's camp was located on an allotment owned by his brother Milton, but as Becky explains, it was a "family camping ground." Her grandmother, born around 1870, told her that, "They'd been camping there for years, ever since their kids were very young." The generations continued this enduring spring and summer tradition, including Clinton and his wife Charlotte, several of their children with their families, Becky and her husband Jerry, and even Becky's aunt and uncle from Noatak. Papa Joe, Clinton's son-in-law, remembers Ipaġaqvik as a place of abundance that "everybody used." It was "the best place for hunting belugas," he told me. Using nets, or hunting from boats, they could always get "enough," but now, "after they build the Port Site," he explained, "there's nothing."

Like Becky, Joe also described to me how the belugas used migrate up along the coast toward Kivalina, but now when they hear the noise from Port, he explained, “they always bounce off.” A few years after the Port had opened, Joe developed a theory as to why this was, but he needed to test it out himself. One time, Joe took his whaling crew out to where there was open water in front of the barge terminal. He explained to them that he suspected noise from port operations, including the electricity generator, was being relayed underwater by the submerged dock supports. “I say maybe we could test it,” Joe told me. Before the era of go-pros and underwater microphones, there was an old whaler’s trick for listening for sea mammals under water. Standing at the ice edge, one takes a wooden oar, submerges the paddle, and carefully presses the nub of the handle to a bone on the inside of one’s ear.³⁸ When a crew member asked how to test his theory, Joe said, “I’ll show you.”

...when we get down there I told him to put the oar [in] sideways, not facing Port Site... [but] sideways. And they put it like that and turn it. “Turn it around, turn it around, till you could hear something and then stop.” And he turn it. Just about when it face Port Site [he say], “Oh, I hear the generator.” And I knew that vibration into the water can go way out there.

Noise and traffic from Red Dog port operations has driven the beluga migration not only away from traditional hunting sites like Clinton’s camp, but on a path that avoids the village entirely.

Flying home from Kotzebue once, Becky herself observed this disrupted migration pattern. It was about a mile south of Port Site, she explained, when:

I saw a big herd of belugas heading out before they reach Port they were heading straight out [from shore]. A big, oooh, quite a few belugas and they were going out. So when they come back from the west it’s if we’re lucky. Last year they got some again from the ones coming back from west. They don’t come from the south anymore.

³⁸ I myself have listened to sea mammals this way when whaling with Joe’s son Reppi.

Today, Becky also explained, the few belugas that Kivalina catches are “coming from the west,” they “are the ones that [have] change[d] the migration pattern” and now return to the coast from “way out [on the] other side of Port.” With the migration pattern now changed, Kivalina’s hunters are not able to hunt from the main pod. “Only stray ones we get,” Joe explains, “maybe one a year, or two, that’s it.” It is a far cry from the days when hunters could corral multiple belugas into nets extending just off shore. Back in the day, Joe reminds me, “They always have enough. Maybe only [except for] two times... they always have enough. Now *after* they build the Port Site, there’s nothing.”

Along with Beluga, ugruk (bearded seal), and caribou migrations have also been severely affected by Red Dog operations. Reflecting further on her Uncle’s camp, Becky recalled that, “they used to go and hunt ugruks too... over there toward Port Site.” It was “a big feeding ground.” But today, she explained,

...they don’t even do that no more. They have to go out, elsewhere to hunt their seals, their ugruks. Those have moved too... There’s just too much noise and traffic over there now that everything has changed.

Marine mammals are not the only animal migrations to be disrupted by Red Dog operations within Kivalina’s homeland territory. “Same thing with our caribou,” Becky said, pointing inland. “[W]hen they’re coming in the fall time, the tundra up here... you can’t even see the land because there’d be so much caribou, right up here, right across” the lagoon.” But, “We haven’t seen that in the *longest* time, because their migration pattern has changed” (see also Chapter 4).

The impacts of Red Dog Mine and associated infrastructure on regional animal migrations and local food sovereignty were not unforeseen by local hunters and elders. “[W]hen they building a road,” Joe told me, “when they going to build Port Site, we asked them, ‘What about the belugas that migrate through there?’”

‘Oh...’ they said, ‘They’ll get used to it.’

And I say, ‘I don’t think so. You cannot tame wild animals.’ That’s what I was tell ‘em. ‘You cannot tame the wild animals unless you keep it in your farm or something. You can tame ‘em, but you can’t tame the migration.’

“Sure enough,” he continued, “as soon as they build Port Site... they stop the migration route.”

In addition to the disruptions that Red Dog operations and infrastructure has caused to animal migrations and local land-based practices in Kivalina, there is also the issue of the heavy metals produced at the mine. The handling, or mishandling, of these materials over many years continues to affect social and ecological systems. Becky explained that she and Jerry “were the last ones to camp over” at Clinton’s. I asked her why people stopped going there and she explained, “When Red Dog opened, we tried, but the noise and the dust...” She explained:

[W]e didn’t want our kids exposed to it so we quit going. You could actually smell it, you know? Especially if the wind was a little bit from the southeast and south we could smell it. And all the noise was too much, too much for us so we quit, quit going to camp... I told Jerry this is not good for our kids, they’re too young. We don’t want them exposed to that smell and dust, so we quit going to camp.

In the matter of only a few years, Red Dog operations would turn Clintons camp from a site of intergenerational abundance to a site of toxic sacrifice.

Out of Compliance

In addition to disrupting animal migrations and longstanding land-based practices, Red Dog’s lead and zinc extraction processes produce significant amounts of contaminated waste, or “tailings,” which are stored in a human-made 3.5 billion gallon reservoir.³⁹ To maintain water levels and not overtop this open-air storage site, the mine discharges approximately 1.2 billion

³⁹ The EPA’s 2017 Toxic Release Inventory (published in 2019) indicates that Red Dog Mine is responsible for 86% of all toxic releases in Region 10, which includes all of Alaska, Idaho, Oregon, and Washington (Collins 2019). See: <https://www.epa.gov/trinationalanalysis>

gallons of treated wastewater annually into Red Dog Creek, a tributary of the Wulik River. Discharge begins each spring when the river begins to flow, but this timing continues to be a matter of contention and negotiation between mine operators and community leaders. With climate change, break up of river ice usually occurs much earlier than it once did, theoretically pushing the discharge start date earlier in spring and extending it further into the fall. According to State and federal law, Red Dog discharge is permitted to contain specific amounts of pollution, including toxins that, over time, can become increasingly concentrated in ecosystems, and human and animal tissues, through bioaccumulation. As such these materials are of significant concern to local environmental and community health.

In 2002, lawyers for the Kivalina Relocation Planning Committee (KRPC)⁴⁰ filed suit against Teck Cominco Alaska and NANA, the operator and the landowner of Red Dog Mine (*Kivalina Relocation Planning Comm. v. Teck Cominco Alaska, Inc.* 2004.) The suit was dismissed for lack of standing, which prompted six KRPC members to reformulate the litigation in March 2004 as a private citizen suit against Teck Cominco, under the Clean Water Act (*Adams v. Teck Cominco Alaska, Inc.*, 2008). The Kivalina plaintiffs alleged that Red Dog Mine and its Port Site had been “grossly exceeding the discharge limits established by its National Pollution Discharge Elimination System (NPDES)” and they sought “an injunction, declaratory relief, and civil penalties in response to repeated and continuing violations of the Clean Water Act.” Relying on the mine’s own self monitoring discharge reports, these community leaders

⁴⁰ The KRPC was represented by the late Luke Cole, founder of the California environmental justice organization, Center for Race Poverty and the Environment (see: <https://crpe-ej.org>). As the planning committee for Kivalina village relocation process, the KRPC did not take to legal action lightly, but rather pursued this course of action under their mandate to secure a suitable source of clean water for Kivalina’s future village site. As the lifeblood running through the heart of Kivalina’s homeland territory, the Wulik River had been the focal point of years of relocation studies (Chapter 3).

asserted that Teck Cominco, as a matter of routine, “knowingly violates at least some of its permit limits every month that it operates.” Because of the corporation’s “continued disregard of the specified limits in the mine site and port site permits,” the KRPC members were compelled, as is their right under the CWA, to protect their community and ensure its healthy future by seeking compliance (*Adams v. Teck*, First Am. Revised Supplemental Compl. at 1).

The infractions documented in the 2004 lawsuit were not the first instance of violations at Red Dog. Although the mine formally admitted to no wrongdoing in legal dealings with EPA, a 1997 consent decree imposed \$1.7 million in fines for alleged CWA violations (see: *Native Vill. of Kivalina IRA Council v. U.S. Env'tl. Prot. Agency* 2012, Petitioners Opening Brief at 1.).⁴¹ From 1998-2004, four additional consent decrees established “that Teck violated both the daily maximum and monthly average TDS⁴² effluent limitations” of their 1998 permit during their discharge seasons in 1998, 1999, 2000, and 2001 (*ibid* at 15). While acknowledging these violations, the use of such settlements by the federal government has also had the effect of further delaying and deferring compliance with the pollution levels authorized through NPDES permits.⁴³ In their legal action, the Kivalina plaintiffs would also challenge the EPA’s routine use of deferred compliance as an alternative to enforcement, arguing that:

Neither the EPA nor the Alaska Department of Environmental Protection have undertaken any enforcement action or imposed administrative penalties in response to the repeated violations of the NPDES permits. EPA’s response to the repeated violations has been to issue Compliance Orders by Consent that give Teck Cominco additional time to comply with its permit limits and specify new, less stringent interim limits. Teck

⁴¹ That settlement also required an approximately \$3.1m in “Supplemental Environmental Projects.” (Government Publishing Office 1997) See: *U.S. v. Cominco Alaska Inc.* No A97-267CIV (JKS).

⁴² Total Dissolved Solids.

⁴³ *Native Vill. v. U.S. EPA* 2012, Petitioners Opening Brief notes that this “purported to defer Teck’s duty to comply with the 1998 Permit by extending compliance with the end-of-pipe TDS limits...” (at 15).

Cominco violates these Compliance Orders as well (*Adams v. Teck*, First Am. Revised Supplemental Compl. at 2).

Citing the lax enforcement of state and federal regulatory agencies the plaintiffs were simply “seeking to enforce environmental laws when state and federal agencies are unable or unwilling to do so” (*Adams v. Teck*, First Am. Revised Supplemental Compl. at 1).

The six KRPC members did not enter into legal action lightly, but rather as a response to decades of pollution that put themselves, families, community and territorial ecology at risk. “We’re not fighting for money,” Joe, who was a plaintiff on the lawsuit, told me, “we’re fighting for a life... to save the people.” Indeed, the complaint invoked Kivalina’s deep connection with the Wulik River, as a source of water, food, and a watershed that has “been the home of their people since time immemorial” (*ibid* at 4). Lawyers for the plaintiffs also outlined at length the overall impact of Teck’s ongoing permit violations and continued pollution:

The plaintiffs, and other residents of Kivalina, reside at the mouth of the Wulik River. The Wulik River is the primary source of drinking water for the village of Kivalina. Plaintiffs also obtain a number of species of fish from the Wulik River and its tributaries. Plaintiffs hunt for marine mammals and fish in the waters offshore from the port site’s discharge point on the Chukchi Sea. Plaintiffs and other residents of Kivalina depend on the food obtained from subsistence hunting activities on these locations for a substantial portion of their dietary needs... Likewise, plaintiffs fish and hunt in the waters of the Chukchi Sea into which Teck Cominco’s port facility regularly discharges hazardous substances such as zinc, cadmium, and fecal coliform. Plaintiffs observe that the quality of their drinking water has declined since the mine began operating, noting strange tastes and colors that make the water offensive to consume. Plaintiffs have also seen changes in the location and quantity of terrestrial mammals, marine mammals and fish that constitute their basic source of food. These changes have affected the way plaintiffs conduct their basic life activities, and hampered their ability to ensure an adequate supply of food for themselves and their families. Plaintiffs and other Kivalina residents hunt in the vicinity of the mine, and are afraid that the subsistence resources that they are hunting may be contaminated from drinking in the streams to which Teck Cominco is illegally discharging. Plaintiffs fear that Teck Cominco’s continued illegal discharge will further limit their hunting and fishing. The also fear for their health when drinking the water near the mine during those hunting trips. Teck Cominco’s violations of the Clean Water Act expose the plaintiffs to poor drinking water, threaten the health of the marine and freshwater ecosystems on which the community depends, and deprive the community of

the opportunity to continue exercising its traditional lifestyle without fear of illness or exposure to dangerous contaminants (*ibid* at 3-4.).

Along with this overview of substantive impacts, the complaint enumerated a list of 2,984 specific permit violations, noting that many of these were also in violation of the EPA Compliance Orders by Consent issued in 1999 and 2002.⁴⁴ For each of these claims, plaintiffs further asserted that they believed the violations to be “ongoing to this day or capable of repetition.” The suit sought a declaration that Teck Cominco had violated the CWA, an injunction requiring full permit compliance, the remuneration of legal fees, and the imposition of civil penalties totaling \$85,390,000 (*ibid* at 13-30.).

On July 28, 2006, US District Court (Alaska District) issued summary judgment establishing Teck’s liability for 621 violations of the CWA.⁴⁵ Liability for an additional 206 violations was also established on May 6, 2008. After a mediated negotiation, the remaining claims were settled by consent decree on October 23, 2008. The provisions of this settlement attempted to address three essential issues: permit compliance, immediate community health concerns, and eliminating future risks to community and environmental health. Yet, as written, the consent decree also allowed Red Dog a certain flexibility to decide the limits of any action it

⁴⁴ These included regularly exceeding both daily and monthly average discharge limits for TDS and cyanide from 1999-2007, as well as cadmium and Whole Effluent Toxicity (WET) between 1999-2002. Additional allegations included unpermitted discharges onto the tundra “when the pumping system was overtopped” on three occasions in May of 2002, multiple failures to sample/report contaminant levels in discharged wastewater on multiple occasions between 1999-2002, as well as unpermitted/above limit discharges and various self-monitoring and reporting violations at Port Site from 2000-2002.

⁴⁵ Between August 24-30 2006, while the *Adams* suit was ongoing, EPA inspectors also discovered that Teck had been deliberately diluting its effluent samples (111 violations) between 2004-2006. This illegal practice had begun just after the *Adams* plaintiffs had filed their citizen suit on March 8, 2004 (*Native Vill. v. U.S. EPA*, Petitioners Opening Brief at 15-16.).

would take to comply with the agreement, in effect prolonging local exposure to, and uncertainty about the risks emanating from mining operations through the present day.

First, the settlement affirmed that Teck “has undertaken, and is implementing, measures to further ensure compliance with the Clean Water Act” at both the mine and port site (*Adams v. Teck Cominco Alaska, Inc.*, Consent Decree at 2). Specifically, this was to include coming into compliance with its existing NPDES permit for “parameters other than TDS,” which would be subject only to Alaska State water quality standards (*ibid* at 6). Secondly, the settlement sought to limit immediate health risks from exposure to polluted drinking water in the community by introducing small-scale reverse osmosis water filtration units to private residences and public buildings. This could be done relatively affordably: \$10,000 was provided to the City of Kivalina for the installation of these systems and \$50,000 annually for maintenance or replacement of units (*ibid* at 5-6).⁴⁶ Third, as the defendant, Teck would reimburse plaintiff legal costs (\$2.35m to the California based Center for Race, Poverty, and the Environment) and pay what amounted to a nominal civil penalty (approx. \$118,750 per discharge season) to the U.S. Treasury (*ibid* at 7-9).

Beyond each of these, the cornerstone of the settlement, as envisioned by the plaintiffs, was to permanently redirect contaminated wastewater away from the Wulik River, thereby addressing long-term ecosystem and environmental health risks. The settlement stated that “Teck Cominco will, in good faith, undertake to design, construct and operate a pipeline to carry Red Dog Mine effluent” along the haul road right-of-way, “to an outfall to be constructed in the Chukchi Sea at or near” Port Site. For the plaintiffs, piping the pollution to the ocean would be

⁴⁶ For polluters, it may be more cost effective to address water quality at the household level rather than at the point of contamination, but even the best implemented household systems cannot address potential bioaccumulation in the Wulik River ecosystem, including the species of fish that are a major food source and cultural cornerstone.

the most effective and certain way to secure the health and future of Kivalina and while allowing the mine to keep operating in such proximity to their homeland territory. Toward this end, the settlement stipulated that the mine would “diligently pursue the necessary permits and needed approvals for the construction and operation of the Pipeline” (*ibid* at 4). Furthermore, the parties asserted that Teck had “no reason to believe the Pipeline” could not be “designed, engineered, constructed, and/or operated... as provided for in the Settlement Agreement,” that “all information available... suggests that engineering and construction costs... will be substantially less than \$120 million,” and “that any necessary permits or permissions” would be granted (*ibid* at 2). As interveners to the suit, NANA and the Northwest Arctic Borough also warranted “that they support the pipeline concept and will actively work for its implementation” (*ibid*). Despite these broad assurances, additional provisions stipulated a range of financial consequences (one time \$8-20m penalty and nominal amounts for cumulative permit violations) should the pipeline project not move forward.⁴⁷

In December 2013, I was in Kivalina with several Re-Locate colleagues working to digitize documents and media for the Kivalina Archive project (see Chapter 6). In spite of the timing—the week before Christmas—Red Dog had scheduled a community meeting. The issue at hand was an unexpected increase in the amount of selenium coming from a new section of mineral deposits. As a result the mine was lobbying the State of Alaska to increase their permitted amount of selenium discharge. When five or six representatives from the mine,

⁴⁷ Rather than properly incentivize construction, the penalties established in the settlement had the effect of placing the project at the mine’s discretion: “If Teck Cominco elects not to proceed with the Pipeline, it will notify the Court and Plaintiffs, and it will pay a civil penalty in the amount of eight million (\$8,000,000) dollars if Teck Cominco’s decision not to proceed is for good cause or twenty million (\$20,000,000) dollars if Teck Cominco’s decision not to proceed is not for a good cause” (*Adams v. Teck Cominco Alaska, Inc.*, Consent Decree at 4-5).

including an Iñupiaq interpreter, began the meeting only three adult residents of Kivalina were present along with a handful of kids and our group of four visitors. Selenium, they explained was “natural” and even involved in manufacturing ordinary blue jeans. As the meeting went on, the discussion also turned to the status of the pipeline. Based on preliminary study results—comparing above ground and underground options, varying technologies and materials—mine representatives indicated that there were many issues to be worked out. One that they mentioned was how to build a pipeline without disturbing caribou migrations. With their intentions so well telegraphed, no one was surprised when six months later, Red Dog announced, after spending \$1.7m on the pipeline study it had decided to opt out of pipeline construction and instead elect to pay an \$8m fine. “Ultimately, we decided there just wasn’t any increased benefit,” a spokesman for the mine told the *Alaska Dispatch News*, adding: “What we’re doing discharging into Red Dog Creek is protective of human health... They wouldn’t issue us a permit that wasn’t protective of human health and the environment” (Caldwell 2014).

The Biopolitics of Environmental Risk and Regulation

The intergenerational impacts of Red Dog Mine, as well as the historic and ongoing concerns of Kivalina’s people about these impacts, are indicative of much broader trends in the gaps and limits of environmental regulation in the United States, especially where these concern the health, wellbeing, and collective continuance of Indigenous communities. As Dorcetta Taylor and other environmental justice scholars note, Native American, Alaskan, and Hawaiian communities are among those groups most exposed to environmental toxins in the U.S. (2010). In fact, the EPA’s 2017 Toxics Release Inventory National Analysis indicates that total releases from Red Dog increased 43% from 2016-2017 and accounted for 86% of all releases reported from EPA Region 10, an area that includes the states of Alaska, Washington, Oregon, and Idaho

(Collins 2019). While community-led lawsuits such as *Adams v. Teck* a testament to the determination of Kivalina's local leaders in their struggle for breathing room and environmental self-determination, they also illustrate how environmental justice communities themselves must always speak and act for themselves. Scholars of environmental justice have critiqued dominant regulatory regimes organized around the allowance of "minimal acceptable risk" (i.e. Peña 2011). In colonial contexts, these environmental regulation frameworks operate as forms of colonial biopolitics and demonstrate that colonial governments, when they intervene for the "protection" of Indigenous lives, often do so only in the most minimal terms, and without concern for the quality, futurity, or particularity of those lives.

We can think through the failed biopolitics of state and federal environmental regulation in the U.S. in three dimensions: the burdens of protection, procedural injustice, and definitions of environmental risk itself. Time and time again, governmental regulatory regimes work to shift the burden of environmental protection to frontline communities themselves. The citizen suit *Adams v. Teck* emerged because failed enforcement of environmental regulations at the Red Dog Mine had become a matter of routine at both the state and federal level. As noted in the revised complaint, "EPA has not initiated any enforcement action against Teck Cominco for its violations," but rather extended deadlines by which the mine "must comply with its permits and establishing relaxed limitations for certain parameters" (*Adams v. Teck*, First Am. Revised Supplemental Compl. at 9). In this instance, compliance orders had been issued and modified seemingly to no end (*ibid*, 10). The EPA's willingness to settle with Red Dog and continually "defer compliance," rather than to enforce its permitted limits, reveals an underlying tolerance on the part of the federal government of mining pollution and a systemic devaluation—and sacrifice—of downstream human and ecological health.

Ryan Holifield has noted the ways in which existing risk assessment models in the U.S. fail to take into account local publics, especially among Indigenous communities (2010, 2012)—as such, these models are an example of procedural injustice (cf. Schlosberg 2007). In order to attempt to protect themselves through legal action, communities like Kivalina must first identify and then engage in a highly specialized set of proper procedures, including: retaining legal counsel, giving proper notice of their intent to sue, and framing claims in accordance with legal regimes of recognition. In a sense, citizens themselves are required to fill the regulatory and enforcement gaps, created through governmental indifference, through the exertion and performance of particular kinds of expertise. These procedural inequalities require communities themselves to act as protectors of their own environmental health, rather than compelling industry to be socially and ethically responsibly, or oblige governments to fulfill their most basic legal responsibilities or moral obligations to their citizens.

In light of these shortcomings, the actual definitions of “risk,” “health,” and “wellbeing” used in environmental regulatory assessments today must be modified to take into account local understandings of health (Arquette et al, 2002), including experiences of structural violence, cumulative risk, and historical trauma (Peña 2011). In this regard, it is significant that the Red Dog complaint refers not only to toxic exposure but also to the *fear* of ongoing future contamination and the constraints this will continue to bring to intergenerational land-based modes of life:

Plaintiffs fear that Teck Cominco’s continued illegal discharge will further limit their hunting and fishing. They also fear for their health when drinking the water near the mine during those hunting trips. Teck Cominco’s violations of the Clean Water Act expose the plaintiffs to poor drinking water, threaten the health of the marine and freshwater ecosystems on which the community depends, and deprive the community of the opportunity to continue exercising its traditional lifestyle without fear of illness or exposure to dangerous contaminants (*Adams v. Teck*, First Am. Revised Supplemental Compl. at 3-4).

Thus, Kivalina is doubly exposed. Since it was opened, Red Dog Mine has presented both a bodily and an affective risk to the community's collective future.⁴⁸

The local impacts of the Red Dog Mine not only dramatize the challenges that ANCSA's model of extractive development poses for the continuance of "traditional lifestyles," but especially the ways in which capitalism unevenly concentrates social and environmental harms—as "externalities"—in spaces of toxic sacrifice. The contradictions of ANCSA may not be indicative of an inherent, or ontological, struggle between indigeneity and all forms of capitalism,⁴⁹ but rather, demonstrates the material, spatial, and temporal characteristics of a particular mode of development. Since 1989, this mode of development has been particularly harmful to the people of Kivalina. The story of the Red Dog Mine reframes Kivalina's long struggle for breathing room around a particularly long and winding place—the Wulik River, which, as we will see in Chapter 3, had already become, and remains today, a site of contestation through village relocation planning.

⁴⁸ Kivalina's people have lived under the cloud of environmental uncertainty for a far too long. (See: O'Neil 1994).

⁴⁹ For example, see Cattalino (2008), especially on the "fungibility" of money.

Chapter 3. The Biopolitics of Village Relocation Planning

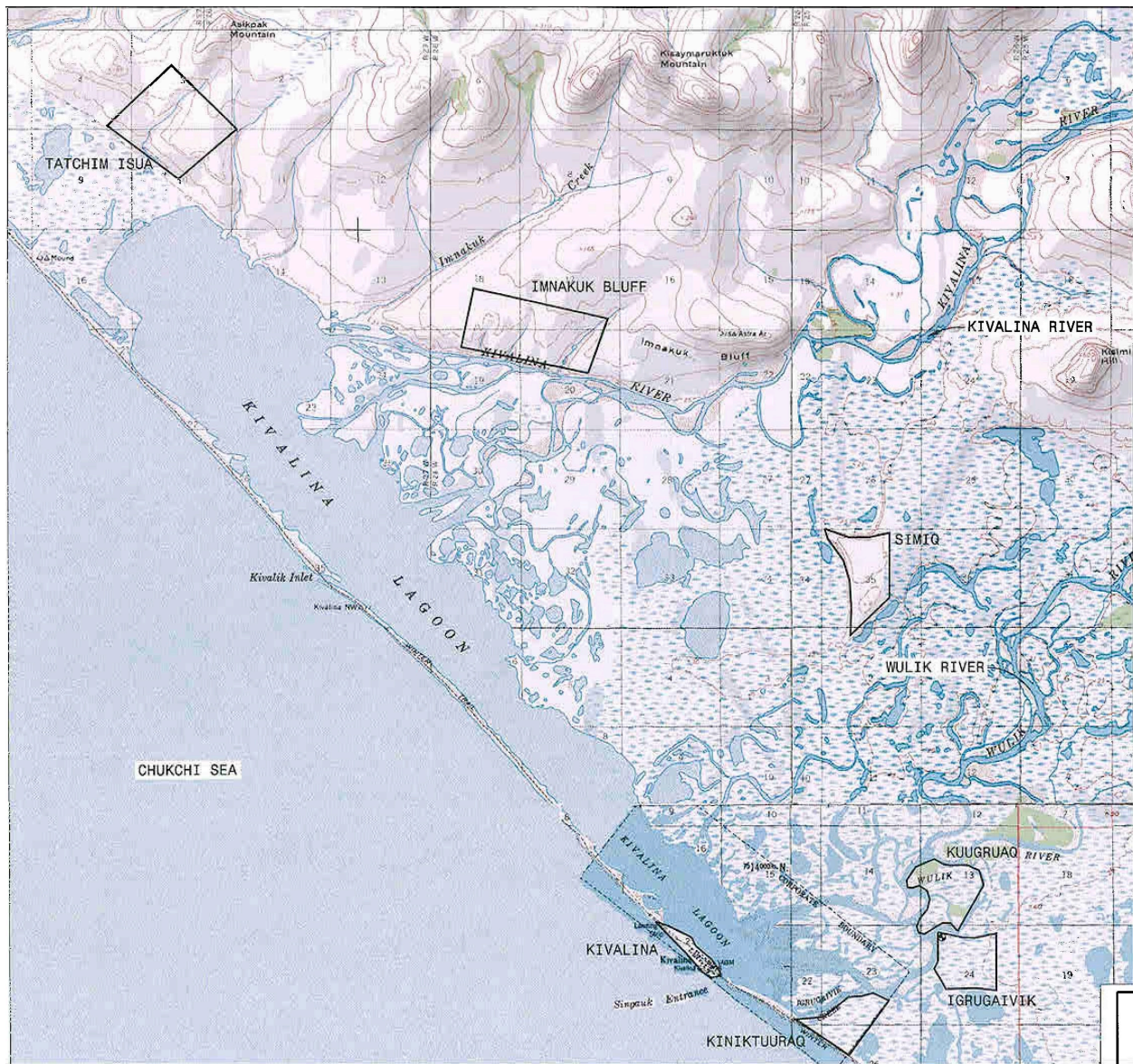


Figure 3.1. Kivalina's Potential Relocation Sites (USACE 2006)

In April of 1981, the Kivalina City Council circulated a questionnaire among its residents on the question of village relocation. The balance of responses revealed broad public interest in moving the community and garnered an array of comments, which were penned in a blank space provided. The concerns enumerated by residents ranged from erosion of the narrow barrier island and the risks of flooding from high wind and water during fall storms, to the need for running

water, sewer services, and the general improvement of “living conditions.” A few respondents also urged that relocation be pursued immediately—before additional investments, like new housing or an expanded school, were made at the current site. One respondent wrote that they were glad to receive the survey because, “We should think of our next generation.” This assortment of comments echoes many of the same concerns that have caused Kivalina’s people to consider village relocation and expansion at several times since the Bureau of Education first built a school at Kivalina in 1905 (see Chapter 1). But this particular moment was also an inflection point, for it was the first step in the emergence of a formal, multi-decadal planning-process through which local leaders would enlist the collaborations of myriad federal, state, and regional institutions. Village relocation would soon become a generalized ambition and in many ways a unique representation of Kivalina’s collective future, that is: the community’s quest for both spatial and temporal “breathing room.”

More than thirty-five years ago, this formal planning process arose from the dual desire to expand the possibilities for collective flourishing in Kivalina, while continuing to bolster the intergenerational place-based practices that had long supported its people. While these longstanding needs remain, in the last fifteen years, the relocation process has been complicated by the urgencies of global climate change and political factors at several scales. This chapter considers Kivalina’s village relocation planning efforts (focused especially between 1981-2006) as a practice of sovereign multiplicity, or: as simultaneously working within, against, and beyond colonial governance structures for a self-determined future. In the context of the multigenerational environmental justice struggle described in Chapter 2, this chapter also addresses how the politics of climate change have both hastened and encumbered the community’s long quest for breathing room through village expansion and relocation. While

comprehensive relocation planning remains stalled, local leaders have succeeded in gaining several partial protections by working within the existing structures and entanglements of regional, State, and federal governance. Today, climate-induced relocation in Northwest Alaska is proving to be more than a technical, engineering, or budgetary challenge. For many in Kivalina, comprehensive relocation continues to be a demand and desire that both exposes and refuses the minimal logics of colonial biopolitics.

Obama, Alaska, and the Politics of Oil

In late January 2015, U.S. President Barack Obama made two announcements of great significance to Northern Alaska's Indigenous communities, politicians, and the oil industry. First, Obama declared his administration's intention to ask Congress to designate portions of the Arctic National Wildlife Refuge (ANWR) as a wilderness, thus protecting key areas from oil drilling, including the calving grounds of the Porcupine Caribou Herd.⁵⁰ ANWR is an area of critical importance to the Gwich'in, who have long struggled to protect what they call, "The Sacred Place Where Life Begins."⁵¹ But elsewhere in Alaska, Obama's pledge was less well received. According to the *Washington Post*, the announcement was enough for Alaska's Republican politicians to "declare war" on the administration (Eilperin 2015).

U.S. Senator Lisa Murkowski (R-Alaska) was among those to lead the charge against what she called, "a stunning attack on our sovereignty and our ability to develop a strong economy that allows us, our children, and our grandchildren to thrive." Appealing to a settler understanding of Alaskan independence, Murkowski continued:

⁵⁰ See: <https://obamawhitehouse.archives.gov/blog/2015/01/25/president-obama-calls-congress-protect-arctic-refuge-wilderness> and <https://www.doi.gov/news/pressreleases/obama-administration-moves-to-protect-arctic-national-wildlife-refuge>

⁵¹ See: <http://ourarcticrefuge.org/>

It's clear this administration does not care about us, and sees us as nothing but a territory... I cannot understand why this administration is willing to negotiate with Iran, but not Alaska. But we will not be run over like this. We will fight back with every resource at our disposal (Eilperin 2015).

As if this announcement of a policy *intention* was not enough to rile up Alaska's oil friendly politicians, two days later President Obama issued a memorandum to withdraw several areas of the Beaufort and Chukchi Seas from the federal oil and gas leasing program. Among the considerations he cited was "the critical importance of certain areas... to subsistence use by Alaska Natives as well as for marine mammals, other wildlife, and wildlife habitat...."⁵² For many Indigenous leaders throughout the State, this decision was a welcome step in the right direction, though it did not go far enough.

In early February of 2015, Kivalina received word that President Obama's Secretary of the Interior, Sally Jewell, would be visiting the community. It seemed clear that whatever her intentions, the trip would also be embedded in this larger-scale political performance. In fact, just after her trip to Kivalina, Jewell was scheduled to attend the Alaska Federation of Natives' winter retreat in Kotzebue alongside many of the same lawmakers who had been so publicly infuriated with the administration.⁵³ To complicate matters further, several State of Alaska and regional officials announced that they would also be visiting Kivalina on the same day as Secretary Jewell. Their agenda was to see firsthand the overcrowded and substandard McQueen School, an experience that would ostensibly help them make the case, at a time of depleted oil revenues, to appropriate funds for a new school in the State budget (Forgey 2015). But their timing also seemed intended to diminish the significance of federal attention to the climatic

⁵² See: <https://obamawhitehouse.archives.gov/the-press-office/2015/01/27/presidential-memorandum-withdrawal-certain-areas-united-states-outer-con>

⁵³ See: <https://www.nativefederation.org/2015/02/afn-holds-2015-winter-retreat-our-homeland-our-future/>

conditions affecting Kivalina. The small barrier island community was not only precariously perched between the Chukchi Sea and Kivalina Lagoon, but it was now being positioned in the middle of a spat between state and federal lawmakers about the politics of climate change and fossil fuel capitalism.

Elders and Hunters Speak Out

When Kivalina received word just ten days before the Secretary’s scheduled visit, a group of IRA and City council members invited Michael Gerace and me to a planning meeting.⁵⁴ The Secretary had expressed an interest in learning about the impacts of climate change on the community, so it was decided that she would first meet with officials from the Native Village of Kivalina, City of Kivalina, and Kivalina Relocation Planning Committee (KRPC), before a public conversation with hunters and elders. When Michael and I were asked to organize the second event, we gladly accepted the responsibility. The challenge, everyone agreed, would be to center the concerns and goals of Kivalina’s people, while each of the visiting delegations would bring their own, perhaps dueling, agendas.

It was a bright sunny day—quite mild for February—when a plane carrying Secretary Jewell landed at Kivalina’s gravel runway. Officials from the IRA and the City councils greeted her, the handful staff traveling with her, and a small gaggle of reporters. With snow machines, Hondas (ATVs), and the one working pickup truck in town, the visitors were driven to the two-story faded-green building shared by the IRA and City councils. On the first floor, the Secretary sat at a conference table with the members of both councils and the KRPC, where they discussed the urgency of securing funding for continued planning and construction of an “evacuation

⁵⁴ Trained as an architect, Michael Gerace is an Anchorage-based multi-disciplinary artist, scholar, and founder of Re-Locate (see Chapter 6). Since, August 2013, we have worked closely together in Kivalina.

road”—a project envisioned to ensure much needed relief and safety during fall and winter storms. The road, it was proposed, would cross the lagoon and lead inland to a new school that could serve as an emergency evacuation shelter; in fact, the State was already obligated to construct the new school (see: Hopkins 2011).

Meanwhile, the existing McQueen School was a hub of activity. Student youth leaders led the regional and State officials on classroom tours that included the pod of detached prefab trailers that was growing annually to accommodate the growing student population. Early that morning, Michael and I, with a few student volunteers, had begun our preparations and were nearly finished. Typically, public meetings in the school gym featured a sea of bleachers looking out over a few small tables behind which representatives, spokespeople, or visiting dignitaries sat. Hoping to facilitate a more intimate and democratic exchange than these gatherings typically



Figure 3.2. McQueen School Gym before the start of “Kivalina Hunters and Elders Speak Out ” February 16, 2015

allowed, we arranged things differently.⁵⁵ Stepping inside the gym that morning, one would have found the area around the entrance to be dimly lit, while at the far end, nine lunch tables had been joined together and were covered in white paper. They were illuminated by a single row of overhead lights and surrounded by a smattering of chairs. On the wall behind this table we hung sheets of white paper, onto which two videos were projected on loop.

The films were edited from home videos provided by friends and colleagues around town. On one screen we spliced together footage from several whaling feasts in the 1980s and 1990s, celebrations that had been held on the beach along the Chukchi Sea on the north end of town.⁵⁶ In one clip, a woman jokingly dangles a handful of mikigaq, or fermented whale meat, into her husband's mouth as they both laugh. The camera pans from one smiling face to another: elders, children, mothers holding babies, old friends carrying on—everyone is having a good time. In the next clip, the 77 whaling crew, led by Joe Swan Sr. and co-captain Jerry Norton, are slicing bowhead whale flipper into thin strips. The strips are arranged on a four by eight foot sheet of plywood that the crew members carried out and place on the grass in the middle of the people who are assembled in a large circle. Joe and his wife Lona come forward and beckon each of Kivalina's whaling crews to the middle of the circle where they will receive their shares. Visitors from Pt. Hope, Kotzebue, and elsewhere are all then invited to do the same. The circle is protected from a north wind by a ring of whaling boats turned onto their sides. Dancers, singers, and drummers enact stories of Iñupiaq success going back generations. This gravely and grassy area, between the Episcopal Church and the clinic, is today partially protected by a sea wall.

⁵⁵ See Hollifield 2010 on the importance of spatial relations for supporting environmental justice in tribal and settler government relations. See also Fortun 2012 on anthropology's roll in "staging encounters."

⁵⁶ Available at: <https://www.youtube.com/watch?v=6qr2M8P6gtI>



Figure 3.3. Meeting participants enjoy home videos before the Secretary arrives, February 16, 2015.

The other video, also running on loop, tells a different story of the ocean and Kivalina's coastline. It shows a collection of footage taken during several storm events since the mid 2000s. In one scene, a brigade of local volunteers stand knee deep amid crashing waves as they pile sandbags to protect what remains of an eroded bank just below the school. The camera quickly cuts away to a group of high school students who are also laboring swiftly. One student struggles to hold open a white plastic sack as it flaps wildly in the wind. Two more students stand ready to fill it with shovelfuls of sand and stone. In the next frame, a portable gas-powered water pump, connected to thick rubber hoses, works overtime to remove the seawater that has begun to pool in the middle of the island between the school and the site of the former village store. More recent footage shows an area north of town, well beyond the safety of the existing sea wall, where the ocean crashes into the gravel edge of the airport runway: an infrastructure that facilitates the ongoing procurement of necessary supplies, including much of the food consumed in Kivalina, and which is especially critical in the event of medical emergencies. Flaked with

peeling amber paint, the arm of a loader dangles a giant rusted plate of scrap metal, while half a dozen volunteers attempt to push it into place. The metal had been salvaged from some decommissioned fuel storage tanks and cut lengthwise in anticipation of this very purpose.

As community members began to gather at the gym, Michael and I encouraged elders, hunters, and search and rescue volunteers to sit at the big table where the Secretary would soon join them. Many did, but others were more comfortable in the surrounding chairs. As their tours and meetings with school students, teachers, and the principle come to a close, the State and regional officials also started to trickle into the gym. With an administrator from the school district standing next to him, Northwest Arctic Borough (NWAB) Mayor Reggie Joule moved to address the crowd. Since the Secretary was on her way over, Joule explained, he wanted to introduce the State and regional officials—including several members of the Alaska State Legislature—who had also endeavored to make the journey to Kivalina. Joule acknowledged the long difficulty of gaining “traction” with the State legislature, but also shared that the governor’s new budget included both planning money for the road and design money for a new school.

After Secretary Jewell arrived and was introduced, Lucy Adams, an elder and longtime city councilmember, delivered the invocation in both Iñupiaq and English before elders were invited to share their stories of how climate change was affecting the land, creating challenges to hunting and whaling, causing dangers from erosion and storms, and also to reflect on their collective struggle to save the community. Secretary Jewell told the gathering, “It is really helpful to be here and I really would like to hear what your experiencing in the village.” She continued:

Meeting with the IRA council was very helpful and I saw the plans that you’ve had underway for a number of years... and the changes that you saw here in terms of the landscapes and the erosion that has happened. Also, we talked a little bit about the history of the federal government asking you to move to this island from the inland areas and the

impact that that now has on you, and the challenge about getting funding for potential relocation.

So, I just want to say that I'm not a stranger to Alaska. Many years ago I was actually the lead banker for NANA, so I was with Rainer Bank in Seattle, that is my home. I was in the oil industry before that and I came back and was a banker largely to natural resources, and that's when I started doing business with NANA. So the early days of the Red Dog Mine brought me to Kotzebue, brought me out to the mine site, but more importantly gave me a sense of the culture, the richness of the culture, and the commitment on the part of NANA and the village corporations to shareholder engagement and shareholder employment over the long term... and it is great to be back.

As the Secretary spoke, the crowd grew too large for the number of chairs we had been able to gather. Some participants wheeled out a few sections of aluminum basketball bleachers and arranged them in a semi-circle around the outer edge of the chairs that surrounded the table as Secretary Jewell continued speaking:

So, for the elders that are willing to open up, I'd be very interested in hearing about the changes you've seen on the landscape, how that's impacted your subsistence, [and] where you'd like to see things go for the future. I have grandchildren myself, and to have a school where you're worried about their health and wellbeing with the storms is something that would be a constant worry to me if I was in your chairs. So, I'd be very interested in hearing from all of you the things that you'd like to tell me that I can take back to Washington, DC as we work with you on a long-term solution to the challenges that you're facing.

With this invitation, elders, hunters, and other community members began an open-ended dialogue with the Secretary, offering their accounts and testimonies about the range of issues around which their experiences intersected with her institutional purview as the head of the Department of the Interior.

Several elders spoke of old traveling trails that had outright disappeared because of climate change, new ponds forming throughout the tundra, and ocean ice conditions that were now unsuitable for safe and successful spring whaling. "Nowadays, our land's melting real fast..." one elder and retired whaling captain told the Secretary, "the climate has changed real

fast around here in Kivalina area...” Colleen Swan, Operations Chief for Kivalina’s all volunteer Search and Rescue organization, added that “our weather’s been really going from warm to cold to warm” and explained how this unpredictability was causing unprecedented risks for inland hunters and travelers. “We’ve had to respond to people traveling on the river, falling through the ice,” she added. “At this time it should not be happening... I mean 30 degrees above zero is warm at this time of the year... the weather system has just gone crazy.” The everyday unpredictability that global warming has brought to the Arctic, Colleen continued, was also punctuated by occasional extreme events:

...in 2011 we had to evacuate our people here to the school; the whole State was on alert. We had a mega storm coming, something that never happens in this area. The system that came through was called an “extra tropical cyclone,” and those things don’t happen up here—they’re not supposed to. It was 250 miles offshore and we were on the outer reaches of the wind, and our winds were getting as high as 70 miles an hour. I was out there taking videos as it was happening. And when you go to the channel, that’s the roughest part, because... the ocean water is coming in. We had people out there, they were saying, “That water is only about a foot below the highest part of the rock revetment...” When we heard that one of our elders was worried about that, we decided that we should probably bring people to the school, but I really think it was the rock revetment that saved us...

Another elder and retired whaling captain made the connection between climate change and village safety, saying: “Our life is not easy now, because of the ocean... The storm comes in every fall time, especially... It’s a lucky thing we always [used to] have the slushy [ice] that form about quarter mile out from our village... before it freeze on the ocean. That scares us.” Throughout the conversation, several elders went on to make an explicit connection between these dramatic changes and the urgency of village relocation.

Joe Swan Sr., a longtime member of the KRPC, offered some historical context to the discussion:

Since 1952... we have been calling the State [and saying] that our land is eroding and getting smaller and smaller. And finally, few years ago, they finally hear and *see* what needs to be done. What they do, they build a sea wall—you see it out there. We lost about a mile of land from where the sea wall is, that’s how long. The legislatures have *failed* to see this small community because it’s isolated, and [failed to] protect us.

Although community leaders had been “calling for the sea wall,” Joe continued, “it didn’t happen until one apartment in front of [the school was] ...hanging halfway from the bank. That’s when the legislatures *wake up*,” he explained, “and decided to do something about it.”

Expressing gratitude for even this small amount of outside support after decades of inaction, Joe added, “They appropriate some money to build the sea wall, I’m not saying these are bad guys.”

Beyond dealing with today’s coastal threats, the needs and desires that had first spurred relocation planning decades ago were still also on the forefront of many elders’ minds. “You wanna take my honey bucket to where you come from?” One elder jokingly asked the Secretary, referring to the five-gallon buckets that Kivalina’s residents used as improvised chemical toilets in the absence of running water. “That’s all I’m worried about,” he continued, “and I’m worried about my grandkids, no place to build a house. I got how many families in my house now? No place to build a house... so if you go back, tell your boss, ‘You better hurry up.’”

Joe agreed, “All of the elders have [a] few families in their house, all of the elders... cause they know about sharing, protecting.”

Another elder added, “Keep in mind that pretty much each household has ten to nineteen in a household... some in two-bedroom, [or] three-bedroom [houses]. [It’s] overcrowded and it’s [a] health hazard.”

In light of these enduring needs, several participants began to raise questions about the relationship between evacuation road planning and the long forestalled village relocation project. If the road were built, one asked, would there still be money for relocation? Or was village safety

now being pursued in isolation from these critical, decades-old needs? As the conversation continued to return to the question of relocation, the Secretary acknowledged that she herself was in the process of trying to understand the responsibilities of the various institutions involved:

We were just speaking [at] the IRA Council about what your options are, and what your plans are around relocation. I was trying to understand what the State's role is, what the federal government's role is, ...[and] is there a relocation plan? So, I can't answer your question because I don't know.

Moments later, Enoch Adams Jr., the KRPC chairman, referred Secretary Jewell to the "final report that the Army Corps of engineers put out in 2006," saying it "would be a document you would need to look at." But he also qualified his referral, noting:

[W]e told them that there's some statements in there, in that study, in that final report that are unsubstantiated. Statements that are made, that have no evidence that they can provide. So, in 2008 we asked for an audit of that report, and to this day they have not given us an audit of that report. We formally asked the Corps of Engineers to give us an audit, and they have not done that *yet*.

While he was speaking, Jewell took notes on a piece of paper on the table in front of her.

"Ok," she responded. "If you want to give us the documentation you sent to them, we can try and follow up and see where that is with the Corps."

"Yah," Enoch nodded.

"Anybody from the State legislature..." Jewell paused, glancing around the room. "I think there's some state legislators here... wanna help?"

"They left," someone replied.

"Oh they left..." Jewell said, "they left?"

"Yeah, their charter came in," said another.

A nervous chuckle overtook the table. "Ok, all right," said Jewell. "That was convenient," she added, before continuing, "Cause I don't know what the State's responsibility is, what the

federal government's responsibility is. I understand the needs that you have here and I think that's part of what we need to figure out."

"Yeah," Enoch agreed.

"Yeah," echoed Jewell. "Cause the school and the road to the school sounds like it may be something the State is already working on."

"And probably the large majority of their responsibility in relocation would be the school,"

Enoch noted.

After an hour of wide ranging dialogue, the Secretary addressed the gathering one last time:

But let me just say... thank you profoundly for sharing your stories... You are experiencing things here in Kivalina that we can learn from as scientists and we can certainly learn from as officials of the federal government, the State government, and local governments. So thank you for sharing this with me, I think it's been well recorded... there's T.V. cameras all around us. Your story will help the world understand what's happening right here. It will help us make the case for climate change in the U.S. Congress. It will help us bring the kind of resources that we have to bring to bear for people like you and for people in other parts of the world that live in coastal communities that are at high risk. So I can't thank you enough for sharing your perspectives.

We all care for our children and our grandchildren, but the way you are caring for them, and the way you talk about them is powerful. Thank you for your work in Search and Rescue, because you also are on the front lines, and you see these things happening. We care at the Department of the Interior, there's a lot of parts of my world that interact with you: Bureau of Indian Affairs, an agency that has a history that's not always been welcomed here, and I understand why; my colleagues at the US Geological Survey... the Fish and Wildlife Service... the National Parks Service, which has lands here... within the areas that you hunt and do your subsistence.

So we have much to learn from you, and to the extent that we have scientists on our staff, which we do... hopefully we can help share with you what's happening so that we can work together to adapt to this world that is changing, where climate change is very real. It's happening, it's happening right now. You know that, so we have to adapt. We are a very adaptable species. All of the rest of those species that you may rely on for subsistence may not be as adaptable as us and that's going to be challenging. Again, thank you so much for sharing your stories and I look forward to the rest of the tour of

the village... I know that I will go back much richer for the experiences that I've had here... and we will work on the things that are important for you.

It was time for the final part of the afternoon's program, during which a group of high school students delivered a presentation entitled, "Future Leaders of Kivalina," all about their own lives in Kivalina and including the challenges they've experienced from living with continued coastal insecurity. When the students were finished, Secretary Jewell joined several local officials in the back of a pickup truck for a brief tour of the village before flying back to Kotzebue.

Village Relocation Planning History: 1981-2006.

In 1981, when the Kivalina City Council conducted its survey on relocation, it was beginning to investigate options for how to address longstanding community needs for running water, sanitation, and adequate housing. State and federal agencies with the obligation to provide these basic services had long claimed there wasn't enough space, or the correct environmental conditions, on the island, and that the community should consider moving to a more suitable site. In 1992, the City of Kivalina held a special advisory election in which residents voted 72-7 in favor of beginning "the process of relocating to solve various environmental problems."⁵⁷ With funding from the Alaska Department of Community and Regional Affairs (DCRA), the City contracted DOWL Engineers "to determine the best solution [to]... problems result[ing] from expansion of the City being limited on three sides by water and on the fourth side by the airport."⁵⁸ Overcrowding, inadequate sewage, lack of running water, DOWL noted, all contribute

⁵⁷ See: <https://kivalinaarchive.org/digital-heritage/city-kivalina-special-advisory-election-relocation>

⁵⁸ A summary of the report can be found on pages in USACE (1998:22-27). For the full 1994 DOWL report see: https://kivalinaarchive.org/system/files/atoms/file/1994_Kivalina_Relocation_Study.pdf

to “an extremely high instance of communicable diseases and other health problems.”⁵⁹ The DOWL study sought to “evaluate the needs of the people and determine which relocation option is best for expansion and development of the City,” because it was “believed that relief from overcrowding and an improvement of the sanitation conditions will improve the quality of life and improve the general health of the population.” As reasons to consider moving the village, the study also cited the exposure to storm surges in late summer or fall and the persistence of erosion, especially on the lagoon side of the island (DOWL 1994: 2-3).

The DOWL contractors considered four scenarios for Kivalina’s future, which included making modifications to the current site (either by moving the airport or by backfilling a portion of the Kivalina Lagoon), using a bridge across the channel to expand to the south, or moving to an entirely new location (see Figure 3.4). During a series of public meetings, eight relocation sites “were selected for consideration” and visited by the contractors, who carried out preliminary evaluations of soil conditions and topography (4-5). The report notes that while all sites were evaluated, several were most highly favored. In early 1994, a draft report was presented in a public meeting in Kivalina, where participants indicated their preference for relocating to a place called Kuugraug, two and a half miles up the Wulik River. But by fall of that year it had become clear that “land ownership problems” at Kuugraug could not be resolved. DOWL therefore recommended the community further consider its second ranked site, only two miles up the Wulik at Igrugaivik (DOWL 1994: 24). At the time, DOWL estimated relocation

⁵⁹ The 1994 DOWL report cites examples “where 16 people were living in a 900 square foot home” (2). In 1998, USACE reported 68 separate residences with an average occupancy of 5 people each. At the time, the “average number of bedrooms in the residences is two” and the “maximum occupancy recorded was 17 persons living in one 3-bedroom residence, but other high occupancies of 15, 14, 12, and 10 persons living in 2- and 3- bedroom residences were also recorded (23).”

costs to be in the ballpark of \$50 million and outlined a range of next steps for continuing the planning process.

The study focuses on four basic options as discussed below:

- Option 1 Develop the existing airport land and construct a new airport northwest along the island from the existing airport.
- Option 2 Fill in a portion of the Kivalina Lagoon adjacent to the City and create new land that could then be developed.
- Option 3 Build a bridge across the Singauk Entrance (the Wulik Channel) to the southeast and create access to more land for development along the coast.
- Option 4 Move the City to a new location where a planned community could be constructed.

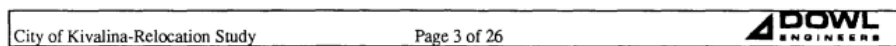


Figure 3.4. Relocation Options (DOWL 1994).

In June of 1997, the Northwest Arctic Borough (NWAB) and the U.S. Army Corps of Engineers (USACE) entered into a cost-sharing agreement that “called for investigation of three basic options.” These included: making “improvements at the existing village site,” relocation to Imnaaquq (on the lower Kivalina River), or relocation Igrugaivik on the lower Wulik River (USACE 1998:iii, 1-2).⁶⁰ Figure 3.5 shows the range of factors considered at each site. On January 26, 1998, the City of Kivalina held a special election to select a site for “community improvements” from these three options. The Wulik River site at Igrugaivik received 85 votes, or 66%, followed by Imnaaquq with 19% (or 25 votes). The third option, remaining in place (i.e. building up and expanding the current site) received 15% (19 votes).⁶¹ Ninety-three years after the federal government began to consolidate the people of the region into a single centralized dwelling site, the residents of Kivalina formally voted on where their future village site should be

⁶⁰ Cost sharing was through Planning Assistance to States (PAS) mechanisms. A preliminary draft of this report was circulated to Kivalina residents and presented at a public meeting on December 11, 1997 (USACE 1998:3) with a final report published in April of 1998.

⁶¹ See:

https://kivalinaarchive.org/system/files/atoms/file/1998_01_26_Relocation%20Special%20Electi on%20Results%20and%20Certification.pdf

located. Just as an earlier generation of elders had indicated in their petition to the federal government some fifty or sixty years earlier (Burch 1965), the site preferred by two thirds of Kivalina’s voters was about “two or three miles” up the Wulik River.⁶² An Appendix to the 1998 USACE report outlined a 6-year implantation plan, beginning with further soil and geotechnical assessments, and a cost of \$54m cost for moving to Igrugaivik.

5. COMPARISON OF ALTERNATIVES

Table 5-1 displays a comparison of the three alternatives for Kivalina that were considered in detail: remaining at the present Kivalina site, moving to the Igrugaivik site on the Wulik River, and moving to the Imnakuk site on the Kivalina River.

Comparison criteria	Sites		
	Kivalina Town	Wulik River	Kivalina River
Above 100-year flood plain	No	Yes	Yes
Accessibility to rivers	Good	Fair	Fair
Accessibility to ocean	Good	Fair	Poor
Expansion capability	Poor	Good	Good
Development as part of a phased approach	Good	Good	Poor
Efficiency of layout (utilities, circulation, etc.)	Poor	Good	Good
Environmental impact/permitting ability	Moderate	Moderate	Good
Initial construction cost	\$34 million	\$54 million	\$60 million

Figure 3.5. Comparison of Relocation Alternatives (Table 5-1 from USACE 1998:49)

In December 1999, Bob Sanders, the main USACE engineer working on the Kivalina Relocation Project, wrote the KRPC chairman, Sylvester Swan, with the results of geotechnical drilling at Igrugaivik.⁶³ The studies revealed a “high content of layered ice in the soil,” which, as he noted, would make “the relocation much more difficult and expensive than previously expected.” Building on high content ice-layered areas is possible, Sanders observed, but an estimated 13 ft.

⁶² The voting process is described in detail in the April 1998 USACE Report (pp. 50-51).

⁶³ See:

https://kivalinaarchive.org/system/files/atoms/file/1999_12_10_USACE_Sanders_Project%20Formulation%20Section_Letter%20to%20KRPC%20Sylvester%20Swan_Igrugaivik.pdf

of gravel fill would be required to protect the permafrost beneath from melting. “If the permafrost is not adequately protected from thawing,” he wrote, “the village would literally sink into the ground as the ice layers melted. (Actually, sinking into water-filled holes would be more descriptive.)” That amount of gravel fill that would be required to build a 13 ft. layer would indeed be expensive, but Sanders pointed out a silver lining to this problem. If constructed “almost anywhere in the Wulik River area,” such a thick gravel pad “would form a hill standing well above ‘the 100 year flood level.’”⁶⁴ Funding aside, it seemed that Kivalina could now choose from any number of options. As Sanders explained, “The insulation of the permafrost requires building a hill and allows the people of Kivalina the opportunity to decide where they would like that hill.” While Sanders felt “duty bound to honor” the Igrugaivik vote, in light of this new information he told the KRPC that he also felt “obligated to bring to your attention any alternatives that might be to your benefit.” Above all, he communicated his “impression that the residents of Kivalina are most interested in being near both the ocean and the Wulik River, and in an area where there is room for expansion and a properly oriented airstrip.” Taking these considerations into account, he proposed three alternatives: a site across the channel, about a mile south along the coast, and mostly within the city limits (later identified as Kijiktuuraq); a site just south of that, also along the coast; and backfilling part of the lagoon to build up and expand the existing townsite. Sanders presented these findings in Kivalina at a public meeting on January 26, 2000.

On March 2, 2000, Sanders sent another letter to the KRPC, summarizing possible ways

⁶⁴ Executive Order 11988, Sanders: “(a) prohibits the expenditure of Federal funds for building within an area predicted to be flooded by a 100 year flood and (b) dictates that hazardous and toxic materials be stored above the 500 year flood level.”

forward in the wake of complications with Igrugaivik.⁶⁵ These included several options down the coast between the mouth of the Wulik and Usak, as well as sites at the base of the Kivalina River and at the north end of the Kivalina Lagoon. On April 10, 2000, the Kivalina City Council, IRA Council and the KRPC once again “placed the matter of Kivalina Relocation up for special election.” With 99 votes cast, Kijiktuuraq received 53.5%, Imnaaquq (a bluff just up the Kivalina River) received 32.3%, while 8.1% voted to remain on the island, and 6.1% still held out for Igrugaivik.⁶⁶ In response to these results, planning for relocation at Kijiktuuraq began and for the next three years was carried out in earnest: studies were conducted for a new airport, a barge landing, and water and sewer opportunities. In Kivalina, the KRPC was further assessing community needs and organizing local assets. They completed an inventory of buildings that needed to be moved to the new site, made house-to-house visits to determine what relevant technical expertise and labor skills already existed in the community, and even conducted out of town surveys to better understand how many people might move home when the village could boast of running water, flush toilets, and adequate housing. High school students were also invited to offer their ideas and concepts for what should be included in a future village and in late 2001, the community selected between several village layout options. All the while, the KRPC was working closely with ANTHC and the Army Corps to identify clean water sources that could supply a village at Kijiktuuraq; with bore holes turning up salty, attention soon turned to the nearby Wulik River.

⁶⁵ See:

https://kivalinaarchive.org/system/files/atoms/file/2000_03_27_KRPC%20Coordinator%20A_Swan%20Letter%20to%20Residents%20of%20Kivalina_Followup%20to%20Jan%2026%20Public%20Meeting_Re_USACE%20Bob%20Sanders%20Analysis.pdf

⁶⁶ Again, Kivalina voters showed a strong preference for Wulik River sites. Kijiktuuraq and Igrugaivik garnered a combined 59.6% of votes. See:

https://kivalinaarchive.org/system/files/atoms/file/2000_04_10_Relocation%20Advisory%20Election%20Results_0.pdf

Despite the momentum created through this constellation of local, regional, State, and federal institutions, at the height of planning for Kijiktuuraq, tensions between relocation stakeholders began to emerge around another issue: the Red Dog Mine and its associated infrastructures. In April 2001, it was announced that Cominco, the firm that operated Red Dog, would merge with Teck, another Canadian mining company. As a newly formed “global mining giant” (CBC 2001), Teck Cominco quickly turned its focus to expanding Red Dog, including a proposal for the construction of an airport at its Port Site. Having already endured the loss of marine mammal migrations and disruptions of caribou trails from existing mining activity and infrastructure (see Chapter 2), opposition to the project was strong in Kivalina, as well as in the State of Alaska, which was already focusing on a new airport just 15 miles away at Kijiktuuraq.

At the same time that the Red Dog Mine was attempting this expansion, longstanding community concerns over heavy metal pollution and the associated impacts to human health and regional ecosystems, were also coming to the fore. In 2001, the National Park Service published a study that found elevated concentrations of heavy metals including lead, zinc, and cadmium in moss samples taken from the Red Dog road corridor (Ford and Hasselbach 2001). It was an area where Kivalina people would routinely pick *agpiks* (salmonberry/cloudberry) and other berries. Moss is a major food source for migrating caribou, while “real Kivalina *agpiks*” are among those highly desired Native foods whose taste is distinguished from those that might be imported from even one village away.

In 2002, the KRPC filed a lawsuit seeking to hold the mine accountable for its permit violations and to stop the ongoing pollution of the Wulik River (see Chapter 2). As members of the KRPC and other local leaders pursued their right to environmental and ecological health, the proposed Red Dog expansion, revelations about “fugitive” dust along the road corridor, and

disputes over toxic discharge, put additional strains on Kivalina's relationship with State and regional entities that depended financially on Red Dog. External support for Kivalina's move to Kijiktuuraq was starting to wane. State and regional agencies begin to balk at the cost of the gravel pad that would be needed to protect the permafrost. They also cited concerns over flood risk, even though the gravel pad being discussed would already be thick enough to elevate a new village above the flood plain at Kijiktuuraq. It was back to the drawing board.

In early 2004, the USACE took bids for a new master planning process to evaluate Kijiktuuraq, side by side with a range of alternatives (including two formerly disqualified sites: Kuugraug and Igrugaivik) in terms of technical, social, and cost criteria. Like the others before it, this new master planning process would again develop a schedule for relocation. For two years, USACE carried out its evaluations of seven different options and presented the results in a public meeting in June of 2006. The final report, also published in June painted no clear path toward relocation, but concluded:

Any of the sites under consideration for Kivalina relocation that are analyzed in this report can be technically constructed. However, the analysis conducted for this report, including siting criteria and site evaluations, indicate that none of the sites currently under consideration are ideal for relocation (2006b: 101).

A matrix of criteria (Figure 3.6) used to evaluate the site alternatives ranked Tatchim Isua (on the north end of the Kivalina Lagoon) as the overall best option, although it ranked 5th out of 7 in terms of "social and access" factors. On the other hand, in spite of being ranked the best site in terms of "social and access" factors, Kijiktuuraq was ranked 5th overall. This was in large part, according to the matrix, due to challenges stemming from the physical environment—vulnerability to storm surge and flooding, erosion, poor drainage, high ice-content soils, and poor water supply. What's more, while relocation to Kijiktuuraq and four of the other sites was

estimated to cost around \$250m, reinforcing and building up the current village site estimated at \$196m, the Corps felt that Tatchim Isua could be accomplished for closer to \$150m (Figure 3.7).

Figure 16 Master Relocation Matrix Matrix Criteria

Criteria	Site						
	Tatchim Isua	Innakuk Bluff	Simiq	Kuuruaq	Igrugaivik	Kinktuuraq	Existing Site
site has generally positive attributes associated with this specific criteria							
site has mixed positive and negative attributes with specific criteria; or criteria is neutral							
site has generally negative attributes associated with this specific criteria							
PHYSICAL ENVIRONMENT							
Storm surge vulnerability	5	5	5	3	3	1	1
River flooding vulnerability	5	5	5	2	2	3	3
Shoreline erosion vulnerability	5	5	5	2	2	1	1
Site drainage and wetlands	4	3	2	3	1	1	5
Soils - ice content	3	3	2	3	1	1	5
Vulnerability to high winds	1	1	3	3	3	3	3
Water supply - source and quality	4	5	2	2	2	1	1
<i>Subtotal Physical Environment</i>	27	27	24	18	14	11	19
CONSTRUCTION & UTILITIES FACTORS							
Sewage disposal availability	5	3	5	3	2	2	1
Ease of water storage and distribution	4	4	2	3	2	1	1
Solid waste disposal availability	5	5	3	1	1	1	1
Gravel requirements to develop site	3	3	2	2	2	1	2
Barge access/distance to site	3	2	1	2	2	5	5
Site for an airport with crosswind runway	4	3	4	3	3	3	2
Community expansion potential	5	5	4	2	2	2	1
Ease of maintaining two sites during construction	1	1	1	3	3	4	3
Permitting Obstacles	4	4	3	2	2	2	3
<i>Subtotal Construction and Utilities</i>	34	30	25	21	19	21	19
SOCIAL AND ACCESS FACTORS							
Distance from current village site	1	2	3	4	4	5	5
Access to the ocean	3	2	1	4	4	5	5
Access to the Wulik River	1	1	1	5	5	5	4
Access to the Kivalina River	3	5	1	2	2	2	2
Access to the Kivalina Lagoon	4	3	1	4	4	5	5
Access to subsistence camps and traditional use areas	2	2	1	4	4	5	5
Location of boat/gear storage	2	2	1	5	5	5	5
Potential for ice cellar construction	3	3	5	5	5	5	2
General comfort with site	2	3	2	3	3	3	3
Land Status	5	2	5	1	5	5	3
<i>Subtotal Social and Access</i>	26	25	21	37	41	45	39
COST IMPLICATIONS							
¹ Site preparation costs	5	1	1	1	2	1	3
Access road development costs	4	2	2	3	3	4	5
² O&M costs	4	4	3	2	2	1	1
³ Cost of living (heat, power)	2	2	2	3	3	3	3
Fuel costs for access to subsistence areas, airport, dock	1	2	2	3	3	4	4
<i>Subtotal Cost Implications</i>	16	11	10	12	13	13	16
COMPARATIVE TOTAL	103	93	80	88	87	90	93
RANK	1	2	7	5	6	4	3
¹ Site preparation cost estimates range from \$155 to 252 million							
² O&M costs reflect differences in costs per village, mostly for maintaining erosion and flood barriers							
³ Costs for heat and power are assumed to be higher in areas where terrain is subject to higher winds (hillside sites)							

Figure 3.6. Master Relocation Matrix (Figure 16, USACE 2006)

Site	Simiq	Tatchim Isua	Imnakuk Bluffs	Kivalina	Kiniktuuraq	Igrugaivik	Kuugruak
Tasks							
Sitework ¹	\$ 167,400,000	\$ 70,400,000	\$ 165,900,000	\$ 109,600,000	\$ 163,700,000	\$ 164,800,000	\$ 164,800,000
Erosion Protection ⁵	\$ 231,000	\$ 231,000	\$ 231,000	\$ 7,151,550	\$ 2,613,600	\$ 1,045,440	\$ 2,961,750
Construction Camp ² (over 5-year Construction Period)	\$ 606,000	\$ 606,000	\$ 606,000	\$ 902,670	\$ 606,000	\$ 606,000	\$ 606,000
Power & Fuel	\$ 5,292,000	\$ 5,292,000	\$ 5,292,000	\$ 5,292,000	\$ 5,292,000	\$ 5,292,000	\$ 5,292,000
Move Buildings	\$ 1,125,000	\$ 1,125,000	\$ 1,125,000	\$ 1,125,000	\$ 1,125,000	\$ 1,125,000	\$ 1,125,000
New Buildings	\$ 52,690,000	\$ 52,690,000	\$ 52,690,000	\$ 52,690,000	\$ 52,690,000	\$ 52,690,000	\$ 52,690,000
Water/Sewer System & Landfill	\$ 21,119,261	\$ 21,521,638	\$ 19,844,807	\$ 19,473,814	\$ 22,125,007	\$ 20,521,057	\$ 18,146,638
Transportation System ³	\$ 3,056,000	\$ 3,056,000	\$ 3,056,000	N/A	N/A	N/A	N/A
Total Cost:	\$ 251,500,000	\$ 154,900,000	\$ 248,700,000	\$ 196,200,000	\$ 248,200,000	\$ 246,100,000	\$ 245,600,000

1. Sitework includes airport construction.

2. Construction Camp costs include move/demob, construction and removal.

3. Shuttle transportation system costs over 3-year period is proposed between villages, when two villages are operating at the same time.

4. Costs are in 2006 dollars

5. Erosion protection costs are for boat staging area erosion protection, river erosion protection, plus shoreline erosion protection.

Figure 3.7. Sitework Cost Estimate Summary (USACE 2006)

With the publication of the 2006 Army Corps report, the Kivalina Relocation Project reached an impasse. But the Corps' conclusion would not go unchallenged. The 2004-2006 master planning process had its genesis in the State and regional opposition to Kiniktuuraq that had been attributed to two interconnected factors: the site's exposure to flooding risk and the costs of constructing a gravel pad to mitigate these and other environmental risks (such as permafrost melt). In its final report, not only did the Corps assert that Kiniktuuraq was "subject to coastal erosion and flooding," but it also published an unattributed, and widely disputed, claim that the "[a]rea was flooded during recent storms" (USACE 2006:99). It was bad enough that an outside agency's flood plain assessment, which had proved fickle throughout the planning process, contradicted intergenerational traditional knowledge about Kiniktuuraq's historical

vulnerability to flooding, but this second assertion also contradicted the recent experience of many in the community. In 2008 the KRPC requested an audit of the Corp's assessment, which they never received.

Partial Protections

“We’re an adaptable people,” Colleen Swan once told me, “but since 2004, we just can’t adapt this fast.” That was the year when chunks of the island began falling into the sea. With ocean slush and landfast sea-ice forming later and later each year, Kivalina’s coastline is no longer protected from seasonal fall storms. While the island has always undergone cycles of erosion and accretion, over the last fifteen years global climate change has accelerated land failure at places where residential homes, the school, the medical clinic, and the airport all abut the Chukchi Sea. With profound political, financial, and technical challenges stalling Kivalina’s long-sought relocation, these impacts of climate change added to the urgency of moving, but have also created new uncertainties over long-desired relocation sites at coastal and riverine locations.⁶⁷ As legal battles, political interests, cost estimates, and flood plain assessments began to undermine the community’s move to Kijikturaq, the erosion caused the storm events in 2004 and 2005 drew the attention of key governmental actors and, in the eyes of many, reframed Kivalina’s relocation primarily around an urgent need for safety and security in the context of coastal risk and climate change.⁶⁸ Within this newly circumscribed set of priorities, Kivalina’s leaders would work with great dedication and skill to achieve a range of strategic victories, or

⁶⁷ Some of these sites have the potential to be further affected in an increasingly warmer world, but have yet to be properly assessed.

⁶⁸ For an account of how regional and State entities responded to the 2004 and 2005 storms see: <https://www.commerce.alaska.gov/web/dcra/PlanningLandManagement/AlaskaCommunityCoastalProtectionProject/Kivalina.aspx>

partial protections, that have increased both spatial and temporal breathing room, even as a comprehensive relocation planning remains forestalled.

In August of 2005, U.S. Senator Ted Stevens (R-Alaska) visited Kivalina for a tour of erosion on both the Chukchi Sea and lagoon sides of the barrier island. In 2006, Northwest Arctic Borough contractors completed the construction of a \$3m erosion control project to armor the ocean side, but their chosen technology—a gabion wall constructed from HESCO baskets—seemed woefully inadequate to local residents who either worked on or observed the project. It turns out that these community concerns were well founded, for the day before the gabion structure was to be dedicated, it was washed out to sea. What’s more, because of the way that the contractors had sourced their material from the coastline, this failed fix was widely understood to have further exacerbated erosion in key places (Gray 2010). In September of 2007, Kivalina received warnings of a storm surge that could potentially inundate the community. At the urging of Northwest Arctic Borough officials, community leaders facilitated a daring and frightening evacuation. While flying as many elders and children as possible to Kotzebue, Hondas were floated across the channel to take the remaining evacuees south along the coast to Port Site, from where they were bused up the haul road to the safety of the Red Dog Mine. In 2008, USACE contractors completed 400 ft. of a planned 2000 ft. rock revetment wall (GAO 2009: 33)⁶⁹ and added 1,200 ft. in 2009 (to total 1,600 ft.), but the wall’s future became “uncertain” when Congress repealed its funding authorization (USACE 2009:5-4). Without maintenance, for which there was also no funding, the partially completed seawall was expected to secure a portion of the island through 2023 (GAO 2009), although the Corps predicted “extreme damage” at Kivalina by 2019 (USACE 2009:5-4).

⁶⁹ For a prior 3,100 ft. proposal, see USACE 2007.

In August 2013, Michael and I attended a meeting of the Kivalina City Council that had been called on account of the visit of the USACE's new district commander, Col. Christopher Lestochi. The commander was preparing to deliver a report to a congressional field hearing in Anchorage and needed to give an account of the work the Corps had been involved in around the State, including at Kivalina. Along with two of his engineers, he wanted to make a first hand inspection of the seawall (see Figure 3.8). Before we started the tour the engineers had a few questions, although several city councilors had their own priorities for the conversation. The five-year-old wall was holding fast, it was agreed, material was even building up behind it, but one city councilmember wanted to know when the Corps was going to come back and *finish* it. Until the wall was completed to its original specifications, another councilmember pointed out, key areas of the island would remain exposed to erosion, including the airport, health clinic, and houses along the lagoon-side.⁷⁰ Throughout the last decade, in order to protect this critical infrastructure during seasonal storms, city workers and volunteers have had to create their own DIY erosion control methods using locally available materials ranging from sandbags to giant sheets of scrap metal that they cut from the fuselage of an abandoned airplane or from decommissioned fuel tanks. Finding themselves out of other options during one storm in the fall of 2019, City leaders made the difficult decision to redeploy boulders from the existing rock revetment to buttress the coastline from severe acute erosion that was fast closing on the airport runway. A loss of air access in and out of Kivalina would strain the supply of food and other items that are daily flown into the village, but the loss of the runway would be downright dangerous in the case of medical emergencies.

⁷⁰ Protecting lagoon-side housing from erosion had been identified nearly twenty years earlier (see: DOWL 1994).



Figure 3.8. Michael Gerace, Janet Mitchell, USACE Engineer, Col. Lestochi, and Colleen Swan tour the seawall, August 2013.

As several community members told Secretary Jewell, the partially completed rock revetment has brought a sense of comfort and security to the village during the most severe storm events (see: Brubaker et al 2010). Its construction was a formidable achievement and testament to the unrelenting advocacy of local leaders and their successful negotiation of State and federal bureaucracies. At the same time, however, the story of Kivalina’s seawall—built as it was to replace an even-more-inadequate intervention—is indicative of the ways in which colonial welfare, or settler-humanitarianism, has historically operated throughout Arctic North America: through the logic of minimal life preserving measures (see Chapter 1; Paine 1977; and Stevenson 2014). Before the USACE constructed the rock revetment, Kivalina was made to endure years of severe exposure to coastal risk. Those State and federal institutions charged with ensuring the safety of its residents and citizens remained, as it were, “indifferent” to the community’s

wellbeing and collective future. When State and regional institutions finally did respond, it was only through the most minimal terms of engagement—a wall that immediately washed away and even made the erosion worse. And while the more expensive replacement seawall has made a significant difference, it has remained unfinished for the last ten years. Within this regime of partial protections, local leaders and volunteers have had to triage the minimal-resources available to them, even moving boulders from one part of the island to protect another, which has become more acutely threatened. For all the ways that the seawall has made *parts* of Kivalina safer, it also represents a reduction in the scope of State and federal concern and engagement, which, over the last fifteen years, has shifted from proactive, long term, and comprehensive relocation planning, to partial securitization and minimalist emergency response.

In the wake of the storms of 2004 and 2005, a second infrastructure project was also unbundled from comprehensive village relocation planning and pursued with urgency by local leaders to address public safety: an evacuation road. A 2018 environmental assessment prepared by the State of Alaska and its contractors describes the background to the project:

The community of Kivalina has been working for decades with a variety of local, state, and federal agencies to address threats of coastal erosion and flooding. Numerous study, concept, and planning documents exist on potential solutions, which range from erosion protection around a portion of the barrier island to relocation of the entire community at a new mainland site. Issues surrounding community relocation have been challenging to overcome, as they are neither culturally preferable nor fiscally practicable in the foreseeable future. Consequently, Kivalina proposes to develop a safe, reliable, and direct means of temporary community evacuation to an acceptable mainland location on K-Hill.⁷¹

⁷¹ January 2018 draft Prepared by State of Alaska Dept. of Transportation and Public Facilities, Northern Region; Stantec Consulting Services Inc.; and Remote Solutions, LLC. See: https://kivalinaarchive.org/system/files/atoms/file/2018_DOT_Stantec_RS_Final%20Environmental%20Assessment%20Kivalina%20Evacuation%20and%20School%20Site%20Access%20Road.pdf

An evacuation road, the report adds, “would provide Kivalina residents a safe and reliable evacuation route in the event of a catastrophic storm or ocean surge, allowing evacuees to temporarily mobilize to safe refuge at an assembly site on K-Hill” (2018:11). Like the seawall, initial evacuation road planning began as a way to *temporarily* ensure community safety in the event of future flooding or a storm surge. Years later, this initial concept would take on a new dimension.

In 1997, Willie and Sophie Kasayulie, of Akiachak, Alaska, along with parents from several other rural Alaskan villages, began to seek restitution in the courts for the State’s systematic and racist neglect of village schools (Kasayulie v. State 1999). In 2011, Kivalina became a beneficiary to the \$146m settlement that resolved the 14-year-old lawsuit. While Kivalina was one of five villages designated to receive a new school, the settlement also allowed “the legislature to refuse funding for the Kivalina school based on concerns over erosion or viability of the school site without penalty” (Hopkins 2011).⁷² With the school settlement, the evacuation road took on a dual, and perhaps more urgent, purpose as a potential access road to new school site.⁷³ In January of 2012, the Northwest Arctic Borough School District presented its proposal for a new school to be located 8-miles inland from Kivalina at Kisimigiutquq Hill. With funding from the BIA Tribal Transportation program the Native Village of Kivalina and Maniilaq hired WHPacific to prepare a Preliminary Environmental Report (WHPacific 2012) and formal evacuation road planning began in full force. By the time of Secretary Jewell’s visit

⁷² See: [http://www.ceaac.net/documents/Final%20Consent%20Decree%20-%2008-24-11%20\(00349224-8\)-FINAL.pdf](http://www.ceaac.net/documents/Final%20Consent%20Decree%20-%2008-24-11%20(00349224-8)-FINAL.pdf)

⁷³ See: <https://www.nwabor.org/about/projects/kivalina-evacuation-school-site-access-road/>

in 2015, both the IRA and City Councils had identified the road as a priority and were working with the NWAB to lobby federal and State officials for construction funding.⁷⁴

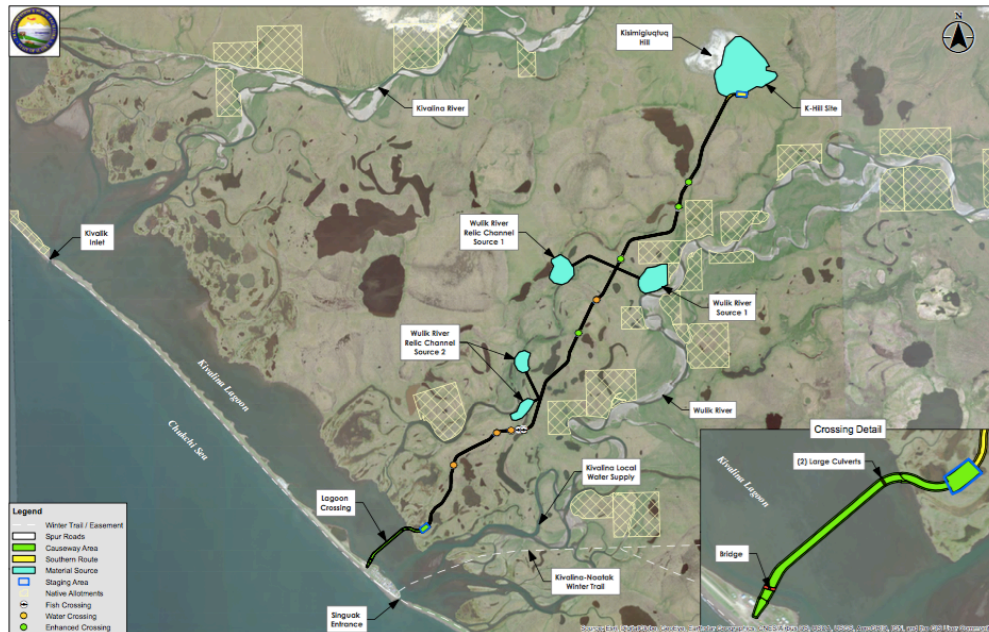


Figure 3.9. Proposed Evacuation Road (State of Alaska DOT 2018)

In August 2018, the *Arctic Sounder* reported that funding had been secured for both the school and the road, and asserted that “the construction of a new school on a new site, combined with the access route, means the community is one step closer to relocating” (Oliver 2018). In the fall of 2018, contractors from Arctic Slope Regional Corporation (ASRC) delivered heavy equipment to Kivalina. Once the lagoon froze over in January 2019, ASRC contractors and dozens of local workers began construction of an ice road from the existing village to Kisimigiutq Hill. After ASRC trucks and heavy equipment were moved to the site, blasting and gravel extraction began. Working their way back toward town, teams of drivers and heavy equipment operators worked through the night to lay down gravel, nearly reaching the lagoon by

⁷⁴ At that time, the USACE had been the lead agency on the evacuation road project but when cost estimates for a lagoon crossing came back exorbitantly high, the project was transferred to the State of Alaska DOT.

late March. Road construction has been a boon for temporary winter employment and the prospect of a new school for Kivalina is a welcome development, given the long outdated and overcrowded McQueen School facilities. A new school would also double as an emergency shelter should the sea again become dangerous and the community decided to evacuate the island. The road will also increase access to Kivalina’s homeland territory for many members of the community who intend to explore new hunting, fishing, and berry picking sites, or take advantage of more efficient access to existing sites. But challenges also remain about whether the project will be funded through its anticipated completion, as well as how the road will be maintained for public safety. Even after road construction began in the winter of 2019, the Alaska Department of Transportation website still hedges on the outcome of the planned school project, reading: “if constructed within the vicinity of the project terminus, the school could augment the undeveloped evacuation site by serving as a full-service community emergency shelter.” The website also adds that: “school construction is remote and speculative.”⁷⁵ At a public meeting in Kivalina in May of 2019, officials from the Northwest Arctic Borough School District presented a draft school site layout plan and outlined a range of factors that still need to be addressed, including: land ownership of the proposed school site, identification of a water source, and sanitation solutions. School District officials estimated that a new school would open in the fall of 2022. Local decision makers are in the process of deciding how the new gravel pit, emerging evacuation road, and proposed school site might also be used to expand housing opportunities for Kivalina’s young families. Beyond the stabilizing qualities of the seawall, the emerging road and school projects have the potential to provide safety during coastal storms, bring relief from a substandard and overcrowded school, increase collective access to inland

⁷⁵ <http://dot.alaska.gov/nreg/KivalinaEvacRd/> (accessed June 11, 2019).

territory, and further develop a gravel source that could be used to facilitate village expansion in any number of locations, while also being used to construct additional erosion protections.

If the storms of 2004 and 2005 initiated a process that compartmentalized immediate safety concerns from comprehensive village relocation planning in Kivalina, local leaders have worked successfully within this framework to create material change for community wellbeing through the creation of new infrastructures. In doing so, they have created immediate breathing room, while also working to expand the scope of what is possible for Kivalina's future. However strategic on the part of local leaders, this compartmentalized approach to community planning also represents a dramatic reduction in the scope of federal, State, and regional engagement with, and support for, the longstanding needs (such as water, sanitation, and housing) that were identified by the community as priorities nearly 40 years ago. While this long and still-unfolding history of village planning is a testament to the resolve, dedication, and skill of Kivalina's leadership over several generations, it also illustrates the biopolitics that Arctic Indigenous communities must negotiate in their dealings with those settler governments, which (when not openly violent or hostile) have historically been, and very often continue to be, only indifferently motivated by the logics of minimal-life preservation. Nevertheless, within these logics, local leaders have carefully worked and negotiated to secure critical material resources for village safety while also seeking to build a future on their own terms, beyond these biopolitical logics altogether. For many today, "relocation" still represents this breaking through.

"My name is Lucy Adams," one elder told Secretary Jewell that February morning in 2015. "Our first priority," she said, "is always the relocation. When they were building the sea walls... I watched, cause I live close to the beach. And I told my great-granddaughter... 'They

will not relocate us for rest of our lives, instead of relocating us they're spending... to make sea wall." As she continued, her voice began to quiver, "'We will live without running water for rest of our lives,' that's what I was telling her." Lucy then went on to recount the history of recent storms, saying, "And then when we reach 2000, the weather start changing... We had big storm in 2004, and then in 2009 we had Christmas Program in Episcopal Church. The ocean was still not frozen, but the lagoon had ice." There was a strong northwest wind that evening and "the big waves were beginning to rise." Around midnight Lucy went home from church for some water and a snack. She heard her sister-in-law speaking on the VHF, saying, "The water is coming in through the channel and it's covering the lagoon ice." Lucy then received a phone call from another concerned elder who told her, "We gonna be in danger. There's ice on the lagoon and the salt water is coming in through the channel." The elder told her, "We gonna be in danger, it's gonna flood because the water can't sink through the ice." After a while, Lucy returned to the church and asked the congregation to pray about the weather. When the Christmas program was over and she returned home, that elder called her again and said, "There's a hole by the channel now. The ocean water is sinking through that hole, just like somebody drill through the ice."

But the following winter, Lucy explained, "We had problem with the ocean... the ocean did not freeze again, we were in *danger*. I always picture children, little children... floating on top of water. Is that good news?" Her question echoed through a silent room. "We would try to ask for help," she said, "Who would help us?" Lucy's voice began to shake as she continued, "This is me. I'm saying what I'm thinking. I want them to *know* when our village need help, our NANA board, Northwest Arctic Borough, Maniilaq, State of Alaska... better pass that message to President Obama, if he can hear us."

“He can hear you...” Secretary Jewell responded. But Lucy continued speaking, her voice was reaching full crescendo as she exclaimed:

We’re humans! We’re not animals. We wanna live *too*. Just like we were animals, nobody don’t wanna help us. Who can help us? Look at our village! Every year the ocean did not freeze again till January... We know where we live. When we tried to relocate, they would try to boss us from Kotzebue where to relocate, even though the elders who already have gone have selected where there is gravel to relocate the village...

These things we are going through, what we live today. I’m speaking for children who are in school, our grandchildren, our great grandchildren... Our priority is relocation, we need to relocate, but who gonna help us? Who? This is our life. We know our living here in the village. That’s why I always get mad when somebody try to control us where to relocate and how to live, who is not living in Kivalina.

Seven months later, in September 2015, President Obama would become the first sitting U.S. president to travel to the Arctic. It was a visit designed to dramatize his administration’s case for climate change. With a stop in Kotzebue he announced what some hailed as a groundbreaking commitment: the revival of a defunct and underfunded federal agency, the Denali Commission, as the new lead entity for village relocation planning in Alaska.⁷⁶ Despite the new cycle of public attention generated by high profile visits to the region, Lucy attests to the feeling of having been abandoned by the institutions with both the responsibility and resources to help the community achieve their self-determined goals.

⁷⁶ See: <https://obamawhitehouse.archives.gov/the-press-office/2015/09/02/fact-sheet-president-obama-announces-new-investments-combat-climate>



Figure 3.10. Photo of Kivalina taken from Air Force One (and tweeted from the White House account) during President Obama's flyover en route to Kotzebue, September 2, 2015 (Andrew Harnick, Associated Press).

Since 1981, while negotiating false starts, bureaucratic shifts, and securing partial protections, Kivalina's village relocation advocates and community planners have sought to break through the biopolitics and structural violence of settler humanitarianism and welfare colonialism. The contemporary politics of climate change have only intensified these challenges for Kivalina and many other Indigenous communities. In some ways, Kivalina's experience is similar to others in Northwest Alaska who, facing dramatic climate-induced erosion, are also seeking to move their villages, retain local sovereignty, and address longstanding deficiencies in their built environment. But it is also unique, for it has been forged through the highly specific histories of political economy and colonial entanglements of the Kivalina region. It was the Army Corps of Engineers that noted the "imminent" danger in communities like Kivalina, but such forms of federal recognition have failed to enable the future that many people in these communities desire. Within this broad milieu, Kivalina's leaders remain steadfast and continue to organize for partial victories, even while they pursue greater expressions of long sought spatial

and temporal breathing room. Kivalina's long history of relocation planning can be understood as an expression of Indigenous sovereignty: whether working within, against, or refusing the terms of settler institutions, local leaders have sought, and continue to seek a collective future far beyond them.

Chapter 4. The Taste of Fullness and the Politics of Care: Food Sovereignty and the Criminalization of Subsistence.

The air was cool and the willows across the lagoon were beginning to turn yellow. It was my first September in Kivalina. As usual, I spent the first few hours after my arrival setting up the house I was renting: getting the electricity turned on, hauling water, and dealing with a stove-oil leak. I set out to buy a few supplies at the store when I ran into a friend walking along the gravel road near the central water tank. Instead of her usual greeting of: “Welcome home!” she chided me, playfully, saying, “My Papa says, ‘How come you can’t visit?’” An exaggerated look of shame overtook my face and she burst out laughing. Earlier that year, the last time I was in Kivalina, it took me nearly two days to go see Papa Joe and Momu, which was most unusual. Not wanting word of my arrival to spread any further before I could greet them in person, I abandoned my trip to the store and hurried to their house.

Papa Joe was sitting in a wooden chair at a small table by the window. He was looking outside across the lagoon with his back to the door. Across the room, Momu turned slowly from the stove, smiling.

“Hellooooo,” I bellowed. Joe turned his head but didn’t speak. “How *are* you?” I asked, continuing my blustery greeting.

I stood in the doorway silently until he responded with one word: “Starving.” A moment passed before Joe took pity on my confusion and spoke again. “Do you know why I say I’m starving?” he asked. Again I waited with focused silence. “Because I never eat caribou,” he explained.

Starving—the word itself was arresting, but I was also caught off guard to be discussing caribou. When I arrived in Kivalina that day I had had something else on my mind. It had been a particularly bad spring for ugruk (bearded seal), with Joe’s family catching just one small and

sickly animal. Ugruk depend on sea ice for their habitat and when the ice went out that spring it never came back, it just melted away, as did the chance to fill the buckets with enough blubber to render a year's worth of oil.⁷⁷ But that had been four months ago and while Joe had no doubt missed a summer of fresh "black meat" he was now waiting, somewhat impatiently, for the caribou herd to come down from the mountains, to the rivers, hills, and flats where Kivalina's hunters would be waiting for them.

But there was a problem. A few days earlier, some Kivalina people were staying at a cabin and fishing upriver. They were having a look around just below the mountains where they thought the caribou were when they spotted a small plane in the distance. It was the kind of plane commonly used by outfitters from Kotzebue to drop off big-game hunters, mostly from Southern Alaska and the Lower-48, and their guides in search of trophy racks from bull caribou. But this plane was not delivering a group of hunters, it was swooping down repeatedly in a motion that could only serve one purpose: to keep the migrating caribou herd on State-owned land where they could continue to be pursued by mostly white clients. The plane was red and white, but too far away to definitively read the tail numbers and make a report to Alaska Fish and Game. Aerial herding is not only illegal, but it violates the Iñupiaq principles of not disturbing a migrating group of animals. Kivalina's young hunters are taught from a young age to hunt only from the middle of a herd of caribou or pod of beluga. To interfere with the leaders of any species would

⁷⁷ Ten years ago, ugruk provided more than a third of Kivalina's Native food by edible weight (ADFG 2010). With Arctic sea ice extent recently measured at an all time low for the third year in a row (NSIDC 2017), it is an open question if this can continue. Although precise population trends of bearded seal in the Chukchi Sea are poorly documented, ugruk, like other Arctic marine mammals, are "icons of climate change." Their future will be determined by the presence or absence of their sea ice habitat (Laidre et al. 2015). While Kivalina has had decent ugruk seasons since, the spring of 2015 was largely seen as a portent of things to come.

disrupt their migration path, and while it might serve one's personal short-term interest, it makes it near impossible for other hunters, especially from other communities, to get their share as well.

Interference from trophy hunters, traffic on the 52-mile haul road that connects the Red Dog Mine to its Port Site (Wilson et al. 2016), and climate change, are among the factors that Kivalina's hunters will credit with changing the long-term migration patterns of the Western Arctic Caribou Herd through their territory. But while the impacts of climate change are often described in general terms, hunters can pinpoint on a map with startling accuracy how caribou have changed their path every few years in response to road traffic and sport hunters' deceptive tactics. That September, the small planes were keeping the caribou pinned in the mountains about eight miles northeast of Red Dog Mine and they wouldn't be coming down anytime soon. Joe knew this and was not pleased. "They won't move when they're disturbed," he explained to the community one afternoon on the VHF radio, before adding brusquely, "Sport hunters." In just a few weeks the males would enter the rut and "get stink," he told me, their meat would be no good.

As I sat with Joe, waiting for caribou, someone else began to speak on the VHF. Listening through static we strained to understand what they were saying: a wildlife biologist from Kotzebue had confirmed that the caribou were still up in the mountains just as the Kivalina hunters had thought. "So... I dunno," the garbled voice continued, "if they don' wanna come down... as long as we got pop and chips, we're not worried."

I froze. Joe did a double take, looking first to the radio and then to me with eyebrows raised, "Did he say 'pop and chips?'"

“Starving”—it is a word used frequently by elders in Kivalina, not to connote a state of immanent bodily death stemming from hunger, but rather to describe a range of felt conditions. Describing how she might skip her mid-day meal when losing herself to the focus of sewing or other handiwork, an elder might say, “I always starve myself till supper.” While the pleasure of one’s own craft might drive a person “to starve,” more often than not the term does indicate a lack of agency. In this way, Joe was referring to his experience of a deep hunger that was not of his own choosing. Yet rather than describing a lack of food quantity, or caloric sufficiency, “starving” for Joe, indicated a longing for a particular kind and quality of nourishment. On the other hand, the right kind of food, in the right amount, and the proper social context might cause a person to experience a state of fullness. For example, a photo posted to Facebook might feature a fist-sized chunk of quaq (aged and frozen raw fish) beside a small pool of seal oil and inspire the comment: “Mmm, only need a bite to get full with that kind!” In the everyday lives of Kivalina’s people, to “get full” or to “starve” are very often qualitative states that do not depend solely on caloric intake as a universally exchangeable form of nutrition.

In contrast to colonial representations of “starvation” among Arctic Indigenous peoples (see Chapter 1) and the one-dimensional definitions of “food security” that still circulate in the climate adaptation literature (see Chapter 5 and 6), the Inuit Circumpolar Council-Alaska⁷⁸ (ICC-Alaska) defines “food security” in holistic terms that are inclusive of its nutritional, cultural, and political dimensions:

⁷⁸ The Inuit Circumpolar Council (ICC) is an international NGO and advocacy organization founded in 1977 to address issues of common concern among the culturally similar Indigenous peoples of Alaska, Canada, Greenland, and Siberia. ICC-Alaska is the non-profit representing Alaskan Yup’ik and Iñupiaq communities within the ICC. In an international context these communities are often included in the broader term “Inuit.”

Alaskan Inuit food security is the natural right of all Inuit to be part of the ecosystem, to access food and to care-take, protect and respect all of life, land, water and air. It allows for all Inuit to obtain, process, store and consume sufficient amounts of healthy and nutritious preferred food – foods physically and spiritually craved and needed from the land, air and water, which provide for families and future generations through the practice of Inuit customs and spirituality, languages, knowledge, policies, management practices and self-governance. It includes the responsibility and ability to pass on knowledge to younger generations, the taste of traditional foods rooted in place and season, knowledge of how to safely obtain and prepare traditional foods for medicinal use, clothing, housing, nutrients and, overall, how to be within one’s environment. It means understanding that food is a lifeline and a connection between the past and today’s self and cultural identity.” (ICC-Alaska 2015, 5)

Here, food security is defined as a right, inclusive of culture, inheritance, and even taste. As such, it is through and through a political claim because it seeks a space for the continuance of collective land-based modes of life amid a range of colonial and capitalist incursions. In this way, many Indigenous concepts of food security in the Alaskan Arctic are closely aligned with what activists and advocates call “food sovereignty.” Food sovereignty is both an analytic and a global social movement that moves beyond mere access to food and toward control of the means and methods of food procurement and production (Nilsson and Evengård 2015; Declaration of Nyéléni 2007). Critically, the ICC-Alaska views food sovereignty as a precondition for food security for Arctic Indigenous communities.

Following this turn to food sovereignty among Arctic Indigenous advocacy organizations, this chapter considers the contemporary political economy of niqipiaq (Native food) in Kivalina in the context of the corporate entanglements and settler colonial legal regimes and policies affecting land ownership, use, and access. Specifically, this chapter argues that hunting and other intergenerational land-based practices are critical forms of intracommunity care that undergird individual and collective wellbeing in Kivalina. Through government regulation, non-local management of private property, and competition from non-Native land users, these forms of care are today subject to all manner of pressures and constraints, including outright

criminalization. Through a combination of direct action and advocacy, Kivalina's people refuse, resist, and negotiate these entanglements in order to sustain the social and multi-species relationships that have long supported their collective continuance. In Chapters 1-3, I argue that settler-state engagement with Indigenous peoples in Arctic North America has largely been framed around concern for the most minimal forms of bodily survival. Here, I extend this critique of state biopolitics through an analysis of Indigenous hunting rights in Alaska, which, in the absence of federally recognized territorial sovereignty, are both recognized, regulated, and at times diminished through the logic of "subsistence." Yet, as an expression of individual and collective sovereignty, longstanding Native Alaskan hunting, fishing, and gathering practices—and the relations of care they support—far exceed this logic.

Tasting Fullness: "That muktuk saved my life."

It was the mid-1980s and Joe was working on a crew to build a heavy equipment storage building for the State of Alaska Department of Transportation on the south side of Kivalina's runway. One afternoon, late in the workday, he was up on the roof; something happened and he slipped off. His back was badly damaged and he was taken in the medevac plane to Anchorage where he was laid up for twenty-three days. As his back was slowly recovering, the doctors also placed him on a strict diet. They told his wife "not to bring any heavy meat," he told me.

Deprived of his Native foods, he began to waste away:

So I keep bugging [and bugging my wife]... and finally, one Sunday morning she come in and say she had to tell me something. So she was standing right in front of me, 'cause I can't move. And she said, "I bring you some muktuk⁷⁹...but I'll give you only two pieces." I said, "Okay!" So she give me reeaaal small strips... I swallow them... and my stomach start to crawl. I was on the fifth floor and I told ...[her] to go get me some snacks from downstairs, even though I don't want them... [I said] "I need all kinds," to make sure that she got a lot of time to pick all the food that I wanted. And I was hoping that—cause I

⁷⁹ Bowhead whale blubber, still on the skin.

know my arms wouldn't move—I was hoping that... [she] would put her purse where I could reach it.

Joe twisted ever so slightly toward the imaginary purse by his side to show me just how he did it.

“And sure enough she put it riiiiight...” he strained his voice as he pretended to reach. “Riiiiight...”

he continued, still stretching with a grimace on his face. “Riiiiight over here...” having reached

the imaginary purse, he exhaled fully and relaxed his body before he continued his story:

I time her, cause we have to go through elevator. I time her how long it will take, to make sure that she don't return and see what I am doing... There was a one-pound container and I open it. Before she comes back I finish the whole thing: one whole one-pound container. And when she come back... [she] look at me. I told her, “I finish it. I'm starving now.” So she kept coming and going down [to] get me some snacks and [it was] finally dinnertime. [I ate so much] 'cause my stomach was empty, 'cause I was... nothing but bones... [T]he nurses bring me some food. I ate it and *still* I was hungry! And they give me another. I told her I would never tell the doctors or nurses. I promised her that they would never know... [T]he nurses were so glad that I eat, they bring me [more] food [and] I keep eating them. My stomach [was] still crawling, no matter how much I eat. It last like all night. I don't know how much it was empty. That's how... those whale muktuks saved my life. 'Cause I was just... nothing but bones.

Joe pinched himself and pulled a finger full of skin away from his arm. “That muktuk saved my life,” he repeated. “I was scared alright... I get scared that I was going to starve myself to death.”

One of the things that stood out each time Joe has told me this story, is the way in which his life-saving appetite was initiated by a particular kind of food, with a distinct taste, and a specific social quality. That small can of muktuk did not quench his hunger, but it got his stomach “crawling” to the point where he could gobble down even the most otherwise undesirable hospital food and vending machine snacks. This, it seems, is the power of a food's social quality and taste: to stimulate the basic appetite one needs to eat anything at all. Here, a food's quality and kind emerge as critical attributes of its nourishment; these attributes are at least as important as caloric quantity. And, while one's experience of a food's quality and kind may include its physical attributes (like taste, smell, and texture), niqipiaq is also saturated with

the relations of care that produce (or in this case, catch, share, prepare) and provide it. Momu's clandestine act of care—first bringing, and then neglecting, the one-pound can of muktuk just within Joe's reach—was a betrayal of doctor's orders, but Joe's life depended on her refusal of this “expert” authority. Calories are not interchangeable.

Joe contrasts his own hospital experience with an Auntie of his who spent the last few years of her life in an eldercare home in Kotzebue. Denied her Native foods, she just wasted away. “I know they was starving her,” he told me. “When they buried her she was nothing but bones. [I heard one time they gave her] sausage... and what's that white stuff? Sauerkraut? I would never eat that... That's why I say they were starving her. They were feeding her the wrong kind of food.”

When Joe thinks back on how muktuk saved his life, he has often recalled another story that demonstrates what fullness feels like. Every fall after he quit reindeer herding, his dad Louis would go walking in the mountains inland from Kavrauraq, just past the northern tip of Kivalina lagoon. Louis would set out at the beginning of August in search of caribous, just when their winter coats had been shed, and the skins were just right. His dad just “loved to walk,” Joe told me. Out in the country, he would catch what he could, dry the meat, “and carry them home,” he'd ‘make ‘em light with the skins.” Louis would stay out there by himself for three weeks, or even a month, with his family not knowing precisely when he'd return, but it didn't matter. It happened “evverry year,” Joe explained:

I don't see my mom ever worried about him because as long he have a little seal oil, that's good enough, ‘cause he can eat anything off the ground, even willows sometime. When we run out of food he always... take young willows... while they're still growing... and peel... [the bark] off and just scrape it with his knife... make flakes, fill up the bowl, and just stuck ‘em in the seal oil, soak ‘em to seal oil. We always eat, you can't starve. He know how to survive. That's why he always take only seal oil, no coffee, no tea, no sugar, anything, just a jar of seal oil...

One jar of seal oil was all that Louis needed to guard against hunger while he roamed the country for up to a month. If his search for caribou was successful, he might enjoy the oil with a little meat. If not, it could be paired with “anything” from the land, even the inner shavings of young willow shoots. Joe experienced food scarcity only one time when he was growing up. As a young boy, he remembers searching the underground food caches for something to eat, but he was coming up empty. He himself used this old-time technique: a bowl of willow shavings soaked in seal oil could bring, even if only for a time, the taste of fullness.

Whimsical Closures, Sovereign Refusals

The next morning I returned to visit Joe and learned of a new development in the caribou situation. A worker at the Red Dog Mine had spotted a few caribou grazing just in view of the haul road.⁸⁰ As the news spread, Kivalina’s hunters began to get ready. A boat sped through the lagoon to the south end of the island where it would ferry Hondas (ATVs) across the channel. Once on the mainland, hunters would ride south along the gravel beach for 17 miles to the Red Dog Port Site and then cruise inland on the haul road, hoping to spot caribou in the tundra. For years, an agreement between the village and Red Dog had specified that, should caribou enter the area, local hunters would be allowed road access. It was an arrangement designed at least to minimally offset the long-term disruption that traffic and noise from the road had caused to caribou migrations through Kivalina’s hunting grounds.

On that particular morning, with increased activity from small plans, and no fresh meat in town, time was of the essence. But amidst the excitement and expectation, an announcement

⁸⁰ The Red Dog Mine is an open pit lead and zinc mine that has operated within Kivalina’s traditional territorial boundary since 1989 and discharges its wastewater into a tributary of the Wulik River, Kivalina’s most important fishery and source of drinking water. The mine-site is located 46 miles inland and is connected by a 52-mile haul road to a port-site on the coast of the Chukchi Sea (see Chapter 2)

came over the VHF from NANA.⁸¹ Our of respect for the Iñupiaq ethic of allowing the first caribou to pass, so as to not disrupt their migration and prevent other villages from getting their share, the road would be closed to Kivalina hunters for another week. It's true, many elders and hunters have told me, hunting the "leaders" can throw off a caribou migration, but NANA's decision seemed to come out of thin air. As one elder explained, Kivalina's hunters were only after the "stray" caribou that were "hanging around the road." There were no migrating caribou that day. Weeks ago, the main herd had already passed well behind Red Dog and were now pinned in the mountains by the sports hunters. Another friend remembered seeing the data from collared caribou on the Fish and Game website. "They go to the road," my friend explained, "They zigzag and they go back up [behind Red Dog]. This is for how many years, so they learn not to cross the road." Indeed, before the road, the caribou used to pass right close to Kivalina, but this disrupted route was now the prevailing pattern, and one that Kivalina's hunters and elders saw coming even when the mine first opened (see Chapter 2). With the caribou migration pushed farther and farther away from town, the road has become a critical way of reaching those animals that wandered away from the main herd. It was simply, as one hunter told me, the "most efficient" way to hunt for a community where cash was scarce, fuel expensive, and one's Honda, let alone one's body, could only take so much riding through deeply pitted tundra.

NANA's unilateral decision to suspend its longstanding agreement with Kivalina and close the road to hunters was defended in the name of the greater regional good, but this claim seemed disingenuous as Kivalina's people could clearly see through Facebook the success that

⁸¹ The Northwest Alaska Native Association (NANA) is a regional corporation established by the Alaska Native Claims Settlement Act in 1971 that absorbed Kivalina's village corporation in 1972 and today controls much of Kivalina's traditional territory, including the land on which Red Dog Mine operates through a partnership between NANA and Teck Alaska, Inc. (See Chapter 2).

other villages were already having. What's more, even though Red Dog Mine claimed to be closing the road in order to protect the migrating leaders from being disturbed, they themselves were still actively hauling ore along the road with semi-trucks—an activity that would pose far more of a disturbance than the passage of a few Hondas.

Headed back to my house that morning, I passed by a friend who was leaning against the front of an old Honda parked outside her front door. “Gonna be some vigilantes on the road today,” she declared softly. She shook her head and I reciprocated the gesture. Her displeasure, however, was not with the few defiant hunters that would almost certainly ignore the closure and head out along the road, but rather she was alluding to the fact that by doing what they should be doing—hunting, providing, and caring for their families—these hunters would find themselves in a position of criminality created by a remote regional institution and unaccountable land-owner. After a summer of relative scarcity, at a critical moment of need and opportunity, the road closure seemed to foreclose the possibility that Kivalina's people would be able provide for themselves and for one another from their own land. It denied a cadre of young men and a few young women a form of labor that was as enjoyable as it was efficient. As another friend put it, the road closure was the kind of “whimsical” action one had come to expect from the regional corporation and it was costly to Kivalina's wellbeing (see also Chapter 2).

With reports of abundant caribou and the road officially closed, Kivalina's hunters took up several different strategies. My friend Reppi was among those who, deciding to try their luck, ferried their Hondas across the channel and rode the 17-mile beach to Port Site. These hunters simply could not believe that if they followed the existing policy of signing in and picking up a safety vest the Port workers, many of whom were also hunters and even relatives from around the region, would actually refuse them the pursuit of fresh meat.

I was sitting on the couch at Reppi and Dolly's house when a rush of cool air seemed to blow the front door open. Rep came in, taking off his heavy jacket as he paced back and forth along the length of an empty chest freezer. Dolly looked up from the table expecting his account, although we both already knew what had happened. "Just go waste gas," he said, exasperated. "Didn't let us on the road, just waste gas, that's all." I looked down at the carpet, feeling heavy, angry, and sad. It would be spaghetti for at least another night. "Griff!" Rep shouted, commanding my attention. "You better pray they open the road tomorrow."

I looked up and nodded slowly with a sternness to match Rep's. "I will," I said.

"Yep, better pray they open the road," he said again, still pacing and breathless with adrenaline.

Later that evening, an ambitious young hunter came over to the house. He wore a heavy coat and sat quietly in a chair by the door. No one said anything, but the weight of the day was palpable. After a long silence, he finally spoke, "Jus' gotta pray, ah?"

"Yep," Rep agreed quickly.

Back at my place, as it was growing dark, I peered out the window to see a Honda pass with one caribou tied on the front and two on the back rack. At least one "vigilante" had been successful, I thought. Another group of young hunters, I later heard, had set out on the road that day in defiance of the closure. An elder posted online, approving of their quest, and hopeful that they would return with caribou, which was so dearly needed, she pointed out, at this time of month when household financial resources were often scarce. But after making it a good ways up, this crew was kicked off the road before they could find any caribou. Determined to catch anything they could for their families, they rode home slowly over the tussocks—the high mounds of grass that crater the tundra. They found nothing but their own exhaustion, more

wasted gas, and at least one broken axle. Online, a string of comments expressed support for them and decried the injustice of the situation. In addition to the community's prayers and acts of defiance, Kivalina's local officials also began advocating on several fronts for NANA to reverse its decision.

While the issue of the road closure appears to be a disagreement over the management of hunting rights stemming from discordances between local/traditional and remote/expert knowledge of caribou migration, it is also evidence of much deeper disagreement, that is, it is a manifestation of competing claims to the governance of Kivalina's territory. The direct actions and formal demands rising in the wake of the road closure offer insight into the broader politics surrounding the community's struggle to maintain its longstanding land-based practices throughout a homeland territory that is today, in large part, owned and managed by various non-local entities. While corporate, State, and federal land-owners each purport to grant the rights to hunt, fish, and gather in accordance with traditional methods and practices, Kivalina's people must continually negotiate multiple barriers to the practices at the core of their collective continuance. First, there is always the question: "On whose authority, and based on whose knowledge, definitions, decisions and regulations are established and enforced?" Differing claims to authoritative knowledge—in this case knowledge of caribou migrations—gain unequal traction in the world according to the power relations of the actors involved.⁸²

⁸² Paul Nadasdy has shown how even the best intentioned wildlife "co-management" schemes in subarctic Canada operate as an extension of colonial knowledge-power, which is to say, such programs leave little room for the particular ontologies, values, and principles of local Indigenous communities but operate according to the wider norms of settler society (2005). The rules of participation, having been established by the state, are rooted in, and therefore reinforce, an asymmetrical power arrangement within the "logic of elimination" (Wolfe 2006) through normalization and standardization.

Second, as Chapter 2 makes clear, contemporary regional politics are entangled with a range of economic interests. NANA is part of a network of state and non-state institutions in Northwest Alaska that together enact a neoliberal mode of “governance-beyond-the-state” (Swyngedouw 2005), wherein the decisions of several remote authorities dramatically effect the lives of local communities and individuals. As Chapter 3 demonstrates, these same knowledge-power dynamics have also been at work in the selection of a new village site throughout the relocation planning process in Kivalina. The precarious dynamics, logics, and relations of power governing local land-based practice involve many of the same networks that are affecting Kivalina’s broader claims to an enduring future.

Finally, the material needs of Kivalina’s people for bodily nourishment are indeed also at stake in this struggle. “It was pretty tough last year,” one friend told me when we spoke the following summer, “because we didn’t get ugruk and we barely got any caribou. A lot of people were hungry... that’s how important our hunters are. We ate sparingly.” But this is a key point: the mitigation of material scarcity in Kivalina is deeply tied to the maintenance and unimpeded exercise of hunting and fishing rights. Yet, in spite of the critical importance of these political and social dimensions, the material aspects of these land-based practices play an outsized role in the public spaces of recognition and advocacy.

“It’s a real good feeling when you give it to them”—Hunting as a Practice of Care

The following summer I sat with Reppi, a whaling captain and distinguished hunter, at his kitchen table before a bucket of oil filled with paniqtaq, half dried meat, and fermented blubber. It had been a good ugruk season and he was eager for me to taste it. Some Point Hoppers had spotted caribou up north and we were planning a long Honda ride. Rep had finished a full day of work doing maintenance at the village store, and with 24 hours of sunlight, we were likely

to ride through the night. I told him about my conversation with Joe, his dad, last fall when we were all waiting for the caribou to come down from the mountains and how Joe said he had been “starving” without caribou.

“It’s a big part of our lives here,” Rep replied, “just like me I’m waiting. I’m waiting for the Western herd to come... they only pass once so we have to try and get as much as we can.”

“Why is it so important for hunters, as you’ve said before, to do ‘what they gotta do’?”

“It’s our livelihood. If we don’t get the caribou its gonna be a whole lot harder for us. Store is expensive, it’s not like downstate where... how much is a pound of meat? Fuel is cheap too, right?”

With gas in Seattle at less than half the cost of gas in Kivalina I couldn’t argue, but there was more to the story. “I remember last fall you also said your kids were tired of store-bought meat,” I said.

“Yeah, the store-bought meat, its gets tiring,” he replied. “You know, we could live off it, but it gets tiring.” Explaining the limitations of store-bought meat, Rep continued, “It don’t fill our stomachs. Just maybe for twenty minutes and that’s it. And with the caribou that we get, I think it’s more healthy for us.” For Rep, caribou meat is not only a “livelihood” and “more healthy,” but it offers a particular kind of long-lasting fullness that is simply more satisfying than store-bought sources of calories.

Reppi’s sister Janet is an accomplished fisherwoman, plant gatherer, traditional food preserver, and ethnobotanist. When I asked her about the importance of these land-based practices in the community she described to me the “need” for niqipiaq, saying:

[O]ur foods are very nutritious, whereas the Western style food is very fattening... it doesn’t fill you in terms of nutrition. You can have pork chops for lunch and you’re hungry after a certain amount of time because there’s no nutrition in the food... [but with] our foods, you can eat one meal and be good for a day.

For many people in Kivalina, the quality and kind of food—including the right kinds of food at the right times of year—are as important for “food security” as is getting enough calories. But the most desirable qualities of Native food can have as much to do with its means of procurement as with its taste. For Rep and many others, hunting is a form of labor that offers its own ever-renewing experience of fullness. “It’s a lot of fun,” he told me, “It’s a lot of work, but it’s a lot of fun. It’s well worth it...we could travel hundreds of miles...”

When I asked Janet why it was important for young people to hunt, she described the ways in which hunting is both a mode of caring for oneself and for others. “Not only do you feed yourself,” she said, “you feed those who are not able to hunt. Not only do you fill your freezers, but you get a sense of pride and happiness that you provided for someone. That feel-good feeling that you’re helping someone.” Her assessment reminded me of the young hunters I knew who routinely share sled loads of fish or caribou around town, with relatives in nearby villages, or even among strangers. Rep also described the positive feeling that comes from providing for one’s family—especially elders and children—and from filling someone else’s freezers first:

The first caribous we get, it goes to our parents. They can’t hunt, they get too old, [so] they’re always excited. It’s a good feeling to know that my parents are waiting, ready for that meat. It’s a real good feeling when you give it to them.

The work of care, writes Joan Tronto, involves “a reaching out to something other than the self.” It is “neither self-referring nor self-absorbing,” but “involves taking the concerns and needs of the other as the basis for action” (1993:102-105). In this way, the hunting described by Janet and practiced by Reppi can be understood as a form of care.

For many young people in Kivalina, the labor required to provide for others is also a practice of caring for one’s self and a buffer against psycho-social exhaustion in a community too often described in terms of what it lacks: running water, sanitation and other basic

infrastructure, adequate housing, and educational or job opportunities. “A lot of people need that,” Janet says, “especially in a community like this.” She explains:

Everything always looks so hopeless [here], but that’s the one thing that keeps them grounded, keeps them from falling into depression or despair: the fact that they can go out in the country. They know they can still eat... It gives *me* hope to know that they can still go out and hunt, because it’s easy to fall into despair... Not only do they provide, but they are happy when they’re out there... they get a sense of self worth... That’s easy to lose, self worth. But, being out there makes them happy.

As a form of caring labor, therefore, hunting is also a source of pleasure and a mode of self-fashioning. In addition to the joy of providing for others, being “out there” in the country offers many hunters the embodied experience of movement through tundra, rivers, and ocean, bringing relief from the physical constraints of a barrier island where overcrowding is pervasive. For many in Kivalina, hunting is experienced, time and again, as a renewed horizon of the self, emerging from a trying social context.⁸³

Elizabeth Povinelli writes that “Western models of productivity” often fail to grasp, and even seek to undermine, “the meaning and importance of indigenous labor-action” (Povinelli 1993: 5-6). As Chapter 5 will also argue, the economic models that dominate ecological anthropology and the social science of climate adaptation often fail to acknowledge the interconnections between labor, pleasure, and even joy that exist within the land-based practices of many Indigenous communities. This is the hard, but satisfying work described by Reppi: the work of providing for others as an act of care and the “convivial labor” (Valle 2016) that sustains and is sustained by social relationships. As a form of care, therefore, hunting is also a source of

⁸³ Janet’s observations are in striking accordance with recent assessments of Indigenous youth resilience across five Arctic contexts. Among the core factors Olga Ulturgasheva, co-authors, and their youth collaborators identify as positive forces for individual and collective well-being are “movement” throughout the land; access to hunting, fishing, and gathering activities; and “the opportunity to share” with others—especially the resources derived from land-based practices (2015).

pleasure. Beyond pleasure, these other-regarding practices can also be understood as a source of selfhood and collective sovereignty. The caring labor of Kivalina's hunters reaches beyond one's own immediate or extended family. Every year, for example, the first beluga or ugruk of the season is typically given to the whole village. One summer, Reppi had tremendous hunting success and caught three belugas.

[M]y dad asked me what I'm gonna do with the other two, and I said do whatever you want with them. He gave [them to] the whole village. Two more. We get a share, small one. That's ok. My dad... he coulda kept the other two 'cause we already distributed the first one to the whole village... [but] I tell him he can do whatever you want with them, "They're yours."

While hunting may give an individual the strength to keep going in their daily life, it is also a source of social solidarity and an enactment of lived sovereignty. Sharing, hunting for and with others, writes Povinelli, contributes to the "ongoing production" of community's "economic, cultural, and political well-being" (1993: 5). From the standpoint of political economy, we might say, the density of these caring networks is the bedrock for the enactment of collective autonomy.

Audra Simpson speaks of a particular kind of polity that emerges from practices of care and recognition within Indigenous communities. "Feeling citizenships," she writes, "are structured in the present space of intracommunity recognition, affection, and care" as alternatives to the state, and therefore "outside the logics of colonial or imperial rule" (2014:109). Hunting and other land-based practices operate as one such space in Kivalina. For Kyle Whyte, such intracommunity relationships (along with external solidarity networks and interspecies relations) are key sources of "collective continuance." Which is to say, in the face of climate change and persistent colonialism, they are essential to a community's "capacity to be adaptive in ways sufficient for the livelihoods of its members to flourish into the future" (Whyte 2013:518).

The road closure, like other decisions made by the non-local institutions that are attempting to govern Kivalina's land-based practices, is not simply a disruption to material livelihood, or adequate nutrition, but was a direct incursion into Kivalina's collective life itself.

Criminalizing Care and Sovereignty

Looking back to the fall of 2015, Martha, an elder, described an unprecedented feeling when the road finally opened up and her hunters were able to start catching caribou.⁸⁴

I didn't know if it was going to be our first and the last, because this has never happened before. I've never had to feel that way before. You know I was even afraid to, like, share it. I debated on whether I should put it all away, cut it up, bag it, and freeze it, because I didn't know if my boys were gonna catch any more. I've never felt like that before, because all the time, always our first catch we always give away. But this last fall... I debated...

For the first time in her life, Martha found herself at the limits of a longstanding practice of care: afraid to share the first caribou of the season. Her experience of scarcity was produced by a combination of the environmental conditions (affecting ugruk) and the arbitrary decisions of remote governmental and corporate actors (affecting caribou) representing the institutions that today lay claim to portions of Kivalina's territorial homeland.

Beyond protecting animals or ensuring equal access to animals among villages, the road closure, like other regulations, whether intentional or not, also had the effect of disciplining care, policing pleasure, and governing sovereignty through the management of affective relationships, or "feeling citizenships" (A. Simpson 2014). The impact was born the hardest by Kivalina's young hunters as Martha explained:

[A]ll of our young people, they don't just hunt for themselves. Like us, we share with everyone. So that's hard on them. To me, it takes away their pride, it takes away their ownership of their land, this is their land, they own it. They [should be]... free to hunt like before. But when this is done, to me, it takes away their pride, their pride in

⁸⁴ Martha is a pseudonym.

themselves and their pride in hunting. Their ownership, just taken away to where they have to, like, become criminals just to try an' hunt for their families, which is not right and I don't like that... I mean it was just so wrong.

The road closure put many young people in an impossible situation: to take up the convivial yet arduous labor, which is one's communal vocation, was to risk becoming a criminal. The free practice of everyday sovereignty—hunting on land that is one's own—was to become a vigilante. In this way, collective life itself—the relations, affections, and practices that make Kivalina *Kivalina*—are managed by a network of remote institutions. Yet, Kivalina's people persist. “But you know,” Martha continued, “I shared, because its just our nature. Sharing is our nature. We don't go without sharing, we don't catch anything that we just put away and keep for ourselves. After we share, then...we put away...” Even while navigating the interplay of colonial governance structures and contemporary environmental change, Kivalina's hunters and families continue these and other practices of environmental self-governance and their own Iñupiaq principles of land use.

Proposal 177

To more fully understand the politics of managed sovereignty in the Kivalina region, it is worth considering another important event in the collective life of the community. One December I was visiting with a friend when we heard some troubling news on the VHF radio: a State Trooper was at a local home and confiscating the rifle and snow machine of a Kivalina hunter. The news was shocking and disturbing. I went to visit Papa Joe, because surely he would know what was happening. Joe explained that the hunter had been accused of catching a qavvik (wolverine), in a way that was forbidden by Alaska Fish and Game. Specifically, he had been accused of firing on the animal from a moving snow machine, a feat of marksmanship and coordination that is widely considered to be impossible. The hunter was charged with a

misdemeanor and had his hunting gear impounded—not just the rifle, but the snow machine as well. To make matters worse, the trooper confiscated the qavvik, which was to be a gift for the hunter’s wife. In the eyes of his community the qavvik hunter had done nothing wrong. For Joe and many others, the interpretation and enforcement of these regulations were as arbitrary as the State of Alaska’s claim to Kivalina’s territory itself. “The only thing he do,” Joe explained to me, “is he get caught.”

It seemed that the entire community would be affected in some way by the incident because it came up with nearly everyone I interacted with the rest of the day, but especially with men of hunting age. I was drinking coffee at a friend’s house, a warm and cozy space with freshly painted walls and good fragrance coming from the clothes dryer that was running under the kitchen counter. My friend stared into his cup, before murmuring, “Dang man, I don’t even care. I’m feeding my family...” He stopped short, looked up at me and asked, “Did you know what that trooper said to him?” I shook my head. “He told him, ‘All you Kivalina hunters are criminals.’”

Later that evening, I strummed guitar and harmonized at the Episcopal Church, where the men’s singing group was preparing a set of songs to share at the annual Christmas Program. Back at a friend’s house afterwards, a few of the guys stood together in the doorway, smoking cigarettes and chatting. “I guess the regs say you have to stop before you shoot?” I asked naively.

One of the guys put his cigarette in his mouth so his hands could act out the absurdity of trying to drive a snogo while also firing a rifle. We all laughed.

“I can’t shoot and drive!” he exclaimed. “That’s ridiculous...”

Although the charges against the qavvik hunter had been contrived, the trooper, it turns out, offered him a deal. If he provided the names of other hunters who used the same techniques, then

the trooper would let him off. The hunter refused and would now have to find the funds to get himself to Kotzebue for legal proceedings—a nearly \$400 round trip.

“Crazy,” someone said.

“It’s like them troopers got nothing better to do before Christmas,” another added.

After the incident, many young men around the village were now afraid to hunt.

Christmas break had just started and there was perhaps no better way for teenage boys to stay out of trouble than to be out in the country providing for their families. But this year the risk was just too great, especially for anyone who had already been in trouble with the law for one reason or another. Because hunting is a convivial and collective practice of care, the prosecution of the qavvik hunter was experienced as a kind of collective punishment. As with the road closure, it was a whimsical and colonial enforcement decision with disciplinary repercussions rippling outward so as to act, through fear, upon the desires and practices of the community as a whole.

The incident had wide ranging repercussions not just in Kivalina, but also throughout the region. The hunter was charged not with taking the animal itself, but rather because of the accused method of the taking. While the trooper had accused him of firing from a moving snow machine, he was formally written up for hunting with “Unlawful Methods and Means.” Specifically, the qavvik hunter was charged with the motorized pursuit of the animal, which is a longstanding and widespread practice among Iñupiaq hunters throughout Northwest Alaska. The case therefore became a rallying point throughout the region, spawning letters of support from village councils and school children alike. By January, Proposal 177 was submitted to the Alaska Department of Fish and Game, and would clarify the rules around hunting wolf, wolverine, and caribou with snow-machine. Alex Whiting, staff biologist for the Native Village of Kotzebue and

Vice Chair/Secretary of the Kotzebue Sound [Subsistence] Advisory Committee, outlined the stakes with the utmost clarity in his public comment to the Alaska Department of Fish and Game:

Current regulations regarding the use of snowmachines for hunting wolves and wolverines are insufficient to accommodate local hunting practices that have been used since snowmachines first arrived in [the region]... the prohibited practice has been in effect for the last 40 plus years and yet both species continue to be present in huntable numbers... in order for people to respect the law – that law needs to respect the people... [If] the recent event that precipitated this current conversation... [is] left standing unaddressed, [it] will likely have a dampening effect on the number of people actually hunting wolves and wolverines (Whiting, n.d.).

Proposal 177 was amended and adopted in March, just three months after the incident. While a positive development for the future, this change in the State's policy could not undo the experience of injustice and collective punishment that had accompanied the prosecution of the hunter, the confiscation of the qavvik, and the financial damages he would also suffer. To say, as Joe did, "the only thing he do, is he get caught," is not to admit that his actions violated even the settler's laws, but rather is to assert that the catching of a so-called "vigilante" can be as arbitrary as the settler's laws themselves.

The Biopolitics of "Subsistence" Regulation

While important to consider in its own right, the case of the qavvik hunter also helps situate the road closure in a broader context of various non-local attempts to define the permissible contours and limits of social life, care, and convivial labor in Kivalina, that is to say: the context of regional biopolitics. The actions that my friend described as "whimsical," are perhaps best understood within a wider context of the frequent criminalization of land-based modes of life, the biopolitics of care, and Indigenous refusal of colonial "indifference." In deciding whether to respect NANA's road closure that day, each hunter had to weigh the value of working hard, providing for, and caring for one's family and community, against staying out of those kinds of trouble—potentially with the law—that could delay or derail one's own life and

future. Such precarious tensions permeate social life in Kivalina. Like the doctor's prohibition of Momu's provisioning niqipiaq, colonial biopolitics involves the regulation of how Indigenous individuals, families, and communities care for one another and build their futures together (Stevenson 2014). In the wake of the Alaska Native Claims Settlement Act (ANCSA),⁸⁵ the external effort to manage and delimit collective sovereignty in Kivalina, has not been enacted through any single institution, but rather occurs through networks of state and state-like institutions, along with the incursions of private actors, like sports hunters. In spite of numerous amendments and revisions to ANCSA, "the failure to affirmatively recognize Native governmental authority over land, or to protect Native hunting, fishing, and gathering rights under federal law," writes Bob Anderson, "are glaring deficiencies in the settlement" (2016).

In Northwest Alaska today, federal, State and regional entities form a matrix of biopolitical governance that attempts to manage local sovereignty through a range of implicit and explicit decisions and practices. Among these is the ability to define (and redefine) the actual limits of legal protections for longstanding hunting, fishing and gathering practices through the domain of "subsistence." Because of the tireless advocacy and hard fought victories of Joe and others of his generation, a host of Indigenous land-based practices are now widely recognized by both state and state-like institutions as "subsistence," yet these practices are simultaneously rendered precarious by the very actors who set, adjust, and reset the very terms of recognition. "Subsistence" is an entanglement that Native Alaskan advocates have skillfully engaged in order to protect a range of land-based practices in the context of settler governance, but this has also come at a cost. "I hate that word 'subsistence,'" Enoch has often told me. Speaking in no

⁸⁵ In 1971 the U.S. Congress attempted to extinguish the inherent sovereignty (i.e. "aboriginal property rights") of Native Alaskans through ANCSA, while reserving a fraction of Indigenous homelands to be administrated by newly formed Native corporations (see Chapter 2).

uncertain terms, he adds: “It’s an ugly word. We don’t just live so we can eat for a year. We’re smart enough to know how seasons go from year to year and how we can deal with them... [we live] not just to *survive* but to *thrive*.” While “subsistence” is today commonly invoked to describe and protect intergenerational land-based practices throughout Northwest Alaska, the concept betrays a kind of biopolitics—for it is a “right” that at its foundation is tied to biological necessity. Subsistence is not sovereignty.

The governance of “subsistence” has a long history within the policies that European settler-governments have adopted for the management of human and ecological communities alike. In the days when the United States first began to claim and assert legal jurisdiction over Alaska, Natives, along with miners and explorers, remained exempt from game laws, provided that they were “actually in need of food” and were hunting for their “immediate use” (Wilson 1903 in Huntington 1992: 24; see also Anderson 2016). Under this logic of “subsistence,” Native hunting and fishing in Northwest Alaska was more or less freely practiced until the late 1940s and early 1950s, when federal regulations increasingly attempted to prescribe the means by which animals could be taken (Huntington 1992:27-28). Alaskan statehood in 1959 brought “far-reaching change[s] to the status of Natives,” who for the first time needed “a license to hunt,” and like the settler population could not “hunt during the closed season except in ‘dire emergency’” (Huntington 1992:27-28). While governmental recognition of Native hunting rights in Alaska has its origin in these notions of bodily necessity, even emergency, the State of Alaska’s protection and regulation of “subsistence” hunting now includes provisions for Indigenous “cultural education,” as well as “religious,” “ceremonial,” or “customary and traditional” uses (Alaska Department of Fish and Game n.d.). If the State recognizes such diverse and critical values as a part of “subsistence,” why does the word still sound so ugly?

In Northwest Alaska, “subsistence” is the concept by which the State and other settler polities recognize Native rights to a multitude of culturally significant land-based practices, while at the same time seeking to limit collective sovereignty. As we have seen, hunting is a form of caring labor that goes well beyond the minimal life-preserving logic of “subsistence.” On paper, the State maintains a robust definition of “subsistence” that claims to honor a wide range of “cultural” practices, while at the same time subjecting these practices to the logic of “subsistence,” the logic of the minimum. Such rights are indeed granted, yet the very practices to ensure Indigenous futures are made precarious by the minimal terms of their recognition. Collective livelihoods are at once protected and criminalized as communities are subjected to whimsical decisions that trade on the possibility of their bodily exhaustion. In the absence of territorial sovereignty, “subsistence” betrays the logic of the settler-state, which “regulates not only the proper kinds of embodiment (‘bare life’) but also legitimate modes of collectivity and occupancy”—what Mark Rifkin calls “*bare habitance*” (2009:90). Yet, the people of Kivalina, and many other Indigenous communities throughout rural Alaska, remain continually engaged to keep these precarious rights from being extinguished.

In Kivalina, “culture” is a concept used widely to describe those aspects of local life that people consider to be both distinct about themselves and which is also held in common with other Iñupiaq people. In this sense, culture includes a range of public expressions through art, music, and dance; concepts, logics and affects reflected in language; socially enacted values, ethics, and principles; norms of care; and a range of locally specific land-based practices.⁸⁶ It is true that the State of Alaska regulation of hunting and fishing recognizes the cultural and religious dimensions of these practices, but what happens to cultural, or religious, domains of life

⁸⁶ In much the same way, Coulthard defines culture as a “grounded normativity” (2014); see also Chapter 5.

when they are viewed and treated through a “subsistence” lens?⁸⁷ Under this logic of “subsistence,” one could argue, a community’s dispositions, values, norms, ethics, principles, ontologies, and creative practices are in fact subjected to the same minimal logic that has governed state and state-like approaches to the community’s bodily survival and collective prospects for the last 100 years. Culture, when viewed as *mere subsistence culture*, is always minimized and relegated to a minor role. As such, it is denied the possibility of its own flourishing, its own hegemony. The logic of “subsistence” recognition subjects these locally specific modes of life to the pressures of a dominant norm; the biopolitics of making populations live according to a particular form is a strategy of settler colonial elimination. Tying Indigenous futures to the logic of “subsistence,” the logic of survival, as Enoch notes, is not only to crowd out the desire flourish, but is to erase the ways in which Kivalina’s people are already thriving. To say you want to thrive, as Enoch does, according to particular ways of life, is to refuse these settler sensibilities, logics, and regulations.

The Politics of Recognition: From Bodies to Territory

As Joe’s stories remind us, collective wellbeing, like an individual’s hunger, includes access to foods of a specific taste, quality and kind, as well myriad social practices, forms of labor (see Chapter 5), and the internal networks of care that build and support community autonomy. For many communities, the ongoing procurement, enjoyment, and sharing of Native foods goes beyond mere “subsistence,” nevertheless, the risk of material and bodily deprivation plays a disproportionate role in structuring the politics of territorial-use rights in Northwest Alaska. What cannot always be heard in many settler publics, are the aspects of Native hunting

⁸⁷ Jessica Cattelino raises a similar questions in her analysis of “the double bind of need-based sovereignty” whereby settler recognition of Indigenous sovereignty in the U.S. has tended to follow a humanitarian logic that seeks to constrain Native communities to a slot of poverty, need, and lack (2010).

that go beyond the minimal life-preserving logic of “subsistence” and exceed the biopolitical regimes of recognition that in large part structure settler governance institutions throughout Arctic North America. The need to endure and navigate this interplay of biopolitics and recognition is a common experience for Indigenous communities throughout the United States and other liberal, multicultural, settler-democracies, which too often regard a people’s (apparently) “authentic” poverty and neediness (i.e. their mere “subsistence” and bodily survival) as a prerequisite for recognizing their claims to political sovereignty (Cattelino 2010).

In such contexts, the (often racialized) bodily conditions of a community are taken as a gauge of the population’s level of need. Audra Simpson describes the recent emergence of this “biopolitical project of recognition” as states began to see “governable populations based on bodily attributes.” Under such logics, Native Americans were moved “from the semisovereign status of ‘domestic and dependent nations’ and into the conceptual and legal ambit of racialized minorities” (2014: 138). As Jean Dennison writes,

Bodily forms of recognition serve a similar function as the logic of elimination in that they ultimately alienate indigenous populations from their land. By rendering American Indians as possessors of particularly marked bodies rather than as citizens in polities controlling a territory, colonial forces are able to further settle into the land (2014).

In Kivalina’s case, hunting rights are not “protected” on account of race (though Indigenous hunting practices in the Arctic have historically and continue to be represented in a racialized way), but rather on a different bodily trait: the minimizing logic of “subsistence,” survival, and the bare preservation of one’s life.

In their complementary analyses, Simpson and Dennison redouble our attention to a core issue for Indigenous politics today: the effort to move away from the recognition of particular bodies and into the ambit of territorial sovereignty. Simpson reminds us that local perceptions and lived practices of “territory” do not conform to official, institutional governance of land

when “a place... [is] divided and administered without... consent” (2014:131).⁸⁸ This was certainly true for the young hunter I spoke with who told me, “I don’t need permission to hunt in our land.” How an individual acted on that conviction was varied during the road closure, but those whom I spoke with were unanimous in the assertion that, “All that land out there, that’s *our* land.”

Throughout this dissertation I have asked how anthropology might apply its analytical concepts and practical techniques to support the enduring futures that Indigenous individuals and communities have identified as priorities for themselves. One contribution to this goal would be further critical analysis of the concept of “subsistence” and especially how it functions in social science, policy, and politics. As one of the major domain of rights that the State guarantees to Native Alaskans, “subsistence” may be a “critical language game in the conditions of settlement” (A. Simpson 2014: 105).⁸⁹ But, like many rights defined and guaranteed the State, “subsistence” may foreclose as much as it protects. After all, as Martha told me when we were discussing the events of that fall, “We used to be free to hunt as we pleased.”

Writing in the *Arctic Sounder*, James Stotts, President of ICC-Alaska and Vice Chair of the ICC Executive Council calls for “decolonizing” access and management of the food resources that Alaskan Iñupiaq and Yup’ik communities “depend on for nutritional and cultural survival” (2016). It is a position consistent with AFN’s 2012 Subsistence Access Plan, which advocates for policies to create “lasting protection for our hunting, fishing and gathering way of

⁸⁸ In fact, lived-territorial practices of “occupancy and use” have been the legal basis for transformational land claims by Indigenous First Nations in Canada for over forty years (Freeman 1976).

⁸⁹ Which is to say: the concept is an entanglement that has also been used to shelter some of what Kivalina’s people do care about and continue to fight for, even as it seems to foreclose others. For example, not wasting any part of the animal that is caught is a critical distinction between the ethics and principles of Iñupiaq hunting and settler trophy-hunting in Northwest Alaska.

life, and a co-equal role in managing the fish, wildlife and other renewable resources” (AFN 2012). Stotts cites ICC-Alaska’s path-breaking 2015 report that identified “lack of decision-making authority” as the leading driver of food insecurity and calls for “priority access to and management over... [Inuit] food resources,” as rooted in holistic, adaptive, place-based knowledge. Indeed, the authors are clear that decision-making power and access to functional, healthy lands—territorial sovereignty—are preconditions for food security. They assert that “without food sovereignty, food security will not exist.” The lingering question, especially for smaller communities like Kivalina, will be at what scale—local, regional, or State-wide—will the “right of Alaskan Inuit to define their own hunting, gathering, fishing, land and water policies” be affirmed and upheld (ICC-Alaska 2015). For Stotts, existing management plans are at an “impasse...because the federal government does not recognize or treat Inuit as true partners in their co-management efforts.” Rather, he writes:

[T]he federal government comes up with a management plan and then asks Inuit what they think of it. This is not co-management; it’s colonialism in the 21st century. Inuit don’t need the government telling them what’s best for them. History proves this to be a failed policy. Inuit want to be self-sufficient and be able to take care of themselves, especially when it comes to food security and feeding our families” (2016).

Stotts makes clear that food security in Iñupiaq and Yup’ik Alaska requires nothing less than the restoration of territorial hunting and fishing rights, that is to say the practice of political sovereignty.

This demand for food sovereignty through the free and necessary practice of hunting and fishing in Native Alaska, as shared by ICC-Alaska and AFN alike, also gives shelter to additional desires, including a future grounded through collective self-sufficiency and rooted in practices of care—or, as Stotts puts it: for a people “to be able to take care of themselves, especially when it comes to... feeding our families.” Indeed, the domain of *care* has long been a

terrain of social struggle in the experience of Indigenous communities who have experienced the double-edged promises of welfare colonialism in Arctic North America (Paine 1977; Stevenson 2014). Care, therefore, is an important analytic for understanding contemporary colonialisms, as well as Indigenous endurance, resilience, and projects of decolonization. Advocates of Indigenous food sovereignty emphasize that today's challenges are not limited to getting enough calories, but include maintaining and strengthening the social and political power grounded within these very networks. Affirming food sovereignty as a condition for food security, Stotts and the ICC propose dealing with the "food insecurity" in ways that honor and sustain the complex relations of intracommunity care that can be a foundation for collective continuance in the face both climate change and the structural violence of persistent settler and welfare colonialisms.

Openings

The morning after the road closure I was in a local government office when someone announced on VHF that the road would be opening.⁹⁰ I sprinted to Reppi's house where he was already hustling to get ready.

"You should let me follow on that old Honda," I smirked. "You know, the one with only four gears?"

"Go 'head," he said, not missing a beat. I hopped on a red Honda outside, drove it home, threw some essentials in a backpack, and cruised to the store. I was at the register paying for gas when Rep came in smiling and scolding me loudly, "You took Dad's Honda!" Papa Joe's four-wheeler was a shared family rig, but Rep had secured it for the day's hunt. It was the same color,

⁹⁰ Through a combination of refusal, advocacy, and prayer, Kivalina's hunters and government leaders were able to quickly restore access to the road. Following this incident in the fall of 2015, NANA representatives have visited Kivalina annually in anticipation of the fall caribou migration to discuss policies and protocols for continued hunting along the Port Road.

but much newer and more reliable than the half-busted rig I'd bargained for. We laughed all the way back outside where, to my surprise and delight, Rep continued riding the older machine. I met him at the edge of the lagoon where his nephew was using a boat to ferry hunters across the channel. Once on the other side, we began a 17-mile high-speed ride down the beach to Port Site where we checked in at a corrugated booth and a worker issued each of us a day-glow yellow vest.

As Reppi took off up the road, I started driving as fast as I could stand to, but could barely keep him in view. I was afraid to be left behind, when out of nowhere—like speeder bikes from *Return of the Jedi*—six Hondas passed me at top speed. Shortly thereafter, Rep pulled over. Thinking he's stopped to let me catch up, I felt relieved. Then I saw a cluster of light brown bodies coming up over a plateau on the Northeast horizon.

“Those guys pass right by,” he said. “So eager to get up the road, they never look around.”

Noticing that Reppi had stopped, some of the other hunters circled back around. Together we rode slowly through the tussocks to a place where we thought the caribou would soon show themselves. As they did, we jumped off and hid behind our machines. Rep tried out a new vocal call he had seen on TV and amazingly it worked. Between 30 and 50 grazing caribou started heading our way. Impatient, one of the younger hunters fired, causing the animals to run. The other hunters quickly followed suit. I saw two caribou fall before the rest darted out of sight. We rode over to where one lay in the grass and Rep exclaimed, “Praise the Lord! Fresh meat!”

Exhausted from a day of hard riding, and with two more caribou caught by our group, we called it a day. The pitted tundra appeared vaguely lunar as we headed down the road toward the ocean. It was cooling off fast, but the last of the sun was shining on our faces. Although it would soon be dark, there was no race this time. The ocean was calm and the ride along the beach

hypnotic. When we reached the channel, a hunter I hadn't met before ferried us back to town. I was freezing now.

As we rode through town, I saw Papa Joe standing on the edge of his lot, watching us pass. He wore his trademark quilted blue vest with "Lona" embroidered with a cursive yellow thread just above his heart. Back at Reppi's we drank hot coffee before laying a tarp over the gravel outside. Rep showed me how to use my knuckles and palm to separate the skin from the meat along the caribou's ribs. The animal had been caught hours ago, but its body was still warm. With fresh meat warming my freezing hands, I looked up to see Joe, through a haze of Honda dust, walking slowly toward us along the dusky gravel road.

Chapter 5: Enduring Economies: Labor, Precarity, and Place in a Changing Climate

Among the most profound ways in which global warming has affected both individual and collective life in Kivalina, is through the ways it has undermined the reliable presence of multiyear sea ice. In June of 2012, when I first visited Kivalina, Jerry Norton took me out to search the sea ice for pools of fresh drinking water that had formed from rain, or thawing snow. It was the last of the season's "good coffee water" he explained. A few days later, after the wind shifted and the ice went out, it came back loaded with ugruk, just as he had said. This June, seven years later, there is no ice at Kivalina: only open water as far as the eye can see. Hunters must travel by boat over 50 miles northwest to find ugruk among the ice on the other side of Cape Thompson by Pt. Hope. While climate change poses new challenges to ugruk and walrus hunting, the loss of sea ice has been perhaps the most detrimental for Kivalina's bowhead whale hunt.



Figure 5.0. 65 Crew Whaling Boat, Chukchi Sea, April 2014

Until the early 1990s, whaling crews would camp out for weeks at a time by the lead (where frozen and liquid ocean meet), some ten to twenty miles out from shore and well positioned to strike a migrating bowhead. In recent years, Kivalina's whaling captains are lucky if the ice will support a few days of camping even a mile out from town. At this distance, only a few bowhead whales will stray from the main migration route. Back in the day, the ice was no guarantee, but it was the context for a good faith return on one's labors and patience.

In May of 2019, I brought a draft of this dissertation to review with those friends who have so generously shared their lives, families, perspectives, snogos, Hondas, and stories with me over the years. Reppi was paging through the copy I had printed out, when he turned to me and asked, "Do you remember when I said to you that my boys would never know what it means to hunt from the ice?"

"Yeah," I said.

"It happened even faster than I thought it would," he replied.

I sat silently at the weight of his statement, before Rep added, "You should put that in there."

"Ok," I said.

A couple evenings later, Reppi and I spent a few hours together sitting and talking by the ocean, staring out at the open water as it glimmered in the 11pm sun. I thought back to the cold nights and hot days I spent with Rep and his crew at whaling camp just five years earlier, in April of 2014. "I'm trying to adapt alright," Rep said to me, "but there's no ice. It's still *umiaqtuq season*," meaning whaling time, "but no ice. Whales and belugas are passing right out there, we just can't get to them."

We were quiet again for a little while, before I asked, “What do you think you need to be successful?”

“We can be,” he says, “if we work together. We need more boats out there.” Rep explained how hunting in open water requires larger and more boats than from the ice. It needs to be a group effort, requiring all the crews to work together, not only to strike, but also to land a bowhead whale. Rep’s boat chased two whales this past April, but even if they struck one, he explained, his small boat alone might not be enough to bring it safely to shore.

“This is new to us,” he explains. “Our tradition was using umiaq boats, paddle boats, to hunt through a small lead that opens every year. Now look, no ice. Big open ocean... too big for a paddle boat; rapidly changing weather...” There we sat, watching the ocean and continuing to talk for who knows how long about the different villages in Northwest Alaska, how they do their whaling at different times of year, what he’s learned from these communities, and what he might do differently next year. Talking to Rep, it was clear to me that Kivalina’s whaling captains are the ones who know best what they need to be successful under new and always rapidly conditions.

Precarity and Normativity in Arctic Indigenous Economies

In the previous chapter I argued that Kivalina’s hunting, fishing, and other land-based practices are the grounds of intracommunity care and an expression of individual and collective sovereignty. Through hunting, care is linked to sovereignty through the material networks and affective relations of individuals, families, neighbors, and friends. Such practices are also public enactments of self-determination through a lived claim to territory, that is, to engage in these practices in to determine the terms of one’s own “land use.” For many individuals and families in Kivalina, these practices are a continuance of the land-based ways of life that have been

supported by the intergenerational transmission of normative ethical principles, taste memory, and ecological knowledge. The networks of intracommunity care and recognition enabled through these practices are also buffers against the multiple forms of precarity that have been produced through colonialism, global economic entanglement, and ecological uncertainty. The social practices grounded in these reciprocal relations to more-than-human ecologies, or place, offer Kivalina's people a material base for partial economic autonomy and political sovereignty.

In this chapter, I expand my analysis to consider some of the specific ways in which these life-giving land-based practices are entangled with non-local economic forces, value systems, and labor logics, and how, within these entanglements, Kivalina's people pursue "collective continuance" (Whyte 2018) in the midst of environmental uncertainty and economic precarity.⁹¹ While local land-based practices have long been at the core of economic life in Kivalina, the people of the region have also engaged in trade with Iñupiaq nations from beyond the Wulik and Kivalina watersheds for centuries (Burch 2005; 2006). Across Northwest Alaska, the late 19th century brought a fundamental deepening of economic entanglements with entities from farther and farther afield, with increasingly divergent interests, and unequal political power. Beginning in 1888, commercial shore whaling drew laborers from throughout the region (Cassell 2000). For the first four decades of the 20th century, many Kivalina men were also employed as the keepers of government-owned reindeer herds (see Chapter 1). In the years that followed, the possibilities for wage labor within the village have expanded to include the local ANICA store, regional airlines, utility companies, seasonal construction, and the public sector (which ranges from local government administration to healthcare, social work, and education). As noted in Chapter 2, the Alaska Native Claims Settlement Act of 1971 (ANCSA) would also transform the region by

⁹¹ In recent years, "precarity" and "precariousness" have become core themes in critical anthropology, e.g. Muehlebach 2013.

ushering in a wave of extraction and new options for itinerant labor in the mining and oil industries. Throughout the last century, but especially since ANCSA, these novel, non-local entanglements have produced new forms of economic precarity and environmental risk.

When Arctic Indigenous people hunt, fish, or gather in some proximity to cash exchange, or wage labor, the social science literature has often fallen back on the concept of a “mixed economy.” But the existing scholarly discourse may tell us more about the state of Arctic social science than about the experiences and interests of Native communities. Throughout this chapter I argue that the concept of a “mixed economy” relies upon a teleological, pseudo-scientific framing of cultural evolution and progressive replacement. As such, the concept is laden with settler nostalgia, that is: a fascination with Indigenous elimination. Instead, this chapter situates Arctic Indigenous economies in the context of colonialism and capitalism. My conversation with Reppi causes me to think more carefully about the ways we as anthropologists, social scientists, and other scholars might better organize our work in conversation with and in response to the leaders and local experts in communities already experiencing climate change. In particular, this and other conversations I have had, raise several considerations that are often evaded in the scholarship of Indigenous Arctic economies, namely: precarity and normativity. These two themes, therefore, frame my approach in this chapter. Rather than a nostalgic social science that might ask, “*Why* do certain practices persist today?” Rep and I quickly came to a different question: “*How to make* these things persist?” Where it has grown preoccupied with the size and shape of elimination, Arctic social science must instead join with individuals and communities to take up a situated, invested inquiry centered on questions, methods, and means of Indigenous survivance and collective continuance.

Over the last one hundred years, external political and economic entanglements have produced new forms of precarity in Kivalina. This chapter draws on several conversations I have had in Kivalina about the kinds of effort required to sustain and/or reinvigorate a range of land-based practices in the context of economic precarity and environmental uncertainty. These conversations often deal with the negotiations, tradeoffs, and enduring challenges of navigating, what has, especially since ANCSA, often been experienced as two economic worlds. But rather than affirming the existence of two ontological realms (as the concept of a “mixed economy” often does), the lived experience of “two worlds” might be better understood as indicative of a political struggle between normatively different value systems and modes of life, as each is imbricated in uneven relations of power. Specifically, I ask how local land-based labor-action in Kivalina interacts with forms and strategies of labor that are also accountable to the logics of wage earning, non-local financial interests, and regularized work schedules.⁹²

The social science literature on Arctic Indigenous economies has identified time and again a positive correlation between household cash revenue and hunting activity (Dinero 2003, BurnSilver et al 2016). To varying degrees, for varying ends, and for varying lengths of time, the

⁹² The uncritical recirculation of the “mixed economy” concept to describe contemporary Arctic worlds is an example of what Latour has called as the “science of the social,” whereby “the social”—in this case “the mixed economy”—is taken as a preformed given, a reified thing that actually obscures our understanding of the world. Instead of a “science of the social,” Latour proposes a method of “tracing” the phenomenological “associations” that constitute the empirical world (2005). In this chapter, I build on Elizabeth Povinelli’s use of “labor-action,” as a phenomenological analytic that can describe diverse forms of labor (hunting, fishing, caring for family, government administration, or laboring for a wage) in a non-hierarchical, non-teleological way (1993). Such approaches are not without precedent in Arctic anthropology. Although they use the “mixed economy” concept, some scholars have attempted to describe the relationship between land-based labor and the cash economy in ways that lessen the impression that the two belong to different ontological realms. George Wenzel, for example, describes Inuit engagement with the cash economy in Clyde River as a kind of pragmatic “bricolage” (1991). In his typology of Sami hunting, pastoralism, and ranching, Tim Ingold (1980) also approaches such questions phenomenologically through the metaphor of distinct, but interconnected and co-existing “spirals of accumulation.”

monetary costs of land-based labor are often supported by wage labor, even while land-based and wage labor-action frequently require the active negotiation of seemingly contradictory logics, demands, and tempos. While this chapter considers the challenges that can arise when contradictory economic logics and values are backed by uneven forces of power, it pays particular attention the kinds of effort required to sustain Indigenous place-based cultural economies in the context of settler colonialism, global capitalism, and climate change. Glen Coulthard's concept of "grounded normativity" is helpful to explain what I mean by a cultural economy. For Coulthard, "grounded normativity" refers to "the modalities of Indigenous land-connected practices and longstanding experiential knowledge that inform and structure our ethical engagements with the world and our relationships with human and nonhuman others over time" (2014, 13; see also Simpson 2017).⁹³ Coulthard argues that "grounded normativity" is a non-essentialist concept because it is focused on practices, rather than identities. In this way, "grounded normativity" resonates with the ways in which many people in Kivalina often speak of their "culture," when describing a complex of land-based practices, ethical norms, collective values and the intergenerational desire to continue this land-connected future.⁹⁴

In this chapter I am not interested in achieving an "objective," static, or singular distillation of a complex social world, but in outlining a few contours of what is at stake, that is: in a situated and partial description of the power dynamics at work in a broad milieu of market-based extractive capitalism, global climate change, and settler colonialism. To raise these questions is to more intentionally and thoughtfully attend to the subjective gloss that

⁹³ His emphasis on the intrahuman dimensions of this grounded normativity is also important to attend to and has resonances with Audra Simpson's notion of "affective citizenship" (2014).

⁹⁴ Non-essentialist concepts of "culture" are important, lest essentialist concepts continue to represent Indigenous peoples as bound by instinctual "attachment" to place—as some of the Arctic adaptation literature has (even inadvertently) suggested.

anthropologists, as storytellers, place upon the empirical world. Questions of interpretation are not politically or ethically neutral (Simpson 2007).

“Saturdays are not enough”

One summer afternoon I went to visit Enoch at home. He was watching his two youngest children while his wife, Charlene, was at work and his older kids were playing outside. We sat together on the overstuffed sofa where I once slept, after the stove oil at the house I was renting ran out in the middle of a frigid winter’s night. Over the years I had heard a few stories from Enoch’s four years studying at Liberty University in Lynchburg, VA and his time teaching school in both Noorvik and Kivalina. Back in the 1980s, and even today, it was exceedingly rare for a young person to leave Kivalina just out of high school to attend a four-year college—Enoch’s achievement was even celebrated in the regional newspaper.

I asked Enoch if he would tell me how it came to be and he told me that the dream of going to college began with his father, Enoch Sr., who had been tapped by Milton Swan, the Episcopal priest at the time, to enter the ordination process. His father understood that “in order for him to go through the process he’d have to leave Kivalina for months at a time” for training. And so, “even before it started, it ended.” Enoch explained, saying:

[M]y dad said “no” when he was told he had to leave Kivalina for months at a time to get an education. He said, “No, I can’t do that. If I go, I’m going to miss out on certain parts of hunting and it’s going to affect our ability to feed ourselves, to have enough food for the winter, so I can’t go, I can’t do that.” So because of that he saw that he had let a great opportunity to serve God slip away from his hands... He couldn’t make that sacrifice, because of his children, his family. And I think that’s largely where he began projecting himself onto me. He always told me and my sister, “When you were born...”—they gave us back to the Lord. They saw us as gifts from God, so we were given back to Him, because that was the right thing to do... And, whenever my dad would bring up that story he would tell me, “You’re gonna go to college, you’re gonna become a priest...” And, as far as I can remember those two things came one and two: going to college, becoming a priest. Of all the important things that my mom and dad told me, those were two things

that were first told to me by them, especially my dad.

Enoch Sr.'s dream for his son had emerged from the challenges of reconciling his own responsibilities as a hunter and provider with the outside training he would need in order to follow a call to ordained ministry in the Episcopal Church, an international Christian denomination. This dream emerged both from his gratitude for God's providence, but also, as Enoch explained to me, from his perception that Kivalina's future would be quite different from the past.

In order to be successful, perhaps even to survive, Enoch Jr. might need an education entirely different than what his father had received. Like many members of his generation, Enoch Sr. looked out on Iñupiaq Alaska of the 1980s, in the wake of ANCSA, and saw that a great transformation was taking place. His dad understood that a "new kind of economy was becoming dominant," Enoch explained to me.

He saw that coming, everybody saw that coming... that we would be moving away from a hunting-gathering economy to a cash economy. Not just him but I think all our elders did. Apparently his mom saw it coming that you would need an education, a Western education to live comfortably wherever you live... I mean, my grandma, just thinking back listening to her stories and understanding what my dad said about her. She figured it out too...

But it was not until Enoch was a teenager that he began to adopt his father's dreams as his own. As a boy he "had a secret dream," to become a fighter pilot, but by 12 or 13 his eyesight began to decline, and he began to adopt his father's dreams as his own. Enoch began to excel in school, receiving honors, and was even pressured by his teachers to "jump" grades. But his parents refused, he said, because they didn't want to deny him "the opportunity to be a child, to grow up like he's supposed to."

For young Enoch, focusing so intently on his studies would limit his ability to engage in many of the other passions he was also developing as a teenager. To succeed in school, he explained, required the kinds of sacrifice that his father had found so difficult to make:

My dad was a hunter; he went out just about every day. I started following him when I was 12. He saw me wanting to do that too, so he told me, “If you do good in school, we’ll go out on Saturday.” But, ah... he never let me miss school, ever, for hunting, gathering activities—never. I asked him a few times, I told him a few times... that I wanted to go, that I needed to go, that I needed to learn, that I needed to go out there... And he’d say, “No, you’re going to school.” So, in a sense that became a sacrifice for me, a lot of my friends were taking time off from school to follow their parents, follow their dads, and go hunting... [T]hey would skip school for that but my dad never let me do that, ever. Not once.

Enoch remembers especially asking to follow his dad in the fall and winter for caribou, wolves, and wolverines. His dad “saw the spark light up” in his eyes, but the more he wanted to be out on the land, the more resistant his dad became. “The first time we went out,” Enoch remembers, “I wanted to go with him all the time and he saw that. And he became stricter with that kind of thing.” He told Enoch, “Nope, you’re not gonna go, gotta go to school.”

At Liberty, Enoch majored in education and gained important professional experience as a student teacher. After graduation, he returned to Northwest Alaska and taught for a year in Noorvik before moving home to Kivalina where he would teach for 15 years. In Kivalina he taught wide ranging subjects—from social studies to math—several grades, and even coached basketball. Over the years he has also held positions on the school board and the parents association. Enoch’s contribution to education in Kivalina and as a role model for young people in the community has been profound. Yet throughout this time, he also experienced certain compromises to who he understood himself to be as an Iñupiaq man: sacrifices he had endured throughout his life, and which his father also understood:

When I became a teacher I had a lot of money, I bought the latest snowmobile, I bought sleds, I bought rifles, I bought everything. I was able to get gas to go from Kivalina to

Anchorage and back. But no opportunity... Saturdays are not enough. Many times I wanted... I *suffered*. As a teacher I suffered, as an Iñupiaq, every spring. Whaling season I suffered, 'cause I couldn't go.

In those days, Enoch went out hunting on a lot of stormy Saturdays “at great risk” to himself. Teaching during the week, and with Sunday a day for church and collective rest across the community, Saturday was “the only available day.”

Towards a Convivial Continuance⁹⁵

Although Enoch's story—going to college and returning home to teach—is quite unique, his experience of attempting to balance the demands of wage and land-based labor is not uncommon for many of Kivalina's people. Whether you are working inside or outside the village, in this “new kind of economy,” it can be a constant struggle to provide for your family from the land, rivers, sky, and sea. The difficulties Enoch described are widely shared:

...guys that work at Red Dog, guys that work here in Kivalina—that work everyday. I can understand them. I understand them. I understand their frustration. 'Cause they get frustrated too when they have to show up for work everyday and not be able to go hunting.

At that moment, Enoch's infant daughter climbed onto the couch and stuck her face in his. He swooned in her direction, saying, “What, baby?” before turning back to me and adding, “But those guys... those guys are struggling, I struggled.”

“I remember once you also said you saw a lot of guys doing the things that you wanted to be doing,” I recalled, “A lot of guys your age, learning the things... what you felt you should be doing.”

“That was a huge part of why I wanna quit,” he replied.

⁹⁵ I draw the concept of “convivial labor” from Gabe Valle (2015).

Finding these sacrifices too great, Enoch would eventually walk away from teaching, which had ultimately become too much for him to balance with the other ways in which he understood himself to be a provider, not just from the land, but also as a father and a husband:

You even can't raise a family as a teacher. Unless you're totally committed to working every day, and then going home every day to your family and nothing else. Your family and work... Even right now I have my teaching degree, I can get my certificate, my Alaska certificate. That's not going to be a difficult thing, but I would be sacrificing time with my family, time that I have spent with my five children right now would be sacrificed greatly. So I can't even go back to that. I refuse to go back to that, it's a different kind of commitment that takes you away from your other commitments. To be successful to be a successful teacher you have to live, eat, and breathe education. And you can't do that with a family.

As if on cue his daughter stood up from his lap, looked him in the eye and said, "Baboo." She wants a bottle. Enoch pointed to the table, from where she grabbed her bottle before scampering off to the back bedroom where her brothers were watching cartoons.

Enoch experienced a contradiction between his responsibilities as a father, the rhythms of the land, rivers, and sea, and the standardized demands of wage labor. "That's one of the things about this cash economy that is *really bad*," he told me. "I mean that lifestyle would fit perfectly in the lower 48, living the 'American dream.' He smirked, invoking quotes with his fingers. "But up here... that's not how we live up here." He continued:

Up here to get the food that you need, to harvest the resources that are available, you have to do it day in and day out. And you don't know from day to day whether or not your gonna be able to go out. Sometimes you'll be able to go out one week without worrying about any weather. And other days you'll go out maybe not even the entire week you wouldn't be able to go out... in between there's some days in a week that you'll be able to go, and the next day that you won't be able to. But in order to be successful, you have to be *ready* to go out *every* day, you have to be *ready* for that, because if you're not *ready*, for everyday, to be able to hunt, to be able to fish, if you're not ready you will not succeed, if you're not ready. You have to be ready to go at the drop of a hat, to get out there. And everyday you look at the weather, you look at the conditions, you look at your equipment, you look at everything that you're gonna need to be successful and you make sure that your stuff is ready. You make sure that your knowledge is up to date of what the conditions are. You know where the animals are,

where they may be, you know where the fish are, [and] you know that they're gonna be able to bite. In the wintertime fish do not bite when it's full moon. They don't. So even on a good full moon day, you will not get fish. Even if its nice, weather's nice, conditions are nice, ice is good, weather's good, full moon, no matter how many places you put a hole in the ice, you will not get fish. So you have to have a knowledge of all those things put together and you have to be ready at the drop of a hat to go. You can't do that in a cash economy, you can't. Because you have to go to work everyday, you have to be consistent where you work. You gotta have a working knowledge of what you're able to do; you have to know what to do, not just from that day, but the next week, the next month. And that's a whole different lifestyle. The lifestyles clash up here.

In his efforts to reconcile two different "lifestyles," Enoch has experienced a significant conflict between the temporal rhythms, demands, and attunements of a land-based economy (organized in relation to the flux and flow of ecological processes) versus a cash-based economy (pegged, as it is, to homogeneous industrial time). When "you're aware of the clashes," he explained, "then you're able to try and figure out what you can do, how to make both of them work. And I will tell you..." he lingers on each syllable, "That is downright impossible." For Enoch, even one's best efforts to reconcile these competing demands is to expose oneself to new forms of precarity. "Some of us," he tells me, "have figured out how we can... live in both worlds. But you barely get by financially. You can barely get by financially to live in both."

Beyond the inherent alienation of wage-labor, the economic precarity that Enoch has described is further intensified by the challenges and pressure of persistent colonialism. It is indicative of a broader Indigenous struggle to make particular land-based ways of life continue, and a refusal of hegemonic settler economies:

There's [the] ...Western culturalists who will tell us that we should just accede to their culture, because it's good and because they've succeeded—even well meaning people have said that. And some of these people are my friends that say this kind of thing. But in the back of my mind I'm saying, "What in the world are you telling me to do? You're telling me to turn my back on my culture, you're telling me to change my lifestyle to become like you? No way, no way am I gonna become like you. No way."

Enoch's refusal is a testament to the work of endurance and the labor of survivance, amid the persistent pressures of Indigenous erasure and settler normativity embedded in the uneven economic entanglements of global capitalism and empire.

But we know what works best up here. Just like they know what works best in the lower 48, they know what works best. That's their lifestyle. That European lifestyle, they know how best to work in their environment. But for them to think that you can bring it up here and live that way. It's...

His daughter returned to the couch, upset by her brother's roughhousing perhaps. She started to cry until Enoch began bouncing her gently on his knee. Collecting his thoughts, he spoke in much a lower voice than before, "And the bottom line, its genocidal..."

"You what?" I asked, my ears failing for a second.

"It's suicidal to think that way up here," he responded, still comforting his daughter.

"Who?" he asked her, as they snuggled and bounced some more. "Where's your baboo?" Enoch grinned and giggled, now conscious that I was catching on to his most reliable parenting trick. I started laughing too.

Enoch's account of the challenges that expanding settler economies pose to the continuance of land-based modes of life in Kivalina is closely connected to his critique of the concept of "subsistence." To understand this point, we might recall (from Chapter 4) the social, political, and psychological dimensions of Kivalina's intergenerational land-based practices. For Enoch, like Rep and Janet, these practices are forms of labor that offer a sense of enduring satisfaction through a good return on one's effort:

Every drop of sweat is bringing something good. You work hard to make sure your ugruk that you caught is taken care of in the right way. You have to sweat. You're gonna work hard to make sure that it turns out the best that you want it to become. The dried meat, the blubber, you're gonna figure out how not to let it get bad no matter what kind of weather there is, but you have to sweat to get there. And in that way, that sweat is good. And that work is fun because you see the end result of your labor, you know how it's gonna turn out... And while you're working hard, you know what's coming and you love

it. It's gonna turn out the best that you know how, the taste, the texture, will all be perfect if you do everything to make sure... So you gotta sweat.

Here, Enoch describes a convivial form of labor, where sweating and working hard are embraced as a forms of pleasure. "And you work with joy," he added, "because you see what is coming from that work." It is a joy that is multiplied from knowing that the fruits of one's labor will also be widely shared and will support a multitude of human and ecological relationships:

...my family is going to eat good. My mom is going to eat good. We're going to sit down and regale the stories of how the thing was caught, what took place... and we're gonna talk about other times when we worked hard to get all that stuff and what's going to come next. The berries are coming next, the sourdock's coming next, the fish, salmon... there all coming next. We're ready to go to the next step, and because we know what the next steps are, we are joyfully anticipating what's coming. Because we continue to work hard and sweat, all these good things will come.

During our conversation, it occurred to me how what Enoch is describing exceeds the conventional descriptions that scholars and bureaucrats often use to describe Arctic Indigenous lifeways. "A lot of what you're describing." I pointed out, "often gets distilled under the word 'subsistence.'"

"Yeah," Enoch responded, "You'll notice [during] this interview I never use that word. I hate that word—it does not define our lifestyle. We don't live to exist, we live to thrive." He explains:

Any successful society you can see how successful it has become by looking at playtime. And our playtime is as varied, or more varied than the Western culture. And we're a thriving culture. Our culture has thrived, even... even in the face of calamity. I mean, you here the stories about starvation, why? Because that's how life is? No! You hear the starvation stories because you want to work so that won't happen ever again. The stories are there. It's not because that's how life was lived, it's not how life is. We're a thriving culture. We're not a 'that word,' culture...

At that, Enoch raised his arms above his head and with his fingers made air quotes to erase the concept of "subsistence" from its association with Iñupiaq culture, before he continued:

...that bad word, that ugly word, that despicable word. We're not... *that* doesn't define us. Look at our games, look at our dances. Our culture, just like the Western culture has thrived.

Enoch paused, exhaled slowly and deeply, before he also said, "And now we have to work with two of 'em instead."

Whither the mixed economy?

In a milieu of melting ice and liquid capitalism, it is especially important for scholars working with Arctic Indigenous communities to ask how the concepts we use either support the sovereignty, or further the dispossession of the communities to whom we are accountable (cf. Simpson 2007). Across manifold social science and policy discourses, the "mixed-economy"—figured as a combination of "subsistence" and "cash"—has come to stand in as a default description of Indigenous economic life throughout the Arctic. But why are some human practices described as "mixed" while others' are not? In this section I consider the origins and legacy of the "mixed economy" concept in Arctic studies and especially the dangerous ways that the concept has been combined with totalizing, reductive, and biopolitical framings of Indigenous climate "vulnerability" from contemporary social science and popular media.

As Enoch attests, Indigenous societies are as complex and successful as any other, and yet Franz Boas set out to Baffin Island—home of the "Central Eskimo"—because he wanted to understand what he viewed as "the simple relationships between the land and the people" (Boas 1885:62 in Müller-Wille 1998:3). Time and time again, when settler social science has "assumed that the traditional, aboriginal, and the 'other' could only be found far away...the Subarctic and Arctic became attractive places for scholarly inquiry," for it was "thought that traditional peoples might still be found there" (Holly Jr 2002:12). The scholarship of so-called "modern" or "contemporary hunter-gatherers" in the Arctic (Smith 1991: 358; Wenzel 2013) must contend

with this legacy in part by asking whether its representations of Indigenous life, such as “the mixed economy,” undermine or affirm Indigenous futurities. Scholars of the “mixed economy,” or the “mixed subsistence-cash economy,” begin from a diverse set of questions, yet very often come to the same conclusion. In his 1999 fieldwork in Arctic Village, Alaska, for example, Steven Dinero found the use of cash was largely viewed as a means to an end, one that enabled the community to “reproduce itself socially, economically, and culturally, and with subsistence clearly as its center (2003).” Though they are often presumed to contain elements from different historical periods of human evolution, Indigenous economies are often quite unified in their pursuit of collective “economic, cultural, and political well-being” (Povinelli 1993: 5) at multiple scales, or what Kyle Whyte has called “collective continuance” (2018).

In 1977 E. A. Smith conducted fieldwork in Inujjuaq, on the east coast of Hudson Bay, Canada. As an ecological anthropologist he sought to “evaluate the role of evolutionary ecology in studying human foraging behavior” while also remaining mindful of the “tenuous links” between evolutionary ecology and the social sciences. Refusing to choose between what he considered two competing orthodoxies of the time, Smith felt strongly that “hunter-gatherers can be *both* products of complex histories” and “informative of the structure and function of preagricultural lifeways” (1991: 1-3). In one of his concluding chapters (Chapter 9) he turns to “the problem” of the mixed economy in which “individuals face a much wider set of subsistence choices than considered in classical foraging theory (358).” His analysis ultimately affirms that the complexity of Inuit modes of life exceeds such methods of understanding them. Although he was reticent to predict the future, Smith concludes this chapter with the question of “persistence.” He asks why, if “various cost-benefit analyses... all agree ...[that] foraging is less profitable than alternative sources of livelihood,” do the people of Inujjuaq “continue to engage in the large

amount of foraging in my study” (393)? Smith’s question anticipates, by 25 years, a paper in the March 2016 *American Anthropologist* entitled “Are Mixed Economies Persistent or Transitional? Evidence Using Social Networks from Arctic Alaska,” in which five co-authors draw on thirty years of “household-level social network and economic data” to show that not only that “mixed economies” have proven “remarkably persistent,” but that “those highly engaged in market activities are also disproportionately involved in subsistence activities, sharing, and cooperation” (BurnSilver et al 2016:121).

If, as the empirical research shows, land-based labor and wage labor belong to the same pragmatic-phenomenological universe—often in the service of convivial livelihoods—then what is being mixed in the “mixed economy,” and in whose view? Throughout the history of European and euro-settler social science, Indigenous peoples of the Arctic—especially those who have been called “Eskimos”—have been framed through “a double image.” On the one hand they have been regarded as “essential men” whose “daily lives epitomized the triumph of man over nature,” and on the other “a[s] ‘natural man’ devoid of both history and culture.” In many ways today, settler society remain mystified by the Indigenous peoples of the Arctic: “remarkable as much for what they lack... as for what they have” (Fienup-Riordan 1990:14–23). Settler colonialism continues to imagine Indigenous people as lacking a future, for having a future is predicated on having *a present*.

Diverse forms of labor action (hunting, fishing, gathering, wage labor, caring labor, social labor, etc.) reciprocally coexist in the Arctic, as they do in “diverse economies” throughout the world (Gibson-Graham 2008), yet scholars continually reproduce the notion that cash belongs to a different ontological realm than land-based labor. The “mixed economy” concept reproduces an imagined ontological collision between the traditional-natural-Indigenous

(the world of so-called “subsistence”) and the modern-cultural-settler (the world of cash). It is not two ontologically distinct livelihood strategies that are presumed to come together in “the mixed-economy,” but rather two presumed historical temporalities.

Whether intended or not by those who use it, the “mixed economy” concept therefore aids the logic of elimination by perpetuating the binary of an “authentic” or “impure” indigeneity. Like notions of blood quantum, it posits a form of Indigenous “identity that is at once measurable and dilutable” (Kauanui 2008: 3). In societies where “Natives are never quite Native enough to deserve the rights granted to them under the law” (Barker 2011: 6), the concept contributes to a discourse that has the potential to undermine sovereignty and perpetuate Indigenous dispossession. “The interests of industry,” wrote Hugh Brody, in the context of Inuit land claims struggles in 1970s Canada, “throw a bright light on the ambiguous position of the Eskimo who is neither hunter nor skilled worker... there is a need for some of the land on which Eskimos once depended, and there is a new need for Eskimo workers who no longer depend on the land” (1975: 213).⁹⁶

By recasting indigeneity in the past, the discourse of a “mixed economy” contributes to the erasure of Indigenous presence today, but it also underplays the pressing contradictions and challenges emerging from globalized extractive capitalism. While wage labor and land-based labor exist in the same pragmatic universe, they are very often accountable to distinct moral economies and value systems—systems that, at the present moment, are bolstered by differential, uneven networks of power. Scholars of the so-called “mixed economy” are perhaps right to note the existence and interrelationship of multiple, diverse labor forms, yet they also eschew the

⁹⁶ This is among the many “double binds” (Cattelino 2010) of settler colonialism. Under settler regimes, the right to *land* requires the authentic need of that land for traditional “subsistence” use, but the right to *property* requires the performance of properly modern modes of “improvement,” development, and use of that land (Barker 2015; Coulthard 2014: 78).

struggle through which many Indigenous individuals and communities have sought to balance these contradictory logics in a field of unequal power relations: how, as Enoch puts it, “we have to work with two of ‘em instead.”

The precarity that Enoch described does not arise from a teleological struggle between ontologically incommensurate modes of life, but rather attests to the ways in which different “lifestyles” are unevenly supported, normalized, or assaulted by contemporary forces and structures of politics (i.e. global capitalism, settler colonialism, etc.). While social scientists have recognized that diverse forms of labor action are often taken on in service of myriad land-based practices and convivial livelihoods, they often fail to address the new forms of precarity contemporary entanglements have created. These include: the discordant time requirements of hunting, family life, and wage labor; the contingent and seasonal nature of wage labor; the overall lack of availability of employment opportunities; the exorbitantly high cost of commodities; and the ways in which many of the jobs created through post-ANCSA economic development are actively destructive to human health and the environment. Future research might be organized to support the ways in which Indigenous individuals and communities throughout the Arctic are already pursuing sovereignty and collective continuance through diverse forms of labor-action, and especially through alternative and locally-accountable forms of “economic development.”

Reassembling “the cultural” in climate adaptation praxis

Today the realities of climate change, and the discourse of climate vulnerability and adaptation (see Chapter 6), are intensifying the ways settler social science, through taken-for-granted concepts like the “mixed economy” and “subsistence,” continue foreclose Arctic Indigenous futures. In the climate adaptation literature, for example, the concept of “adaptation”

is often deployed uncritically, without definition, or as a bio-functionalist universal. In one of the most problematic examples, a widely published Canadian geographer speculates that:

Limits to adaptation are likely to be cultural in nature, where trade-offs necessary to maintain food security compromise social and cultural values. While these trade-offs constitute adaptation at its most basic (i.e. survival), the associated cultural impacts affect the core of how Inuit define themselves. However, if Inuit society evolves according to current trends, with increasing importance of the wage economy and store-bought food consumption, it may be that country foods have less cultural and economic importance when the worst impacts of climate change manifest themselves (Ford 2009).

Here, the “mixed economy,” as a marker of Inuit *evolution*, is doing *exactly* what it’s designed to do: to displace Native nations from their land and eliminate Indigenous peoples. In this example, “culture” is understood as an “identity,” that is, as a set of self-defined preferences rather than a “mode of life” or praxis (cf. Coulthard 2014: 64-66). This allows scholars to claim that Inuit “social and cultural values” may have to be compromised in the interests of securing the bare life; understood in this way, climate adaptation is a form of “humanitarianism without politics” (Agamben 1998).

On the other hand, many friends in Kivalina describe their “culture” as a locally- specific (but also regionally similar) praxis that includes a network of land-connected practices, social ethics, and relations of care. Coulthard’s understanding of Indigenous culture as a “grounded normativity” is once again helpful here. For Coulthard, it has been the decoupling of Indigenous “culture” from its normative material, economic, and political dimensions (64-66) that has enabled the dispossession and proletarianization of Indigenous peoples through settler regimes of cultural recognition. The ground of “grounded normativity” is the land (and sea) itself, which Coulthard understands “as a system of reciprocal relations and obligations,” rather than “a material resource to be exploited in the capital accumulation process” (78). To recover, uphold, and strengthen these relationships would be, in the words of Whyte, to engage in the labor of

“collective continuance” (2013, 2018). In spite of the current state of climate adaptation scholarship in the Arctic, the material pressures of a changing climate are real and Native people are already negotiating them. How people “define themselves” (cf. Ford 2009) cannot be a footnote to these conversations and neither is history. As Chapter 3 attests, Kivalina’s leaders have for decades negotiated within, against, and beyond a host of settler institutions in pursuit of a new village site that would not only be materially resilient and socially just, but would also support the continuance of vital social (including multi-species) relationships and “land-connected practices” (Coulthard 2014).

Chapter 6. Beyond Vulnerability: From Climate Adaptation to Indigenous Sovereignty.

Ten years ago, the U.S. Government Accountability Office (GAO) concluded that 31 Native Alaskan villages were “imminently threatened” by the accelerated impacts of climate change—flooding, erosion, and thawing permafrost (GAO 2009). With Kivalina both “overcrowded and shrinking,” the GAO determined as early as 2003 that “[r]emaining on the island... is no longer a viable option for the community” (GAO 2003), but this recognition of Kivalina’s “vulnerability” has failed to capacitate the comprehensive village relocation that community leaders have sought for decades (see Chapter 3). Today, climate change has become the key driver behind Kivalina’s village planning efforts. In public discourse, climate risks now overshadow earlier community health concerns, but with Kivalina still using honey buckets—improvised chemical toilets that use a hefty bag suspended over a bucket, and a dollop of pine sol—these earlier desires and demands have not gone away. Future climate impacts, such as sea level rise, also complicate the local desire to move or expand the village in a way that also supports Kivalina’s relationship to the sea as a source of abundance. Village planning today must address longstanding community health needs and navigate coastal risks (such as erosion, flooding, and changing sea levels) while continuing to sustain vital multi-species relationships and longstanding land-based practices.

If the GAO’s 2003 report was a recognition of local experience in Kivalina, more importantly perhaps, the finding also marked the implicit failure of a long-standing project of colonial-spatialization that was initiated some hundred years earlier by the U.S. Federal Government. Kivalina’s experience, though unique, is not exceptional. For the 500 residents of Kivalina, contemporary climatic risk has emerged from a collision of anthropogenic environmental change and a series of maladaptive rigidity traps produced through the

entanglements of U.S. colonialism beginning in 1905 (see Chapter 1). At the beginning of the 20th century the federal government of the United States laid the foundations, quite literally, for the crisis of climate risk throughout Native Alaska (Marino, 2012). Up and down the Northwest Coast of Alaska, the U.S. federal government sedentarized and concentrated semi-nomadic communities onto accessible, efficient, and “legible” (Scott, 1998) coastal and riverside locations, standardizing town layouts and built environments. But even federal recognition of the threats that climate change now pose to these villages has not enabled a solution. The most iconic communities—Kivalina, Shishmaref, and Newtok—remain in place despite widespread media attention and multi-decadal relocation planning efforts involving a multitude of state and federal agencies. While community leaders have long sought to transform their circumstances, they consistently encounter the limits of regional, state, and federal governance structure, capacity, and will (Marlow and Sancken 2017; Maldonado et al 2013; Bronen, 2009, 2011; Marino, 2009; Shearer, 2011 and 2012).

The 2009 GAO report identified two main policy deficiencies constraining relocation of villages threatened by erosion in Alaska: a lack of funding and no federal coordination of relocation assistance. Few of the 31 “imminently threatened” villages identified in GAO’s 2009 report qualified for federal assistance.⁹⁷ In 2008 the Native Village of Kivalina and City of Kivalina took matters into their own hands by suing the country’s 24 largest greenhouse gas emitters in what would become a landmark climate justice case (*Native Vill. of Kivalina v. ExxonMobil Corp., et al.*, 2008). Under public nuisance law, Kivalina sought 400 million dollars

⁹⁷ Between 2005 to 2009, the GAO wrote, USACE had congressional authority (under SECTION 117) “to carry out, at full federal expense...projects for storm damage prevention and reduction of coastal erosion... including relocation of affected communities” but after 2009, relocation (under SECTION 116) would require local cost sharing with only 65% federal funds (GAO 2009).

in damages—the upper limit of the Corp’s estimate—and hoped to establish financial liability between those who profit from climate change and those who most experience its negative impacts.⁹⁸ But the merits of *Kivalina v. Exxon* were never heard. In late 2012 the 9th Circuit Court of Appeals declined to grant “standing,” to the village, yet the judges also disavowed their decision, writing: “our conclusion obviously does not aid Kivalina, which itself is being displaced by the rising sea” (*Native Vill. of Kivalina v. ExxonMobil Corp., N.D. Cal.* 2009).

While funding and technical challenges remain today, relocation planning in Kivalina, as elsewhere in Alaska, has also been constrained by structural inequalities surrounding decision-making, land ownership, and institutional jurisdiction. In this regard, the GAO also noted that existing agency efforts to assist villages were too uncoordinated and recommended the designation of a lead federal agency to support relocation (2009). But even if a lead agency were identified, local decision-making in Native Alaskan village relocations would risk being dominated by settler-government frameworks and institutions (Marino 2009). To this end, some legal theorists call for climate adaptation frameworks based in human rights doctrine (Maldonado et al 2013) and environmental justice (Whyte 2013). Like so many frontline climate-affected communities, Kivalina occupies a space where just and effective policy simply does not exist.

A critical assessment of multi-decadal village relocation efforts in Kivalina and elsewhere challenges any approach to the human dimensions of climate change that fails to consider history and politics. The situation that many Native Alaskan communities are now facing requires us to resituate the scholarship of Arctic climatic vulnerability and adaptation within the fields of critical Indigenous studies, political ecology, and environmental justice. The

⁹⁸ The Army Corps has estimated Kivalina’s relocation to cost between 250-400 million dollars (USACE 2006), though local planners insist this number is inflated.

Hunters and Elders Speak Out (described in Chapter 3), for example, illustrates how the politics of climate change has both hastened and impeded Kivalina's pursuit of village relocation.⁹⁹

While Secretary Jewell acknowledged the unwelcome "history" of federal colonial policy, her closing comments position the knowledge that Kivalina's elders and hunters shared with her as especially helpful "to supplement the work the scientists are doing" and for making "the case for climate change in the US Congress." While the desires and demands articulated by Kivalina's people far exceed this scope, Kivalina is very often positioned as a witness in a far greater and more widely dispersed political contest.

As frontline communities experience the limits of existing institutions, they are also creating their own climate policy from below. Negotiating the last century of colonial, environmental, and economic entanglement, that has today affected their dwelling-site, built-environment, and political agency, Kivalina's leadership continues to pursue collective ecological, social, and spiritual wellbeing through a range of situational strategies. Working with state and federal agencies, within existing governance structures, Kivalina's leaders are seeking to build a healthy and resilient future for their community. But over the years, village relocation has also been understood as an opportunity to unsettle and recompose these relationships, to ensure not simply survivability, but Kivalina's collective flourishing, and intergenerational self-determination. For many, relocation has come to represent Kivalina's longstanding effort to re-inhabit its homeland territory by renegotiating institutional constraints, invigorating wellbeing, and sustaining both human and ecological relationships.

⁹⁹ The inclusion of Indigenous peoples in state-led climate adaptation or risk mitigation planning is often undermined when Indigenous communities are viewed as merely "at-risk," rather than as experts with their own authoritative knowledges and values (Martello 2008).

Contemporary approaches to Indigenous sovereignty can help us understand the issue of village relocation in Northwest Alaska in at least three ways. First, Kivalina’s long history of relocation planning has been an “entangled” struggle for more equitable relationships with existing settler institutions (Dennison 2017). Second, the pursuit of relocation has been a “refusal” of the limits inscribed by these institutions (A. Simpson 2014). And third, relocation planning is an effort to recover and sustain a healthy and resilient future through remaking these “relationships” and institutions (Stark and Stark 2018). Similarly, a lens of sovereignty can inform the scholarship and practice of climate adaptation in Indigenous communities more broadly.

This chapter offers a critical assessment of the prevailing approaches to climate adaptation in the Arctic and argues that the use of vulnerability and/or resilience assessments must be situated within values-laden frameworks that center the experiences and concerns of Indigenous communities themselves. Since late 2012, I have co-curated Re-Locate—a transdisciplinary collective working to support the institutions pursuing relocation in Kivalina, especially the IRA Council, City Council, and the KRPC.¹⁰⁰ Through long-term community immersion and relational commitment, Re-Locate works with local leaders to co-develop systems, strategies, and infrastructures that both honor local history and support enduring cultural practices. Alongside colleagues specializing in architecture, physical science, and law, I bring engaged ethnographic and social science methods to a wide range of projects. Building on Whyte’s concept of “collective continuance” (2018) and drawing on seven years of engaged-

¹⁰⁰ See: relocate-ak.org

fieldwork, I propose an alternate understanding of climate adaption as a practice of Indigenous sovereignty.¹⁰¹

Vulnerability, Resilience, and Adaptive Capacity

“Vulnerability” and “resilience” are the two analytical frameworks most commonly applied by social scientists seeking to understand the human dimensions of climate change in Arctic Indigenous communities. A 2006 special issue of *Global Environmental Change* considered genealogies of, linkages among, and divergences between these approaches, while focusing especially the core concepts, such as “adaptive capacity,” that are shared by both methodologies (Folke 2006; Gallópin 2006; Janssen et al 2006; Smit and Wandel 2006).¹⁰² While “minor differences” exist in how similar concepts are mobilized, both frames consider the “mutual interactions” between “social and ecological systems” (Janssen and Ostrom 2006; see also Ford and Pearce 2012). Yet, even minor differences between conceptual frameworks are significant, for they inform the methodological approaches that delimit the scope of what climate adaptation researchers are disposed to perceive and how their scholarship interacts with the desires of Indigenous communities themselves.

Applied to climate adaptation, resilience frameworks focus not only “on the capacity to absorb shocks and still maintain function,” but also on a community’s “capacity for renewal, re-organization and development” through “social processes like, social learning and social memory.” In resilient socio-ecological systems, “disturbance has the potential to create

¹⁰¹ The history of Arctic anthropology (see especially Chapter 5) demonstrates how prevailing settler understandings of Indigenous “adaptation” (i.e. as civilization and/or modernization) has historically and continues to aid the logic of elimination, colonial biopolitics, structural violence, and global capitalism.

¹⁰² More recently, Miller et al. (2010) have called on researchers working within the two approaches to more actively engage with each other so as to “coproduce new knowledge” and action.

opportunity for doing new things, for innovation and for development.” In vulnerable systems, however, “even small disturbances may cause dramatic social consequences” (Folke 2006). Likewise, vulnerability has been defined as: “the state of susceptibility to harm from exposure to stresses associated with environmental and social change and from the absence of capacity to adapt” (Adger 2006). Vulnerability and resilience, therefore, are both defined “in terms of the capacity of individuals and social groups to respond to, that is, to cope with, recover from, or adapt to, any external stress placed on their livelihoods and well-being” (Kelly and Adger 2000). In the broadest sense, therefore, conditions of resilience or vulnerability have been distinguished by the relative presence or absence of “adaptive capacity”.

While both research frameworks emphasize the coupling of the social and ecological, what constitutes “adaptive capacity,” and at what spatio-temporal scales, is a matter of critical distinction—as is the question of what is included, excluded, or occluded by the concept of “the social” itself (Latour 2005). Many longstanding approaches to climatic vulnerability do place “the social and economic well-being of society at the centre of the analysis, focusing on the socio-economic and institutional constraints that limit” adaptive capacity, such as “resource availability and... the entitlement of individuals and groups to call on these resources” (Kelly and Adger 2000). In other words, adaptation—whether viewed through the lens of resilience or vulnerability—is widely understood to occur not just in ecological terms, but also within a field of power relations. Approaches to climatic vulnerability rooted in political ecology and informed by environmental justice concerns, attend to the (in)equitable distribution of resources or entitlements (Kelly and Adger 2000; Ribot 2010), questions of sustainable development (Adger et al 2003), the role of governance (Keskitalo and Kulyasova 2009), globalization as “double exposure” (O’Brien & Leichenko 2000; see also Keskitalo 2008), as well as normative concerns

with representation and social justice (Adger et al 2006; Ribot 2011, 2014). Far from mere matters of emphasis, these methodological differences have real implications for understanding local contexts and the degree to which research may or may not contribute to the flourishing of particular ways of life. What counts as “adaptation,” (as I argue in Chapter 5) is as much a political as a technical question (Adger et al 2009; Orlove 2009; Pelling 2010; Jennings 2011).

The Politics of Arctic Vulnerability

The earliest treatments of the human dimensions of climate change in the Arctic evolve from the two distinct, though not unrelated, approaches to climate adaptation described above. While both resilience and vulnerability frameworks emphasize the temporal and social nature of adaptive capacity, in practice, each lens maintains its own distinctive emphasis. Typified by Berkes and Jolly’s (2001) work in Sachs Harbour, Canada, a resilience standpoint moves outward from a community’s adaptive characteristics, asking what “linkages for feedback across different levels” can *enhance* “the capacity for learning and self-organization of... local inhabitants and mak[e]... it possible for them to transmit community concerns to regional, national, and international levels.” Here, adaptive capacity is understood as inclusive of those short-term coping strategies and long-term adaptive practices emerging from particular understandings of local, regional, and global modes of life.

A vulnerability approach begins elsewhere: “with an assessment of the vulnerability of the community or region, in terms of who and what are vulnerable, to what stresses, in what way, and what capacity exists to adapt to changing risks.” Ford and Smit (2004) conceptualize vulnerability “as [a] function of exposure to climatic stresses and the adaptive capacity to cope with these stresses.” They propose a temporally attuned research framework inclusive of both biophysical and social dimensions of vulnerability production. Attending to “current exposures

and current adaptive strategies,” they write, enables researchers to assess “current vulnerability,” while estimating “future vulnerability by... directional changes in exposure and predicting future adaptive capacity on the basis of past behavior.” It is critically important, they note, “to establish how far back in time the study should go when analyzing risks and community response” (Ford and Smit 2004).

On its own terms, this framework raises several methodological considerations of both epistemological and ethical significance. First, what can be assumed of the future based on the past and present, and how do researchers’ assumptions about these dynamics affect the capacity to perceive emerging dynamics of social learning, or what has been called “autonomous adaptation” (Forsyth and Evans 2013)? Second, who determines the boundaries of spatio-temporal inclusion/exclusion in vulnerability assessments? Temporal framing determines how seriously climate researchers will take pre-existing but no less detrimental forms of precarity, risk, and structural violence (Marino 2012; Griffin *forthcoming*). Taken in tandem these questions point to a third: the issue of expertise, or what kinds of knowledges are considered, by whom, towards what end, and how do some knowledge-practices gain authority over others in climate adaptation planning?

In asking “how climatic risks and change are experienced and responded to” among Inuit in Iqaluit, Nunavut, Canada, James Ford and colleagues “advance a vulnerability approach that integrates longitudinal study design, real-time observation of human–environment interactions, community-based monitoring, and mixed methods to capture the dynamic multiscale processes.” Through five years of fieldwork the authors conclude: “climate change might pose more serious risks to the harvesting sector than previously assumed.” This finding, they write, explicitly “challenge[s] previous research that has argued that current resilience of the Inuit socioecological

system is indicative of high adaptive capacity to future change” (2013). While this paper represents a methodological expansion of prior temporal framings, or timescales, of climate vulnerability, the question remains whether it goes far enough into the past. While “longitudinal” approaches to the human dimensions of climate change will no doubt increase validity, the question of how “the social” is constituted historically remains poorly defined and under-theorized.

There can be little doubt that Inuit hunters and their communities are actively negotiating the effects of climate change, but whether a single “sector” can be isolated from a complex lifeworld and in turn mobilized to make broad claims about a community’s adaptive capacity, especially independent of any external constraints, remains a point of disagreement among Canadian scholars. Situating climate adaptation in broad historical and political context, George Wenzel (2009) complicates existing approaches to vulnerability and adaptation in the Canadian Arctic (Ford et al. 2006 and 2008) by enlarging the spatial, temporal, and institutional scales of socio-ecological analysis. First, Wenzel notes that the spatial constraints of Canadian state policy have gravely reduced the mobility of settlement that had in the past provided Arctic peoples with an adaptive strategy to major environmental change. By historicizing vulnerability he makes way for all manner of factors, considerations, and possible adaptation strategies typically occluded by ahistorical assessments of Inuit climate vulnerability. Second, Wenzel argues, when it comes to hunting, it is not a matter of whether Inuit people will carry out a host of “effective low-level adaptive responses,” but whether, for example, these strategies will be accommodated by non-Inuit “wildlife conservation, sustainability and environmental management” regimes. For Wenzel, climate adaptation is an autonomous process *already* underway within local

communities well before global warming was taken seriously beyond “a small body of scientists” (2009).

Haalboom and Natcher extend this critique by pointing out that “vulnerability is a power-laden concept, the application of which could hold very real consequences for the populations labeled as vulnerable.” This is especially true of the rapid appraisal methods commonly deployed by climate researchers, which, they write: “may undermine indigenous agency and efforts to achieve greater autonomy.” Without attending to local values, these analytical and discursive practices risk disempowering local communities and enabling interventions geared toward accelerated economic integration and social assimilation (Haalboom and Natcher, 2012).

Similarly, for Emilie Cameron, dominant social scientific approaches to climate vulnerability in the North are providing the “political and intellectual formations that underwrite a new round of dispossession and [capital] accumulation in the region” (2012). By limiting “Indigenous peoples to the ‘local’” and “the legibility of Indigenous geographies to the realm of the “traditional,” she observes, the prevailing human dimensions scholarship in North America “hinges on the exclusion of contemporary and historical geographies of colonization, including their political–economic articulations.” When scholars refuse to “account for the most significant and pressing dimensions of climatic change in the region,” she writes, they are “failing” on their “own terms.” Ahistorical and apolitical vulnerability assessments, therefore, are “not accurately identifying the nature, extent, or strategies appropriate to addressing climate change” in Northern regions (Cameron, 2012; see also Ginsberg, 2011). Climatic vulnerability cannot be isolated from longer-standing modes of dispossession and newly emergent forms of precaritization (Griffin *forthcoming*).

New Directions: Subjectivity, Values, and Place

What are the contours, barriers, and limits of climate adaptation—and who decides? In much of the human dimensions of climate change literature, the concept of “adaptation” is often taken for granted or undefined. This has the impact of eliding “the full impacts of climate change,” obscuring “the perceptions of the people affected,” and concealing “the range of alternatives open to them” (Orlove 2009). Years ago, one contributor to the seminal collection, *The Earth is Faster Now: Indigenous Observations of Arctic Environmental Change*, would lament that while “many researchers document the impacts of environmental change” in Native communities, they do not “investigate how community members *feel* about these changes” (Fox, 2002). In much the same way, O’Brien and Wolf have argued that vulnerability and adaptation research has been limited by its avoidance of human subjectivity. Attending to “what the effects of climate change mean for what people value,” they write, is critical in defining “which types of adaptation pathways are perceived as most desirable, effective, and legitimate by individuals and communities” (2010; see also Wolf et al., 2013).

Researchers are beginning to consider the subjective experiences and concerns of Northern communities already experiencing climate change, focusing in large part on the importance of “sense of place, place-attachment, and place-based identities” as “indicators for climate-related health and adaptation” (Cunsolo Willox et al. 2012; see also Aronson 2013). Because climate change is experienced as “compounding other personal, intergenerational, and collective mental health issues” (Cunsolo Willox et al. 2013a), these approaches highlight the importance “of both short- and long-term health and resilience programming and resources to support emotional health and well-being” (Cunsolo Willox et al. 2013b). They also have proposed critical resource allocations to frontline communities, including “the creation of place-

specific adaptation strategies and health programs,” such as enhanced “on-the-land programming” and other “community-driven activities” (Cunsolo Willox et al. 2012).

Attending to affect, subjectivity, and mental wellbeing represents a significant step forward in Arctic vulnerability and adaptation research, but truly transformational adaptation pathways (Ribot, 2011; Pelling et al. 2015) will require an expansion of spatial and temporal scales. Scholars and practitioners must pay attention to times before the present, as well as places and institutions beyond the local. Concepts like “place-attachment,” for example, might be augmented by more robust anthropological attention to place making as an active and ongoing process (Carroll 2015; Hastrup 2005; Basso 1996; Jackson 1995). “Social worlds,” as Kirsten Hastrup reminds us, “are *enacted* rather than simply given” (2012) and emerge always from histories that persist within contemporary bodily, ecological, social, political, and ontological formations. What’s more, many Indigenous “attachments” to place have been produced through historical processes of removal, consolidation, dispossession, and colonization (Carroll 2015; Cameron 2012; Wenzel 2009; see also Chapter 1). This subjective turn in climate vulnerability and adaptation must include normative questions of value and the political question of whose values count.

When too spatially broad, however, assessments regional climate vulnerability cannot adequately incorporate the hyper-specific genealogies and structural formulations of risk affecting local communities in the Arctic and around the world (Gearheard et al. 2006; see also Chapter 2). In addition to these local histories, climate vulnerability and adaptation must be situated in the context of legal and territorial constraints and political economy at multiple scales. Relatively synchronic, single-sector approaches to vulnerability and adaptation may be of strategic use for particular communities in circumstances where discrete resource allocation

demands the disciplined performance of a specific kind of vulnerability, but such approaches to climate adaptation policy are unlikely to transform the relations of power already hampering the resilient flourishing of communities enduring generations of structural violence, environmental risk, and political marginalization. In contexts where anthropogenic climate change amplifies existing inequalities (i.e. colonialism, capitalist extraction, dispossession, or neoliberal abandonment), resilient and sustainable climate adaptation pathways will require a renegotiation and transformation of political and economic relationships.

In Kivalina, global warming both presents novel conditions and exacerbates existing structural and infrastructural deficiencies (see Chapter 3). Contemporary experiences of climatic vulnerability compound decades of environmental injustice, epistemological and structural violence, and a legacy of environmentally mediated historical trauma ranging from the Red Dog Mine's aquatic and terrestrial pollution, disruption of key animal migrations, and contamination of drinking water and fisheries (see Chapter 2) to Project Chariot (O'Neil 1994).¹⁰³ What's more, global environmental change further enables the emergent risks of oil extraction in the Chukchi Sea. In understanding climatic vulnerability therefore, history matters, not only to understand specific genealogies of cumulative environmental risk (Peña 2011), but also to address the normative questions of accountability, responsibility, and justice (Whyte 2013).

Transdisciplinary Collaborations for “Collective Continuance”

Kyle Whyte is a Potawatomi environmental philosopher working at the intersection of Indigenous studies and community sustainability. He approaches Indigenous engagements with climate change from within a values tradition, defining adaptive capacity in terms of what he

¹⁰³ Project Chariot was a proposal by the Atomic Energy Commission (AEC) to create a deep-water harbor north of Kivalina using nuclear bombs. The nuclear blast proposal was resisted and defeated, but the AEC still carried out experiments that littered the northern edge of Kivalina's homeland territory with nuclear contamination (See: Vandegraft 1993).

calls “collective continuance.” Whyte defines “collective continuance” as a society or community’s overall “capacity to maintain its members cultural integrity, health, economic vitality and political order into the future, and [to] avoid its members from having to experience preventable harms.” At the core of this capacity, are both social and multi-species relationships. For Whyte, collective continuance is a productive way to think through both climate change and colonialism. He theorizes settler colonialism as “a form of domination” that assaults the collective continuance of Indigenous communities by targeting “the relationships that create [and sustain their] collective capacities.” For Whyte colonialism and climate change are “metascale forces” that pose significant challenges to collective continuance and therefore must be addressed together (Whyte 2018). For Indigenous communities, “collective continuance can be seen as a community’s aptitude for making adjustments to current or predicted change in ways that contest colonial hardships and embolden comprehensive aims at robust living” (Whyte 2013:518). Theorizing adaptive capacity as “collective continuance,” can allow scholars and professionals to develop broad, collaborative responses to climate change that also support longstanding Indigenous desires for collective self-determination, health, and wellbeing.

In July 2012, just a few weeks after my first visit to Kivalina, I received a phone call from Michael Gerace, an Anchorage-based architect and social artist. Having curated a series of participatory arts projects across Alaska, Michael was organizing a new project around the issue of village relocation; a mutual friend in Kivalina had encouraged him to contact me. He was particularly interested in how arts-based inquiry, and global transdisciplinary collaboration, could begin to address the deficiencies Kivalina’s leaders had long identified in their built-environment, while also supporting the particular modes of life the community sought to sustain

in to the future. The project was called Re-Locate.

Gerace had first emailed Kivalina's leadership in March 2012 with a proposal of "solidarity and support" and expressed his interest in co-designing a project "focused on collaboration, conversation and a shared goal of finding viable, culturally specific futures." The project, he proposed, would address "the future with urgency and sensitivity," but also move "beyond economic efficiency and expediency" that had up until that point characterized state-led approaches to village relocation. Through an "open space for dialog and exchange," he wrote, the project would be committed to understanding "what culturally specific issues have been left out of existing relocation initiatives," to "re-present[ing] the needs and goals of existing initiatives," and grounded through a commitment to "locally defined solutions." In his email, Michael asked: "How can we locate, share, and encourage local material potentials, notions of identity, and ways of life that should define the character of relocation alternatives?"

Kivalina's municipal leaders responded with interest and in the months that followed their virtual discussions gave way to a series of dinners in Anchorage. That May, Michael was invited to go whaling in Kivalina with the 77 Crew and he eagerly accepted. When not on the ice, he kept a busy schedule: discussing his proposal and refining project goals and strategies with the City Council; introducing himself and committing to work with the Kivalina IRA Council; meeting new people around town, visiting people in their homes, and sharing meals together. Back in Anchorage, Michael continued a dialogue with Kivalina's leadership as he selected and invited fourteen international researchers and artists to visit Kivalina.¹⁰⁴ In August of 2012, Re-Locate project members traveled to Kivalina and met with community delegates in

¹⁰⁴ The group included members of the social arts collective WochenKlauser, multidisciplinary artists from California College of the Arts, digital media artist Sharon Daniel (University of California, Santa Cruz), two architects affiliated with the Alaska Design Forum, and the climate justice lawyer and professor Jennifer Marlow (University of Washington).

their offices, homes, public spaces, and during boat trips upriver.¹⁰⁵ Living together in the temporary workspace they had created in the Kivalina community building, the team began to render (through drawing, multimedia documentation, and writing) the deficiencies, strategies, and aspirations made known to them through intensive community immersion and their preparatory research. Re-Locate artists developed several participatory platforms to host digital content that ranged from formal interviews with local leaders to “KVAK TV,” a map-based interface where young people could document what they felt were the most important aspects of their everyday lives.

Returning to their homes around the world, Re-Locate team members began to identify “agents of change” who might join the collaboration and work with Kivalina’s leadership to co-develop projects to address systems-related deficiencies within the village’s built environment. In the spring of 2013, Gerace and Jennifer Marlow, now also a project curator, held workshops in London and Vienna to prepare new partners for a second Re-Locate gathering in Kivalina. In the summer of 2013 I traveled to Kivalina with Michael, Jen, and a group of global collaborators who carried out a diverse set of projects. Forensic Architecture graduate students from Goldsmiths, University of London, carried out a multi-stakeholder village modeling project; the [applied] Foreign Affairs Lab of the University of Applied Arts-Vienna initiated a study of village water economies; and Architecture Without Borders (Austria) sought to understand how an in-village planning space could be designed to support a locally-led village relocation, expansion, and territorial reinhabitation.

Over the last seven years, Re-Locate has sought to join with Kivalina in building

¹⁰⁵ Having traveled to Kivalina two months prior, I was unable to travel with Gerace and the others to Kivalina in August of 2012, but I joined Gerace and Jennifer Marlow as a project co-curator later that year.

breathing room by addressing immediate needs while also supporting long-desired future transformation. Take, for example water and sanitation—the original reasons for relocation planning. For the last 30 years, since Kivalina has sought to relocate, federal and state agencies have been hesitant to make any new investments on the barrier island. This means that while planning is stalled, key infrastructure has suffered from disinvestment, new projects remain unfinished, or in some cases outright abandoned. Working with global collaborators, through a combination of outside funding and the State of Alaska Water and Sewer challenge, Re-Locate is developing in-home water and sanitation designs, many of which draw on the innovations that Kivalina’s residents have already begun to make in their homes. Through mixed methods approaches, we have sought to understand how water and human waste move through the village, leading us to develop a context-specific sanitation option: a decentralized biochar reactor that is housed in a customized shipping container. When combined with separating toilets, the reactor produces valuable charcoal bricks while minimizing household and environmental exposure to contaminants. The unit is also fully mobile, so if houses were to be moved from the island, or new homes constructed, at a new or expanded village site, the reactor could go with them or multiple reactors could be deployed. Multiple reactors can service clusters of houses, leading to more fluid options for a village redesign.



Figure 6.0. Kivalina Biochar Training, December 2016 (Photo Courtesy of Michael Gerace)

By decoupling from static infrastructures, it may be possible for Kivalina to improve community health, adapt to climate impacts, and increase collective self-determination all at the same time. Re-Locate’s community-engaged approach to water and sanitation points to how sovereignty and collective continuance can begin to reframe the collaborative practice and scholarship of climate adaptation.

In the remainder of this chapter, I will consider two additional Re-Locate projects (The Kivalina Archive and the Kivalina Food Sovereignty Project) that can also be understood as approaching climate adaptation through the lenses of collective continuance and Indigenous sovereignty.

Kivalina Archive.

When I first traveled to Kivalina in the summer of 2012, I was primarily interested in learning about how the community was negotiating the impacts of climate change and whether

there was some way I could support their efforts. When I returned with Re-Locate in 2013, I was quickly educated about the broad history of relocation planning described in Chapter 3. My Re-Locate colleagues and I also began to observe first-hand a lack of institutional memory among the State and federal institutions that had been involved in the planning process for decades. When representatives of these agencies came to town, for example, they were often unaware of the results of their own multi-million dollar studies, which had been reduced to binders on the shelf or boxes of files. As we spoke with longtime village relocation planners, the need to aggregate and make accessible this long legacy of records and reports became clear. At the same time, when we asked local leaders what had been missing from the relocation planning process in the past, they would often respond by saying something like, “A sense of our history.” For the leaders and elders we spoke to, this collective history included not just the history of inhabitation of the region and intergenerational forms of land-based knowledge (i.e. “traditional ecological knowledge”), but it also included the political realities of over a century of negotiated struggle for both spatial and temporal breathing room. Through these conversations, we began to imagine a place where traditional ecological knowledge, cultural history, and local analysis could co-exist alongside the technical studies and reports that had been conducted over the years throughout Kivalina’s territorial homeland. We imagined a “living” digital archive.

Over the last four years we have worked with several funding and technical development partners to design and launch the Kivalina Archive: a digital heritage collection and cartographic planning tool. Using participatory methods this project seeks to expand the public discourses of climate displacement beyond dominant narratives of vulnerability. It also seeks to support local sovereignty by offering a robust, historically grounded, future-oriented understanding of

Kivalina's homeland territory. As a tool for village planning, and a local and global educational resource, it also aims to contribute to Kivalina's collective continuance.

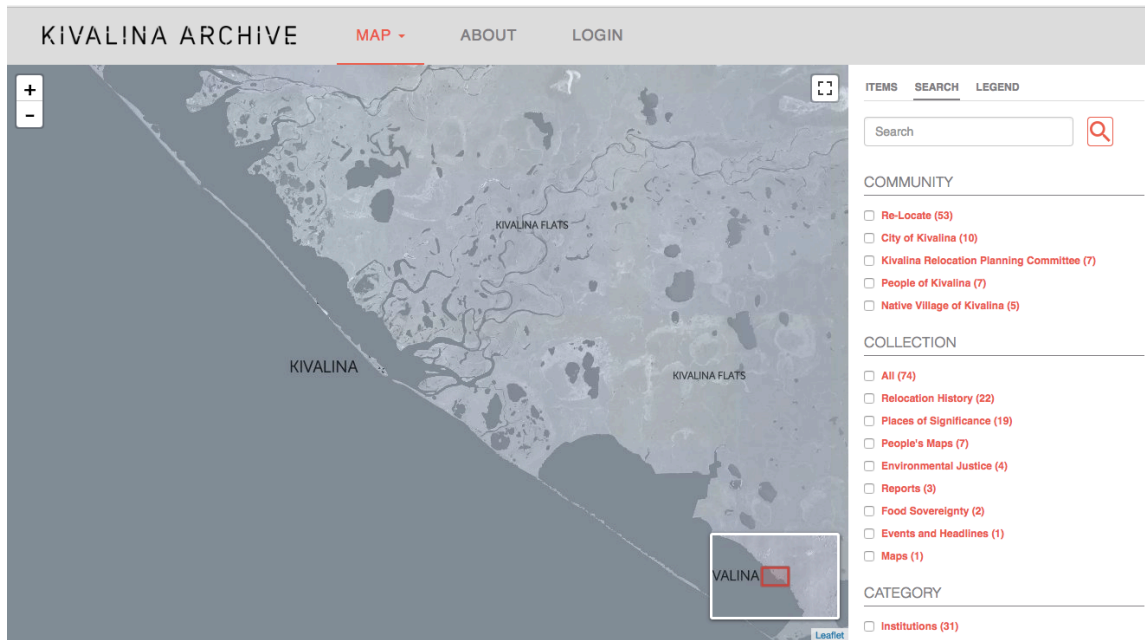


Figure 6.1. Kivalina Archive homepage (*kivalinaarchive.org*).

In designing the Kivalina Archive, we had several core technical needs. First we needed to show highly diverse media that ranged from geotechnical reports to home videos. Second, we had to represent content geographically. Finally, to support data sovereignty, we needed to allow multiple publics to have differential access to content: members of the global public can see one set of items, as determined by the owners of those items, while leaders of Kivalina's institutions will be able to login to view any private items that they have contributed to the archive. To meet these needs we ultimately settled on a combination of custom and existing platforms. Working with developers and designers, we built a custom front-end mapping and search interface. The

back end of the archive integrates two existing components: an open source line-point-polygon drawing tool from MapBox and Mukurtu, a content management system.¹⁰⁶



Figure 6.2. Kivalina Archive: “All” search result (public view).¹⁰⁷

¹⁰⁶ Mukurtu is a content management system that uses culturally specific, fine-grained access protocols. It was developed by Kim Christen, an anthropologist at Washington State University, in collaboration with aboriginal communities in Australia. See: <http://mukurtu.org/>

¹⁰⁷ See: <https://kivalinaarchive.org/browse/map/681>



Figure 6.3. Kivalina Archive, “Relocation Sites” search result (public view).¹⁰⁸

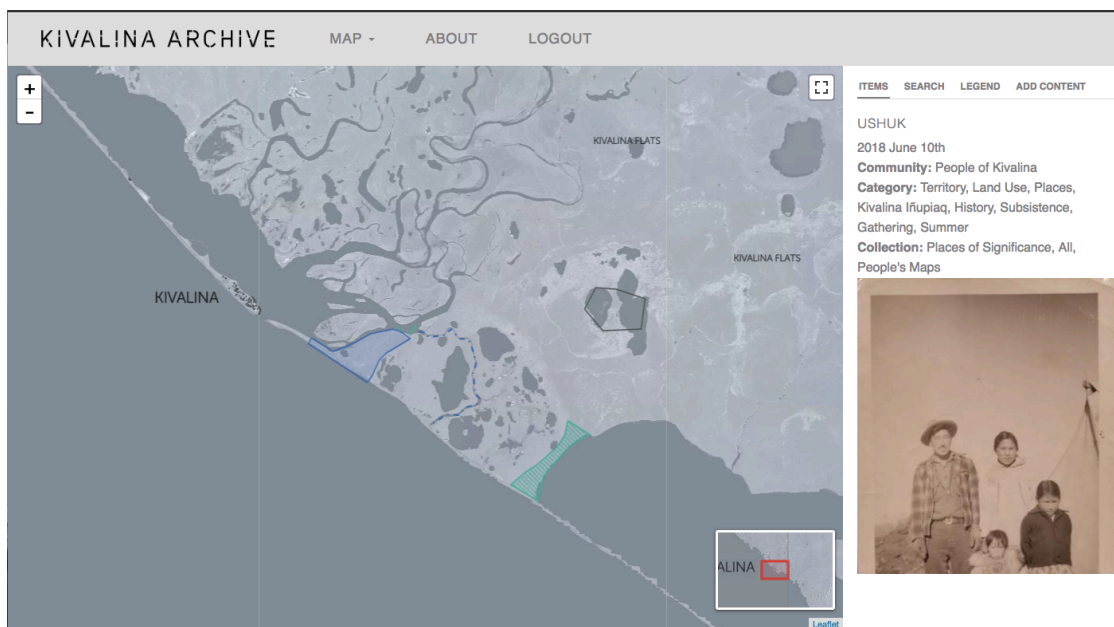


Figure 6.4. Kivalina Archive, “People’s Maps” collection (public view).¹⁰⁹

¹⁰⁸ See: <https://kivalinaarchive.org/browse/category/relocation-sites>

DOCUMENTATION OF COASTAL EROSION
1990 Jul 17th

Youth video project documenting coastal erosion with VHS.



[Access video](#)



Figure 6.5. Kivalina Archive example of item pop out (public view).¹¹⁰

¹⁰⁹ See: <https://kivalinaarchive.org/browse/map/729>

¹¹⁰ See: <https://kivalinaarchive.org/browse?search=erosion>

The Kivalina Archive both gathers and seeks to reactivate multiple forms of existing information, build broad institutional accountability, and produce new content that can inform Kivalina's future planning through local knowledge, history, and collective values. The archive also interrupts apolitical understandings of "traditional ecological knowledge," by including normative values-laden content, alongside Native science and knowledge of plants, animals, ice, and tundra (see: Nadasdy 1999 and 2005). Through spatial visualization and analysis, we have already been able to identify gaps in existing assessments and, working with elders, local government councils, and the KRPC, recruit and hire specialists to expand the scope of past geotechnical studies through the use of technologies such as ground-penetrating radar.

Kivalina Food Sovereignty Project

In the summer of 2016, I wrote a proposal on behalf of the Native Village of Kivalina to the First Nations Development Institute for funding to conduct a community food assessment and to launch phase one of the Kivalina Food Sovereignty Project. The proposed project would seek to understand and address existing challenges to fishing and hunting practice, the extremely high cost of store-bought food, and planning ahead for the effects of climate change. Because I and my Re-Locate colleagues were often asked to create opportunities for youth and young adult tribal members in Kivalina, the project was intended to prioritize, above all else, youth leadership. In November 2015 we hired four young adult tribal members to work with me throughout the winter and spring as part-time interns. During our initial planning workshop in December 2016, I worked with our interns to compose our project goals (see Figure 6.6.), outline the broad contours of a community survey, and identify what additional activities we might engage in during the turn of the internship to further support the sharing of intergenerational knowledge of Native food, regional ecologies, and environmental policy. In January of 2017 I

returned to Kivalina to host a second training and worked with the team to organize a kick-off potluck that celebrated local Native food traditions and introduced the project to the community.

KIVALINA FOOD SOVEREIGNTY PROJECT

Follow @kvl.food.sovereignty on Facebook

We want to be the change in our community by supporting the health and wellness of our people, working to keep our Iñupiaq traditions alive, and expanding the knowledge of our future leaders.

Our Goals:

- To end hunger in our community by lowering the cost of store-bought food and supporting residents who are able to share subsistence food.
- To make hunting, fishing, and gathering more accessible by training and supporting young people, and sharing knowledge between generations.
- To plan ahead for how climate change is already affecting our hunting, fishing, and gathering.
- To have more nutritious foods available and to encourage our community to eat healthy, especially our kids.

Figure 6.6. Kivalina Food Sovereignty Project Goals.

We structured the project as a professional and personal growth opportunity for our interns, but we also wanted to foster relationships between youth and elders. So the interns split their time between conducting house-to-house surveys, administrative work, and visiting with and learning from elders. When appropriate, they made videos of elders' stories, instruction, and traditional skill demonstrations, which ranged from putting food away to specialized sewing techniques.



Figure 6.7. Food Sovereignty Project Interns Alexis Hawley, Loni Frankson, and Bryon Adams Sr. with Lucy Adams, March 2017

During the community food assessment, our interns surveyed 68% of households in Kivalina to better understand the ways in which climate change, mining, education, family structure, economic, and other factors were affecting access to Native foods, or “niqipiaq.” Results from this initial assessment will direct future action-oriented research to support Kivalina’s land-based practices and Iñupiaq food traditions, and which will center around three areas of concern: climate change, mining, and youth opportunity. Finally, the youth internship culminated with a trip to Seattle where the interns presented their Native food traditions at the May 2017 Living Breath of wəłəbʔaltx^w Indigenous Foods and Ecological Knowledge Symposium at the University of Washington.

Displacement and Sovereignty in a Global Context

This dissertation argues that existing vulnerability and adaptation agendas are insufficient, especially in Native Alaska, and proposes community-led approaches to climate-induced relocation as a practice of Indigenous sovereignty and collective continuance. Caught for more than a decade within an atmospheric and bureaucratic maelstrom, Kivalina's situation raises several important questions for climate adaptation praxis in the North American Arctic and throughout the world. It demonstrates the political, economic, and institutional limits faced by those Indigenous communities who, enduring climatic risk, have begun to name and mobilize their experience as a means of redressing their material conditions. In the last decade especially, Kivalina's leaders has skillfully drawn worldwide attention to the community's experience of climatic change and, through their lawsuit, positioned their village at the center of global social movement for "climate justice." Kivalina's long struggle for environmental self-determination is indicative of the ways Indigenous communities are seeking to transform and surpass the limits of existing social, political, and economic institutions.

Under settler colonial and biopolitical regimes of representation and recognition, narratives of global climate displacement too easily give way to a sensational "humanitarianism without politics" (Agamben 1998) whereby one's right to survive in exile depends upon relinquishing normative claims to the future, that is: the continual performance of powerlessness. While Kivalina is considered an icon in a global movement for climate justice, it has also been marked in the global media as "America's first climate refugees" (Sackur 2013), a classification that garners no formal legal recognition and which is "a post-political discursive configuration, which, by supplanting politics with governance, leaves underlying power relations untouched" (Bettini 2013). In Pacific Island communities, for example, the imaginary of the "climate refugee" has tended to "discount long histories of ordinary mobility among affected populations"

(Farbotko and Lazrus 2012). When applied to Northwest Alaska, the concept also ignores the historical and political dimensions affecting collective continuance and Indigenous sovereignty in the face of climate change. Rather than universalizing international protections for “climate refugees,” however, some legal scholars call for regionally specific schemes to address the underlying circumstances shaping human mobility, which take climate change as a distinct phenomenon, yet interrelated with the experiences and concerns of everyday life (McAdam 2011).

In spite of this, frontline Indigenous communities around the world are developing sophisticated strategies for negotiating both the attention and limits brought by the global recognition of their climatic vulnerability. In 2006, for example, the Council of Elders of the Carteret Islands created Tulele Peisa, an Indigenous-led relocation effort, because they were eager “to see the media headlines translate into practical assistance.” In a piece entitled “How-to Guide for Environmental Refugees,” Tulele Peisa’s elected leader, Ursula Rakova, addresses the community’s decision to “engineer their own exile from a drowning traditional homeland:”

...the story you have not likely read is the one of government failure and the strategy we developed in response... Carterets’ people are facing, and will continue to face, many challenges as we relocate from our ancestral grounds. However, our plan is one in which we remain as independent and self-sufficient as possible. We wish to maintain our cultural identity and live sustainably wherever we are (Rakova 2009)

While Tulele Peisa calls for the creation of governmental policy, they “are not sitting by,” but offer their “carefully designed and community-led [relocation] action plan... as a model for communities” around the world (Rakova 2009). Such approaches actually invert the dominant framing of the “refugee” and center the agency of Indigenous peoples themselves. Likewise, transdisciplinary practitioners of climate adaptation might approach our collaborations with

frontline Indigenous communities, nations, and individuals in terms of collective continuance and local sovereignty.

Conclusion: Towards an Ethnography For the Anthropocene.

Nearly twenty years ago, two physical scientists proposed a reconfiguration in the way that the discipline of geology narrates the history of the world. “The Anthropocene,” they claimed, denoted a new epoch of geological time in which humans had now become geologic actors at a hitherto unimaginable scale (Crutzen and Stoermer 2000). Through a host of ecological, economic, political, and sociocultural transformations, this contemporary moment—the late Anthropocene—is indeed marked by a proliferation of uncertainty and risk across scales and for multiple constituencies. But when did this era begin? For whom is it new? And who is most responsible? Scholars in the Marxian tradition associate the Anthropocene with the rise of industrial capitalism in Europe, its global expansion (Foster et al. 2011; Moore 2014), uneven geographical development (Harvey 2006), burgeoning material consumption, economic integration, and the increasingly unequal distribution of “life chances” (Povinelli 2011) around the world today. More recently, critical-Indigenous scholars (Davis and Todd 2017) and climatologists alike (Lewis and Maslin 2018) have linked the emergence of the Anthropocene with the onset of European colonialism.

Today, global environmental change intensifies the ecological, social, infrastructural, and existential insecurities of colonialism, racism, neoliberal abandonment, precaritization, and extractivism. For the Indigenous communities who have for generations made their homes amid the shifting Arctic land-sea-icescape, rapid environmental transformations in the Arctic (ACIA 2004; Larsen et al. 2014) are experienced not only as unprecedented (Berkes 2002; Fox 2002) but also as a grave injustice (Trainor et al. 2007; Steere 2010). But, will climate change merely magnify existing structural violence, historical trauma and environmental injustices? Or might our atmospheric entanglement also give rise to new forms of global solidarity?

In late 2011, after we first met in San Francisco, before I had ever traveled to Kivalina, the Rev. Enoch Adams Jr. told me that, “We get a lot of sympathy from a lot of people, but we need more than sympathy. We need empathy.” As the longtime chairman of the Kivalina Relocation Planning Committee, Enoch was reflecting on his experience of working with countless State, federal, and regional institutions to secure the future of his community. A few months later, I asked Enoch if he would explain further what he meant by “empathy.” This is what he said:

To empathize with another you’ve got to really put yourself in their shoes for an extended period of time. Empathy is going to take time... it’s more than feeling sorry for someone. To really empathize with someone in our situation you really have to experience what we experience; eat our food; face our seemingly compounded dilemma. We know that there are solutions to our situation. We know that there are ways that our problem can be resolved. It’s going to take tremendous sacrifice on the part of those who don’t understand... For an extended period of time, their power to realize their destiny, their future, has to be in someone else’s hands. One of the things you also realize in what we’re experiencing here, is that sometimes you come to the conclusion that these are the kinds of things you don’t wish anybody to go through. It’s kind of ironic. You wouldn’t even want your worst enemy to go through it, but it has to happen, it’s got to happen, because the only way that understanding will happen is if you experience it.

Enoch’s words are a powerful critique of the colonial biopolitics, structural inequality, and slow bureaucratic violence that have placed Kivalina in a “seemingly compounded dilemma,” but I also understood them as a call to engage with Kivalina in a particular way as both friend, student, and anthropologist.

Throughout this dissertation I have considered “breathing room” in both spatial and temporal terms, but with this definition of empathy, Enoch points to a third meaning. He asserts that by breathing together in close proximity, by sharing space and life—by being in relationship with one another—we can gain new understanding. Enoch’s call for empathy, through material and bodily encounter, relational commitment over a long duration, and the displacement of the

self, bears a striking resemblance to the ways in which some anthropologists describe the ethnographic method. In particular, Michael D. Jackson describes ethnographic fieldwork as an ethics of being-with where one “place[s] oneself in the situation of the other” and a process of unknowing that involves, if not a geographic, then an epistemological, existential, or ontological displacement on the part of the ethnographer. Like Enoch, Jackson suggests it is only through “sustained intimate, and often silent involvement in [another’s] everyday lifeworld,” that one “inevitably transforms one’s own worldview” (2004, 2005).¹¹¹ If Enoch’s words can be read as an invitation to ethnography, they beg the question what kind? Jackson is quick to warn of ethnographers’ patronizing tendency to “escape into... sympathetic identifications, or [even] political actions that reduce the other to a means for... demonstrating what a compassionate person one is, or [for] changing the world (2005).” I read Jackson not as a condemnation of politics outright, but rather as a reminder of the limits of representation and of the associated tendency to “magic the problem away” by giving ourselves a sense of having intervened (2005). As such, Jackson critiques what Elizabeth Povinelli calls “liberal empathy” (2011:4)—the “sympathy” that Enoch has experienced time and time again and that, never risking its own “unrecognizability” (Butler 2005: 23), simply feeds on its encounter with the suffering of others. The “understanding” that Enoch describes, however, is far more than “feeling sorry for someone,” rather it’s the basis for causing a problem to be “resolved” and for generating “solutions.” It can be the basis for remaking relationships at every scale.

Enoch describes a mode of being-with that could give new shape to our mutual “enfleshment” (Povinelli 2011:4) and contemporary planetary entanglement. There is no guarantee that the kind of “understanding” he describes, will contribute to the kinds of social and

¹¹¹ Tim Ingold (2014) has recently challenged the ubiquity of all things “ethnographic,” suggesting that what Jackson is describing quite simply is a process of “education.”

material transformations that he seeks, but without a commitment to that possibility, empathy would be incomplete. From the ruins of late industrialism, Kim Fortun offers a vision of ethnography that would “stage encounters...that are productively creative, creating space for something new to emerge, engineering imaginations and idioms for different futures, mindful of how very hard it is to think outside and beyond what we know presently” (2012). In much the same way, Povinelli proposes an “anthropology of the otherwise” that would be attendant to the “virtual space” that “opens up between the potentiality and actuality of an alternative social project[s]” (2011). She recasts critical theory “as an experiment in and against power, a method of *trying things out* as a manner of capacitating thresholds” (Povinelli 2012). Such visions of an engaged ethnography require that anthropological practitioners not only pay attention to peoples’ “arts of living” (Biehl and McKay 2012) but to the “alter-politics” (Hage 2012) thereof. Enoch’s comments foreground the ways in which climate change is both a universal and particular phenomenon. The Anthropocene may be a moment of global uncertainty and insecurity, but the risks of this uncertainty are unevenly distributed across time, space, and historically contingent power-bearing relationships. So if the global atmosphere is also a shared breathing room, perhaps it can also become a catalyst to transform these relationships through the commitments of scholars, educators, and professionals, working in partnership with frontline communities around the world.

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