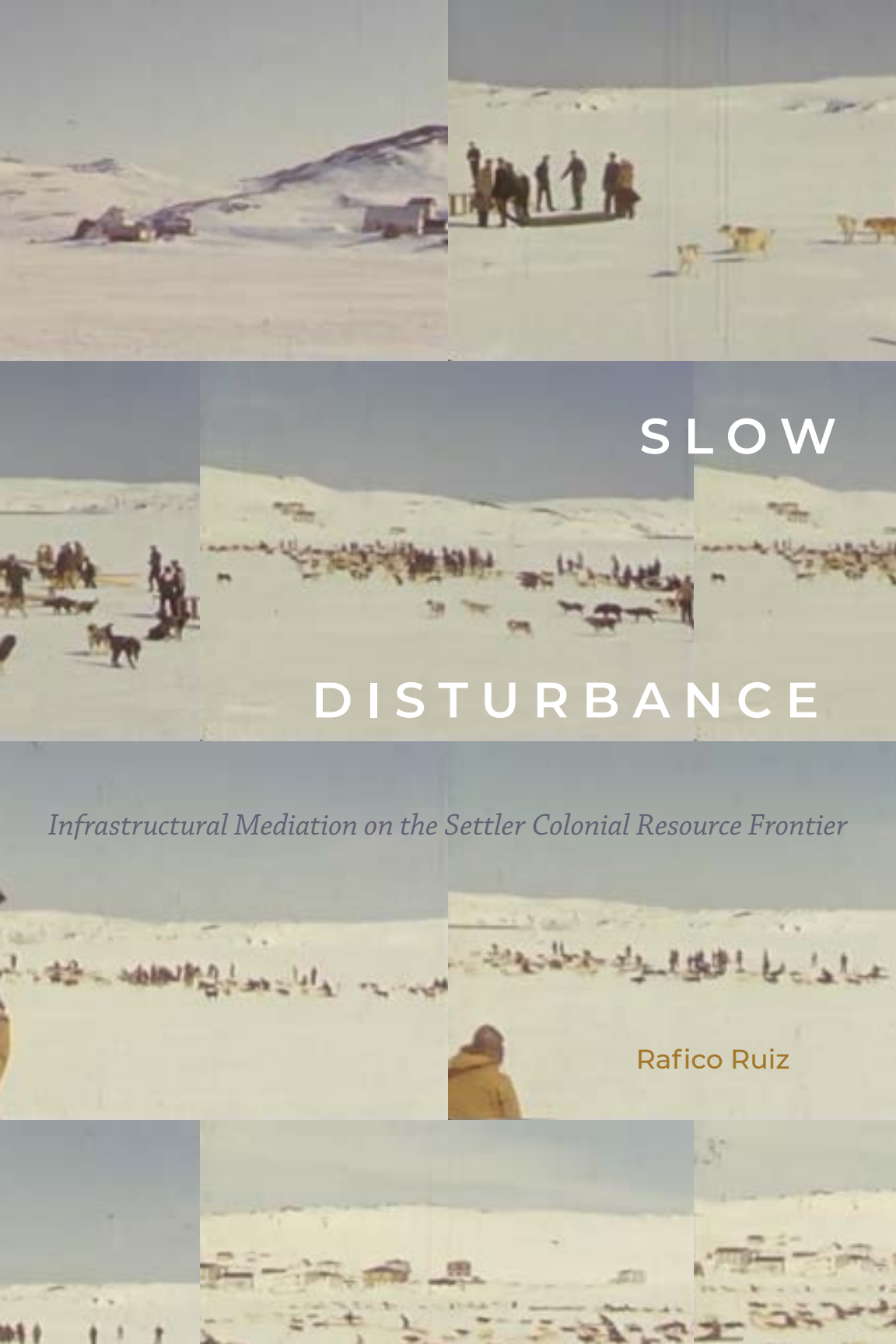

SLOW DISTURBANCE

Infrastructural Mediation on the Settler Colonial Resource Frontier

Rafico Ruiz

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Infrastructural Mediation

Sign, Storage, Transmission

A SERIES EDITED BY JONATHAN STERNE AND LISA GITELMAN

SLOW BANCE

on the Settler Colonial Resource Frontier

Rafico Ruiz

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To Paulina, for teaching me not to read

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The Grenfell Mission story is one that can be told and retold and, with each new telling, informs the ways in which this island and deep coast are and have been connected to the world. The lands of the Beothuk, Mi'kmaq, Innu, and Inuit demand recognition as past, present, and future homes. They precede, underlie, and should take precedence over these connections to other lands and stories. It is for that reminder of connection that I thank the numerous residents I spoke to across northern Newfoundland and Labrador. And it was, largely, as "residents," people with a long experience in situ, both Indigenous and settler, that they helped me to understand the slow and ongoing evolution of the International Grenfell Association. These conversations made the many hours spent in archives feel like a life in their own pasts and that I was privileged to be able to make that trip. My sincere thanks in particular to Dorothy McNeil for sharing her father's remarkable legacy, one that could lie just below the surface, and also to Agnes and Francis Patey for making the past inhere in small but dear objects. Thanks as well to Jane McGillivray and the Michelin family in North West River, Labrador, for inviting me in with so much kindness and generosity.

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Gitelman, thanks for bringing me into the critical space of the Sign, Storage, Transmission series—this book could be nowhere else. As per convention, two anonymous reviewers were the not-so-silent voices that shaped this book in substantive and profound ways. I am immensely grateful for their synthetic comments and willingness to see the infra- in the structure.

INTRODUCTION. FIRST FISH, THEN MEDIATION

FIGURE I.1. Detail of the ceramic mural designed by Jordi Bonet for the rotunda of the Charles S. Curtis Memorial Hospital, which opened in St. Anthony in 1966. St. Anthony, Newfoundland and Labrador, 2011. Photograph by author.

The fish came first. It is a bright November day on the northernmost tip of the island of Newfoundland. Wave upon wave ferries in on the rocky coasts that contour where land ends and the North Atlantic rises. At our back is L'Anse aux Meadows. Jellyfish Cove. That marker of the fallibility of the Atlantic. Of Norse ambition. Of the promise of colonial contact to come. Farther back still, closer to the geometric and geological center of the triangularly shaped island, is Gros Morne, a plateau that was once the bottom of the Iapetus Ocean. The Proto-Atlantic. It is a place of very old bivalves, corals, cepha-

lopods. A place of inscription and first fish. From the peak of the plateau you look out over gray-green elemental water. Ocean to ocean. Fish of the past and fish of the future. Paleontology. Fishery. This is the promise of extraction.

FIGURE I.2. Spoon, saw, and scissors found at a former Beothuk site on the Exploits River; the Beothuk would rework tools retrieved from settler outport fishing communities to serve as part of their hunting tools, including arrowheads and harpoon tips. "The Beothuk," Newfoundland and Labrador Heritage, www.heritage.nf.ca/articles/aboriginal/beothuk.php.

The fish came first. The Beothuks were refugees in the making. With the arrival of European colonial settlement in the seventeenth century, the Beothuks were forced to cede their coastal modes of living to British and French settlers. They had to go from bone harpoons to arrow points. A forced departure from sea to land. Fish to the Beothuk were a precontact world of life. The opposite of extinction.

The fish came first. For North Atlantic fisherfolk involved in undertaking late nineteenth-century fishery, this was an existential decision. Off the coast of the island of Newfoundland and up into the Labrador Sea, thousands of settler colonists would stake their claims in the resource boom-and-bust economy that was part of the lifeblood of Britain's oldest colony. This New Found Land, the easternmost edge of the North American continent, was part of the first wave of European colonization, and by the turn of the twentieth century, it was a full-fledged resource frontier operating across the spectrum of colonial capitalism. The settler fisherfolk, having supplanted the Beothuk by

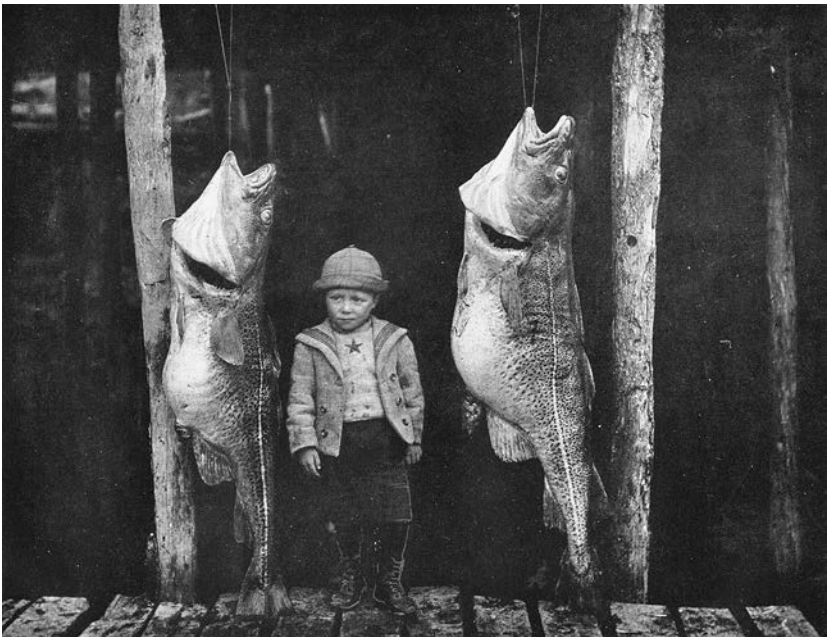

FIGURE I.3. "Big cod fish from the trap, Battle Harbour, Labrador." Photograph from Holloway, *Through Newfoundland with the Camera*.

the early nineteenth century through forced expulsions, the transmission of disease, and other means of colonial settlement, were engaged in a mercantile system that privileged the extraction, processing, and distribution of fish, largely *Gadus morhua*; their specie was Atlantic cod. Sun, salt, and air had to give way to bone-dry fish. This was their promise of extraction.

THE FISH CAME FIRST. Fossil, food, commodity. Natural history, ontology, economy. The promise of extraction. This is a book about the making and breaking of that promise. I begin with the afterlives of North Atlantic fish as a means of reflecting on how resource frontiers get made and unmade through what I call *infrastructural mediation*. *Mediation* is certainly a complex and emergent conceptual terrain. Scholars across media studies and beyond have sought to assess how it both divides and connects "channels and protocols";[1] merges and remediates old and new media forms;[2] is at the heart of the "genesis of the media concept," particularly across the philological record;[3] and encompasses a vertical field of control at a distance.[4] Mediation is

an inferred process that appears across practices of communication. It highlights how such practices come into being and what ontological, epistemological, and material ground is both covered and bound together through such practices. I anchor *mediation* in environmental media studies and attempt to bring it to bear on current debates surrounding colonial forms of environment making that emerge across the sites of extractive capitalism. "Frontiers aren't just discovered at the edge," as Anna Tsing has it; "they are projects in making geographical and temporal experience."[5] Infrastructural mediation designates a process that attends to the materialization of infrastructural arrangements across past, present, and future colonial lifeworlds, with particular attention to the contested sites created by extractive capitalism.

Infrastructures, as Lauren Berlant suggests, are not rigid systems that structurally condition social formations. Rather, they are defined by their "patterning of social form," their capacity to account for the emergence of certain organizations of life over others.[6] Across the Global North and South, for all the talk of our depleted planet, the project of resource frontier making recursively returns, from ocean floor to glacial peak. Resources are seemingly always and everywhere made to appear, though predominantly across the precarious ecosystems that have been at the margins of historical zones of extraction, through practices of communication understood as an infrastructural condition of transportation and a more general political economy of capitalist logistics. The processes of extraction that characterize particular appropriated environments are akin to the mediating properties of conventional media technologies. The protocol of sender-signal-receiver is analogous to and, given our planetary condition of carbon saturation, superseded by processes of extraction, commoditization, and distribution—a resource frontier is an extractive medium. Infrastructural mediation tracks the mobile and world-creating material politics, as well as their associated infrastructural arrangements, that subtend such processes of extraction. Mediation is not simply nor always bound to technical objects. It is also a "living mediation."[7] Infrastructural mediation is a means to examine how colonial lifeworlds, subjectivities, and affects come into being through the design, building, maintenance, and repair of infrastructures that respond to resource frontier–making projects as settler media-making projects as well. It is to a subarctic resource frontier, a colonial environment where settler spaces and times are experientially made through the deployment of infrastructural arrangements, that I turn to ask: How are frontier-making projects themselves made?

Over the course of *Slow Disturbance* I become immersed in the world of the historical North Atlantic extractive fishery and remain submerged within a

largely forgotten and overlooked microcosm of the British colonial domain: northern Newfoundland and Labrador. Britain's first colony was also its first resource frontier. I track this frontier through the lives of the settler fisherfolk who shored up the imperial fishery in this region from roughly the 1880s to the 1950s. In order to follow their fates across this frontier-in-the-making, I foreground how their lives and livelihoods were subject to forms of infrastructural mediation largely enacted by an evangelical Protestant medical mission established in the region to minister to these "toilers of the deep."[8] Medical doctor Wilfred Grenfell began traveling to the outports along the coasts of northern Newfoundland and Labrador in 1892 aboard the medical ship *Albert* sent by the Royal National Mission to Deep Sea Fishermen. In the popular North Atlantic imagination, Grenfell is a little-known and ambiguous figure: doctor, pseudo-saint, author, fundraiser, and missionary.[9] Yet in recent literature, Grenfell is seen to an ever-greater extent as a social reformer who "intervened to change the patterns of living" in northern Newfoundland and Labrador.[10] The mission he worked to establish, culminating in the incorporation of the International Grenfell Association (IGA) in 1914, would eventually oversee the construction and functioning of hospitals, nursing stations, schools, orphanages, cooperative stores, and light industries, among other institutional types, becoming a vast northern health network that the IGA ran until, in 1981, it was finally transferred to provincial control. Known as Grenfell Regional Health Services, it merged with the Health Labrador Corporation in 2005 to create the Labrador-Grenfell Regional Health Authority.

The Grenfell Mission is one of those submerged historiographic entities that is difficult though essential to call forth within the context of environmental and postcolonial media studies—below the surface of disciplinary attention and concern. To become immersed in its world is an attempt to open these fields, and media studies more broadly, to the marginal, so-called minor histories of mediation that inform how we can theorize the relationships between settler colonial projects and the emergence of mediating infrastructures.[11] For the mission was a forceful and environment-responsive mediating entity that relied on a host of infrastructures to reshape the resource frontier inhabited and created by the fisherfolk of northern Newfoundland and Labrador. Much like Tsing's ethnographic coproduction of the Meratus Mountains of Indonesia or the shaded and foraged matsutake forests spanning the globe,[12] this is an effort, shifted into the realm of media historiography, to think alongside the local livelihoods that gave shape to a particular resource frontier in the process of its becoming: "Frontier—not a place or even

a process but an imaginative project capable of molding both places and processes."[13] The Grenfell Mission, informed by imperial legacies of social reform and colonial administration, devised an evolving set of infrastructural arrangements as the means of fashioning the right frontier. Each chapter that makes up this book pauses on how these infrastructures were bound up in the infrastructural mediation the mission was there to undertake—its evangelical and colonial imaginative project that projected a reformed resource frontier into the future through the building of a progressive and standard-setting medical infrastructure (chapter 1); the design of a radical and equitable system of cooperative finance (chapter 2); the mapping of the North Coast of Labrador through an experimental aerial surveying technique (chapter 3); and, finally, the mission's use of film to shape metropolitan perceptions of "need" prevailing on the coasts (chapter 4). These were attempts to shore up and recast the extractive conditions that prevailed in northern Newfoundland and Labrador from the late nineteenth century well into the twentieth.

Building on Lisa Parks and Nicole Starosielski's situating of a media infrastructure studies that can apprehend "the materialities of things, sites, people, and processes that locate media distribution within systems of power," *Slow Disturbance* extends this dynamic and relational approach to the formation of a historic resource frontier and its reliance on the deployment of infrastructure.[14] Here, as the case of the Grenfell Mission shows, this mediation was infrastructural in its refashioning of the fisherfolk's ambient environment. If, as Parks and Starosielksi contend, "infrastructures and environments dynamically mediate and remediate one another," it follows that this rescaling and investment in the minor, if deeply articulated, world of the Grenfell Mission and the fisherfolk of northern Newfoundland and Labrador can inform how scholars working across environmental, postcolonial, and media infrastructure studies theorize the site-specific forms of infrastructural mediation that sustain past and present colonial resource frontiers. As Ann Stoler notes, "'Minor' histories should not be mistaken for trivial ones. Nor are they iconic, mere microcosms of events played out elsewhere on a larger central stage." Rather, they suggest "a differential political temper and a critical space."[15] Cephalopod, extinction, extraction. These are all processes of infrastructural mediation that are sedimented within the Grenfell Mission as a settler infrastructural story, its hospitals, docks, airstrips, roads, cooperative financial systems, and aerial surveys constituting the infrastructural legacies that marked its North Atlantic field of operations. The mission's ongoing historiographical narrative that I both quiet and situate here is a means of mining how settler infrastructure making is an accretive process

that binds together both the fisherfolk's lives as colonial pasts and the deeply felt settler colonial present. The very term *frontier* can sometimes obscure the real and affective homes that come to be built on the original displacements enacted by the promise of extraction. I deploy it here as a reminder of the temporal tensions that reside in settler colonial geographies between colonists (for whom frontiers become homes) and colonized (for whom frontiers are "the land").[16] This is a particularly Canadian legacy that permeates the settler state's claims to its territory. The settlers not only extracted, but stayed. As Patrick Wolfe has it, "Invasion is a structure not an event."[17] This ongoing legacy requires settler Canadians to denaturalize the environments they inhabit in order to allow their colonial past not only to become geographically legible but also to become infrastructural, that is, extended into the present across chains of settler colonial materiality and accountability.

I write this book in the hope of troubling the instrumental present-mindedness that underlies the staking and consolidation of resource frontiers through the current practices of extractive capitalism. The North Atlantic fishery, particularly its sad and telling manifestation in the province of Newfoundland and Labrador, is a surprisingly urgent and useful story of collapse.[18] The 1992 cod moratorium, a government edict that essentially marked the end of a five-hundred-year resource frontier, is a harsh object lesson in the ecological finiteness that actually underlies ocean resources. It was harsh in the toll it exacted on the people who were reliant on this frontier to sustain future-oriented livelihoods: "The activity of the frontier is to make human subjects as well as natural objects."[19] Resource frontiers, particularly oceanic ones, are indeed peopled. From forced displacements to colonial settlement, the ocean as a resource horizon is a case in point of an environment to be made available for extraction. Much like Macarena Gómez-Barris's exemplary effort to examine the subjugated if embodied knowledges that permeate contemporary Latin American "extractive zones," largely through creative Indigenous resistance movements, *Slow Disturbance* slides into a situated history of infrastructural mediation to uncover the lives and livelihoods of long-standing settler colonists in northern Newfoundland and Labrador.[20]

Like many colonial geographies, this settler colonialism is a sedimented overlay of waves of imperial arrival: stretching back to the sixteenth century, wave upon wave of largely French and British colonists took possession of the island of Newfoundland and parts of Labrador.[21] This historical colonial presence serves to reify and obscure the colonial identities of the fisherfolk that the Grenfell Mission was there to serve. By the late nineteenth century, the British imperial imaginary considered these "Vikings of Today" as an impov-

erished, exploited, and threatened population in need of aid; in some, if not all, respects, the colonizers had come to resemble the colonized.[22] The mission sought to hold up their white, Anglo-Saxon, and laboring bodies as particularly worthy of medical and other forms of imperial care, with Dr. Grenfell himself seeking to embody and act out a form of muscular Christianity capable of modeling the corporeal potential white fisherfolk bodies held.[23] Through immersion in the thick of this settler colonial society, this book sets out to map the under-examined divides between colonist (the fisherfolk) and colonizer (largely British mercantile firms engaged in the extractive fishery), with the mediating agency of the Grenfell Mission serving to mold this relationship through social reform–minded practical therapy. While I do not lose sight of the extinction of the Beothuk, nor of the progressive colonization and marginalization of Innu, Inuit, Mi'kmaq, and Métis across Newfoundland and Labrador, my aim is to articulate this historical resource frontier as a site of infrastructural mediation directed toward the fisherfolk as a group of settler colonists: How was this North Atlantic settler colonialism a mediating project? What sort of infrastructures did it rely on? What experiences of the resource frontier did the Grenfell Mission create? Taking up these questions requires readers to attend to the site specificities of extractive capitalism in this North Atlantic world, particularly as it was an apex of the British Empire's colonial environment making. In this context, the promise of extraction was made and performed by fisherfolk, colonial agents and administrators, merchants, and missionaries. Indigenous lives were co-opted by these extractive networks and affected by the Grenfell Mission's medical enterprise. They suffered from the promises of extraction. Whether "resource" frontier or "salvage" frontier, "where making, saving, and destroying resources are utterly mixed up," *Slow Disturbance* shows how extraction is predicated on forms of infrastructural mediation that were tailored, through missionary intervention, to the fisherfolk of northern Newfoundland and Labrador.[24] These historical and environmental echoes can be heard in current promises of extraction—sites of enclosure where commodities are made to emerge, sites of past and future fish.

Infrastructural Mediation

Resource frontiers are emergent. They become surveyed, staked, and extracted. Once a raw environmental phenomenon in a given location is exhausted, extractive practices shift to other sites. This book is immersed in the middle of the process of extraction—the *medium* of the resource frontier. En-

vironmental media studies has begun to attend to the evolving set of material practices and substances that subtend the production and dissemination of media technologies, institutions, and discourses. Janet Walker and Nicole Starosielski specify that much of the scholarship coming under this banner, following that of Eva Horn, evinces "anti-ontological" approaches that shift away from essentialist conceptions of the constitution of media, whether institutional, discursive, or technological, and move toward ways of conceiving of media "as conditions of possibility for events and processes."[25] This instability underlying what media are and can be opens up the possibility of trying to account for the degree to which ecological conditions are intertwined with, or indeed constitutive of, mediating processes. Recent work by John Durham Peters has extended this environmental sensibility underpinning the medium concept to establish its interchangeability with environment making: "The old idea that media are environments can be flipped: environments are also media."[26] Peters establishes the existential stakes of expanded media, specifying how they provide "infrastructures and forms of life";[27] they are, following a tradition he situates extending back through Friedrich Kittler, James Carey, Lewis Mumford, Harold Innis, and Martin Heidegger, "modes of being."[28] I share Peters's call to uncover processes of mediation and the environmental media forms they rely on. However, rather than pursue his timely and important investment in non-anthropomorphic modes of communication, I shift this turn to environments as media in order to examine how the Grenfell Mission was part of a broader process of infrastructural mediation driven by a settler logic of control and a homiletic practice predicated on the materialization of physical good works—as I examine in chapter 1, the design, building, and maintenance of an equally colonial and infrastructural plant. This re-anthropomorphizing of Peters's environments-are-media argument is a means of rendering accountable the media-enabled existential conditions experienced by particular people across precise periods of time, notably at such acute sites where settler colonialism was moved along by waves of extractive capitalism. Resource frontiers make this tension between a given environment, mediating processes, and a laboring *anthropos* apparent; they are, like many media, always in between, relaying, caught in the making.

Infrastructural mediation also attempts to show how resource frontiers are reliant on modes of control that can account for and extend from their surrounding ecological conditions. This is inspired by the articulation of environmental media undertaken in Starosielski's *The Undersea Network*, where she notes how fiber-optic cable networks possess a complex interplay across distinct environmental contexts that oscillate between "strategies of insula-

tion," which enable smooth connection regardless of their surrounding ecology, and "strategies of interconnection," which ground infrastructural arrangements in local social and ecological conditions.[29] The Grenfell Mission's particular form of infrastructural mediation was a hybrid of both strategies. For example, the medical infrastructure it built in the region was shaped by the length and habitation patterns along the coasts, which grew out of early forms of merchant philanthropy, while it also introduced entirely modern medical technologies, such as the x-ray. This infrastructural mediation attempted to account for the status the colony held as a multivalent dependency. Indeed, historically, the colony of Newfoundland was an integral part of the British Empire's network of resource-producing colonies. As one of the earliest comprehensive histories of the colony of Newfoundland remarks: "The island of Newfoundland has been considered, in all former times, as a great ship moored near the Banks during the fishing season, for the convenience of English fishermen. The Governor was considered the ship's captain, and those who were concerned in the fishery business as his crew, and subject to naval discipline while there, and expected to return to England when the season was over."[30] This was a near history that the mission had to contend with in devising its plans of medical and, eventually, social reform.

The *First Annual Report of the International Grenfell Association*, published in 1914, was a pamphlet intended for wide distribution across the mission's network, and it demonstrates the extent of the process of infrastructural mediation the missionary organization had accomplished since its beginnings in the 1890s. Ranging across its hospital ships, hospitals, and cottage hospitals (or nursing stations), the mission had treated 6,855 outpatients and 490 inpatients, with a total number of days of hospital care of 22,628.[31] Add to this the orphanage, school, and work of the industrial department in St. Anthony,[32] the headquarters of the mission on the Northern Peninsula of Newfoundland, as well as the King George V Seamen's Institute in St. John's,[33] and a more comprehensive picture of the scope of the infrastructural mediation the mission undertook comes into focus. Its physical infrastructure of care would be tallied, insured, renovated, built on, and generally improved on as the years passed (I touch on these efforts in chapter 1). New hospital boats would be built that could better withstand the ice and compensate for the poor knowledge of the subaquatic coastline. Yet running from roughly 1914 to 1927, while the mission moved toward a more centralized and bureaucratic system of organization that somewhat reduced Grenfell's idiosyncratic influence, the latter would nonetheless continue to be felt through a wide range of schemes of reform. Much like the cooperative system that

he had put in place in the 1890s (chapter 2), which he continued to bolster through educational initiatives, Grenfell also brought to bear other forms of infrastructural mediation that drew on both the value placed on utility in the social gospel movement and Grenfell's faith that improvements could be made by directing social Darwinism toward the correct, Christ-centric and action-oriented steering influence. As a whole, these practices of infrastructural mediation make up a series of episodes in the mission's existence that foreground how its human subject of reform, while intensely local, was open to and integrated in multiple, mobile networks of global influence across such fields of endeavor as medical innovation, military production, and agricultural experimentation.

In *Slow Disturbance* I focus on four practices of reform that articulate the mission's understanding of infrastructural mediation that could minister to the fisherfolk of northern Newfoundland and Labrador. Their efforts at missionary reform espoused a particular version of the Protestant homiletic tradition that sought to shape both the lives of fisherfolk and their ambient environments through a series of infrastructural incursions. A more ambitious book could spend time examining the wider array of reformative practices, as I touch on below, that evince the mission's reliance on the building of infrastructural capacity with the aim of reconfiguring this North Atlantic resource frontier. A partial inventory of these reformative practices includes: the introduction of whole wheat flour into the Labrador household diet to combat malnutrition; the invention of a textile known as Grenfell cloth as a result of Grenfell's participation in World War I, during which he observed the need for a waterproof uniform for soldiers from fabric that took its origins in Labrador's fishing industry;[34] the implementation of a comprehensive local craft industry to produce hooked, silk-stocking mats and other goods that would be sold in London, Boston, and New York, with the entire enterprise coordinated by Jessie Luther, a pioneer in the occupational therapy movement; the introduction of rational dietary measures, largely based on research around the unlimited possibilities of the soybean by Dr. John Harvey Kellogg and, on the industrial aspect of its potential applications, the Ford Motor Company; the sustaining of an experimental agriculture division in contact with the American government's own installation at Rampart, Alaska, that also built numerous glass greenhouses with panes derived from a soybean compound; and finally, the use of publication and promotion, from magic lantern slides to travel books to Metropolitan Opera fundraisers, in order to create a donating public for the mission's philanthropic enterprise. While a constant behind all these practices of reform is the labor performed by the fisherfolk and the

larger fate of the colony's fishing industry, the mission was working toward establishing new terms of mediation for northern Newfoundland and Labrador by shoring up the missionary organization as the sole medical provider to the settler fisherfolk. By situating an understanding of mediation that is inextricably shaped by its time and place, by its immersion in what Berlant calls the "lifeworld of structure," in this respect I follow other environmental media scholars who have taken up Sarah Kember and Joanna Zylinska's analogous argument that "mediation can be seen as another term for 'life,' being-in and emerging-with the world."[35] Parks and Starosielski describe how "this approach troubles any clear distinction between what we consider to be media infrastructure, such as a broadcast transmitter, and sites and processes typically thought of as its 'environment.'"[36] I would add that Kember and Zylinska's articulation of mediation opens up important stakes for media studies in examining the constitution of unconventional sites of mediation, such as resource frontiers, and how these sites are articulated in and through the organization of settler infrastructural projects.

These stakes largely revolve around a shift away from approaching media as discrete objects toward framing them within analyses that focus on them instead as "processes of mediation."[37] This argument has resurfaced across environmental media studies, media archeology, and other materialist analyses of mediating forms through their emphasis on the mobile constitution of "media" as not only "events and processes" but also, as Jennifer Gabrys's articulation of remote sensing technologies bears out, world-making infrastructures reliant on the durational aspects of mediation.[38] Kember and Zylinksa note in *Life after New Media* that mediation is a complex and heterogeneous process: the "originary process of media emergence, with media being seen as (ongoing) stabilizations of the media flow."[39] They work through what they see as the different incarnations of the term *mediation*. Ranging from Marxist theory's reconciliation of two opposing forces in a given society embodied within a given mediating object to mainstream media studies and its view of mediation as a "'mediating factor of a given culture' which takes the form of 'the medium of communication itself.'"[40] These, in their estimation, "structuralist" and "static" accounts of the process of mediation tend to focus on media "effects" brought about by distinct, identifiable, and usually exclusively human subjects that nonetheless work through and on material objects.[41] By way of contrast, for Kember and Zylinksa, mediation is an active and ongoing process of co-emergence at the biological and sociocultural levels ("that is an intrinsic condition of being-in, and becoming-with, the technological world").[42] The biopolitical sensibility that permeates their

understanding of vital mediation was a powerful corrective to contemporaneous debates surrounding the emergence of new media as both scholarly objects and a subfield of media studies. This emphasis on the *lifeness* of mediation, and on media as temporal processes embedded in articulating contested conceptions of that vital experience, of being inevitably bound to these twin phenomena, establishes a conceptual bridge to my deployment of infrastructural mediation through this minor history of the Grenfell Mission. The mission story offers a prehistory of sorts to understanding how constitutive processes of mediation are to their social and environmental contexts—in this case, the fisherfolks' lives and biopolitical lifetimes—that the Grenfell Mission was so actively shaping through the practice of infrastructural mediation, that is, expanded, often ecologically inflected processes of mediation, from medical infrastructure to aerial surveying, that enabled and extended the operation of a particular resource frontier that registered these practices as an evolving environmental medium.

It is also an effort to shift recent articulations of "story" as a "material ordering practice," largely anchored in historical geography and its allied fields, into the purview of environmental media studies.[43] This book asks how settler infrastructural stories can be told in such a way as to highlight how they are bound up with processes of infrastructural mediation—that their ongoing and material durations have to be taken into account across anticolonial futures. It is by performing an infrastructural storying of the mission that I lay out a propositional methodology that can account for the *lifeness* of processes of mediation across such resource frontiers. While this method shares a sensibility with what Vivian Sobchack calls the "family features" of media archeology, most notably in its emphasis on the material dimensions of media as "forms and structures," it nonetheless shifts attention to the settler materialities and colonial capacities that tracing such mobile sites of infrastructural mediation present.[44] Rather than attempt an archeological excavation of the deep materiality of various media, whether narrowly circumscribed and technical or more broadly environmental, I pursue this method of infrastructural storying that asks analogous questions about how resource frontiers register processes of mediation that are durational and, in this instance, that extend settler colonial logics of extraction into the material order of the present. Infrastructural storying is a practice that sees stories as "modes of relation and intervention," a dimension of this method that I address in greater detail in chapter 4, and it asks environmental media studies to assemble stories about extractivism that can account for the sedimented processes of mediation that underlie its sense of legitimacy.[45] This sedimentation is

not one-dimensionally archeological but rather extends across the practices that order how infrastructures are made, used, and repurposed—how both these practices and infrastructures come to co-constitute settler geographies of extraction. The Grenfell Mission as it appears in this book is thus one such manifestation of the practice of infrastructural storying. The mission story is one that works through the infrastructural dimensions of processes of mediation and how they can be made accountable for our current conjuncture defined by an extractive capitalism seeking out new and increasingly fragile ecologies; it is, indeed, a historical echo within the "extractive zone" that informs how contemporary media theory and environmental media studies can start to account for "medianatures" bound not only to a materialism of discrete media objects but also to a broader and more urgent set of oceanic, terrestrial, and atmospheric extractive practices: infrastructural mediations.[46]

Prehistories of Environmental Media: The Cod Fisheries

Across the province of Newfoundland and Labrador many of the buildings the mission built are still standing, the lie of the roads they traced paved smooth, and the localization of medical care in coastal communities throughout northern Newfoundland and Labrador an ongoing reminder of where the mission had been. While incorporated as the International Grenfell Association in 1914, "the Mission," as it is still referred to locally, was a vast, international network of volunteer labor. Women and men, as nurses, doctors, nutritionists, caregivers, teachers, craft instructors, carpenters, and bricklayers from all over Canada, the United Kingdom, the United States, and Australia, among other countries, came through the mission's headquarters in the town of St. Anthony and on to the mission's various nursing stations and hospitals along the coast of Labrador. All these laboring missionaries who were serving differing ideals of religious and secular obligation made up "a sort of Peace Corps."[47] This historical geography of missionary care belies the settler colonial reality underlying such a resilient and rooted town as St. Anthony. As with many settler geographies, the passing of time has concealed original forms of dispossession that supplanted one set of (Indigenous) lives for extraction-driven settlement—the fish were made to come first. This is a sedimented reality that stretches across the settler state of Canada, and it is made all the more apparent through many rural towns' thin veneer of aging colonial and "invasive" infrastructures.[48] These places show the signs of settlement. This history of dispossession requires deft negotiation given the sense of attachment to place that old colonies, such as Newfoundland, both

celebrate and have a hard time acknowledging in relation to their absencing of Indigenous precedents—a colonial past "everywhere and nowhere at all."[49] *Slow Disturbance* ties together these histories by foregrounding how the infrastructural mediation the Grenfell Mission put to bear on the fisherfolk of northern Newfoundland and Labrador was not only part of this settler colonial project, but it functioned very practically to further marginalize Indigenous lives (and, later, land claims).

In many respects the mission operated at two speeds and across two distinct geographies. Its activities in Labrador came under the influence of its station at North West River, and mission workers there lived apart from, if alongside, Innu, Inuit, and Métis communities in the interior of Labrador and along its North Coast. As above all else a medical mission, providing essential services to parts of the colony that had only ever been served by intermittent medical cruises, usually once a summer, the mission engaged with Indigenous realities and made them a marginal and sporadic part of their reforming, colonial enterprise (with the Inuit residents of the North Coast of Labrador already under the long influence of Moravian missionaries stretching back to the seventeenth century). The Grenfell Mission's enactment of infrastructural mediation was both a settler colonial project and an everyday homiletic practice that would reshape fisherfolk lives, their North Atlantic extractive environment, and, in hindsight, relationships to the affective and practical management of a colonial order that persists today. This places equal emphasis on the emergent, durational character of infrastructural mediation that the book tracks across the Grenfell Mission story—it also makes my telling of the story into just such a media and historiographical event; like the promise of extraction, and as I will touch on in greater detail below, it is to be made and unmade through the Grenfell Mission archives, "generative substances" for epistemologies that pursue knowledge forms that privilege settler accountability,[50] and the lived locales across northern Newfoundland and Labrador that are a testament to "the way it was."[51]

This story is indeed a minor one.[52] Marginal. It is worth recalling that such a minor history of the mission can also really only come from a collection of partial impressions—divergent, spaced across time, and told from multiple gender, class, and institutional positions. One of the clearest indicators of the mission's human impact has been the memory work it has evoked.[53] Its myriad volunteers over the mission's nearly one hundred year existence were indeed marked by the experience. Often it was the pivotal moment in the arc of their lives. Mission work created a network of solidarity for many of its volunteers, with its fading, Victorian epitomizing of service continuously

changing over the years. Yet for all its obscure characters and locales, it is nonetheless a radically situated story that builds on Peters's call for a turn to "infrastructuralism," the obscure, marginalized backdrops to both media theory as a field and the smooth apperance of modernity's westernized daily life (as Paul Edwards writes, "to be modern means to live within and by means of infrastructures").[54] Peters specifies that "infrastructuralism shares a classic concern of media theory: the call to make environments visible."[55] Resource frontiers, environments that highlight the ecological and extractive capitalist power dynamics that inhere in and by infrastructure, are often left out of the concerns of media theory. With notable exceptions that I will address below, it is as if the pioneering work of Harold Innis on the material dimensions of natural resource extraction and circulation has faded into and been absorbed by the more diffuse materialisms under examination in environmental media studies that couple specific media technologies to a suite of underlying energetic and resource-based "footprints."[56] Much like Parks and Starosielski's pursuit of a relational and materially interwoven media infrastructure studies, wherein environments are technologized and nonhuman entities not only possess agency but also constitute the ontological ground of mediation, this book sets out to highlight how processes of infrastructural mediation, such as those undertaken by the Grenfell Mission, can also be at the center of debates surrounding the constitution of contemporary extractive media environments.[57]

Early on in the emergence of environmental media studies, N. Katherine Hayles urged media scholars to apprehend how "nature" and "simulation" (largely articulated through virtual reality spaces) are not opposed but rather the result of a recursive flow of interpretation and experience: "Instead of accepting a construction that opposes nature to simulation, I seek to arrive at an understanding of nature and simulation that foregrounds connections between them. Not two separate worlds, one natural and one simulated, estranged from each other, but interfaces and permeable membranes through which the two flow and interpenetrate. Interactivity between the beholder and the world is the key."[58] Building on Hayles's bounding of real and projected environments, in a simliar vein Ursula Heise weighed the merits of "environment" as a metaphor in media theory. She argued that media ecology and its deployment of textual "environments" could benefit from grounding the metaphor in the political ecologies of spatial experience afforded by particular, real world sites.[59] In many respects scholarship across environmental media studies is an indirect response to Hayles's and Heise's attempts to account for the material and ecological substrata that undergird virtual me-

dia environments. This body of scholarship has far exceeded a simple greening of media ecology. It is infused by the political economic dimensions of Innis's work as well as Kittler's expansive definition of media as practices reliant on recording, storage, and processing and thus has taken shape around an investment in the politics and materialities of ecological situations and thought.[60]

This turn in environmental media studies could also be productively read as a return to the sited parochialism evident in Innis's early considerations of the railway, the fur trade, and the Atlantic cod fishery.[61] These sites of natural resource extraction, production, and dissemination could thus become the originary ground for the emergence of the ecological and material commitments of environmental media studies. In addition, through their emphasis on, if not infrastructure in a narrow sense, then on infrastructure as a relationship-building phenonenon, as Susan Leigh Star and Karen Ruhleder observed,[62] these considerations of the material networks that build out from and across distinct resource frontiers prefigure a media infrastructure studies capable of making its constituent environments visible and available for critique—as Liam Cole Young has it, Innis laid bare the "infrastructure of colonization."[63] Yet, as many scholars have noted, Innis's resource frontiers were not particularly peopled, with an impartial sort of accounting given to settler colonial practices and their effects on Indigenous communities.[64] As Peters generously puts it, Innis "was more interested in organization than in content."[65] *Slow Disturbance* takes up the task of tracing how the fisherfolk's extractive environments came to co-shape the Grenfell Mission's practices of infrastructural mediation. More than simply populating a particular resource frontier, the book thinks out from Innis's generative expansion of the material and ecological dimensions of the interrelations between extraction, infrastructure, environment, and staples (that often served the mediating function of conventional media) with the aim of encouraging sited approaches to contemporary resource frontiers that take them as ecologically and politically defined by practices of infrastructural mediation that are capable of attending to their attachments to histories of settler colonialism. The "extractive view" is one that is historically specific and assembled through material practices.[66] As Innis notes in *The Cod Fisheries*, the North Atlantic fishing industry was reliant on a form of "exogenous" development. This was a constant, outward-looking mode of industrial and spatial organization. Through this structural arrangement, the coastlines of Newfoundland and Labrador, extending up to just below the Arctic circle, became precarious transit zones, or *stages*, in a sense that goes beyond the term's designation of a utility-driven

outpost for fishing; they were sites of mediated life. Having readers spend time on this existential and infrastructural stage is an essential hoped-for outcome of this book.

This topographic critique of Innis's work sometimes bypasses the "dirt research" that shored up his scholarship in political economy. Innis spent time on rivers, in forests, and traveling along with cod fishers on the North Atlantic.[67] It was fieldwork of a kind and one that relied on a firsthand apprehension of on-the-ground economic realities. Innis's writing on communication began in the early 1940s, with his book on the cod fisheries the direct predecessor to the dissemination of his better-known work on center-periphery relations and the formation of monopolies of knowledge reliant on space or time biases. For Innis, too, the fish came first, with the opening pages of *The Cod Fisheries* describing the physiology of cod, the composition of their eggs, and their richly specific marine environment off the Grand Banks of Newfoundland.[68] Published in 1940, the book sought to trace the gradual transition—or, in the case of the colony of Newfoundland, lack of transition—from forms of economic organization derived from commercialism to that of a capitalist system governed by economic growth, in the process offering a critical summary of the various pressures to which the Newfoundland fishery had been subject.[69] These ranged from the advent of machine industry to the substitution of the wooden sailing vessel with the steamship and the railway to the effects of improvements in refrigeration and consumer patterns in urban centers. In his chapter 14 ("Capitalism in Newfoundland, 1886–1936"), Innis sketches a biting diagnosis of the collection of forces, changing communication and transportation technologies foremost among them, that led to the end of responsible government in the colony. His treatment of how the relationship between social organization, mechanization, and technologically informed fishing techniques in Newfoundland shows how "Newfoundland was squeezed between two civilizations": "She produced for tropical countries with low standards of living, and had to compete with other foodstuffs and goods purchased from highly industrialized countries."[70] Unlike *The Bias of Communication* and its sweeping, patterned mode of historical analysis, *The Cod Fisheries* is an attempt to understand the local stakes of "the history of an international economy" across multiple generations of the colony's population. It was also a modulated work of advocacy, as Innis published the book in the midst of debates surrounding the projected independence of the colony.

The Cod Fisheries, with these contextual markers in mind, resonates more with current work in environmental media studies on processes of material-

ization, infrastructure, and global commodities than does Innis's more narrowly defined and acknowledged body of scholarship in media theory. "Like more recent theorists," Jody Berland writes, "Innis viewed colonial space as traversed space; not the empty landscape of a wilderness, or geometrical, abstractly quantifiable space, but space that has been mapped and shaped by specific imperial forms of knowledge and administration."[71] Innis's geographically and historically multilayered portrait of the fate of the colonial cod fishery is a reminder that each resource frontier is nonetheless a "foreign form requiring translation," a spatial and temporal colonial project of infrastructural mediation.[72] *Slow Disturbance* shares Innis's investment in troubling the subjectivities and infrastructures that stem from cod: fisherfolks and missionaries, hospitals and aerial surveying.

Yet what to do with Innis today? How to think alongside his insights on colonial resource practices rather than merely place his influence in a genealogy of media theory? After all, resource frontiers, as Tsing claims, rely on "traveling theory."[73] This reminder of the fish coming first, prior to Innis's investment in untangling imperial webs of communication, situates the rural periphery as a material site for thinking through the stakes of staples always destined to travel. Whether grain elevators on the Canadian prairies or coastal cable-landing sites in Hawaii, the full spectrum of Innis's scholarship on colonial topographies foregrounds how the often forgotten rural is the de facto ground of networks of trade, transporation, and communication.[74] One aim of *Slow Disturbance* is to provide dimensionality and depth, equally historiographic in range, postcolonial in perspective, and topographical in scope, to the marginalized transit zones of historical extractive capitalism. For the Grenfell Mission, northern Newfoundland and Labrador, sites of both extraction and transit, held the promise of a new colonial order. Much like Peter van Wyck's exemplary mining of Innis's "territorial archive" across the "highway of the atom," this book follows the fate of the fisherfolk of northern Newfoundland and Labrador as shaped by the Grenfell Mission's efforts at reform. This is an infrastructural trail that leads at once back in time to the colonial fishery and into an unknown future around North Atlantic extractive frontier making.[75] I take inspiration from Innis's emphasis on the structural, political, and economic conditions of resource frontiers, and I aim to follow this line of inquiry throughout in order to examine the experiential modalities that underpin resource frontiers, that is, how the Grenfell Mission relied on particular processes of infrastructural mediation to shape the subjectivities of these North Atlantic settler colonists.

Settler Infrastructure

Over the course of the 1880s, settler colonists engaged in the fisheries, especially those on the coast of Labrador, experienced several failed seasons. Newfoundland was a colony reliant on a single resource, and when this resource failed to deliver the needed standard of living to its labor force, the effects of this failure circulated widely and quickly, worsening what were already precarious subsistence-living conditions in much of the colony. In 1891, the premier of Newfoundland, Sir William Whiteway, led a delegation to London to protest the imperial government's imposition of restrictive fishing policies on the island's west coast. Whiteway, in a report addressing the possibility of building a railway in Newfoundland, pointed to the structural economic conditions that were leading to its financial and social precarity.

> The question of the future of our growing population has, for some time, engaged the earnest attention of all thoughtful men in this country, and has been the subject of serious solicitude. The fisheries being our main source, and to a large extent the only dependence of the people, those periodic partial failures which are incident to such pursuits continue to be attended with recurring visitations of pauperism, and there seems no remedy to be found for this condition of things but that which may lie in varied and extensive pursuits.[76]

This open-ended call to action was picked up by Francis Hopwood, a council member of the Royal National Mission to Deep Sea Fishermen and an assistant solicitor at the Board of Trade. On the authorization of the fishermen mission's council, Hopwood traveled to Newfoundland in the fall of 1891 to assess the possibility of bringing the fishermen's mission's activities to Britain's oldest colony.

Hopwood's visit did not take him to the remotest regions of the colony, yet through the secondhand accounts of such public officials as judges and government adiminstrators, as well as the private interests of newspaper editors, merchants, and clergymen, his findings ranged across the social, political, and economic conditions of those engaged in Britain's broad network of migratory fishing. With the decline in export prices for saltfish in the 1880s; the increasing protectionism of the French market; the ubiquitous practice of the truck system, which kept fishermen in a state of constant indenture to local merchants and functioned on a barter system that excluded cash, thus forestalling the accumulation of capital savings; and, finally, the near absence of medical care, basic forms of administration, and law-keeping for the close to twenty-five thousand "floaters" who made the trip every summer to fish off the coast

FIGURE 1.4. "St. John's immediately after the fire." Photograph from MS 254, Wilfred Grenfell's personal album, 1889–1892, Wilfred Thomason Grenfell Papers.

of Labrador, all these factors combined to spur Hopwood to recommend in his report that the fishermen's mission send a hospital ship the following summer. While Hopwood was careful to specify that this was to be an "experiment" rather than a permanent "institution," he was nonetheless surprised at the conditions to be found among this settler Anglo-Saxon population and was confident that regulation would improve their conditions over time.[77]

On the council's recommendation, the *Albert* was to set sail for the colony of Newfoundland from Yarmouth, a small port town in Norfolk, England, on June 15, 1892, with Dr. Wilfred Grenfell commissioned to serve as the hospital ship's physician. Upon their July arrival in St. John's, they found mostly charred ruins, the city having been virtually consumed by fire just a few days before. With almost every doctor in town unable to take patients, Grenfell established a temporary clinic onboard the *Albert*. With an eye on their departure for the Labrador coast on August 2, Grenfell had already become acquainted with a situation of scarcity and need and a disturbing, blackened tabula rasa for his emergent missionary practices and spiritual sense of action. "I always have the feeling that, if we are to do a missionary work with

the spirit which I feel alone is of any value," Grenfell writes, "our Mission should realise from the beginning that it is a work of sacrifice."[78]

THE GRENFELL MISSION CAME at a time of infrastructure. The Anglo-Saxon fisherfolk they were there to minister to were in need of a form of infrastructural care that was both hard and soft: hospital beds and cooperative finance. It was a form of care that brought together the mission's emphasis on practical therapy and its turn to infrastructure building and maintenance in order to create what they saw as reformed social, economic, and, in time, environmental conditions for the fisherfolk to flourish under the broad tenets of the social gospel movement. Their North Atlantic resource frontier was just that, a frontier that had to be settled and resettled, accommodated, and brought up to a mobile imperial standard that was enacted periodically and haphazardly, largely depending on a given colony's strategic importance in the British Empire's wider network of trade. Grenfell, pursuing a brand of muscular Christianity driven by practical action, was ready to deploy a full spectrum of reforms to reshape not only the economic conditions that prevailed on the coasts but also the very social and environmental realities that he found upon his arrival in 1892—a meeting of indifferent ocean, wind-contoured coasts, and indebted settler colonists who fished to go on living. The Grenfell Mission was an infrastructure-making project—and, so, a practice of perpetuating and projecting settler lives.

The array of reformative practices listed above were part of a responsive, if not particularly coordinated, strategy on the part of the mission to fashion what they saw as a more equitable, racially sound, and spiritually driven colony that would work in symbiotic extractive harmony with its North Atlantic ecology.[79] The fisherfolk were indeed "toilers of the deep," and the "deep" was an environmental zone wherein laboring men could acquire hearty morals and physiques through extended and intimate exposure to the hardships of cold, dark North Atlantic waters. The mission had this fascination with and commitment to infrastructuralism: how building, meeting standards, and devising practices of reform and care could shore up the colony. They were builders of colonial infrastructures that had to stand in for imperial forms of administration and a robust "state of the nation."[80] The mission was invested in the propagation of an evangelical Protestant logistics: a homiletics that took infrastructural development as its central tenet. "The job of logistical media is to organize and orient, to arrange people and property, often into grids. They both coordinate and subordinate, arranging relationships

among people and things."[81] North Atlantic things (including people) could be improved. Thus, the mission's evangelical reformative practices were infrastructural in their attempts at constantly remaking and reforming the relationships between the fisherfolk and their ambient, extraction-driven environment.

This merging of reformative practices and sited environment starts to complicate how the story of infrastructure, particularly in colonial contexts, is "one of disconnection, containment, and dispossession."[82] The Grenfell Mission's role in building, maintaining, updating, and repairing a settler infrastructure is an untold story as well as a contribution to foregrounding how site-specific histories underlie faded, ruinous, and just simply paved-over settler infrastructures. As Deborah Cowen asserts, "Infrastructures reach across time, building uneven relations of the past into the future, cementing their persistence. In colonial and settler colonial contexts, infrastructure is often the means of dispossession, and the material force that implants colonial economies and socialities. Infrastructures thus highlight the issue of competing and overlapping jurisdiction—matters of both time and space."[83] The durational dimensions of infrastructural mediation can account for how the mission's infrastructure making coalesced across decades, and this process was indeed reliant on means of dispossession in order to assemble a reconceived settler colonial resource frontier. *Slow Disturbance* situates the mission's ministry within an infrastructural zone that aimed to bring the settler colonist fisherfolk up to international medical, financial, and cartographic standards.[84] Each chapter examines how such an infrastructural zone came into being through the incremental reduction of infrastructural difference the mission undertook through its elaborate practices of reform—infrastructural difference could be made to account for the material lack that the "neglected" settler fisherfolk experienced. "Infrastructure is by definition future oriented," Cowen writes; "it is assembled in the service of worlds to come. Infrastructure demands a focus on what underpins and enables formations of power and the material organization of everyday life."[85] The Grenfell Mission staked its claim in remaking and projecting this particular North Atlantic colonial world. Their infrastructural work was a case of both imagining alternative infrastructures to those of the prevailing and usually inequitable imperial and capitalist resource economies while also making that work complicit in the maintenance of a settler colonial project.

This specificity gives the minor Grenfell Mission story the capacity to shift current conceptions of settler colonial infrastructure toward a nested and almost circular history that oscillates between repair and maintenance stem-

ming from an original, if drawn out, settlement of dispossession. The settler colonial project itself becomes a metaphoric road that has to be constantly maintained, filled in, touched up, and tweaked in going from dirt to gravel to asphalt. The Grenfell Mission was precisely engaged in service to the building of *multiple* worlds to come, equally material as spiritual, which makes of their infrastructural work itself a part of its homiletic practice. As the chapters that follow bear out, infrastructure for the mission was the "process of relationship building and maintenance" of both material standards of improvement and the modes of existing within those standards, with both of these substantively modified by the prevailing ecological conditions of northern Newfoundland and Labrador.[86]

As "The Way It Was, St. Anthony, 1959" will touch on in more detail, it is the Grenfell Mission's infrastructural legacy that stretches on most definitively into a future that is still in the making. This processual and time-based conception of mediation is also one that can extend to phenomena, such as infrastructure, that are process-based, future-oriented, and encompass human and nonhuman agencies.[87] Attending to the forms of infrastructural mediation that produce them across resource frontiers can allow for an apprehension of their becoming, that they are relationships which emerge, that are durational. In the early days of the twentieth century, the Grenfell Mission intuited that it was through infrastructure building that a reformed colonial reality could come into being. Infrastructure was the impetus and product of an imperial resource frontier's real and imagined geographies. In a settler state such as Canada, and as Innis delineated in his tracing of the resource routes drawn by the fur trade and other extraction-driven forms of colonial commodity production, infrastructure would become concretized as a phenomenon that is at once ecological and social, material and relational—as Berland so aptly puts it: "The wheat cannot be understood separately from the train, and vice-versa."[88] So too, today, the promise of fish in a place such as St. Anthony, the mission's former headquarters, cannot be understood separately from the infrastructural work that the Grenfell Mission put in over the course of much of the twentieth century. What lies both behind and beyond this past promise of fish and, more specifically, the promises of North Atlantic extractions to come? The answer lies outside of the realm of the cold-water shrimp fishery that has gained momentum in northern Newfoundland over the past decade or so. Behind this commitment to extraction lies the imaginative capacity that inheres in infrastructure building. Alternatives to prevailing conditions emerge when infrastructure is built. This was a foundational principle that the Grenfell Mission articulated through their evangel-

ical lens—maintenance and repair of infrastructure meant the maintenance and repair of fisherfolk lives. (I address this in more detail in chapter 2.)

This commitment to a conception of infrastructure that is hard as well as soft, material and social, echoes current investments in staking a sense of hope in the alternative politics (and lifeworlds) certain infrastructural commitments can enact. I extend and articulate Berlant's understanding of "living mediation," which parallels Kember and Zylinska's understanding of the process, in order to draw attention to how infrastructure can move along with and reflect a given social formation's relational becoming.[89] Infrastructural mediation is suggestive of potential re-form as well. This echoes the Grenfell Mission's mobile conceptions of infrastructural care and work that could sustain the emergence of alternative economic and social conditions for the settler fisherfolk. It is the very longevity of the mission, with a presence in the colony, then province, from the 1890s until the 1980s, that provides a slowed down, colonial lens through which to apprehend the making of a settler infrastructural world: "What constitutes infrastructure in contrast are the patterns, habits, norms, and scenes of assemblage and use. Collective affect gets attached to it too, to the sense of its inventiveness and promise of dynamic reciprocity."[90] How to track across this processual reciprocity? How to make out, through immersion in the formative moments of these practices of infrastructural design, maintenance, and repair, infrastructures as mediating processes?

It is also here that the mission's infrastructural work exceeds its missionary institutionalizing frame. Grenfell often characterized the mission's work as self-eliminating. In time, the fisherfolk would be fully independent, healthy, faith-abiding, and productive settler colonists once more. In the final issue of the Mission journal, *Among the Deep Sea Fishers*, which appeared in July 1981, Dr. Peter J. Roberts, then executive director of Grenfell Regional Health Services, opens the issue with his impressions of the "process of change" for the mission that was coming to an end.[91] Roberts uses the trope of a single trip on the mission plane, one of innumerable routine flights he took on the Northern Peninsula, from Roddickton to Deep Harbour, to review the IGA's past in what he admits is selective and sped-up recall. "One cannot consider life in this area without knowing 'the Mission,'" he writes. "Undoubtedly, there was life here before the Mission and there will be life here after it is gone, but as long as it existed the IGA was an essential part of the life of Northern Newfoundland and Labrador."[92] In an echo of Grenfell's own moral purposefulness, Roberts sets out the essential, enduring core of the mission: "This trip through time clearly isolates the essential fact that people have served with,

and for, their fellows and that no matter how grand or menial their work may have been they have contributed to this worldly life. No mere detail must obscure this fact for herein lies the greatest achievement: the Mission provided the means for all these people to serve their fellow man."[93] This is the above all else infrastructural collective affect that lives on from the Grenfell Mission's enduring commitment to infrastructural mediation. It was and is an alternative material and social infrastructure that has attained a regional reality in northern Newfoundland and Labrador, a settler infrastructure of repair and renewal that has settled into the current real and imagined boundaries of its North Atlantic resource frontier. Environmental media studies, and the environmental humanities more broadly, can begin to attend to the submerged affective registers that are shared, shaped, and coextensive between human and nonhuman agents and that are set into relation by infrastructural arrangements.

The case of St. Anthony, as a sited placeholder for the mission's regional influence as a whole, exemplifies the tendency to overlook mediation as a "process of change," as Roberts would have it, which takes place between real world institutions, people, and diverse human and nonhuman infrastructures. Mediation is not only oriented toward a movement of channeling and becoming; it is also a process capable of registration and stasis. Mediation can be cyclical and take place in situ. Today, St. Anthony, with its deep harbor and a long relationship to the Atlantic at its mouth, has a fifty thousand square foot cold storage facility, factory-freezer trawlers that sit at its edge, and an impressive communications antenna atop the rise that marks its North Atlantic entrance. It has a shrimp-processing facility, jointly owned with Clearwater Seafoods, that processes roughly five and a half million pounds of cold-water shrimp per year.[94] It has a tourist trade built up around the Grenfell Interpretation Centre and the whales, icebergs, and majestic scenery that are a short boat ride away. It has the Charles S. Curtis Memorial Hospital, an institution that serves the Northern Peninsula and Labrador for a range of specialized medical services. It has the Viking Mall, St. Anthony Elementary School, Harriot Curtis Collegiate, and the Polar Centre, which comprises a hockey arena, conference center, and an indoor walking track. St. Anthony has roads, streetlights, a traffic light, a sewer system. Within the province cum colony's history of remote, poverty-stricken outport communities, St. Anthony would seem to have it all. Yet what it lacks is an open-ended and secure sense of a future. As with many industries in the province, St. Anthony's future is seasonal. A looming threat is the onset of a prolonged economic winter. To a serious degree, these are problems of infrastructural mediation, that is, a

resource-driven societal conjuncture defined by its infrastructural networks of exchange, time, and distance. What the town does nonetheless possess is a profoundly anchoring past that is shaped by the affective ties the mission's infrastructural care and work performed over so many decades. It is a place of settled infrastructure. While no longer the missionary outpost of old, St. Anthony is sustained through its own performance of the minor and marginal Grenfell Mission story. Its residents, particularly those who experienced the heyday of the mission's influence in the 1950s, can attest to the "inventiveness and promise," to the "dynamic reciprocity" that inhered in what the mission built, arranged, made happen—an affective settler infrastructure that lives on in all manner of community groups, voluntarism, town festivals, and a diffuse pride in "the way it was" made.[95] "Alternative worlds require alternative infrastructures," Cowen writes, "systems that allow for sustenance and reproduction."[96] Resource frontiers give rise to a horizon of infrastructural worlds—settler, colonial, and settled.

FIGURE I.5. Signage for the Viking Mall in St. Anthony, Newfoundland and Labrador, 2011. Photograph by author.

INTRODUCTION

1. Galloway, Thacker, and Wark, *Excommunication*, 2.
2. See Bolter and Grusin, *Remediation*.
3. Guillory, "Genesis of the Media Concept."
4. See Parks, *Rethinking Media Coverage*.
5. Tsing, *Friction*, 35.
6. Berlant, "Commons," 393.
7. Kember and Zylinska, *Life after New Media*, 42.
8. *Toilers of the Deep* was the official magazine of the Royal National Mission to Deep Sea Fishermen, a Protestant missionary organization that originally sponsored Grenfell to visit the colony of Newfoundland in 1892.
9. Of late the proper noun "Grenfell" has become synonymous with the Grenfell Tower fire that devastated North Kensington, London, in 2017. The tower took its name from Grenfell Road that ran along its southern edge, with the thoroughfare named after Field Marshal Francis Wallace Grenfell, a British army officer who was active in imperial military activities in North Africa in the late nineteenth century. There is no real parallel to draw between the neglect that caused the 2017 fire and the Grenfell Mission story. They both reside in the semantic resonance of this British proper noun; stories that inhere in the commemorative and everyday sites of the British imperial project.
10. Rompkey, *Grenfell of Labrador*, xiv.
11. Stoler, *Along the Archival Grain*, 7.
12. See Tsing, *Mushroom at the End of the World*.
13. Tsing, *Friction*, 37.
14. Parks and Starosielski, introduction, 5.
15. Stoler, *Along the Archival Grain*, 7.
16. For an articulation of this tension in a parallel subarctic context, see Piper, *Industrial Transformation of Subarctic Canada*.
17. Cited in Cameron, *Far Off Metal River*, 17.
18. See Bavington, *Managed Annihilation*.
19. Tsing, *Friction*, 36.
20. See Gómez-Barris, *Extractive Zone*.
21. The first Moravian settlement was established in Nain in 1771, with the pres-

ence of members of this Protestant Episcopal church in Labrador dating to the mid-eighteenth century. The Moravian sphere of influence in the region would continue for nearly three centuries and constituted the first Christian mission to an Inuit community on the territory of what is now known as Canada. See "The Moravian Church," Newfoundland and Labrador Heritage, http://www.heritage.nf.ca/articles/society/moravian-church.php; and Rollman, *Labrador through Moravian Eyes*.

22. See Grenfell, *Vikings of Today*.

23. Warwick Anderson's analogous treatment of American physicians working in the Philippines highlights how colonized Filipino bodies had to be set apart and differentiated from the potentials of white physiology: "In the tropics, then, American scientists and physicians felt compelled to reinvent their whiteness and harden their masculinity. Alongside the science of native pathology, health officers developed a positive and perhaps sadly overassertive science of white physiology and mentality. White male bodies and white male minds were repeatedly differentiated from those of Filipinos and insulated from apparently hostile and degenerative surroundings, especially from moist heat, germs, and Filipino social life. Physicians sought to construct a white corporeal armature—a hard, sporty indifference—to their multiply challenging milieu. But often their whiteness and manliness proved disappointingly fragile or corruptible." Anderson, *Colonial Pathologies*, 7.

24. Tsing, *Friction*, 37.

25. Walker and Starosielski, "Introduction: Sustainable Media," 17.

26. Peters, *Marvelous Clouds*, 3.

27. Peters, *Marvelous Clouds*, 14.

28. Peters, *Marvelous Clouds*, 17.

29. Starosielski, *Undersea Network*, 17–18.

30. Prowse, *History of Newfoundland*, xix.

31. "Report of the Superintendent," *First Annual Report of the International Grenfell Association* (1914), 10–11, MG 63.2207, Grenfell Mission Leaflets and Booklets, New England Grenfell Association Records.

32. The mission's industrial department was essentially a homecraft industry that sought to combine the advantages of a readily available labor force (women at home, especially in the winter months; patients convalescing; fisherfolk suffering a debilitating illness or injury that did not allow them to return to the fishery and so had to find other employment) and materials (wood and a locally available stone known as labradorite). The department, as one of the most enduring legacies of the mission (handicrafts are still a part of the local economy; see Grenfell Interpretation Centre, Grenfell Handicrafts Online Store, accessed May 27, 2020, http://www.grenfell-properties.com/handicrafts), which tells a fascinating story that connects Jessie Luther, a pioneer in the occupational health movement and an early contributor to Jane Addams's Hull House movement in Chicago, with voluntary export campaigns of silk stockings from metropolitan centers in the United States and Canada destined for northern Newfoundland and Labrador and the production of hooked mats. For a more comprehensive account, see Laverty, *Silk Stocking Mats*; and Rompkey, *Jessie Luther at the Grenfell Mission*.

33. This ambitious project was opened in 1911. Earlier that same year, at the outset of

construction, King George V, upon pushing a button in London, laid the building's cornerstone via an early relaying electrical mechanism. Made of brick and reinforced concrete, on designs donated by the prominent New York architectural firm of Delano and Aldrich, and with a substantial estimated construction cost of $150,000, it occupied a prominent site in the center of St. John's. Intended to function as affordable lodgings run at a reasonable rate, it also was meant to keep the itinerant sailors, fishermen, and female workers, among others, out of the nefarious drinking establishments and lodging houses near the waterfront. "The basement contained a cobbler's shop where men could repair their shoes, a laundry where they could wash their clothes, a forty-five foot swimming pool, and a bowling alley. The main floor featured a large hall that could seat 350, a dining-room, a reading room, and a temperance bar. The third and fourth floors consisted of bedrooms, the upper floor reserved exclusively for the use of women in the fishing industry." Rompkey, *Grenfell of Labrador*, 171. It was a white elephant of a project from the start, and problems persisted in its management.

34. See Ruiz, "Grenfell Cloth."

35. Cited in Parks and Starosielski, introduction, 14.

36. Parks and Starosielski, introduction, 14.

37. Kember and Zylinska, *Life after New Media*, xiii. Richard Grusin's understanding of "radical mediation" is in line with this focus on the processual and evolutionary qualities of mediation as a philosophical category, however he foregrounds, through Alfred North Whitehead, Gilbert Simondon, and Karen Barad, the term's "ontogenetic" capacities and how it can exceed the retention of "communication" as its paradigmatic twentieth-century reference point; see Grusin, "Radical Mediation."

38. See Gabrys, *Program Earth*.

39. Kember and Zylinska, *Life after New Media*, 21.

40. Kember and Zylinska, *Life after New Media*, 19.

41. Kember and Zylinska, *Life after New Media*, 19.

42. Kember and Zylinska, *Life after New Media*, 1.

43. Cameron, *Far Off Metal River*, 12.

44. Sobchack specifies that these "family features" include "a valorization of media in their concrete particularity rather than as a set of abstractions; media as material and structures (in their broadest and most dynamic sense) rather than as subaltern 'stuff' subject (and subjected) to theory or metaphysics; media practice and performance as a corporeal, instrumental, and epistemic method productively equal to methods of distanced analysis; description of media's materials, forms, structures, and operations rather than the interpretation of media content or social effects; media's formal and epistemic variety rather than their remedial similitudes; and, finally (at least in this litany), media, in their multiplicity, rupturing historical continuity and teleologies rather than supporting them." Sobchack, "Afterword," 327.

45. Cameron, *Far Off Metal River*, 25.

46. See Parrikka, *Medianatures*.

47. See Toland, *A Sort of Peace Corps*.

48. See Spice, "Fighting Invasive Infrastructures"; and Dafnos and Pasternak, "How Does a Settler State Secure the Circuitry of Capital?"

49. Stoler, *Duress*, 5.

50. Stoler, *Along the Archival Grain*, 1.

51. I first came across this phrase during a tour of Francis Patey's basement workshop. A local historian in St. Anthony, Patey has written a number of books on the Grenfell Mission and life in the region in the early twentieth century. The phrase appeared on cut-out panels that were glued to the front of miniature wooden fishing stages that Patey was making to sell at St. Anthony's Come Home Year event in 2013.

52. Stoler also equates consequential "minor" histories with Michel Foucault's description of the statement-event: what "emerges in its *historical irruption*; what we try to examine is *the incision* that it makes, the irreducible—and very often tiny—emergence." Stoler, *Along the Archival Grain*, 7. This event-driven character of minor history is also reminiscent of Kember and Zylinska's notion of the "cut" (following the analogous poststructuralist tradition of Jacques Derrida) that media studies scholars must make when trying to parse the media flow of mediation; see Kember and Zylinska, *Life after New Media*, xvi.

53. From the scholarly to the sensationalistic, the mission has been treated across a number of genres of study and works of the imagination. Ronald Rompkey's scholarly work is the touchstone in the field, and while I have already noted several of the memoirs he has edited, I should also include *Labrador Odyssey* and *The Labrador Memoir of Dr. Harry Paddon*. The accounts of volunteer nurses, and they are numerous, are mostly to be found in issues of the International Grenfell Association journal, *Among the Deep Sea Fishers*. A few book-length exceptions are Elliot Merrick's *Northern Nurse*, a recounting of his wife's experiences working for the mission in Labrador; Edith Tallant's work of fiction, *The Girl Who Was Marge*; and Patricia O'Brien's edited anthology, *The Grenfell Obsession*. A later account of the mission, given by one of its principal physicians, can be found in Gordon Thomas's *From Sled to Satellite*. For an overview of recent mission literature see Hiller, "Grenfell and His Successors." Finally, St. Anthony–born former forest ranger turned novelist Earl B. Pilgrim has dramatized many of Grenfell's most adventurous encounters and endeavors in *The Captain and the Girl* and *The Day Grenfell Cried*.

54. Edwards, "Infrastructure and Modernity," 186.

55. Peters, *Marvelous Clouds*, 38.

56. See, by way of example, Maxwell and Miller, *Greening the Media*; and Bozak, *Cinematic Footprint*.

57. Parks and Starosielski, introduction, 14.

58. Hayles, "Simulated Nature and Natural Simulations," 413.

59. Heise specifies: "The analysis of the virtual territories of media environments remains incomplete without a consideration of the competing material territories of built and natural environments. Just as environmentalists need to address the ways in which recent technologies have altered our experience and conceptualization of the natural, media theorists need to find ways of relating the global connectedness of virtual space back to the experiences of physical space that individuals and communities simultaneously undergo. Such a move toward a more general ecology of space would be an important step in the 'greening' of media ecology, as well as in the investigation

of 'posthuman' identities that unfold at the interface of nature and technology." Heise, "Unnatural Ecologies," 168.

60. For an analogous treatment of a media theory submerged across its aquatic dimensions, see Jue, *Wild Blue Media*.

61. See Innis, *History of the Canadian Pacific Railway*, *Fur Trade in Canada*, and *Cod Fisheries*.

62. See Star and Ruhleder, "Steps toward an Ecology of Infrastructure."

63. Young, "Innis's Infrastructure," 240.

64. See Evenden, "Northern Vision of Harold Innis"; Berland, *North of Empire*; and van Wyck, *Highway of the Atom*. As Berland specifies: "Innis theorizes place as a spatial, temporal, and economic entity but takes into account no living place in particular. The technologies that produce his centers and margins never encounter the everyday lives, the complex mediated power dynamics, the lively vestiges of myth and memory, the diverse imaginative activities of real men and women. It is this omission, not his attention to technology and space in the history and practice of empire, that makes Innis vulnerable to the charge of determinism." Berland, *North of Empire*, 96. More recently, Young nuances Innis's examination of the fur trade economy by emphasizing how "colonization was enacted as a slow, sedimentary, and violent historical event." Young, "Innis's Infrastructure, 240.

65. Peters, *Marvelous Clouds*, 18.

66. As Macarena Gómez-Barris notes: "Therefore, the extractive view sees territories as commodities, rendering land as for the taking, while also devalorizing the hidden worlds that form the nexus of human and nonhuman multiplicity. This viewpoint, similar to the colonial gaze, facilitates the re-organization of territories, populations, and plant and animal life into extractible data and natural resources for material and immaterial accumulation." Gómez-Barris, *Extractive Zone*, 5.

67. See Barney, "To Hear the Whistle Blow"; Bonnett, *Empire and Emergence*; Buxton and Acland, *Harold Innis in the New Century*; Buxton, *Harold Innis and the North*; and van Wyck, *Highway of the Atom*.

68. Innis, *Cod Fisheries*, 482.

69. As Innis notes, systems derived from commercialism were often heavily subsidized, relied on protectionist measures, and favored short-term credit. By way of contrast, the touchstones of free market competition, a reliance on the acquisition of technologies to increase efficiencies in production and distribution and long-term credit were the defining characteristics of capitalism that were gradually integrated into the colonial fishery. Innis, *Cod Fisheries*.

70. Innis, *Cod Fisheries*, 482.

71. Berland, *North of Empire*, 78.

72. Tsing, *Friction*, 37

73. Tsing, *Friction*, 37

74. See Barney, "To Hear the Whistle Blow"; and Starosielski, *Undersea Network*. Barney calls for the emergence of a form of "critical *agri*cultural studies." Barney, "To Hear the Whistle Blow," 7.

75. Van Wyck, *Highway of the Atom*, 19.

76. Cited in Rompkey, *Grenfell of Labrador*, 38.

77. Cited in Rompkey, *Grenfell of Labrador*, 41.

78. Letter from Wilfred Grenfell to E. A. B. Willmer, February, 23, 1931, MG 63.164, Grenfell Letters, Grenfell Association of Great Britain and Ireland Papers.

79. This dimension of the Grenfell Mission story echoes Edward Jones-Imhotep's recent articulation of the post–World War II Canadian nation-state as both a "natural object defined by distinctly 'Northern' upper-atmospheric phenomena" as well as "a technological space of uniquely powerful, widespread radio failures that threatened the technological integrity of the nation." The mission sought to respond to its surrounding ecological conditions while also trying to improve the extractive relationships fisherfolk were fashioning in response to them. "Decay, degradation, wear, cracking, and corrosion are also 'natural' processes," Jones-Imhotep writes. "Rather than opposing nature or blending seamlessly with it, technologies have figured throughout history as media whose problematic behavior expresses and even defines the natural. If technology is society made durable, then there are crucial episodes, signal instances, where nature is technology made fallible." Jones-Imhotep, *Unreliable Nation*, 3–4 and 12–13.

80. Gregory Dreicer traces the relationships between infrastructure and nation building: "Technological objects serve as ideal containers for nationalistic views. They allow feelings about nativenesss and foreignness to assume a tangible form. Moreover, infrastructure does seem to reflect the state of the nation by demonstrating a government's ability to maintain the networks that enable the nation to function." Dreicer, "Building Bridges and Boundaries," 162.

81. Peters, *Marvelous Clouds*, 37.

82. Cowen, "Infrastructures of Empire and Resistance."

83. Cowen, "Infrastructures of Empire and Resistance." Andrew Barry picks up on a similar thread spanning the posts that appear in *Cultural Anthropology*'s the Infrastructure Toolbox series: "The infrastructures glimpsed here have a history or, rather, they are the products of multiple histories." Barry, "Discussion: Infrastructural Times."

84. Ashley Carse notes that geographer Andrew Barry "uses the term *infrastructural zones* to describe the emergent and striated spatial forms created by the reduction of differences between systems via common connection standards." Carse, *Beyond the Big Ditch*, 12.

85. Cowen, "Infrastructures of Empire and Resistance."

86. Carse writes: "I emphasize infrastructural work—a term used by science, technology, and society scholar Geoffrey Bowker—to foreground the variety of organizational techniques (technical, governmental, administrative, environmental) that create the conditions of possibility for rapid and cheap communication and exchange across distance. As scholars have shown, infrastructure does not refer to any specific class of artifact, but to a process of relationship building and maintenance." Carse, *Beyond the Big Ditch*, 11. Carse's efforts at extending Star and Ruhleder's foundational work toward its ecological dimensions highlights how infrastructure and environment making are often one and the same process.

87. "First, infrastructure is not a specific class of artifact or system, but an ongoing

process of relationship building," Carse writes. "Seen in this way, engineered canals and highways are surprisingly social and ecological. As temporary lines across active environments that erode, rust, and fracture them, infrastructures advance and retreat in relation to the capital and labor channeled into their construction and maintenance." Carse, *Beyond the Big Ditch*, 5.

88. Cited in Barney, "To Hear the Whistle Blow," 6.

89. Berlant, "Commons," 393.

90. Berlant, "Commons," 403.

91. P. J. Roberts, "Process of Change," 1.

92. P. J. Roberts, "Process of Change," 1.

93. P. J. Roberts, "Process of Change," 2.

94. See the Processing Facilities page of the Clearwater Seafoods website, accessed February 18, 2014, https://www.clearwater.ca/en/ocean-to-plate/processing-facilities.

95. Berlant nuances this understanding of the evolving relationalities between affect and the temporal horizons of its infrastructural emergence: "The political and epistemic problem for the politically autopoetic—which is what all world-creating subjects in common struggle are—is that the placeholders for our desire become factishes, fetishized figural calcifications that we can cling onto and start drawing lines in the sand with. . . . What remains for our pedagogy of unlearning is to build affective infrastructures that admit the work of desire as the work of an aspirational ambivalence. What remains is the potential we have to common infrastructures that absorb the blows of our aggressive need for the world to accommodate us and our resistance to adaptation and that, at the same time, hold out the prospect of a world worth attaching to that's something other than an old hope's bitter echo. A failed episode is not evidence that the project was in error. By definition, the common forms of life are always going through a phase, as infrastructures will." Berlant, "Commons," 414.

96. Cowen, "Infrastructures of Empire and Resistance."

THE WAY IT WAS, ST. ANTHONY, 1959

1. Patey's numerous books include *The Jolly Poker*, *The Grenfell Dock*, and *A Battle Lost*, all of which document the history of the region, its struggle to maintain a seal fishery, and many of its economic and cultural traditions.

2. Tsing, *Friction*, 28–29, emphasis added.

3. See Starosielski, *Undersea Network*, 14.

4. Susan Leigh Star and Karen Ruhleder, quoted in Parks and Starosielski, introduction, 9.

5. Berlant, "Commons," 403. Van Wyck remarks how this territorial archive is bound up with the memory work enacted by the Dene, who were employed to mine and transport uranium extracted from the Eldorado mine in the Northwest Territories and who decades later would travel to Japan to apologize for what they saw as their deferred moral complicity in the effects of the atomic bombs; dispersal occurs across the land and is registered across generations. Van Wyck, *Highway of the Atom*, 18–21.

6. See Mitchell, *What Do Pictures Want*? Mitchell emphasizes the "worldmaking" ca-