

Birdseye's Frosted Possession: Processing, Storing, and Transmitting the Gift of Inuit Thermocultural Knowledge

MARCEL BROUSSEAU
Portland State University

If Clarence Birdseye had taken nothing else from four years in the subarctic, the white naturalist and fur-trader came away with a survival story, published in the magazine *Outing* in November 1913. “Camping in a Labrador Snowhole” recounts the voyage of Birdseye, his dog team, and Metis¹ driver Will Martin, as they travel from the settlement of Rigolet through the frigid winter landscape of southern Labrador. As it traces a route across the ice of Hamilton Inlet, Birdseye’s narrative reveals a web of relationships, characterized by stopping places—or “grub depot[s]” as Birdseye calls them—where Birdseye and Martin meet local families and share food, stories, and information.² The story takes its adventurous turn as Birdseye and Martin try to push through a blizzard to the coastal settlement of Flat Water, only to be stranded amid blinding gales and snowdrifts. Surviving two nights in the storm by building a snow cave, Birdseye and Martin continue their journey when the weather shifts, but the narrative ends abruptly as the travelers reach another community, “two shacks” at Back Bay, metonymized by the narrator as “warmth and sleep.” Birdseye’s concise narrative of wilderness craft and fortitude clearly appealed to the editors of *Outing*, who framed it as a tale of discovery, stating “How cold is thirty below? Mr. Clarence Birdseye found out on the Labrador Coast last winter ...” Accordingly, Birdseye’s narration excitedly addresses a curious reader: “Do you know how cold -30 is, with the wind a gale and the world as smoke with driving, stinging snow?”³ Amid such gusts of poesy, the matter-of-fact ethnography of “Camping in a Labrador Snowhole”—its milieu of local toponyms, Inuit and Metis family names, foods, and tools—becomes a “remote, exotic, and un-

familiar northern” fantasy—an “attraction,” in Bruno Cornellier’s words, “aesthetically extracted and exalted by ... artistic flair.”⁴ The better for Birdseye the author, who went on to post two more pieces to *Outing* before abandoning his failing fur-trading business in 1917 and leaving the hinterlands of the North.⁵

Birdseye’s aesthetic extractions became a colorful backdrop for what he ultimately took from Labrador. On March 2, 1930, newspapers in Springfield, Massachusetts printed a new installment of Birdseye’s adventures, in the form of a full-page advertisement rhetorically fit for *Outing*. Gone from this story were the Inuit and Metis, so-called grub depots, shacks, and even dogs. The exotic and unfamiliar North remained, with only a proud frontiersman—a scientist and gourmand—alone in a cabin, truly learning the secret of the cold:

Up in the snow-wastes of Labrador, on the ragged edge of the world, Clarence Birdseye, the Massachusetts scientist, learned about cold—the kind of Arctic cold that freezes your breath and bites to the bone. He saw fish drawn through a hole in the ice congeal in the middle of a flip; he saw the deer carcass he hung outside his cabin door freeze solid in the space of an hour. And when he cooked this meat and found it finer in flavor than anything he had tasted in the States, he realized that intense, sub-zero cold can preserve freshness in food as nothing else can ... With this discovery, the whole future course of food history was affected. For out of this discovery has come the Birdseye Quick-Freezing Process ...⁶

His survival story rewritten as an invention story, Birdseye became Birds Eye, the name of a novel series of comestibles: frozen cardboard packages of peas, spinach, raspberries, loganberries, cherries, and various meats and fish.⁷ This commercial field test, wherein ten groceries in Springfield were supplied with newly invented freezers and twenty-six different Birds Eye-brand “frosted foods,”⁸ signaled what Birdseye would call “the birth of an industry,” a gambit that became a market worth fifty-five billion dollars in sales in the US and one hundred-fifty billion dollars globally by 2019 estimates.⁹

Birdseye’s role in the development of this industry is historicized differently depending on generic contexts. While the journalist and popular nonfiction writer Mark Kurlansky biographized Birdseye as a singularly curious pioneering inventor, academic historians such as Oscar E. Anderson and Mark W. Wilde have decentralized Birdseye as but one actor among many innovating within the industrializing early-twentieth century economy of frozen food.¹⁰ Regardless of their methodological distinctions, some common themes link these interdisciplinary accounts: indisputably, mechanical quick-freezing enacted a paradigm shift in the technical capacity for and cultural understandings of storing food. Furthermore, whether or not he invented the technology, Birdseye—who sold his business and patents to the Postum Company and

Goldman Sachs for twenty-three and a half million dollars in 1929—became the icon of the transnational development of the frozen food industry.¹¹ Finally, and most importantly for this essay, Birdseye’s experiences among Inuit and Metis communities in Labrador represent a complicated archeology that cryptically and ambivalently determines the cultural practice of frozen food.

In what follows, I draw on Indigenous studies and media studies approaches to reframe the discourse surrounding Birdseye’s agency in the creation of the frozen food industry. I argue that Birdseye developed his quick-freezing method through what Aileen Moreton-Robinson (Goenpul) calls “white possession,” whereby Labrador Inuit and Metis knowledges were expropriated through a “mode of rationalization” that pits Indigeneity and whiteness on opposite sides of a nature/culture divide.¹² Birdseye’s epistemological possession occurred subtly, in the course of events of local, trans-cultural knowledge sharing in Labrador, and in the subsequent revision of these knowledges through discourses of scientific experimentation and industrial production in the United States. In this process, quick-freezing exemplifies a form of “acquired property ... enclosed and extracted from the common” through Birdseye’s expropriation and industrialization of Indigenous knowledge.¹³ Labrador Inuit and Metis epistemologies of frozen food became aesthetic extractions “servicing the conditions, practices, implications, and racialized discourses” of industrial capitalism—a system that conversely came to change “traditional Inuit diet all over [what is now] northern Canada.”¹⁴ However, Inuit and Metis epistemologies survive and subvert “white possessive logics.”¹⁵ It is necessary to reposition Birdseye amid genealogies that reveal the “asymmetrical relations of power” that inform the global industry of quick freezing, while reflecting upon the modes of adaptation and self-determination practiced by Indigenous Labradorians.¹⁶

It is historically well-established that Inuit and Metis practices guided Birdseye’s experimentation with quick-frozen food. Kurlansky asserts, citing Birdseye’s own writings, “fast freezing was a traditional idea that came from the Inuit. All his life [Birdseye] credited them.”¹⁷ Notwithstanding the absence of Inuit from the aforementioned advertisement of the Birds Eye field test in 1930, Birdseye did accredit Inuit through oblique and inconsistent references, which were promulgated and sometimes embellished in subsequent historiography. For example, Birdseye wrote in 1941, “[my] first winter [in Labrador in 1912–13] I saw natives catching fish in fifty below zero weather, which froze stiff almost as soon as they were taken out of the water. Months later, when they were thawed out, some of these fish were so fresh that they were still alive! ... I discovered, too, that birds, game, and fish frozen very rapidly in extremely cold weather are much more juicy and delicious than those frozen slowly in the relatively mild early fall and spring frosts.”¹⁸

By 1960, four years after Birdseye’s death, the agency of the story had shifted, with a *New York Times* article reporting that, “diverse stories ... have been told about the experience that led [Birdseye] to become interested in freezing foods ... One amusing tale is of [Birdseye] the young trapper, crouched over a hole in the ice, fishing

Eskimo style [and] toss[ing] his catch high over his shoulder [where] the fish froze immediately in the rush of frosty air. Their flavor subsequently was discovered to be superior to that of fish transferred to dry land in a more orthodox manner.”¹⁹ Although each anecdote indicates Inuit cultural practice, together they enact a progressive dispossession that pushes Inuit actors further and further to the historical margins while still claiming the heritage of their knowledge. This discursive process allows Inuit epistemologies “[to] be excluded or turned into peripheral or relational objects of knowledge or topics, in contrast to subjectively unmarked white Western epistemologies, rationalities, and authorship/authority.”²⁰ It also reflects the “racialized structural power relations that [produce] the legal conditions” within which Inuit may be symbolized and stereotyped without their consent to authenticate the identity of frozen food corporations, in advertising imagery, and in brand names such as Iglo, Eskimo Frozen Foods, or the only recently rebranded Eskimo Pie.²¹

In its most instrumental definition, the frozen food industry, as inaugurated by Birdseye and General Foods, is a “system [of] production, delivery, and consumption.”²² In order to trace more broadly the ways in which Labrador Inuit and Metis knowledges inspired, were possessed by, and also survive and exceed this industrial complex, I reconsider frozen food as a communication system, characterized by dynamics of processing, storage, and transmission. As conceptualized by Friedrich Kittler, a communication system encompasses more than the sharing of messages; it is also a way of accounting for practices that “control the traffic of persons and goods [and thus] comprise all kinds of media ... from road systems to language.”²³ Insofar as mechanically frozen foods are products of an “industry and its support systems,”²⁴ including standardized and mechanized techniques for killing organisms and transforming them into reusable portions; storing those portions in a manner that manages their integrity in relation to microbiological, physiological, biochemical, and physical changes;²⁵ transporting those portions efficiently; and addressing those portions to potential users through symbolic appeals such as advertising, it can be argued that frozen foods are “things communicated,” and that food itself is a form of data, processed according to cultural commands, transmitted and stored using technical media, and ultimately received by an “information drain,” or digestive system.²⁶

Considering food as data not only recognizes communication of food as informing the basis of shared—or communal—living, it also invokes the etymology of *datum* as something given, gesturing toward the essence of food as symbolically distinct from something killed, or as “something killed that is then suppressed, substituted, or transfigured into a sacrifice.”²⁷ This meaning of food is particularly germane to Indigenous discourses of relationality, which, as Elizabeth LaPensée (Anishinaabe-Métis) declares, define foods “as gifts rather than ‘resources,’” bound up in “a reciprocal relationship with place.”²⁸ As emphasized by Robin Wall Kimmerer (Citizen Potawatomi), honoring and communicating food as a gift is part and parcel of an Indigenous “worldview in which the earth exists not as private property, but as a commons, to be tended with respect and reciprocity for the benefit of all.”²⁹ An

Indigenous, place-based, commonly shared system for communicating food, such as frozen food, comprises technologies and techniques that balance relations among “objects, ideas, and beings”³⁰ in order to preserve the data of food—its essential life-giving qualities—so that it can be shared, consumed, and sustained in its environment.

However, the entangled histories of frozen food show that the Indigenous communication system of frozen food has itself been processed, stored and transmitted from a place-based social system into a globalized one. The food data filling freezers worldwide indexes more than the symbolic and material transmutation of biological substances from living, to killed, to food, to frozen food, packaged and stored within the global cold-chain. Industrially frozen food data also indexes, at every stage of its journey, and in the descriptive packages that mediate its reception as data, a confusion of historical events, genealogical problems, ideological frames, cultural appropriations, and transcultural dialogue. That is to say, your mechanical freezer not only discloses nutritional data, but also by necessity, epistemological data: complicated communicative systems of Indigenous and settler-colonial thermocultural knowledge.

Adapted from Nicole Starosielski’s definition, thermocultural knowledges describe and convey “the modes by which temperature is managed and organized in embodied and culturally specific ways.”³¹ As historical accounts show, Birdseye was given a gift—*datum*—of Inuit–Metis thermocultural knowledge during his colonial adventures in the contact zone of early twentieth-century Labrador. This gift of knowledge enfolded Birdseye into what Debbie H. Martin (Inuit) calls an Inuit–Metis culture of sharing, wherein communal interdependence is affirmed through acts of giving and reciprocity.³² In subsequent commercial ventures Birdseye did not process Inuit thermocultural knowledge as a gift, but as a possession to be stored and transmitted through the modes of Western scientific discourse amid a globalized market economy. In Birdseye’s possession, Inuit knowledges were displaced, stripped of their cultural context, and caricatured for commercial effect. However, Labrador Inuit resiliently retain their thermoculture of frozen food, adapting their “collective traditions, practices and social norms” to the shifting relationalities wrought by the market economy and the global cold chain.³³ In the context of Inuit sovereignty, frozen food is neither a historic adventure nor a progress narrative; it is an ongoing relationship with the gift of food, a communicative system that extends to a contested colonial archive where Inuit food data has been processed, stored, and transmitted without being reciprocated. In the following sections I read this archive as mediating entangled histories of Inuit thermoculture and white possession, gesturing toward what Keavy Martin calls a “reciprocity that ... may still need to occur fully.”³⁴

Processing, or Receiving the Gift

Animals and plants are rendered as food through techniques of processing, which makes food data storable and transmittable. Processing mediates material and environmental conditions, and follows cultural commands, making food into a culturally located object, adapted to communal contexts and the sharing of needs. Sharing, which ends with transmission, begins with processing, with “dividing and apportioning the food, [an act] of inclusion and exclusion” that determines what, where, how, and with whom food will be used.³⁵ Archaeology of Labrador Inuit food practices reveals multiple time-honored techniques of food processing correlated to “innovative methods of [storage, including] dehydration, freezing, fermentation, and preservation of fat and oils.” As Marianne Stopp asserts, historic food processing occurred “within a context of residential and logistical mobility,” as Inuit moved in “small nomadic bands” with the subarctic seasons, hunting, gathering, and storing food systematically. Researching ethnographic records dating to the seventeenth century, Stopp notes “the dissimilarity of Aboriginal food storage and processing approaches to known historic European practices (such as pickling and salting),” marking food processing as a site for the implementation of the coloniality of power, wherein colonization changed Native food practices by selectively devaluing Indigenous knowledges and enforcing European cultural and economic values.³⁶

Indeed, Beatrix Arendt documents how the settlement of Moravians—Protestant missionaries from Germany who “established a [mission] station in Nain in 1771, and expanded their missionary practices along the coast”—gradually transformed Inuit foodways in northern Labrador by implicating them in “an extensive global trade market” wherein Inuit would process food to trade for European goods, and not only for communal sustenance.³⁷ As Lynne Fitzhugh observes, in southern and central Labrador, settler economies emerged with far more secular goals than the Moravians, tied “to outside mercantile interests whose sole objective was the exploitation of marketable resources.” European colonization transformed relationships to food across the Labrador Peninsula, as the “[British] Crown viewed Labrador ... as a pantry to be raided by its mercantile companies.” Alongside the centuries-old trans-Atlantic exploration of the Newfoundland cod fisheries, Labrador became, by the late eighteenth century, the site of “merchant adventurers from ... England and ... rugged Canadian entrepreneurs [and] independent planters” trading in seal, salmon, and most of all, fur.³⁸ Within this colonized economy, Inuit communities strove to continue their customs of land use and occupancy, centered around migratory seasonal hunts, particularly moving inland in late summer to settle in skin tents and hunt caribou, animals which were processed to create “a surplus for the winter months” as they “provided most of the meat, and skin for winter clothing for an entire village.” By late fall or early winter, Inuit returned to their sod houses on the coast, hunted seal on the sea ice, and fished for tom cod through the ice, which stayed frozen until June, when salmon fishing would begin.³⁹

Cycles of seasonal movement persisted despite Moravian strategies to compel northern Inuit to permanent settlement. Indeed, even amid colonizing European populations, “economic life in Labrador [required] considerable mobility” for subsistence in the subarctic environment. Thus, Labrador’s “complex [historic] flow of social orders,” wherein since the eighteenth century “outsiders came and sought, directly and indirectly, to effect change among the people living there,” ultimately generated what Hugh Brody calls “patterns of life ... overflowing” across identities of “Indian, Inuit, and Settler.”⁴⁰ Distinctly “gathered on the landscape,” this multiracial, trans-cultural society historically comprised Innu (Indigenous Montagnais-Naskapi peoples) living mainly in the interior; Anglo-Celtic “liveyers” settled on the southern coasts, Moravian Settlers along the north coast, Metis, or mixed-race “trapping clans” around Sandwich Bay and Lake Melville, and Inuit throughout north, south, and central Labrador.⁴¹ Interlinking this diverse, yet “small and isolated” population, Fitzhugh asserts, are “family trees, Aboriginal and Settler, their roots and branches elaborately entwined [and probably] not exceeding three hundred in number.”⁴² The collectivities of these families are the Inuit and Metis of Labrador, inheritors and witnesses of the changes wrought by continuous contact between Indigenous peoples and “explorers, early settlers, missionaries, and colonial and postcolonial governments.”⁴³

Observing that “food practices are intertwined” with contact and change, Maura Hanrahan posits that three phases of change, namely “disruption, adaptation and transformation,” have distinctly “affect[ed] food acquisition, consumption, and meaning” in Labrador.⁴⁴ Disruption marks the initial devastations of European colonization, with crisis from epidemic disease, but continuation of Native customs. Adaptation describes transcultural exchange, as Inuit incorporated introduced or imported foods like root vegetables and coffee during missionary and mercantile colonization, and as settlers “learn[ed] from the aboriginal people how to survive in [the] harsh environment.”⁴⁵ Transformation accounts for governmental revisions of entire social structures, such as those undertaken by the Canadian settler state in the twentieth century. Transformation meant that new communicative systems—wage labor, commercial food, Inuit relocation to permanent housing with its appliances—integrated and informed Inuit and Metis foodways. Along these lines, new food data—in the forms of chicken, ground beef, pasta, bottled milk, cereal, soda, sugar—filled Inuit and Metis stomachs, and new chronic diseases—obesity, diabetes, atherosclerotic heart disease, hypertension, gall bladder disease, dental caries—transformed Inuit and Metis subsistence economies and health practices.⁴⁶

Birdseye arrived in 1912 at the outset of the transformation phase in Labrador, wherein “national and global integration” forced a “rapid pace [of] economic, technological and social changes” on “relatively isolated self-reliant communities based on hunting and fishing” in the region.⁴⁷ Indeed, the 26-year-old Birdseye was invited to Labrador as an agent of systemic change: Dr. Wilfred Grenfell, leader of the International Grenfell Association and British Medical Officer to the Royal National Mission for Deep Sea Fishermen—whose missionary hospital service served as a

colonial “de facto government” for central and southern Labrador⁴⁸—encouraged Birdseye to found a fox trading and farming business to instigate economic development in the region. Birdseye, for his part, saw it as a potential bonanza; backed by New York investor Harris Hammond, he traveled around Labrador purchasing furs and foxes for breeding in captivity (such a journey was the source for his adventure story in *Outing*), eventually establishing a fox farm at Muddy Bay and building a cottage with the “only bathroom ... on the coast.”⁴⁹ As diverting as Birdseye’s aesthetic extractions of Labrador made his journey out to be, he was in Labrador to extract as much wealth as possible from the venerable Labrador fur-trading economy—then dominated by the Hudson Bay Company—by using husbandry to tame the contingency of trapping foxes. If Birdseye exoticized Labrador as foreign and wild in his accounts, then it may likewise be observed that Labradorians saw Birdseye’s experiment in “fur farming”—requiring the care, feeding, protection, and sanitation of wild animals—as “alien and unnecessarily complex,” not to mention overly optimistic about a “volatile” marketplace.⁵⁰

Birdseye’s optimism reflected his calculation that as a “scientifically conducted business” a fox farm would facilitate a “scientifically conducted industry.” Insinuating himself into the Labrador fur trade, he sought to breed rare black and silver foxes while also trapping common red foxes; to sell black and silver foxes “alive for breeding purposes” for sums of up to forty-five thousand and six thousand dollars a pair respectively; and to sell skins, which could earn up to twenty-five hundred dollars for black foxes, although only twelve dollars for red foxes. In keeping with Grenfell’s logic, Birdseye could not manage such an enterprise all by himself; he would need workers—to whom he would pay wages, stimulating the local cash economy—to travel into the field to trap foxes for breeding as well as for skinning, as well as to feed and tend to the “extremely nervous” foxes, to clean their pens, and to help facilitate their breeding. “The cost of establishing such a farm is prohibitive to the small operator,” Birdseye cautioned his *Outing* readers, while also offering tips, such as “where wild meat and fresh fish are readily obtainable the year round the cost of fox food becomes negligible.”⁵¹ Although promoting fox farming as the progression from primitive trapping to standardized, practicable cultivation, Birdseye implicitly conceded the need for contingent, local knowledge.

Indeed, as Chesley Lethbridge recounts in his 2007 memoir, Birdseye depended on the labor and expertise of Labradorian Metis who fished cod year-round, “caught by net in summer, and caught by hook through the ice in winter.” Lethbridge’s great uncle Garland lived in Sandwich Bay—of which Muddy Bay is a southern cove—and was employed by Birdseye to catch “feed for the fox farm.” His story furnishes an alternate history of Birdseye’s discovery of quick-freezing:

One of [my great uncle’s] duties was to catch rock cod ... Birdseye, taking a keen interest in what his employee was doing, noticed that the quickly frozen fish caught in really

cold temperatures seemed to “flick” back to life when thawed in the house. Uncle Garland told him that it would only happen when it would freeze quickly like that at 20 degrees below zero or more, not on somewhat warmer days, such as five degrees below zero. He also informed him that the fish kept better when it froze like that, and that you could freeze anything using ice and salt.⁵²

Lethbridge’s account exemplifies what Glen Coulthard (Yellowknives Dene) calls “grounded normativity,” or “the modalities of Indigenous land-connected practices and longstanding experiential knowledge that inform and structure our ethical engagements with the world and our relationships with human and nonhuman others over time.”⁵³ Although Garland Lethbridge’s ice-fishing, and his subsequent counsel of Birdseye, occur within an uncommon context—the contracted feeding of captive wild foxes—the practices used by Lethbridge are appropriate to the setting and the season, a customary Inuit mode of processing fish. These methods, imparted over time by Inuit to settlers, became common transcultural knowledge, such that “everyone in Labrador knew that game or fish caught when it would freeze quickly retained its taste and texture.”⁵⁴ A recollection by Harriet White about early twentieth-century ice fishing in the Inuit community of Carawalla, in the Hamilton Inlet—the first “grub depot” described in Birdseye’s survival story—provides a sense of the process as practiced for culinary storage: “In the winter we used to go up around Carawalla Head and catch big tomcods, great, big, old, black ones. We’d walk across the neck and go over and cut great big holes with a tom-cod chisel. When you’d catch all the fish you could, you’d pick ’um up off the ice, put ’um on the komatik [(dog sled)] and haul ’um home. You’d haul ’um home and put ’um up on a scaffold. When you wanted fish you’d just go and chop ’um off and thaw ’um.”⁵⁵

Birdseye, in keeping with Kurlansky’s thesis, was manifestly curious about knowledge such as this; Chesley Lethbridge emphasizes Birdseye’s “keen interest.” As Lethbridge narrates the story, Birdseye’s curiosity leads to a conversation with Garland Lethbridge, and a dialogic relationship ensues, in which Garland Lethbridge begins to teach Birdseye, who by his own admission, “knew nothing about the virtues of quick-freezing, whether accomplished naturally or artificially” before “he went to Labrador.”⁵⁶ Within this dialogue, something transpires between Garland Lethbridge and Birdseye, a breath of information—data—is given to Birdseye, inspiring him. What Birdseye does next is not food processing, but experimentation: As Chesley Lethbridge recounts it, a collaborative science occurs, in which Garland Lethbridge gives Birdseye an idea—that is, allows him to see something outside his experience—and Birdseye tests it for empirical proof:

During Uncle Garland’s term of employment, Birdseye, who had a science background, took Uncle Garland’s idea and

began to work with it. He started doing some simple experimental work such as taking the two fish that was caught at different temperatures, and breaking the flesh of the fish apart. He discovered that a fish that was frozen at the higher temperatures contained a lot more ice crystals than the one that was frozen at the lower temperature. The more ice crystals, the more bacteria would set in and cause the fish to spoil more quickly. Uncle Garland died before the experiment was carried any further. Because nobody in the Lethbridge family understood the importance of the invention, Mr. Birdseye took the idea with him when he left the area, and completed it over time. In 1929, he sold it to General Foods for the sum of twenty-two million dollars, and not a penny went to Mr. Lethbridge's family.⁵⁷

In Lethbridge's account, Birdseye takes Garland Lethbridge's idea twice: once while Garland is alive, and again after Garland's death. There is a sense however, in the story, that the idea, taken and worked on, is reciprocally shared with Garland, during his "term of employment," since the results of Birdseye's analyses are described in Chesley Lethbridge's story. However, Birdseye's process becomes his alone, since, as Chesley Lethbridge describes it, nobody in the Lethbridge family, after Garland's death, understood the particular importance of the observation that ice crystal size and quantity is determined by the temperature at freezing.

What was the importance of this invention? Lethbridge seems to imply that if anyone in his family had understood, they might have been able to change what appears, in hindsight, to have been a dispossession. His concern is not with the mechanical discoveries of Birdseye's analysis, which reveal the molecular processes by which fish frozen quickly in extreme cold are better preserved, something that everyone in Labrador already knew empirically. Lethbridge is reflecting on the understanding that the knowledge of variable crystalline structures in freezing could be a form of capital. As an aspect of the grounded normativity of Labrador Inuit and Metis people, quick freezing was a mode of food processing embedded in a seasonal system wherein meat was salted and dried in the summer and frozen in the winter, in order to create stores for community and family survival. Quick freezing was a necessary cultural practice conditioned by, and connected to, features of the land and the extreme cold. To the outsider Birdseye—already in Labrador to capitalize on the fur trade—quick freezing, as proven by the universal structures of crystal development, was a transportable and salable idea. Although Kurlansky argues that, in his Labrador experiments, Birdseye "was not thinking of plans to launch a new food industry," local testimony tells a different story.⁵⁸ Jessie Luther, a US artist who taught crafts at the Grenfell Mission in St. Anthony, Newfoundland from 1906 until 1916, describes Birdseye as a "roving visitor" to the Mission, pitching "a plan for extensive refrigeration of fish,

and possibly venison as a business venture, his odd name making as much impression as his business among those who, at the time, were not financially interested.”⁵⁹ For Birdseye, whose entire enterprise in Labrador was backed by outside investment, soliciting venture capital was just part of the process.

Storage, or Possessing the Gift

Declaring that Birdseye “took the idea with him when he left the area, and completed it over time,” Lethbridge evokes a historic moment wherein the idea of quick freezing is still in its potential, raw material carried south to the US, where it will be refined. In this sense Birdseye’s so-called discovery follows an established pattern, as outlined by Harold Innis, that in “the northern part of North America economic development is powerfully directed toward ... staples for export to more highly industrialized regions.”⁶⁰ Although an immaterial idea such as quick freezing is not an economic staple, as the basis for an industrial system it reshaped the market for staple products, such as north-Atlantic cod, with far-reaching effects. This industrial reshaping was inaugurated in the US and Europe, not in Labrador. In this sense, Lethbridge’s figuration that Birdseye “took the idea” is an assertion that Birdseye had already processed Garland’s idea for export from Labrador. Indeed, as mentioned above, Birdseye “took” the idea twice: Once, for local experimentation, and again on leaving because he had already made it his possession, stored away as capital.

What happened to Garland Lethbridge’s idea after Birdseye took it to the US? As Birdseye worked to “complete it,” the knowledge given by Lethbridge led him to research the established discourse of frozen food as a communication system, a transatlantic set of practices that began with ice-based refrigeration in the nineteenth century. Based on the commodity of ice, early industrial refrigeration was itself a seasonal, land-based practice. However, mechanization expanded the spatial and temporal potential of commercial food processing through transcendent configurations of storage and transmission, such as Philip Armour’s fin de siècle “networks of refrigerated railcars, icing stations, and branch distribution houses” through which processed meat, not livestock, could be shipped “hundreds of miles” across the US to consumers outside of the natural constraints of perishability. By 1912, the year Birdseye traveled to Labrador, mechanical quick-freezing devices were already being invented in Europe with analyses published; a freezer invented by J.A. Otteson of Denmark was imported by the US Bureau of Fisheries for study and logistical use in World War I. Industrial development increased, as scientific discourse fixated on the necessity of using chilled brine as a medium for artificial quick-freezing,⁶¹ corroborating the grounded normativity of Garland Lethbridge’s declaration to Birdseye “that you could freeze anything using ice and salt.”⁶²

Birdseye’s research and mechanical tinkering—financed by the Clothel Refrigeration Company and his sale of stock, and with consultation from experts such as the chief technologist of the US Bureau of Fisheries, Harden Taylor—led him to develop a

“‘Rube Goldberg contraption’”:⁶³ a freezing machine that employed “metal plates ... in the form of opposed imperforate conveyor belts” that “simultaneously quick fr[oze a] packaged block [of densely-packed raw food] by maintaining the metal plates at a temperature of 20° to 50° below 0° F.” The belts, frozen by constant spraying with a calcium chloride brine, would squeeze the package of food to compress air pockets and transfer cold, completely freezing the package in about “one hour and one quarter” as opposed to the nearly ten hours needed for the common industrial sharp-freezing methods of the time. Birdseye’s innovation in this process was the use of packaging as a medium for containing the food throughout the process, allowing a small, easily frozen quantity of food to become a “quick frozen block, frozen in the package or container in which it is to be marketed.”⁶⁴ The first Birds Eye packages promoted and sold by General Foods after its 1929 acquisition of Birdseye’s company consisted of food wrapped in parchment paper and cartoned in “compact cardboards ... cold-waxed on both sides,” with descriptive text printed on the boxes, explaining the food data inside.⁶⁵ Processed through Birdseye’s method, quick-frozen food was packaged to be protected from the elements of freezing, transferred into storage, and thereafter sold in the same package, with no additional processing in-between.

The problem became convincing people to purchase “premium priced” quick-frozen food, which bore the costs of its experimental manufacture, particularly in the face of “deep-seated prejudice” against commonly sharp-frozen food, and in the midst of the Depression.⁶⁶ As Wilde asserts, this is where the legend of Birdseye was born, through a marketing strategy that capitalized his aesthetic extractions of Labrador and glorified his interactions with Garland Lethbridge through combinations of ethnographic, scientific, and religious rhetoric. Thus, Garland Lethbridge’s idea was also packaged and stored for sale, but in the process, he was compressed, reduced, and frozen out of the Birds Eye-branded narrative. Although Birds Eye’s initial advertisement, as shown above, depicted Birdseye alone in the wilderness, subsequent promotions reiterated an ethnospectacular story of discovery, crediting nameless, voiceless Inuit. For example, the copy in a 1945 advertisement for Birds Eye Frosted Foods—printed as the industry was about to enter a postwar economic upswing—reads:

Twenty-five years ago, far north in the Arctic, a man from the States watched an Eskimo catch a fish.

The Eskimo jerked the fish out of a hole in the ice. The fish flew through the air, landed with a “splat”—and lay there with hardly a wiggle.

It didn’t wiggle, because it was frozen stiff as a poker! In the 50-below Arctic cold, it had frozen almost the instant it hit the ice.

Right then and there a whole new industry was born!

For the man from the states was Clarence Birdseye, a scientist. He discovered that the Eskimo’s quick-frozen fish

kept their fresh flavor and texture for months. But he didn't just marvel at this. In typical American fashion he went home and *did* something about it.

Result—a new food miracle ... Birds Eye Frosted Foods!⁶⁷

Illustrated by Ben Stahl with what can only be described as a caricature of Inuit ice-fishing, the advertisement revels in calculated myth making, dating Birdseye's story to 1920, three years after he left Labrador, and turning him into a passive observer in the Arctic, not a boss contracting wage labor amid a colonial fur market. Most importantly, the advertisement evacuates the historical personage of Garland Lethbridge—a Metis descendent of a longstanding mixed-race community in Sandwich Bay dating to the early nineteenth century—and replaces him with an ethnic Arctic type, an Eskimo, who functions as the object to Birdseye's subject.⁶⁸ In this communicative possession and displacement, Lethbridge's knowledge—and the Inuit epistemologies that informed it—become “anecdotal” data included in Birdseye's story but “exclud[ed] from [his] science.”⁶⁹ This possession of Inuit-Metis knowledge as proprietary anecdotal data functions within what Lisa Lowe calls the “modern liberal humanis[ti]c ... economy of affirmation and forgetting,” wherein Birdseye, as a liberal subject, pursues individual freedom and social progress by spatially “exteriori[zing]” the “unfree” and temporally positing them as an “internal contradiction” that will be overcome by his social system. Lowe's framework makes clear that Birdseye “interpret[ed his] connections and relation” to Lethbridge—and by extension Labrador Inuit and Metis people—by making them geographically exterior—far to the north, across national, racial, and meridional borders—as well as intellectually exterior to science and bound to nature, forgotten agents in the formation of scientific progress.⁷⁰

At the same time, since removing Indigeneity entirely from his progress narrative would reduce the liberating scope of Birdseye's science and elide the referent for his individual overcoming of nature, the Birds Eye advertisement affirms Inuit knowledges, not as enlightened acts, but as primitive, ahistorical modalities conditioning the possibility of Birdseye's technical mastery. In this act of “extracting Inuit” from Lethbridge, Birds Eye takes the objectified Indigenous identity that will work—perform symbolic labor—for its mythology.⁷¹ Birdseye's “white possessive logics” served an epistemological purpose that was also a promotional strategy, establishing Birds Eye as a progress narrative “operat[ing] ... within knowledge production through universals, dominant norms, values, and beliefs.”⁷² Preserving food—and thus protecting its data—is the “most vital, the oldest, largest, most varied, and most widespread, of all human activities,” Birdseye lectured to an audience at McGill University in 1943. Referring frozen food to a universal human condition divided by racialized stages of development, he qualified an epistemological divide between “today[‘s] primitive people [and] highly civilized populations,” wherein “Eskimos [who] keep seal and walrus meat for weeks by burying it in the cold sand” follow “ancient practices” relative to “the perishable food industry” which promised to

overmaster even the “canning and pasteurizing” developed in the enlightened “Christian Era.”⁷³ Delivered under the auspices of his professional role as Consultant to the General Foods Corporation, Birdseye’s remarks were not just theoretical but subtly autobiographical. Connecting “Eskimo” food storage to “Christian” canning, to pasteurization, to “modern” industrial freezing was the proprietary stadial narrative Birdseye’s travels had authorized him to tell. In this return journey north—a quarter-century after, and a thousand miles southwest of his years in Labrador—Birdseye made the characterization and plot of the “entrancing industrial stor[y]” of frozen food evolutionarily unambiguous: “Although the comparative virtues of quick-frozen game and seafoods have probably been at least dimly appreciated for many thousands of years by inhabitants of the Far North, the scientific study of quick-freezing and the first commercial use of quick-frozen products is very recent indeed, dating only from about the year 1915.”⁷⁴

Within this “ideological self-description” by Birdseye, dialogic Native information is stored away, and the Metis grounded normativity represented by Garland Lethbridge is segregated to the other side of a nature/science divide.⁷⁵ Positioning frozen food as an emergent property of modern white society, Birdseye communicated in a “selective fashion,” elucidating the “relations between system and environment” from the perspective of an possessive, internal observer engaged in “boundary maintenance,”⁷⁶ inflecting the system of frozen food according a series of ideological distinctions: primitivity and civilization; Eskimo, Christian, and modern; “dim” appreciation, scientific study, and commercial use; millennia and recency. Furthermore, Birdseye plotted these distinctions as proliferating on a temporal axis, wherein different modes of processing, storing, and transmitting food data are either edited out into the environment, or assimilated into the system as it encloses itself around so-called scientific principles and commercial values. However, frozen food is not a closed system of communication. Its relations with its environment “are not static but dynamic,” meaning the boundaries of the system are open to any number of “channels that conduct causality,” which can redetermine the meaning of the system and the environment.⁷⁷ This is to say that while Birdseye’s self-observation reflected the authoritative position of the scientist and businessman whose eponym marks his white possession of frozen food, he remained but one observer, subject to the communicative biases of the social systems to which he was internalized.

Transmission, or Sharing the Gift

Garland Lethbridge’s idea about quick-freezing food was literally *datum* to Birdseye in Labrador—a gift that entered Birdseye into a Native Labradorian social system that Kimmerer calls “a particular relationship, an obligation of sorts to give, to receive, and to reciprocate.”⁷⁸ In Birdseye’s possession, however, frozen food, as a communicative system guided by Inuit knowledge, was itself processed, stored, and transmitted through “scientific ... assertion[s] of universal authority,” and thus “disengaged from

[the] local social and cultural circumstances” of Labrador.⁷⁹ The data of Inuit frozen food was accepted as a possession through forgetting it as a *giving* by Inuit to Birdseye, and affirming it as a scientific *observing* of Inuit by Birdseye. By affirming what he had seen, but forgetting that it had been given, Birdseye freed himself from his “oblig[ation] to reciprocate the present that ha[d] been received,” left no trace of Garland Lethbridge in the patents that secured his intellectual property, and registered an epistemological debt to a fabled Eskimo, located somewhere to the north, sometime in the past.⁸⁰ Since an aesthetic extraction such as this cannot be addressed, there is no possibility of reciprocity, nobody to be responsible to. However, Chesley Lethbridge recalls a rumor of response from Birdseye, embedded in a logic of petition, wherein the Lethbridge family would have to make themselves known to Birdseye through writing—the very medium that he used to make them forgotten: “There was a rumor circulating at the time in the Sandwich Bay area that if any of Uncle Garland’s family would write to Mr. Birdseye, he would send them some money. No one in the family could write because none of them had a chance to go to school, so instead of his family living in comfort, they died in poverty.”⁸¹ Here, Birdseye’s freedom from responsibility becomes a function of a colonial politics of recognition, as outlined by Coulthard, citing Frantz Fanon: Lethbridge’s family must make themselves known on the “terms, values, and conditions” of the colonizer, not their own, and must thus address their dispossession in the proprietary terms of Birdseye’s white possession, by “identify[ing] with ‘white liberty and white justice,’” which they cannot do without using writing, the proper mode of address. In this way, Birdseye’s freedom from reciprocity is affirmed, not as a factor of his domination of social relations—his “explicit nonrecognition of the equal status of the colonized population”—but as an outcome of the failure of liberal self-determination by Lethbridge’s kin, whose inability to write secures their forgottenness and their poverty.⁸²

Despite Birdseye’s forgetting of Garland Lethbridge’s gift of knowledge, Chesley Lethbridge’s account makes clear that Birdseye was not forgotten by Labradorians. However, to paraphrase Fanon, Birdseye neither needed nor wanted such recognition from the subaltern snow-wastes; what he wanted was industry and markets, Birds Eye in all directions.⁸³ As he proclaimed in 1941, his reciprocity was the sharing of a new and civilizing food communication system with the north. He was returning the gift with commercial and strategic interest, a common idea quickened to a proper technology: “Now, as a result of the idea that came to me while I wintered in Labrador, quick-freezing is making possible more efficient distribution of Dominion produced perishable foods. The Hudson’s Bay Company, in making Canadian produced fruits, vegetables and sea foods available throughout the year by quick-freezing, is making a contribution to the Dominion war economy of 1941 by conserving foreign exchange and developing opportunities for export trade to England and other countries.”⁸⁴

Birdseye’s sense of excitement about the distribution of Birds Eye frozen food across international markets testifies to the major difficulty in the development of

frozen food as a communication system: building an infrastructure capable of transmitting frozen food in properly cold storage, from the point of freezing through the point of sale, and until the point of cooking. A network of controlled cold such as this required new refrigeration machinery beyond the limits of block-ice configurations, such as the refrigerated railcars described above, or the literal iceboxes that were only used by roughly half of US households by the 1920s.⁸⁵ The development of this infrastructure was commercially driven by General Foods—who had a monopoly on the as yet insolvent industry—using what Wilde calls a “‘piggy-back[ing]’ approach on existing, even competing systems.”⁸⁶ By appropriating and retrofitting extant canneries, ice-refrigerated rail networks, and cold storage warehouses, and by investing in the invention of new freezer cabinets for retail sale and home storage, General Foods transformed an existing infrastructure, and set the stage for the World War II-era intensification and postwar transnationalization of what is now called the cold chain, or “the succession of refrigeration steps along the supply chain that are applied to keep perishable food in the desired temperature range.”⁸⁷

This infrastructural network—comprising processing plants, cold storage warehouses, land, sea, and air transportation, retail storage, consumer transportation, and home storage—enables the reification of frozen food as a communication system. As its standardization is necessary to mitigate “safety risk [and] foodborne illnesses,” the cold chain is a medium of globalization. However, economic disparities and physical obstacles cause the “chain [to differ] significantly between and among countries in terms of ... the absence of proper refrigeration equipment, reliable sources of electricity, and the high energy cost,” among other factors.⁸⁸ The cold chain is a means for sharing food data on a global scale, but this sharing network, constructed through and designed for commercial enterprise, reflects and compounds the inequalities of global capital.

Labrador’s place in the cold chain reflects its “small and isolated” population,⁸⁹ making it a “highly complex” node in the Canadian network, with its “challenging climate” and “sparsely scattered, difficult to access ... communit[ies, each with] its own unique characteristics in terms of distance to market, accessibility, consumer income, population density ... and availability of country food.”⁹⁰ The difficulty of access to the cold chain negatively affects Labrador Inuit and Metis lifeways according to the four dimensions of food security—availability, access, utilization, and stability—insofar as traditional Labrador Inuit and Metis diets—“what could be acquired through hunting, fishing and trapping”—“have been supplemented or replaced with store-bought foods.”⁹¹

“At any given time” however, “there is a local sense of continuity” among Labrador Inuit and Metis communities, and although the changes wrought by governmentalization limiting seasonal mobility and restricting hunting in favor of commercial food may seem to “amount to a new cultural or socio-economic form” they are negotiated, resisted, and survived as a “change[s] of content, not of form.”⁹² Case in point: Community freezers have become a new aspect of the grounded normativity of

Labrador Inuit and Metis people. The community freezer in the community of Nain, in the Inuit homeland of Nunatsiavut, on the northern coast of Labrador, has operated for many years, and “requires no financial commitment for users, offering a risk-free situation” for residents dealing with financial stress, or difficulty in undertaking seasonal hunting and fishing.⁹³ In the community of Happy Valley-Goose Bay, in the southern Inuit homeland of NunatuKavut (ᓄᓚᓃᓃᓃᓃ), a “community freezer supplies cod (fresh and salted), salmon and caribou to the ... many elders who live there and cannot access the land and sea as easily as others.”⁹⁴ In these reappropriations of quick-freezing, Inuit communities incorporate Birdseye’s mechanical legacy into their own longstanding “social strategies” of using food data to “promote relations among various families” and ensure communal survival.

In community freezer survivance initiatives, the mechanical freezer—index of Birdseye’s dispossession—becomes repossessed as a medium of reciprocity, replaced into a communication system where Birdseye’s fabled “intense sub-zero cold” produces “interdependence among community members.”⁹⁵ In this way, Inuit in northern and southern Labrador have combined “traditional technologies”⁹⁶ with settler colonial machinery in order to, in the words of Marisa Elena Duarte (Yaqui), “create something better.”⁹⁷ And yet, at the same time, this “embedd[ing of the mechanical freezer within] Indigenous values,” within Inuit “methods for classifying, categorizing, and making sense of [food] data,” is also a reclamation of Birdseye’s freezer as part of the gift economy that inspired it.⁹⁸ Indigenizing the mechanical freezer, Labrador Inuit dissimilate it from its commercial use and enter it into systems of relationality as a giver of gifts. This is not Birdseye’s reciprocity, but Inuit self-determination over the meaning of objects: once a white possession, the mechanical freezer becomes, through Inuit cultural sovereignty, and place-based relationality, a gift that keeps on giving.

Conclusion, or Digestif

The recommended temperature range for commercial and residential freezers is from zero to minus twenty-two degrees Fahrenheit, or from minus eighteen to minus thirty degrees Celsius, roughly the hyperbolic “thirty below” of Birdseye’s adventures in *Outing*. In this coincidence, one may read a historical contingency, in that Birdseye was a fortunate man who was able to invent an industry through a methodology of “ask[ing] questions and tak[ing] risks.”⁹⁹ This is to agree with Wilde that “the timing and circumstances surrounding [the] introduction [of the frozen food industry] were far from inevitable,” and that Labrador Inuit were not fated to become aesthetic extractions underwriting the progress narrative of frozen food.¹⁰⁰ By this token, however, English, Portuguese, Basque, Breton, and French vessels were not fated to turn the Newfoundland and Labrador fisheries into economic staples and the French and English were not fated to colonize the Indigenous lands and peoples of Canada. As these things happened, so did Birdseye’s discovery of frozen food happen, in Labrador,

in the event of dialogue with Garland Lethbridge, his Metis laborer, as the proffering of a gift of food data. That, in processing it, Birdseye possessed this data and stored it as the context of a scientific fantasy, is the genealogical problem Birdseye inscribed into the history of frozen food. In this regard, this essay has been an attempt to make a “just treatment of th[is] past, [a] cutting of the roots, [a] rejection of traditional attitudes of reverence, [a] present[ation of] other origins.”¹⁰¹

In another regard, however, this essay has been an occasion for thinking through what Kimmerer calls the “moral covenant of reciprocity” and how its call for “us to honor our responsibilities for all we have been given, for all that we have taken,” applies to the frozen archives of Inuit-settler discourse sitting in seemingly innumerable homes, restaurants, hospitals, schools, offices, community centers, and so on, around the world.¹⁰² Keavy Martin provides an analogous meditation in considering the historic publication and transmission of Inuit songs by the Greenlandic-Danish anthropologist Knud Rasmussen, a contemporary of Birdseye who explored northern Greenland. In Martin’s analysis, songs such as those recorded and extracted by Rasmussen in his ethnographic practice are comparable to “food-items” and are thus “soft item[s] that might be more freely given and taken ... [but] should not be hoarded.” Further continuing the analogy of shared song to shared food, Martin declares that “having been nourished by these songs ... Rasmussen, his anthologizers, and their [non-Inuit] audience are required to compensate the communities that provided the sustenance.” In the event of the historic gulf separating Rasmussen’s early to mid-twentieth-century authorship and the present day, Martin declares that “the challenge remains for [Rasmussen’s] readers to find their own ways of reciprocating [the nourishment received by the sharing of Inuit song].”¹⁰³

Between the epistemological data of song and the physical data of food, the gift of Inuit knowledge shared by Garland Lethbridge with Clarence Birdseye likewise remains a challenge of reciprocity. Amid the expansive communicative system of the cold-chain, the complication of the mechanical freezer with the environment of Labrador is more than a metaphorical temperature relation. Lethbridge’s gift has been colonized by Birdseye’s; a genealogy of Inuit place-based knowledge has been taken and entangled in a system of thermocultural displacement that preserves forty percent of food in the world, consumes fifteen percent of the electricity worldwide, and produces at least one percent of the carbon dioxide warming the globe.¹⁰⁴ Martin encourages that this challenge, however, be seen as a “productive and empowering” move toward accountability. “An offer of food ... should not be refused or handled squeamishly,” Martin asserts, “rather, [you] must learn to accept the gift—and the responsibilities that come with it.”¹⁰⁵

Notes

With thanks to John C. Kennedy.

- ¹ Metis in this essay refers to mixed-race Inuit and European (predominantly English) inhabitants of Labrador, who are also known as the Labrador Inuit-Metis. It is written without an accent in order to distinguish it from the Métis of central Canada, who are primarily of mixed French Canadian and First Nations descent. See Debbie Holly Martin, “Food Stories: A Labrador Inuit-Metis Community Speaks about Global Change” (PhD diss., Dalhousie University, 2009), 14–15. (However, the word has also been written with an accent in the context of Labrador. See John C. Kennedy, *Encounters: An Anthropological History of Southeastern Labrador* [Montreal: McGill-Queen’s University Press, 2015].) In this essay, Metis is employed as an extant category that can be retroactively applied to historical identity; however it must be noted that Metis is at present an identity category in flux. Many who formerly identified as Metis in southern Labrador now identify as Inuit. See NunatuKavut Community Council, Inc., *Unveiling NunatuKavut*, i. See also Note 67 for more historical consideration on mixed-race identity categorization in Labrador.
- ² Clarence Birdseye, “Camping in a Labrador Snowhole,” *Outing* LXIII (Oct. 1913–March 1914), 206. In addition to Birdseye’s published writings about Labrador, mention should be made here of his field journals, which document his time in Labrador from November 1910 to July 1916. The author was unable to consult these journals, which are held in the archives of Amherst College, because of a multiyear restriction on access due to the Covid-19 pandemic.
- ³ Birdseye, “Camping,” 209.
- ⁴ Bruno Cornellier, “Extracting Inuit: The of the North Controversy and the White Possessive,” *American Indian Culture and Research Journal* 40, no. 4 (2016): 30. <https://doi.org/10.17953/aicrj.40.4.cornellier>
- ⁵ See Clarence Birdseye, “The Truth About Fox-Farming,” *Outing* LXIII (Oct. 1913–March 1914), 318–424; Birdseye, “Hard Luck on the Labrador,” *Outing* LXVI (April 1915–Sep. 1915), 711–712.
- ⁶ “Birdseye Frosted Foods Coming to Springfield March 6!” *The Springfield Sunday Union and Republican*, March 2, 1930.
- ⁷ E. W. Williams, *Frozen Foods: Biography of an Industry* (Boston: Cahners Publishing, 1970), 3.
- ⁸ Mark W. Wilde, “Industrialization of Food Processing in the United States, 1860–1960” (PhD diss., University of Delaware, 1988), 228. The field test began on March 6, 1930.
- ⁹ Birdseye, “The Birth of an Industry,” *The Beaver* 272 (Sep. 1941), 24. US sales figures are from National Frozen & Refrigerated Foods Association, *2019 State of the Industry Report*, Todd Hale, ed. (2019), 5. Global estimates are found at <https://www.fortunebusinessinsights.com/frozen-food-market-104138>. I use the year

2019 here because the global COVID-19 pandemic has deviated sales figures from the norm.

- ¹⁰ Mark Kurlansky, *Birdseye: The Adventures of a Curious Man* (New York: Anchor Books, 2012); Wilde, “Industrialization”; and Oscar E. Anderson, Jr., *Refrigeration in America: A History of a New Technology and its Impact* (Princeton, NJ: Princeton University Press, 1953).
- ¹¹ Keir B. Sterling, “Birdseye, Clarence,” *American National Biography* 2 (1999): 808. Adjusted for inflation, the amount Postum paid to acquire Birdseye’s General Seafoods and his patents would equal nearly \$351.5 million in 2022. The major share of the price paid by Postum was put toward the acquisition of Birdseye’s patents. Birdseye personally took \$1 million as part of the price, which would be worth about \$15.5 million in 2022. The timing was fortuitous: As Kurlansky says: “The deal was signed in the spring of 1929, only months before the great market crash While millions started the 1930s having lost everything, Birdseye went into the Depression with an extra million dollars” (see Kurlansky, *Birdseye*, 172–73).
- ¹² Aileen Moreton-Robinson, *The White Possessive: Property, Power, and Indigenous Sovereignty* (Minneapolis: University of Minnesota Press, 2015), xi-xii.
- ¹³ Cornellier, “Extracting Inuit,” 24.
- ¹⁴ Moreton-Robinson, *The White Possessive*, xxiv; Debbie H. Martin, “‘Now we got lots to eat and they’re telling us not to eat it’: Understanding Changes to South-east Labrador Inuit Relationships to Food,” *International Journal of Circumpolar Health* 70, no. 4 (2011): 385.
- ¹⁵ Moreton-Robinson, *The White Possessive*, 110.
- ¹⁶ Mary Louise Pratt, *Imperial Eyes: Studies in Travel Writing and Transculturation* (London: Routledge, 1992), 7.
- ¹⁷ Kurlansky, *Birdseye*, 130.
- ¹⁸ Birdseye, “The Birth of an Industry,” 24.
- ¹⁹ Nan Ickeringill, “Food News: 30 Years of Freezing,” *The New York Times*, March 7, 1960.
- ²⁰ Cornellier, “Extracting Inuit,” 35.
- ²¹ Moreton-Robinson, *The White Possessive*, 7. Iglo—the Dutch translation of “igloo”—is a European frozen food brand founded in 1956 and currently owned by Nomad Foods, which also owns the Birds Eye brand in Europe. See “Our History,” <https://www.nomadfoods.com/about-us/our-history/>. Eskimo Frozen Foods was a brand founded in Grimsby, UK, after World War II. It was absorbed into Findus. See “Findus and Grimsby’s Frozen Food Industry,” <http://grimsbyice.co.uk/>

findus.html. Dreyers Grand Ice Cream is renaming the Eskimo Pie the Edys Pie. See Maria Cramer, “Maker of Eskimo Pie Ice Cream Will Retire ‘Inappropriate’ Name,” *The New York Times*, June 20, 2020. The term Eskimo has also been used informally to characterize workers laboring in extreme cold in the industrial manufacture of ice cream: “The hardening stage in the manufacture of ice cream ... usually involves a temperature of around 40 below zero Fahrenheit. The men working in this environment have to wear heavy clothing and are often ... called ‘Eskimos.’ In the ice cream industry the Eskimos are employed to take the finished product from the hardening area, sort it according to orders and to place them into some sort of container, such as a wheeled cart. Because of the extreme cold, these men can only work for short intervals of time at the job” (Jerry R. Pittman et al., “System for Transferring Articles,” US Patent 3,233,421, filed Oct. 26, 1962, and issued Feb. 8, 1966).

²² Wilde, “Industrialization,” 201.

²³ Friedrich Kittler, “The History of Communication Media,” n. pag.

²⁴ Wilde, “Industrialization,” 202.

²⁵ S. J. James and C. James define potential microbiological changes in stored food as the “growth of microorganisms”; physiological changes as “ripening, senescence and respiration”; biochemical changes as “browning reactions, lipid oxidation and pigment degradation”; and physical change as “moisture loss” (James and James, “The Food Cold-Chain and Climate Change,” 1944).

²⁶ Kittler, “The History of Communication Media,” n. pag.

²⁷ Bernhard Siegert, “Eating Animals—Eating God—Eating Man: Variations on the Last Supper, or, the Cultural Techniques of Communion,” in *Cultural Techniques: Grids, Filters, Doors, and Other Articulations of the Real* (New York: Fordham University Press, 2015), 33.

²⁸ Elizabeth LaPensée, “Relationality in Indigenous Food and Medicine Games,” *Resilience: A Journal of the Environmental Humanities* 4, nos. 2–3 (2017): 193–94.

²⁹ Robin Wall Kimmerer, *Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge and the Teachings of Plants* (Minneapolis: Milkweed Editions, 2013), 376.

³⁰ Duarte et al, “‘Of course, data can never fully represent reality’: Assessing the Relationship between ‘Indigenous Data’ and ‘Indigenous Knowledge,’ ‘Traditional Ecological Knowledge,’ and ‘Traditional Knowledge,’” *Human Biology* 91, no. 3 (2019): 174.

³¹ Nicole Starosielski, “Thermocultures of Geological Media,” *Cultural Politics* 12, no. 3 (2016): 306.

- ³² D. Martin, “Food Stories,” 109.
- ³³ D. Martin, ““Now we got lots to eat,”” 385.
- ³⁴ Keavy Martin, *Stories in a New Skin: Approaches to Inuit Literature* (Winnipeg: University of Manitoba Press, 2012), 88.
- ³⁵ Siegert, “Eating Animals,” 36.
- ³⁶ Stopp, “Ethnohistoric Analogues for Storage,” 306, 318.
- ³⁷ Beatrix Arendt, “Caribou to Cod: Moravian Missionary Influence on Inuit Subsistence Strategies,” *Historical Archaeology* 44, no. 3 (2010): 85, 81.
- ³⁸ Lynne D. Fitzhugh, *The Labradorians: Voices from the Land of Cain* (St. Johns, NF: Breakwater, 1999), 29–32.
- ³⁹ Arendt, “Caribou to Cod,” 82; Harriet White, “Huntin’ ‘n’ Fishin,’” *Them Days: Nunatsiavut*, ed. Irene Hope and Ellen McDonald, 2015, 184–86. Tom cod are also known as rock cod; it is a different species from the Atlantic cod once caught in massive quantities at sea by commercial fishermen.
- ⁴⁰ Hugh Brody, “Permanence and Change among the Inuit and Settlers of Labrador,” in *Our Footprints are Everywhere: Inuit Land Use and Occupancy in Labrador*, ed. Carol Brice-Bennett (Nain, Labrador: Labrador Inuit Assoc., 1977), 311, 316–17.
- ⁴¹ “Liveyer” is an idiomatic settler contraction of the phrase “live here.” See Fitzhugh, *The Labradorians*, 40.
- ⁴² Fitzhugh, *The Labradorians*, vi–vii; see also NunatuKavut Community Council, Inc.
- ⁴³ Maura Hanrahan, “Tracing Social Change among the Labrador Inuit and Inuit-Métis,” *Food, Culture & Society* 11, no. 3 (2008): 316.
- ⁴⁴ Hanrahan, “Tracing Social Change,” 316.
- ⁴⁵ E. Chesley G. K. Lethbridge, *A Life of Challenge (One Labradorian’s Experiences)* (St. Johns, NL: E. Chesley G. K. Lethbridge, 2007), 199.
- ⁴⁶ Hanrahan, “Tracing Social Change,” 326–27. The dietary transformations occurring in Labrador, as described by Hanrahan, are analogous to changes found throughout Indigenous communities during the *longue durée* of settler-colonization of North America. Colonization of Indigenous food has engendered culturally binding culinary innovations but also chemically unhealthy foodways, such as fry bread, which synthesizes government-issued staples, such as white flour and lard, previously alien to Indigenous diets. As Devon Mihesuah (Choctaw) writes, fry bread is a pantribal “symbol of [Indigenous] survival” at the same time that it is a source of “modern health problems” in Native communities (Devon Mihesuah, “Indigenous Health

- Initiatives, Frybread, and the Marketing of Nontraditional ‘Traditional’ American Indian Foods,” *Native American and Indigenous Studies* 3, no. 2 [2016]: 55–56).
- ⁴⁷ Hanrahan, “Tracing Social Change,” 318. Hanrahan cites Peter Bjerregaard and T. Kue Young, *The Circumpolar Inuit: Health of a Population in Transition* (Copenhagen: Munksgaard, 1998).
- ⁴⁸ John C. Kennedy, “Being and Becoming Inuit in Labrador,” *Études/Inuit/Studies* 39, no. 1 (2015): 227. <https://www.jstor.org/stable/44090780>
- ⁴⁹ Archdeacon Francis Buckle, ed., *Labrador Diary: 1915–1925, The Gordon Journals* (Cartwright, NL: Anglican Parish of Cartwright, 2003), 51. The Rev. Henry Gordon, whose tenure in Labrador overlapped with Birdseye’s, testifies to Birdseye having the only bathroom in the region. The cottage was built by local men according to a design by the Beaver Board Company, and “sealed up inside with their product”; see Mary F. Penney, “Muddy Bay (1914–1922),” in *Them Days* 21, no. 1 (1995): 9. In 1934 the house was floated down Sandwich Bay and reinstalled in the settlement of Cartwright; see Ethel McClure, “Clarence Birdseye: The Labrador Years,” in *Among the Deep Sea Fishers* 72, no. 2 (1975), 1–7.
- ⁵⁰ Karen Szala-Meneok, “Time and Contingency: Temporal Organization in Southern Labrador” (PhD diss., McMaster University, 1992), 67–68.
- ⁵¹ Birdseye, “The Truth About Fox Farming,” 322, 320, 324.
- ⁵² Lethbridge, *A Life of Challenge*, 28.
- ⁵³ Glen Coulthard, *Red Skin, White Masks: Rejecting the Colonial Politics of Recognition*. (Minneapolis: University of Minnesota Press, 2014), 13.
- ⁵⁴ Fitzhugh, *The Labradorians*, 142.
- ⁵⁵ White, “Huntin’ ‘n’ Fishin,’” 185.
- ⁵⁶ Birdseye, “The Birth of an Industry,” 24.
- ⁵⁷ Lethbridge, *A Life of Challenge*, 28–29.
- ⁵⁸ Kurlansky, *Birdseye*, 116.
- ⁵⁹ Jessie Luther, *Jessie Luther at the Grenfell Mission*, Ronald Rompkey, ed. (Montreal: McGill-Queens University Press, 2001), 294.
- ⁶⁰ Harold Innis, *The Cod Fisheries: The History of an International Economy* (Toronto: University of Toronto Press, 1954), ix.
- ⁶¹ Wilde, “Industrialization,” 204–14.
- ⁶² Lethbridge, *A Life of Challenge*, 28.

- ⁶³ Wilde, “Industrialization,” 205. Wilde is citing I. L. Rice, “Many-Sided Genius,” *Quick Frozen Foods* (March 1960), 321.
- ⁶⁴ Birdseye, “Method of Preparing Food Products.”
- ⁶⁵ Clarence Birdseye, “Some Scientific Aspects of Packaging and Quick Freezing Perishable Flesh Products: II—Packaging Flesh Products for Quick Freezing,” *Industrial and Engineering Chemistry* 21, no. 6 (1929): 575.
- ⁶⁶ Wilde, “Industrialization,” 224, 218.
- ⁶⁷ “The jobs that came out of a hole in the ice.” Birds Eye Frosted Foods (1945), advertisement.
- ⁶⁸ In John C. Kennedy’s historicization, Metis such as Lethbridge were descended from settlers—“exclusively single males” from Europe—who “came to the Labrador coast to work in British fishing and trading stations,” and married Inuit women. These settlers, in Sandwich Bay and all along the coast, “considered themselves neither European nor Inuit,” and were likewise considered distinct by Inuit, who called them “*Kablunangajuit*, meaning ‘partly white.’” Negotiation of settler mixed-race identity occurred in terms of balancing inherited Inuit and European knowledges and values, and also in the case of “Settlers of Aboriginal phenotype” weathering racialization and “stigmatiz[ation] by Settlers who did not appear to have such roots”; John C. Kennedy, “Labrador Metis Ethnogenesis,” *Ethnos* 62, nos. 3–4 (1997), 8–12. Although he traces his Metis genealogy, Chesley Lethbridge does not racialize his uncle Garland. However, a period source identifies Lethbridge as “Garland Lethbridge, a half breed”; see George Francis Durgin, *Letters From Labrador* (Concord, NH: Rumford Printing Company, 1908), 85. As Kennedy states, “we know relatively little about how early Inuit-Métis viewed their identity. Instead, visitors used a plethora of confusing ethnic labels to refer to the ancestors of today’s Inuit-Métis” (Kennedy, *Encounters*, 332).
- ⁶⁹ Stephen Bocking, “Indigenous Knowledge and the History of Science, Race, and Colonial Authority in Northern Canada,” in *Rethinking the Great White North: Race, Nature, and the Historical Geographies of Whiteness in Canada*, ed. Andrew Baldwin, Laura Cameron, and Audrey Kobayashi (Vancouver: UBC Press, 2011), 42.
- ⁷⁰ Lisa Lowe, *The Intimacies of Four Continents* (Durham: Duke University Press, 2015), 38–39.
- ⁷¹ Cornellier, “Extracting Inuit,” 23.
- ⁷² Moreton-Robinson, *White Possessive*, 110.
- ⁷³ Birdseye, “Food Products in New Forms,” 97–99.
- ⁷⁴ Birdseye, “Food Products in New Forms,” 105.

- ⁷⁵ Niklas Luhmann, "System as Difference," *Organization* 13, no. 1 (2006): 56.
- ⁷⁶ Luhmann, "System as Difference," 56, 38.
- ⁷⁷ Luhmann, "System as Difference," 38.
- ⁷⁸ Kimmerer, *Braiding Sweetgrass*, 25.
- ⁷⁹ Bocking, "Indigenous Knowledge," 42, 46.
- ⁸⁰ Marcel Mauss, *The Gift: The Form and Reason for Exchange in Archaic Societies*. (London: Routledge, 1990), 9. Intriguingly, the anecdotal influence of Inuit on Birdseye's inventions is documented in recent patents and patent applications by Spanish inventor Blanca Rosich Ferrer, who writes, in the background to her invention, "Freezing foods in the Western world was based on the remarks of Clarence Birdseye during his stay in Canada on the behavior of the Eskimos, seeing as these froze freshly caught fishes by laying them on the ice ... Based on these experiences he submitted its first patents in the United States of America more than 80 years ago for freezing foods, especially meats, fishes and vegetables." Of course, this remains an extraction of Inuit with no specific address. Also Labrador and Newfoundland were not yet part of Canada during Birdseye's stay. See Blanca Rosich Ferrer, "Method for Freezing Fruit and Vegetable Produce." US Patent application US 2011/0027439 A1, February 3, 2011.
- ⁸¹ Lethbridge, *A Life of Challenge*, 29.
- ⁸² Coulthard, *Red Skins, White Masks*, 39–40. Coulthard is citing Frantz Fanon, *Black Skin, White Masks*, trans. Charles Lam Markmann (1967; repr., Boston: Grove Press, 1991), 221. As cited herein, it is Chesley Lethbridge's writing of a book in his seventies—"one of the things I always wanted to do"—nearly a century after his great uncle Garland's death, that transmits Garland's story across borders and into the present (Lethbridge, *A Life of Challenge*, 197).
- ⁸³ Fanon, 221. Cited in Coulthard, *Red Skins, White Masks*, 25, 40.
- ⁸⁴ Birdseye, "The Birth of an Industry," 25. It should be noted that expanding frozen food systems in Canada in 1941 enacted another displacement of Indigenous Labradorian knowledge, not a return, as until 1949 Labrador was not part of Canada.
- ⁸⁵ Anderson, *Refrigeration in America*, 114–15. In the US, even around 1920, "a large number of urban homes—probably more than half—bought no ice" and "few farm families used it even when it could be had for the harvesting" (Anderson, *Refrigeration in America*, 115).
- ⁸⁶ Wilde, "Industrialization," 237.

- ⁸⁷ Samuel Mercier et al., “Time–Temperature Management Along the Food Cold Chain: A Review of Recent Developments,” *Comprehensive Reviews in Food Science and Food Safety* 16 (2017): 647. <https://doi.org/10.1111/1541-4337.12269>
- ⁸⁸ Mercier et al., “Time–Temperature Management,” 647–50.
- ⁸⁹ Fitzhugh, *The Labradorians*, vii.
- ⁹⁰ Samuel Mercier et al., “The Canadian Food Cold Chain: A Legislative, Scientific, and Prospective Overview,” *International Journal of Refrigeration* 88 (2018): 642. <https://doi.org/10.1016/j.ijrefrig.2018.01.006>
- ⁹¹ Martin, “Now we got lots to eat,” 385.
- ⁹² Brody, “Permanence and Change,” 311.
- ⁹³ Jennifer Organ et al., “Contemporary Programs in Support of Traditional Ways: Inuit Perspectives on Community Freezers as a Mechanism to Alleviate Pressures of Wild Food Access in Nain, Nunatsiavut,” *Health & Place* 30 (2014): 254.
- ⁹⁴ NunatuKavut Community Council, Inc., 234.
- ⁹⁵ D. Martin, “Food Stories,” 109.
- ⁹⁶ The phrase “traditional technologies” is from Vine Deloria, Jr., *Spirit and Reason: The Vine Deloria, Jr., Reader*, ed. Barbara Deloria et al. (Golden, CO: Fulcrum Publishing, 1999), 129–36.
- ⁹⁷ Marisa Elena Duarte, *Network Sovereignty: Building the Internet across Indian Country* (Seattle: University of Washington Press, 2017), 132.
- ⁹⁸ Duarte, *Network Sovereignty*, 142.
- ⁹⁹ Clarence Birdseye, “If I Were 21,” *Reader’s Digest* 58 (1961): 64.
- ¹⁰⁰ Wilde, “Industrialization,” 238.
- ¹⁰¹ Michel Foucault, “Nietzsche, Genealogy, History,” in *Essential Works of Foucault, 1954–1984: Aesthetics, Method, and Epistemology*, ed. James D. Faubion (New York: The New Press, 1998), 389.
- ¹⁰² Kimmerer, *Braiding Sweetgrass*, 384.
- ¹⁰³ K. Martin, *Stories in a New Skin*, 88–89.
- ¹⁰⁴ James and James, “The Food Cold-Chain and Climate Change,” 1954.
- ¹⁰⁵ K. Martin, *Stories in a New Skin*, 97.

Selected Bibliography

- Anderson, Oscar E., Jr. *Refrigeration in America: A History of a New Technology and its Impact*. Princeton, NJ: Princeton University Press, 1953.
- Arendt, Beatrix. "Caribou to Cod: Moravian Missionary Influence on Inuit Subsistence Strategies." *Historical Archaeology* 44, no. 3 (2010): 81–101.
<https://doi.org/10.1007/BF03376805>
- Birdseye, Clarence. "The Birth of an Industry," *The Beaver* 272 (Sep. 1941), 24.
- . "If I Were 21." *Reader's Digest* 58 (1961): 64.
- . "Method of Preparing Food Products." US Patent 1,73,079. Filed June 18, 1927, and issued August 12, 1930.
- . "Some Scientific Aspects of Packaging and Quick Freezing Perishable Flesh Products: II—Packaging Flesh Products for Quick Freezing." *Industrial and Engineering Chemistry* 21, no. 6 (1929): 573–76.
- . "Food Products in New Forms." In *Canada in the Markets of Tomorrow: A Series of Lectures Delivered at McGill University, Montreal, October 12, 1943–December 20, 1943*. Montreal: McGill University, 1944.
- . "The Truth About Fox-Farming." *Outing* 63 (October 1913–March 1914), 318–424.
- Bocking, Stephen. "Indigenous Knowledge and the History of Science, Race, and Colonial Authority in Northern Canada." In *Rethinking the Great White North: Race, Nature, and the Historical Geographies of Whiteness in Canada*, edited by Andrew Baldwin, Laura Cameron, and Audrey Kobayashi, 39–61. Vancouver: University of British Columbia Press, 2011.
- Brody, Hugh. "Permanence and Change among the Inuit and Settlers of Labrador." In *Our Footprints are Everywhere: Inuit Land Use and Occupancy in Labrador*, edited by Carol Brice-Bennett, 311–47. Nain, Labrador: Labrador Inuit Assoc., 1977.
- Buckle, Francis, Archdeacon, ed. *Labrador Diary: 1915–1925, The Gordon Journals*. Cartwright, NL: Anglican Parish of Cartwright, 2003.
- Cornellier, Bruno. "Extracting Inuit: The of the North Controversy and the White Possessive." In *American Indian Culture and Research Journal* 40, no. 4 (2016): 23–48.
- Coulthard, Glen. *Red Skin, White Masks: Rejecting the Colonial Politics of Recognition*. Minneapolis: University of Minnesota Press, 2014.
- Deloria, Vine, Jr. *Spirit and Reason: The Vine Deloria, Jr., Reader*, edited by Barbara Deloria et al. Golden, CO: Fulcrum Publishing, 1999.
- Duarte, Marisa Elena. *Network Sovereignty: Building the Internet across Indian Country*. Seattle: University of Washington Press, 2017.

- Duarte, Marisa Elena and Morgan Vigil-Hayes, Sandra Littletree, and Miranda Belarde-Lewis. “‘Of course, data can never fully represent reality’: Assessing the Relationship between ‘Indigenous Data’ and ‘Indigenous Knowledge,’ ‘Traditional Ecological Knowledge,’ and ‘Traditional Knowledge.’” In *Human Biology* 91, no. 3 (2019): 163–78.
- Fitzhugh, Lynne D. *The Labradorians: Voices from the Land of Cain*. St. Johns, NF: Breakwater, 1999.
- Foucault, Michel. “Nietzsche, Genealogy, History.” In *Essential Works of Foucault, 1954–1984: Aesthetics, Method, and Epistemology*, edited by James D. Faubion, 369–91. New York: The New Press, 1998.
- Hanrahan, Maura. “Tracing Social Change among the Labrador Inuit and Inuit-Métis.” *Food, Culture & Society* 11, no. 3 (2008): 315–33.
- James, S. J., and C. James. “The Food Cold-Chain and Climate Change.” *Food Research International* 43 (2010): 1944–1956.
- Kennedy, John C. “Being and Becoming Inuit in Labrador.” *Études/Inuit/Studies* 39, no. 1 (2015): 225–42. <https://www.jstor.org/stable/44090780>
- . *Encounters: An Anthropological History of Southeastern Labrador*. Montreal: McGill-Queen’s University Press, 2015.
- . “Labrador Metis Ethnogenesis.” *Ethnos* 62, nos. 3–4 (1997), 5–27. <https://doi.org/10.1080/00141844.1997.9981550>
- Kimmerer, Robin Wall. *Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge and the Teachings of Plants*. Minneapolis: Milkweed Editions, 2013.
- Kittler, Friedrich. “The History of Communication Media.” *CTHEORY*, Special Issue: *Global Algorithm* (1996). <https://journals.uvic.ca/index.php/ctheory/article/view/14325/5101>
- Kurlansky, Mark. *Birdseye: The Adventures of a Curious Man*. New York: Anchor Books, 2012.
- LaPensée, Elizabeth. “Relationality in Indigenous Food and Medicine Games.” In *Resilience: A Journal of the Environmental Humanities* 4, nos. 2–3 (2017): 191–200.
- Lethbridge, E. Chesley G.K. *A Life of Challenge (One Labradorian’s Experiences)*. St. Johns, NL: E. Chesley G. K. Lethbridge, 2007.
- Luhmann, Niklas. “System as Difference.” *Organization* 13, no. 1 (2006): 37–57.
- Luther, Jessie. *Jessie Luther at the Grenfell Mission*, edited by Ronald Rompkey. Montreal: McGill-Queens University Press, 2001.
- Martin, Debbie Holly. “Food Stories: A Labrador Inuit-Metis Community Speaks about Global Change.” PhD diss., Dalhousie University, 2009.

- Martin, Keavy. *Stories in a New Skin: Approaches to Inuit Literature*. Winnipeg: University of Manitoba Press, 2012.
- Mauss, Marcel. *The Gift: The Form and Reason for Exchange in Archaic Societies*. London: Routledge, 1990.
- McClure, Ethel. "Clarence Birdseye: The Labrador Years." *Among the Deep Sea Fishers* 72, no. 2 (1975): 1–7.
- Mercier, Samuel, Martin Mondor, Sébastien Villeneuve, and Bernard Marcos. "The Canadian Food Cold Chain: A Legislative, Scientific, and Prospective Overview." *International Journal of Refrigeration* 88 (2018): 637–45.
<https://doi.org/10.1016/j.ijrefrig.2018.01.006>
- Mercier, Samuel, Sébastien Villeneuve, Martin Mondor, and Ismail Uysal. "Time–Temperature Management Along the Food Cold Chain: A Review of Recent Developments." In *Comprehensive Reviews in Food Science and Food Safety* 16 (2017): 647–67.
- Mihesuah, Devon. "Indigenous Health Initiatives, Frybread, and the Marketing of Nontraditional 'Traditional' American Indian Foods." In *Native American and Indigenous Studies* 3, no. 2 (2016): 45–69.
- Moreton-Robinson, Aileen. *The White Possessive: Property, Power, and Indigenous Sovereignty*. Minneapolis: University of Minnesota Press, 2015.
- NCC (NunatuKavut Community Council). *Unveiling NunatuKavut: Document in Pursuit of Reclaiming a Homeland—Describing the Lands and People of South/Central Labrador*. Happy Valley-Goose Bay: NunatuKavut Community Council, 2010.
- Organ, Jennifer, et al. "Contemporary Programs in Support of Traditional Ways: Inuit Perspectives on Community Freezers as a Mechanism to Alleviate Pressures of Wild Food Access in Nain, Nunatsiavut." *Health & Place* 30 (2014): 251–59.
<https://doi.org/10.1016/j.healthplace.2014.09.012>
- Penney, Mary F. "Muddy Bay (1914–1922)." *Them Days* 21, no. 1 (1995): 6–14.
- Siebert, Bernhard. "Eating Animals—Eating God—Eating Man: Variations on the Last Supper, or, the Cultural Techniques of Communion." In *Cultural Techniques: Grids, Filters, Doors, and Other Articulations of the Real*, translated by Geoffrey Winthrop, 33–52. New York: Fordham University Press, 2015.
- Starosielski, Nicole. "Thermocultures of Geological Media." *Cultural Politics* 12, no. 3 (2016): 293–309.
- Stopp, Marianne. "Ethnohistoric Analogues for Storage as an Adaptive Strategy in Northeastern Subarctic Prehistory." In *Journal of Anthropological Archaeology* 21 (2002): 301–28.

- Szala-Meneok, Karen. "Time and Contingency: Temporal Organization in Southern Labrador." PhD diss., McMaster University, 1992.
- White, Harriet. "Huntin 'n' Fishin.'" *Them Days: Nunatsiavut*, edited by Irene Hope and Ellen McDonald, 184–86, 2015.
- Wilde, Mark W. "Industrialization of Food Processing in the United States, 1860–1960." PhD diss., University of Delaware, 1988.