Lessons on Architecture in Cree Territory

by Amrit Kaur Phull

A thesis presented to the University of Waterloo in fulfillment of the thesis requirement for the degree of Master of Architecture.

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I hereby declare that I am the sole author of this thesis.

This is a true copy of the thesis, including any required final revisions, as accepted by my examiners. I understand that my thesis may be made electronically available to the public.

Canada's subarctic region of James Bay, extending from the southeastern rim of the greater Hudson's Bay, is seated at the interface of diametrically opposed climates, cultures, geologies, and ecologies. With the European settlement of Canada came the division of its land and its First Peoples—both of which were later reassembled in order to access and unearth resource-rich territories. Despite aggressive attempts by foreign newcomers to reshape the land and its stewards, the Cree have gained an unprecedented level of political and economic prowess among all First Nations, though not without sacrifice.

In Cree culture, good health and key relationships to the world are forged through the hunt. By exploring animal behaviours, sinews, muscles, and bones, this thesis navigates tensions between North and South in an effort to move toward a more responsible practice of architecture in this subarctic context. A culmination of architectural research, reflections, and actions over the course of a winter season spent residing and working in the Cree Nation of Wemindji is represented. Five hunts are contained in this work, for geese, power, ourselves, moose, and rabbits. Each hunt is an exercise in, and architectural reflection of, self-awareness.

MEEGWETCH

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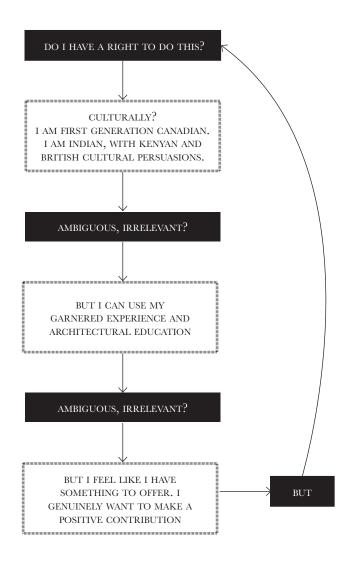
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When the visiting architect encounters a cultural framework beyond her or his own, a series of questions may arise:

"Do I have a RIGHT?" (*var.* "What is MY RIGHT to do this?"; "Do I even have a RIGHT to do this?") "What is my PLACE?" "What gives me the POWER to do this?"

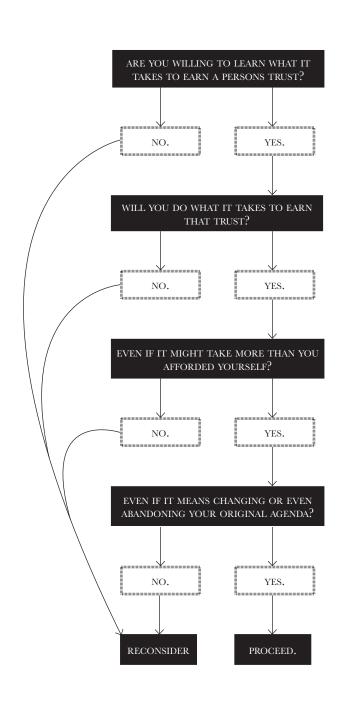
While researching Eastern James Bay Cree territories, I certainly asked myself these questions on a regular basis. After returning from five months of living and working in Wemindji, I continued to ponder this issue of agency. Maintaining a consistent inquiry into personal motivation and action is important. However, without a precise framing of these questions, responses can be vague or uncertain. How does one measure their "right?" What gives a person "agency?" Is "power" acquired through cultural disposition or moral inclination? My own navigation of these questions followed a roundabout pattern of inquiry and confusion (FIGURE 0.1). I have noticed colleagues struggle with a similar pattern. At Waterloo Architecture, close colleagues and I began organizing open discussions and presentations under the title "On Empathy," in order to make time and space for collective critical reflection on the field. In one discussion, the same question surfaced: What right does the visiting architect have?

The reason why these questions form a closed loop without resolve is that the architect is asked to measure herself as she is, as opposed to who she might become. Questions or reflections should become contextual—geographical, cultural, or otherwise. Then they may instil positive change or awareness in the designer. "Right" isn't something an architect is born with, but it is something an architect can build.



[FIGURE 0.1]

[FIGURE 0.2]



Perhaps one's "right" is measured by a willingness to learn, observe, and be changed. In this light, different questions can be used to directly address the visiting architect's intentions and understanding of their "place" in a cultural framework. Vague inquiry could potentially short-circuit a creative process, but a series of conscious decisions might help to clearly discern boundaries. For instance, by simply asking if you are willing to do whatever it may take to earn a person's trust and friendship, the question of "right" becomes much more clear. Questions in this second set are key and descend from my personal experience (FIGURE 0.2). I provide these as an alternative towards a practice of architecture that is an inclusive process rather than an exclusive action. In an architect who considers themself to be a harbourer of knowledge or a purveyor of better decisions, such attitudes can encourage invasive behaviour. Take the existing attitude that the North will "modernize anyways" and that the architect is helping to "expedite the process." While one's "right" can be difficult to discern, it cannot be ignored or assumed.

Cree teachings are fundamental to this book's mining of the issues of right, position, and knowledge. The investigation unfolds in five hunts, each a lesson for the architect:

The hunt for GEESE offers lessons on patient observation. The hunt for POWER positions agency and knowledge in Cree territory. The hunt for OURSELVES helps to guide behaviours and attitudes. The hunt for MOOSE shows how to accept change and be changed. The hunt for RABBIT illustrates the potential of genuine connection.

Each hunt is an exercise in, and architectural reflection of, self-awareness. Each hunt is an argument for the visiting architect to learn from local perspectives. To bring listening and learning into the foreground, preceding the actions of teaching. And to allow herself to be affected by the lessons she experiences.



SIGABON

GEESE

CONTENTS

SIGABON / GEESE

The spring and fall migrations of geese through James Bay marks a culturally and economically significant period of time in Cree communities. In the weeks reserved for Goose Break, schools are closed, offices are quiet and towns are virtually empty. The intricate hunt for geese requires long periods of observation without action. The Cree hunter is well practiced in knowing when to call and, more importantly, when not too. This chapter is a lesson on migration, patience and quiet observation for the architect.

HOW TO WATCH FOR GI	5 EESE	
And Read Environments		

[FIGURE 1.1, PREVIOUS PAGE] Goose feathers

HOW TO WATCH FOR GEESE

SIGABON / GEESE

Understand, I came to this place sightless, with stupid love in my heart. —Laura Legge, excerpt from *Tukisiviit?*¹

At final boarding, I willed myself to memorize the dull buzz of the Dash-8, in case I needed it for solace later. I had been on a propeller plane before, but this particular sound hit my ears differently than it had five months before. During that first ride, I'd remained carefully attentive to the wilderness inside the cabin. I had entered with blind affection and fallen in love with all the dips and hums, the deafening language of the aircraft. I had committed to loving this Northern experience before it began, simply because a) it was happening, b) I am a romantic, and c) I was alone.

The landings had a different sound in each community, depending on the angle of the wind and the ego of the pilot. Still, they followed a similar pattern: a sustained mid-range vibrato throughout the duration of the flight, a dramatic fall toward a bass tone that indicated proximity to the next town, and a deep and rapid cresendo followed by an extended caesura, held until the next takeoff.

This sound approaches and departs Wemindji daily. Its presence fills every corner of the community—a public announcement of the influx and efflux of goods and people. Its comfortably rhythmic occupation of the town both connects and isolates the north. The south is present in the bush.

Soon after arriving in Ontario, I booked a train back to Quebec—not to the north, but to Montreal, in the interest of attending and sharing work at the Eeyou Marine Region Symposium. I was grateful that, following my time in the Cree Nation of Wemindji, I had the opportunity to share a space with researchers and scientists, many of whom I had encountered in my own research on Eastern James Bay. Three full days of presentations on James Bay climate, habitat, wildlife, and industry.

The second day included a series of presentations and a panel discussion on marine topics: subsistence coastal fisheries, establishing protected marine areas, tracing the life and migration of Cisco, and so on. Roderick Pachano, Chairman of the Cree Health Board in Chisasibi, rose to the front of our wallpapered conference room in the hotel basement to mediate the discussion. He was very tall, had a heavy brow and a soft expression. Roderick lowered toward the microphone with his hands gripping each side of the podium and said,

"Mmmm...

"Now I'm hungry."

A laugh rippled through the conference room, breaking the air of academic tension, which had been, at times, impenetrable. Roderick continued, "No, really. When you look at those pictures of the fish, you see fish. When I look at it, I see food."

I nodded with my myopic understanding of and appreciation for this anecdote. It was pleasant and compelling. Others in the room nodded with me.

At the time I was anxiously anticipating the following day's presentations on new research opportunities in the Eeyou Marine region. I felt these were the nuggets of information I had come for: What new technologies are coming to subarctic James Bay? How will we accomodate research vessels in its shallow depths? Will we be seeing more research methods like Dr. Joel Heath's 'scientist in a box'² or large teams of researchers in vessels like Arcticnet's Amunsden icebreaker?³ The ecological attention being paid to the Bay is exciting and fresh, since it has long been a "fascinating blank in the map."⁴

It was a rich, productive day that any eager student would value. I asked questions, I networked, I promoted the work I had completed under The Cree Nation of Wemindji's Cultural Department. Despite these positive aspects, the constant hum of the Dash-8 rumbled below the conference. The south was present in the north.

The event concluded with solemn but stern remarks from both Inuit and Cree community members, carefully spoken criticisms on the approach of Southern

researchers and industry leaders to the landscape. These comments offered more value than any of the presented content. They reminded the attendants, shielded with degrees, papers and Powerpoints, that many words had been spoken, dancing around the critical issues in the Bay and speculating what they might be. They reminded us that the Cree and Inuit know what the issues are because they experience them daily. Knowledge is positioned with them, seated in the landscape. This knowledge is not divided into session topics and panel discussions. Rather, it is a holistic and true understanding of a place.

Travelling back to Ontario, I understood it was likely I would only return to Quebec after my research was completed. I sat in my office daily and walked toward the window when I felt I needed light, I looked outside and scanned for elements of water, green, and 'wild,' admiring how they composed themselves on the floodwalls and stone buildings. Even now, I continue this ritual. When I watched the Grand River in spring, I waited for geese. I was envious of the journey to the North they would soon embark on. A change in seasons is often depicted cinematically: a timelapse of material state changes and decomposition. In real time, the transition can be imperceptibly slow. If it feels otherwise, we have simply been too busy to notice it. I recognized the arrival of spring in a way I did not anticipate.

While walking into school, a lone scout glided over the river between the floodwalls of the Grand River and into my gaze, directed absently through the window. My reaction was strong and singular. I felt my pupils dilate and my palate became wet. The instant I registered the goose, I could taste its caramelized flesh on the surface of my tongue, a long internal "mmmm" accompanied by some inexplicable feeling of attachment. What was this twisted empathy? At the time, there was only one sensation I could liken this to: love.⁵

I travelled to Wemindji with vague, romanticized intentions. I wanted to understand the 'contemporary conditions' of hunter culture. I wanted to know the hunt, how the hunter is situated in space, where the hunters home is. I wanted to know an animal fully, in its fibers, sinews and skins. I offered my services as an architectural designer. After eight months caught in the cycle of offering and waiting, I was invited. I arrived as best I could, given my imperfect understandings of Eastern James Bay communities. The research I had done offered me little preparation.

My experiences of building and making with The Cree Nation of Wemindji were multivalent. I grew, but I only recognized this when I encountered the goose. I have similar sensations every time I see one. It is something that arose from preparing the animal, accompanying it through hours of roasting while spinning it with a carved stick, and then ingesting it. This is important: something fundamental about the way I saw this animal had permanently changed. My perception of the world and my visceral experience of it is so brittle that it can change. There are lessons here that I am able to articulate. One, that we are capable of changing how we encounter the world and ourselves within it through the act of making. Two, that the bond between the hunter and the animal is founded on empathy.⁶

The contents of this book are built upon this new way of seeing and on empathy. In the interest of understanding a place and in order to suppose new ways of building, I had to leave behind much of the academic vocabulary I had inherited in my education so far. I had to mediate between my academic perspectives, grounded deeply on Western and European philosophies and practices, and this new worldview. I had to set aside certain ways of seeing. Assumptions and practices were abandoned in favour of new growth, new relationships, and new possibilities. This thesis is a representation of the rising and falling metric for learning.

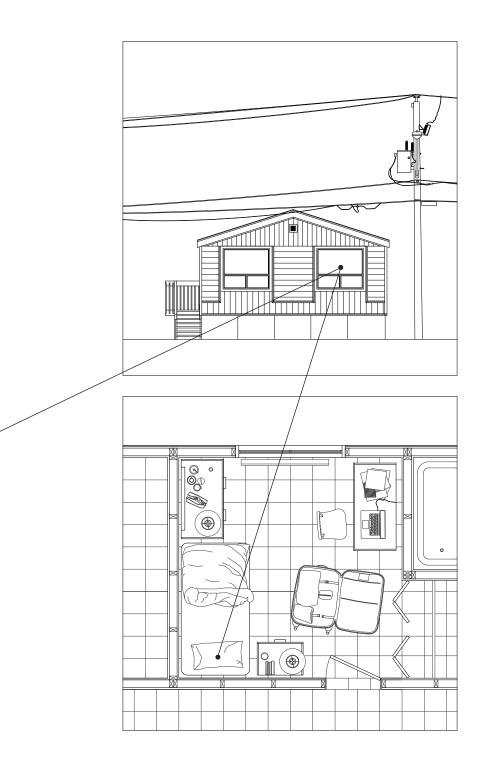
And so, if I have learned anything, it is that surrendering ourselves to the wilderness of empathy is critical to harmonious living. Despite the personal growth I have noticed and the knowledge I believe I have inherited, I still wander the world with the same naivety as the researcher aboard her first Dash-8, falling in love with every hum and buzz, traversing an atlas of white, heading somewhere.





[TOP, FIGURE 1.2] Arriving in Wemindji [BELOW, FIGURE 1.3] Departing [FOLLOWING PAGE, FIGURE 1.4] My room in 42 Spruce Street, Wemindji, Quebec

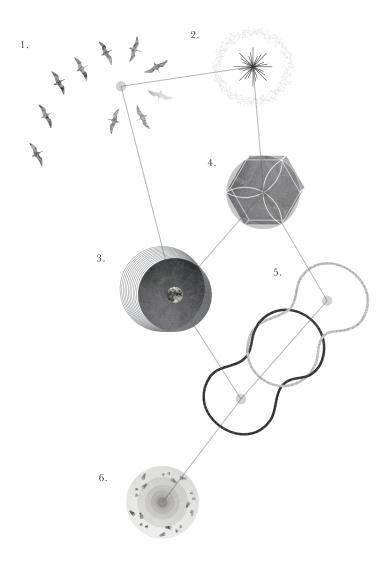




SIGABON / GOOSE

Each of the following three constellations are exercises in the practice of 'noticing'. They are built from fragments of lived experience, scientific and anthropological research, and conversations with community members. The common thread in these constellations is the pattern of the circle. The piecing together and positioning of these fragments represents the methodology of this thesis: geographically-specific research in Wemindji supplemented with stories, from published and academic to candid and conversational.

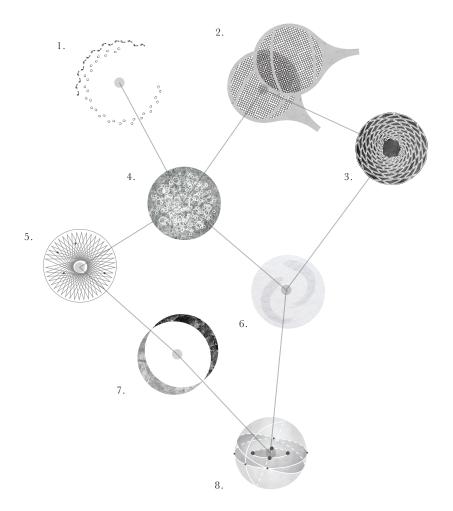
1. Geese will fly in circles as a team to build strength and endurance for long migrations. 2. The shedding pine creates a ring of pale needles on the ground. 3. Willie and I chase the sky after midnight, floating and howling on a skidoo tearing down the James Bay Highway as if we were leaving town forever. The silence of the bush begs us to stop. I tell Willie to check out the moon because I've seen this before in these parts, it's burning a hole in the sky. Not just a dark lining around its perimeter but a penetrating, dome of blackness that might ensnare us against the crust of the eath. Under the vault Willie calls me his sister. 4. Back in the trailer, Wikipedia tells me it was the 22 degree halo or moon ring or lunar halo. Hexagonal ice crystals in the air are bending light at an instance that creates a complete circle. 5. Otters, porcupines and beavers are carried using a dragline or niimaapaan 3 to 6 metres in length, which the hunter ties across his back. The age and experience of the hunter is indicated by the length of the niimaapaan. 6. A polar bear will beg other bears for a share of their kill by lowering itself to the ground, slowly circling the carcass, and touching its nose with the bear in charge.



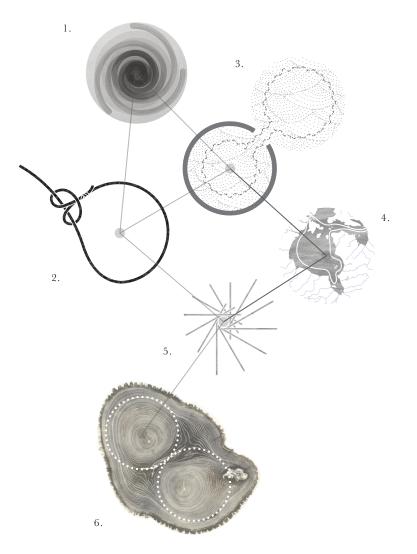


1. When the presence or approach of a hunter is sensed, often from considerable distances, caribou will begin to walk a large circular path for the hunter to follow. The circle is oriented to the wind in such a way that the scent of the hunter will be carried downwind to the low-lying animal when the two are in opposition along the circumference. If time allows, the caribou may complete the circle to confuse the hunter, or simply take off. Young caribou can be seen practicing this method by creating small circular pathways. 2. Bear-paw snowshoes have a rounded shape suitable for firm snow in wooded areas. 3. A dying white spruce sheds its needles forming a ring around its centre. 4. The fur of a moose is comprised of a fine overcoat and a dense, coarse undercoat. The wiry, white hair of the undercoat is, in section, a series of air pockets, which help the hair to be bouyant in water and warm in cool temperatures. 5. The dreamcatcher is a physical manifestation of the Medicine Wheel, an encouragement to recognize sacred hoops in everything. 6. Walrus tracks are distinct, semi-circular sweeps through the snow. 7. An Inuit Elder, a Cree Elder, a mechanic, a nurcse, an anthropologist and an architect go ice fishing. In search of trout, we chisel a hole into loon lake, three pairs of hands for three feet of ice. George Kudlu takes off with his girlfriends kite and occasionally mentions, in a mess of 'goddamns' and 'bastards', that if we want to set a net we have to make at least fifteen more holes. But it's a joke, a diversion from the uncomfortable awareness that loon lake is not part of either Fred or George's hunting territories. Fred heaves a chunk of the freshwater ice, glistening like a Cullinan diamond, into his sled. "It's good for tea," he says. "Very clean, healthy, good." 8. Seasonal variations.





1. Spirals form at the base of a wooden paddle being pushed through water in the Bay. 2. This is a simple way to tie a rabbit snare. 3. In Cree culture, a child's feet are not allowed to touch the ground within the first year of a childs life (unless they are within a built enclosure). Wiiwiitahaausuunaanuu, or 'Walking Out', is a ceremony and community wide celebration for the childs first steps on the surface of the earth. Within a michwaap or teepee, the child greets each Elder as they are guided around the perimeter of the structure. Emerging from the michwaap, they circumvent a tree positioned close to the East-facing entrance. A female child would conclude the ceremony by gathering sticks placed on the ground while a male child would 'shoot' a goose with a wooden member cut to the profile of a gun. The gooses neck would be sitting on a prong stick attached to a thread until a community member pulls at the string, allowing the goose to collapse to the ground, indicating the precise aim of the young hunter. The Walking Out ceremony indicates complex relationship to animals and the built environment -- concepts that Southern culture often washes over with Pan-Native ideas of 'oneness'. 4. Water in James Bay circulates in through the Hudson Strait, through Hudson Bay, through James Bay, and back through the Strait. 5. Michwaap construction requires builders to stand in a circle. The michwaap must be assembled correctly in order to create an appropriately sized and spaced opening for smoke. 6. Rings in trunks are physical layers of time.



[FIGURE 1.7]





CONTENTS

KASCHIHUWIN / POWER

Throughout history, corporations and governing bodies have tried to challenge Cree authority and presence in order to harness their territories' natural resource potential. With the forced movement of their settlements, the carving and flooding of their territory, the construction of all-season roads and the attendant ecological imbalance, the relationship of the Cree to the landscape has necessarily changed. While much of their land has been stolen, the Cree have built a robust political and financial independence founded on relationships, craft, and protest. This hunt is a lesson in power and where it is seated: next to the Cree, within the land.

PEOPLE, LAND,	, ENERGY		• • • • • • • • • • • • • • • • • • • •	 23
Drawn, Photo	graphed, and	Interviewed.		

[FIGURE 2.1, PREVIOUS PAGE] Hydro Quebec facility off of the James Bay Highway

PEOPLE, LAND, ENERGY

KASCHIHUWIN / POWER

In 1668, Eastern James Bay Cree hunters guided England's very first trading ship, bound for the New World, toward the promise of furs. Invited to settle at the mouth of the Rupert River, the British crew established Charles Fort, planting the seed for the world's oldest commercial corporation. Eastern James Bay Cree territory was first to fall under the domain of The Hudson's Bay Company, one that would administer Cree land and people for the next two hundred years and eventually lay claim to a third of present-day Canadian soil. Canadian Confederation saw the dissolve and reorganization of the British colonies and in 1870, Cree lands were sold to the new federal body. Consistently, the ambition of European settlement in the history of the New World has been to claim a landscape using imported notions of authority and structure. The better parts of that history tell a story of fulfilled Native-settler negotiations cemented by bonds of marriage¹, a significant symbol of mutual understanding and respect. However, these examples, which have been scant in the saga of Native-settler history, predate Confederation. The invention of the nation-state allowed for a self-proclaimed authority that required no validation or negotiation with any stakeholders besides itself. Governance was characterized by forcible action and aggressive policy-making geared toward controlling and eradicating Native identity and place. The Cree, apace with all First Nations in Canada, have been fighting to bring visibility both to their identity and to their presence in the landscapes upon which their authority and knowledge is firmly seated.

The Cree call this subarctic land *Eeyou Istchee*. The popularized English translation of this phrase is suited better to the worldview of a settler than that of a hunter: *The People's Land*. This translation ignores the non-possessive nature of *People*, or *Eeyou*. Perhaps a more accurate translation, one that is pertinent to the Cree worldview, would be *The Land's People*, as suggested by Hans M. Carlson, a writer, researcher and close friend of the James Bay Cree.² With all possessive tones removed, it becomes *People and Land*. An even truer translation might be *People Land*, which indicates the inextricable union of the two. The European occupation of *People Land* was a story that began with the commoditization of both *Eeyou* and *Itschee*.

The crew aboard the Nonsuch, the first British trading voyager ship to sail into James Bay, arrived with a fair understanding of which goods the Cree found desirable enough to consider trading for. The Cree had been developing such negotiations with French explorers south of Eeyou Istchee since the beginning of the 17th century, and were at this point well-versed in European means of trade. Thus, with the approach of the French from the south and the English from the north, the James Bay Cree found themselves at the first political interface of 'North' and 'South' since the advent of European occupation (FIGURE 2.8). This meeting of 'North' and 'South' is embodied not only in the evolving political narrative of todays Eeyou Istchee, but it is also reflected in the land's evolving geographical, climactic, and cultural narrative.

In the field of architecture, as in many other fields, there has been a booming interest in Arctic territories over the last five to ten years. This international conversation has been stimulated by the melting of the polar ice caps and the idea of a more 'accessible' North. The cultural keyword 'North' immediately inherited new meanings: time-efficient sealift schedules, unexplored forms of renewable energy and storage, wellsprings of natural minerals and resources, new global identities and defense structures, and so on. 'North' had always denoted a perceived barrenness, both ecologically and culturally (FIGURE 2.8).³ Seemingly, the gateway opened and 'North' consequently became much more than twin and foil of the Antarctic. The unattainable had become the habitable, and a global race to occupy the land commenced-a kind of embodiment of The New World phenomenon. In the best cases, this attraction to the 'North' has been accompanied by the willingness of the 'South' to understand and honour the identities of those already occupying the landscape. The difficulty exists in the fact that there are two dramatically different worldviews intersecting here, and so however careful an action may be, the line between honouring and imposing is a precarious one.

Absent from this conversation is an attempt to confront the 'in-between'—that is, the space between 'North' and 'South.' The image of the latter is a populated and active city, while the former is a disconnected and barren expanse, spotted with the occasional being, either man or animal. Where does one end and the other begin? Is the answer different depending on the variables in question, such as population, politics and climate zones? While the concepts of 'North' and 'South' may be distinguished by their disparate cultures, ecologies, politics, and geographies—clearly enough to position one as an organism separate from the other-there exist many degrees of 'North' and 'South' in either direction. Research and design discourse is often quick to propose the construction of new pathways and networks between these distant places without an acknowledgement of the pre-existing intersections and relationships between them. Eastern James Bay, for instance, is intimately connected not only to southern Canadian cities such as Montreal, but also to southern states, including New York and Vermont. The landscape of Eeyou Istchee has been dramatically reshaped in order to source electric power to these cities. Unidirectional relationships such as these allow the South to both reap from and mutate the soils of the North, without having to adequately reciprocate the service. Carlson argues that the refusal of the South to incorporate the North into its narrative is a grave and deep-rooted error.⁴ In other words, the unwillingness to transparently include Native presence and history in the dominant Western narrative is not only unfair, but extremely unhealthy, as the Western world certainly has a colonial and largely aggressive presence in Native identities.

The South allows the North to exist separately by excluding it, and yet the South is palpable and present in the North. Perhaps a question worth considering is not how can the South occupy the North, but rather, how can the North be allowed to occupy the South?

Consider the interface of the two. Somewhere between the Arctic tundra and the southern city lights, all-season roads end. Northern roads are, in all cases, carefully orchestrated pathways shaped by the economic desires of a body politic. At the inauguration of his electoral campaign in 1958, Canadian Prime Minister John G. Diefenbaker launched the Roads to Resources program as part of his Northern Vision, a political and economic initiative to connect the state to untapped resources via 2,270km of newly constructed all-season roads. Though the plan proved too ambitious to be completed during Diefenbaker's term in office, Roads to Resources was a major catalyst to northern roadway development, and many of its projects were finished in later years. Today, the all-season roads of Canada terminate at resource nodes, such as mines or hydroelectric dams. Though in rare cases roads seem to arbitrarily disappear into the northern bush, certainly this was never the original intention. Natural resource discoveries had simply led construction elsewhere. Thus, the northern road is entirely a political project, and the distance to which the road can travel north is limited by an even greater governing body: the climate (FIGURE 2.9). The construction of all-season roadways in an Arctic climate has only recently been considered by the Canadian government⁵. Because such a project was previously deemed too expensive and technically challenging, transportation in the Arctic for large motorized vehicles presently takes place on seasonal ice roads. In the past, the all-season road could not physically be constructed beyond the Subarctic. The northbound economic thrust constantly found itself stunted by natural systems. It is a compelling story, a tale of the age-old tension between mortal desires and nature's power. The road is the great Canadian Odyssey, its hero pressing north, stationing himself where riches are within grasp, being displaced when the storm arrives.⁶

Could the Subarctic, the locus of this epic, also be the location of the North/ South interface-the place where the road, icon of urbanism and human development, terminates and the romantic image of the unbounded, barren wilderness begins? While it may not be helpful or possible to trace the exact coordinates of this interface Subarctic James Bay is in multiple ways a symbolic intersection of North and South. Besides being the end of a southern road line, it is a resource belt in which both provincial and federal extraction programs are in place. In this visible ecological interface, the polar bear and the skunk can be found cohabitating. Home to the end of the tree line, it contains the last area of Taiga, the northernmost part of the Boreal forest, before the treeless tundra (FIGURE 2.8). Eastern James Bay, in particular, has historically been a location for the interface of people and cultures. Besides being the meeting place of rival European powers entering from both the north and the south, Eastern James Bay is also the site of a rare positive relation between the Cree and their Arctic neighbours to the north, the Inuit. The history between the Inuit and the Cree had been volatile and violent until new connections were forged when Inuit families sailed south to the warmer, more biologically diverse islands of Eastern James Bay in the early 20th century.⁷

These social, geographical, and political intersections are not simply circumstances of the region. They are its identity—they make up the fundamental and unique fabric of the James Bay Cree. Being at the centre of these crossways has fostered a culture of observing, reinventing, learning, and teaching, which are all central principles of Cree culture. Carlson reminds us, "Native cultures were changing long before the coming of the Europeans, but these changes were exacerbated in situations where individuals entered into another cultural environment, as happened with contact places like James Bay".⁸ The James Bay Cree have endured radical attempts by the nation-state to essentially erase Native presence in order to also erase the narrative of the landscape as it existed before European presence. The blatant and intentional 'forgetting' of Native existence reached a critical point in the late 1960s when a monumental plan to develop Eastern James Bay into a hydroelectric capital was set into motion, unbeknownst to the Cree. Though hydro development has transformed the Eastern James Bay landscape into an unrecognizable place, Northern development did not come without the strong, immediate, and effective opposition of the Cree.

The major road connecting Eastern James Bay to the South is the aptly named James Bay Highway, which runs north for 620km before terminating in a town called Radisson. The James Bay Highway was constructed in the 1970s by Hydro Quebec in anticipation of The James Bay Project, a large-scale and ambitious plan to transform James Bay into a mega-complex of dams, reservoirs, and generation plants (FIGURE 2.10). The proposal followed Quebec's Quiet Revolution, a social movement of the 1960s that called for political independence from Canada. This monument to hydroelectric power symbolized for Quebec the ability to instate itself as an independent and contemporary centre of economic innovation on a global stage. After all, Quebec was the colony of 'New France' before the Royal Proclamation of 1763. As a fragment of European France, it needed its own Paris, the masterpiece of infrastructure and urban planning designed by Georges-Eugène Haussmann. Quebec found its infrastructural revolution and leader in the campaign of Premier Robert Bourassa, who sought to channel the power of northern hydrology into the city. What else could he call this visionary project, scheduled to cover 166,500 square kilometers of land, include four dams and offer three times the power generated by the largest hydro plant in operation at the time, but La Grande?⁹ It was of no concern to Bourassa and his followers that this plan involved the hollowing out of Cree territory and the robbing of their Nile. Cree presence, narratives, and hunting values were essentially invisible next to this massive, technologically dominant project, which was guaranteed to be a boon to the economy. Bourassa and the Quebec government were unprepared for what followed the public announcement of La Grande in 1970, as the Cree entered a relentless and intense legal battle with Hydro Quebec.

A well-known testimony in the court cases began with a Cree hunter being requested to take an oath upon the Bible.¹⁰ When asked to tell the truth, the whole

truth and nothing but the truth, the hunter responded with, "Well, I can't tell you the truth. I can only tell you what I've seen." Moments like this in the courtroom were poignant and plentiful. They amplified the radical difference in southern Canadian and Cree relationships to the land. Government lawyers posited that the Cree relied more heavily on institutional bodies than on the land and designed questions for the Cree to confirm this position.¹¹ The Cree were asked to express their relationship to the land through numbers and measurements. They were asked to commodify the land. They refused. Carlson accurately captures the farcical nature of the interrogation in his chapter 'Flooding the Garden,' noting one instance in which the Quebec government asked a Cree hunter whether he was 'part-time' or 'full-time'.¹² They wanted a one-dimensional portrayal of the hunter, and they asked questions that would conjure that image. However, the relationship between the Cree hunter and the land is profound, even when spelled out in statistical, diagnostic words:

One: that he has a trapline, number 33, within the Eastmain hunting territory that includes the area on the north side of the Eastmain River and both sides of the Opinaca, and that his trapline is presently being used; Two: that for several years, he has used his trapline every year, for periods from three to seven months; Three: that when he is not on his trapline, he also hunts and fishes around the settlement, throughout the year; Four: that he catches beaver, lynx, otter, bear, mink, rabbit, ptarmigan; Five: that he catches the following fish: pike, sturgeon, Whitefish, walleye, sucker and the big catfish species, the exact name of which is unknown; Six: that he catches the following birds: geese, blue geese, loon, ducks and white owl; Seven: that he and all of his family, one wife and six children, eat approximately 80% of country food, when in and around the settlement; Eight: that he has gone up the Opinaca River a considerable length; Nine: that his children hunt and fish around the settlement when they are home from school.¹³

Despite the government's best efforts to downplay hunter values, it was evident the Cree were indivisible from their land.

Malouf's order that Quebec stop its intrusion on Cree land and rights marked the first time in Canadian history that a fight for ecology triumphed over development.¹⁴ Quebec's Court of Appeal quickly overturned Malouf's judgment, but it could not ignore the weight of this event. The provincial and federal governments were required to negotiate with the Cree, which culminated in the JBNQA (James Bay and Northern Quebec Agreement) in 1975. This agreement established new categorizations of land, each with articulated rules towards economic development. Since this agreement, twelve dams have been constructed across Eeyou Istchee, the proposals for which have been met with protests. As it stands, an area greater than New York State has been flooded by Hydro Quebec reservoirs and river diversions (FIGURE 2.11). The landscape has been irreversibly transformed (FIGURE 2.4-7). The complexes collectively generate enough electricity to power an industrial economy–based country like Belgium (FIGURE 2.13).¹⁵ In the eyes of Hydro Quebec, this is only a fraction of the energy potential latent in Eeyou Istchee. In 1986, the province put forth a hydroelectric dam proposal for the diversion of the Great Whale River.¹⁶ Though the project is currently shelved, there is a general and somber understanding throughout Eeyou Istchee that it is only a matter of time before the proposal will be set forth again and construction will begin. This is an unfortunate reality, but the initial suspension of the Great Whale project was in fact a great victory for the Cree and the Inuit, who protested in the ways they know best—by carefully crafting materials and undergoing demanding journeys through the landscape.

Though the JBNQA was established to promote the involvement of the Cree in political and legislative decision making, all legally binding agreements require both parties to honour the terms. Without speaking to any Cree leaders or conducting any environmental research, Hydro Quebec placed a call for tenders for construction and clear-cutting in anticipation of an access road to the proposed Great Whale site. 1 Cree concerns were ignored by Hydro Quebec, the province of Quebec, and the federal government. It became apparent that the JBNQA could be made into an empty formality by the government when it was convenient for them. Additionally, the energy generated by the proposed facility was not needed for use within the province. The intention was to sell kilowatt hours to the American market. Conversations within their own country had failed, so the Cree and the Inuit decided to approach the people for whom this energy was intended.

The threat of the Great Whale project was imminent. Both the Cree and the Inuit were at risk of losing their homes. Recognizing this shared concern, they banded together in a non-traditional but impenetrable partnership. Despite their hostile past, an earlier story of harmonious Inuit-Cree partnership can be found in the bay. In the 1930s, George Weetaltuk, an Inuit ship builder and navigator for the Hudson's Bay company, moved his community of eight families into the Eastern James Bay island of Cape Hope. Weetaltuk was attracted to the warmer climate and the lush ecology, which demanded that he and his families learn to hunt animals they had never seen before. Life on Cape Hope has been described affectionately by the Inuit. The film "Nunaaluk: A Forgotten Story", produced in 2013, documents Minnie Aodla Freeman's return to the island on which she was born and raised. As

she recalls memories of Weetaltuk, she gestures into the air and projects a collection of homes and half-built ships onto the landscape with her hands and words. Inuit families developed healthy relationships with the Cree occupying the adjacent Old Factory Islands, and both groups learned to speak the other's language. The Inuit of Cape Hope quickly became famed for their craftsmanship, of canoes, in particular. Weetaltuk, the master builder and patriarch, had even constructed a small sawmill and steamer on the island.¹⁵ Photographer and researcher Fred Bleummer recalls his drafting, sketching and model-making abilities, likening Weetaltuk's techniques and design sensibilities to those of Norse ship builders thousands of years earlier (FIGURE 2.2).¹⁷ In 1944, Weetaltuk constructed the Carwyn, a fifty-foot-long, masted boat. Weetaltuk was eighty years old at the time.¹⁸

In 1960s, the Canadian government moved the Inuit of Cape Hope to Great Whale River without warning. Weetaltuk and his families were forced to abandon everything they had built (FIGURE 2.3). The order was part of a massive replanning aimed at concentrating Native populations into fewer locations. Governance was easier that way. The Hydro Quebec projects followed a very similar model. The majority of the communities in Eeyou Istchee today are quite young, as previous settlements had been moved in order to make space for hydro development. Permanent homes in the communities are often trailers from construction and mining camps intended for temporary occupation only. The Great Whale Project was another unsettling and frustrating chapter in Inuit and Cree experience, where families were forcibly removed from their homes to allow for the flooding of their land.

After the Canadian government rejected the Cree and Inuit plea to abide by the JBQNA and halt development, joint protest began. It was not through picketing, letter-writing, or formal meetings. This protest began with a very different set of tools: draughtsmanship, mapmaking, and woodworking. Billie Weetaltuk, son of George Weetaltuk, designed and constructed the odeyak with a team of Inuit men. The vessel was an eight-metre-long hybrid of the Cree canoe, called an ode, and the Inuit kayak. The odeyak was a symbolic union of both Cree and Inuit narratives. Together, Inuit and Cree community members mapped a route from Whapmagootsui to New York City, a five-week trip that would terminate at the cities' public celebration of Earth Day. As the odeyak travelled farther away from the North, the South began to take notice:

I remember feeling very homesick. A lot of us were thinking about how the people back home were getting ready for the goose hunt. In a week we would

be getting home. As we watched odeyak preparing to head off for New York City, there were some Canada geese paddling around in the water. Seeing the geese only made it worse. So a few of us practiced our calls. Of course, the TV cameras instantly swivelled to whoever was calling the geese. I think they were amazed that the geese actually reacted to what we were doing.¹⁹

For the first time, the North had entered Southern consciousness. The odeyak was spotted on New York waters and immediately became the focus of journalism for days to follow. The Inuit and the Cree implored American citizens to consider the impacts of their energy use and to stop Hydro Quebec from damaging Cree and Inuit territories. The demonstration gained the support of several environmental organizations, including Greenpeace, and a meeting with New York City's mayor followed shortly thereafter. This led to a majority vote amongst New York politicians in 1992 to cancel the purchase of energy from Quebec markets. Canadian and Quebec governments were forced to address the concerns of their indigenous populations. In 1994, the project was successfully stopped. This had been their goal, and it had all begun with a design and a journey.

The story of Eeyou and Istchee is intensely sweet and bitter. Themes emerge: power, control, authority, energy. The Cree have undergone overwhelming amounts of change in the last forty-one years, constantly encountering attempts by Hydro Quebec, government bodies, or resource-extraction corporations to rob them of their power, control, authority, and energy. Very quickly, the Cree were launched into the political arena, a system not their own. It demanded they be savvy and persistent—they needed to quickly learn the behaviours and methods of corporations and political bodies in order to challenge them. The Cree emerged with their own administration, council, school board, education board, health board, and more. Now, they have gained the highly valuable ability to self-govern. They have tactfully established partnerships with Hydro Quebec and resource companies such that they can benefit from the unearthing of their land, too. These difficult decisions have involved immense sacrifice, but they have offered the people of Eastern James Bay a level of security that simply does not exist in other Native Canadian groups. Despite this, the last forty-one years have seen profound changes in the Cree relationship to the land, though this relationship has survived numerous attempts to sever it. Southern Canadians often romanticize the concept of the Cree hunter and the bush, willfully rejecting the evolution of hunting values in the wake of technological and infrastructural development. The reality is that land values have certainly changed, but power, control, authority, and energy have always been and will continue to be seated in Istchee, the land. Carlson offers an articulate reflection on change in Cree communities:

Many of these changes have not been for the better, but nothing in the history of the region indicates that this trend need be permanent. Nothing in the history of the region indicates that change, as such, need be a problem for the Cree—only specific changes. Defining the historical context of change and continuity seems particularly pressing in light of these recent events in James Bay. The Cree past needs to be connected clearly with the Cree present in a way that takes the Cree environment into consideration. This is because, when the Cree today appear in court, or at a press conference, or in front of the government officials, they are continuing a long negotiation with white culture, and they are trying to explain the meaning of a long cultural narrative about the lands of James Bay. They are trying to explain their environment to us and, in doing so, are attempting to maintain some control over it.²⁰

The North has been forced time and time again to rely on southern markets, amenities, and models as an aspect of control critical to the creation and maintenance of independent and healthy communities. Balanced relationships with the South are good and beneficial, but the North is not the South, nor does it have to be.

Though southern models have in many cases been forced up them, Cree communities have established fascinating ways of percolating control through these systems and ultimately transforming them. For instance, traditional dwellings such as miichwaaps (teepees) can be seen behind most homes in typologically suburban developments. Social media armatures such as Facebook are critical tools for sharing community information, such as the sighting of the wolf in town. They are also used less formally, to share images of the landscape or simply to say, "Good morning." These two examples create an extremely fitting representation of Cree communities. The miichwaap in town and the online community may seem like chronological inversions of one another, but they combine to create an atemporal situation—they both describe an effort to make the bush, which is timeless, present within the town.

Certain structures are purposefully made rigid in order to make it challenging to infiltrate and transform them:

<u>Research</u>. Hydro Quebec has had a stronghold on ecological research in James Bay since it first became interested in northern hydrology. Documentation of the land is surprisingly scant, as not much material has been produced or at least made public since the early 1970s. Government and hydro-sponsored research has been used as self-serving information, rather than as an illustration of the landscape's condition. For example, the 2014 Eeyou Marine Region Symposium included one presentation by Hydro Quebec, in which a scientist stated that the saltwater/freshwater interface in the Bay has not moved too much since the construction of the dams. This was presented to a room full of people, including hunters and researchers, who had been gathered to communicate quite specifically the myriad of negative impacts of damming. For the first time ever, James Bay has received funding from Environment Canada to establish thorough and genuine datasets for the region.

<u>Development.</u> Cree communities are experiencing rapid sprawl and are continually being fed suburban models by architects and planners from the South. Inefficient ways of building, whether in the construction or planning of the community, are being proposed. Those doing so are quite obviously interested in the financial prospects of working with the Cree. In one instance, a community received a proposal for a shallow outdoor reflecting pool and splash pad—a bold suggestion to a Northern community that could realistically could only use it one to two times a year in a subarctic climate. Despite efforts like this by Southern communities to monopolize on an apparently ample Northern market, the Cree Nation has established its own construction company, Tawich Construction Inc., to serve Eeyou Istchee. Tawich is a fantastic model of independence from Southern resources.

Employment. Mining resource companies and Hydro Quebec have created complex partnerships with the Cree, in which a major factor is the promise of employment. These companies approach school classrooms and market these opportunities to young students. The salaries they offer are unmatched. The jobs require no diploma and follow a two-week-on, two-week-off model. Job security is certainly important in any community, but jobs at the mine can prevent a diversity of skill and knowledge within in the community, However, Eeyou Istchee has seen several examples of families partnering with anthropologists and archaeologists in order to have intense yet respectful and unbiased surveys of their traplines facilitated. This information, compiled by researchers and the trapline family, makes a strong case for the protection of land in the region. The goal to establish protected areas is effective and ongoing.

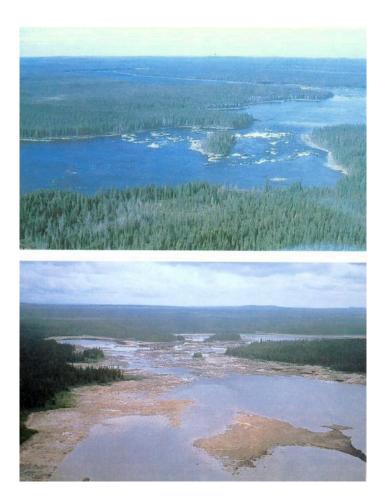
<u>Education</u>. Curricula in northern schools are almost identical to those in southern ones. Aspects of the system like classrooms and standardized testing ignore the fundamentals of Cree modes of learning: knowledge through making and improvement through failure. In the southern model, little room is made for hands-on learning. However, the Cree Education Board has succeeded in integrating Cree language and culture into the curriculum, where students must speak Cree in early education and spend class time on the land.

Each of these matters illustrate a unique friction in the North/South interface and a corresponding impulse to establish a Cree presence in imported models.

The historical analysis and criticism reflected in this essay offers a fairly low resolution snapshot of Cree history, which is much more rich in its content and broad in its depth. However, the keystones presented in this timeline are necessary tools in understanding the significance of Eastern James Bay Cree presence and influence. For instance, take a moment to meditate on where your electric power comes from. Surprisingly, it is a question that very few people have an answer for, but the answer is always one that involves and effects numerous stakeholders and communities.



[TOP, FIGURE 2.2] Boat construction on Cape Hope Islands [BOTTOM, FIGURE 2.3] Remains of boat building on the island today

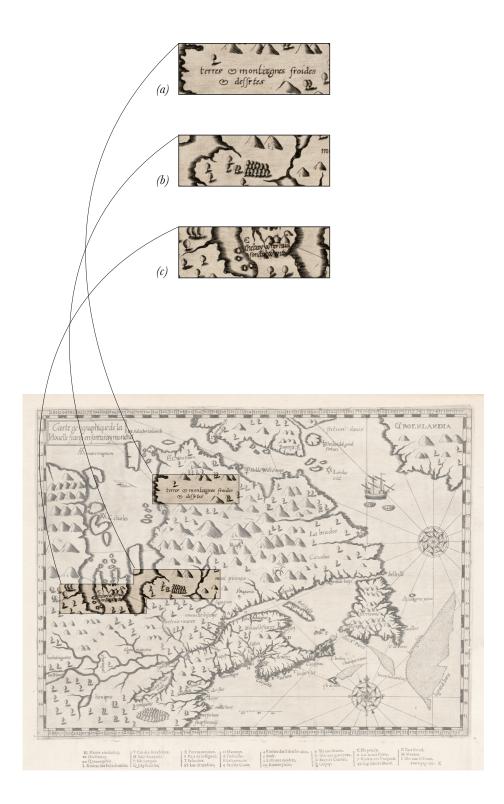


[TOP, FIGURE 2.4] The lower Eastmain River was once a powerful complex of waterfalls and rapids. [BOTTOM, FIGURE 2.5] The river was destroyed with diversions by the James Bay project.



[TOP, FIGURE 2.6] The Eastmain River had the ecological, economic and cultural status of the Nile for the Cree.

[BOTTOM, FIGURE 2.7] 90% of the river flow was sent north to La Grande.



An early map of New France contains cues to subarctic ecology, history, and culture, shedding light on some of the lasting European settler perspectives on the North. As one of the first maps of The New World, its geographical dimensions are largely inaccurate in comparison to those found in Inuit and Cree cartography. Callouts from this map indicate:

(a) The idea of a vacant North, ripe for colonization. A label stating "terres, montagnes froides, dessertes" (trans. lands, cold mountains, deserted) is placed in the northern portion of today's Quebec, which has been home to the Inuit since before European arrival.

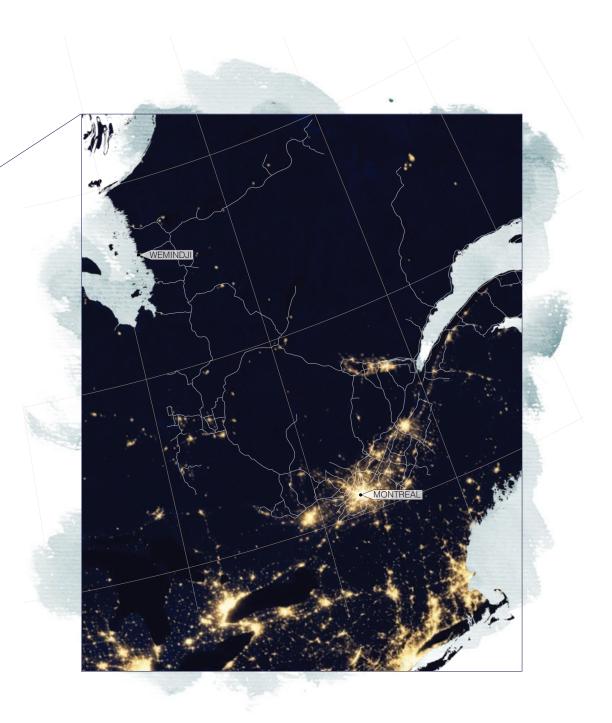
(b) James Bay is situated at the interface of two geographies, where forested areas become rocky and sparse.

(c) James Bay was also a political interface, having been approached by the British from the north and the French from the south. A label in the bay reads "the bay wher [sic] Hudson did wintr [sic]."

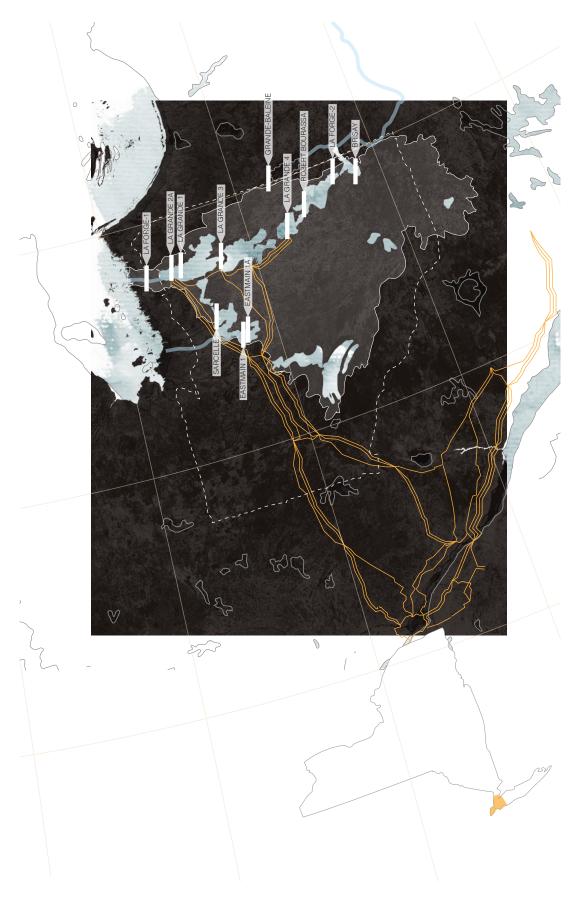
[OPPOSITE, FIGURE 2.8] Carte geographique de la Nouelle Franse en son vray meridiein Faictte par le Sr. Champlain, Cappine. por le Roy en la marine, 1613 (trans. Geographic map of New France in the true sun meridian made by Captain Champlain at sea for the king - 1613).

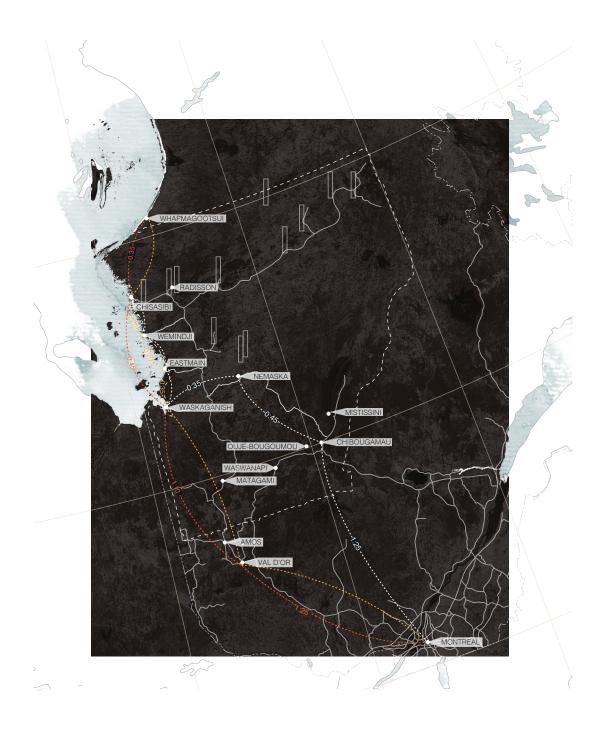


[FIGURE 2.9] This map indicates how all-season roads terminate in the Subarctic region. Most of these roads ends at points of resource extraction. All others end at resource extraction sites that have not yet been developed or previously failed.



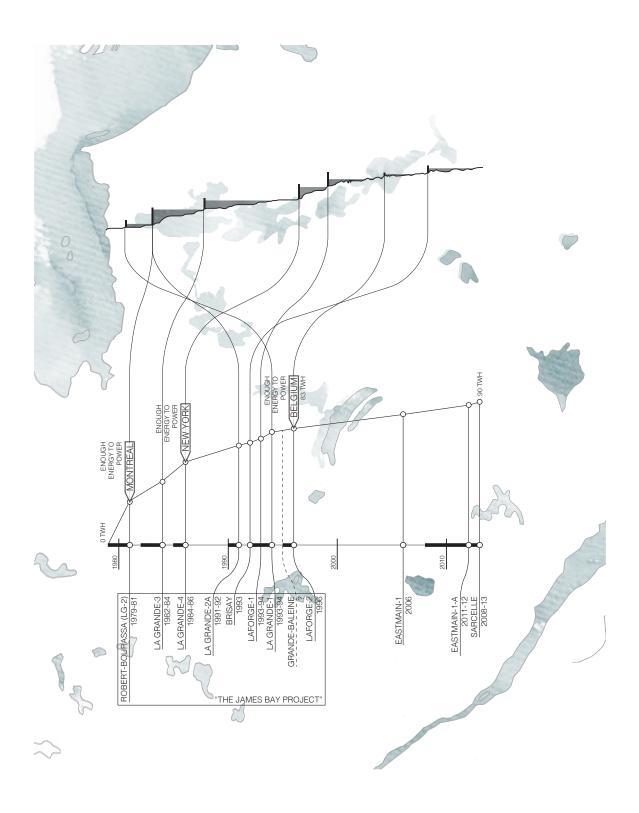
[FIGURE 2.10] A satellite image of the earth at night reveals energy use in southern cities such as Montreal, New York and Vermont. The illuminated cities are in stark contrast to the Cree communities that power them. Roads are keyed in for reference





[OPPOSITE, FIGURE 2.11] This map shows the locations of Hydro Quebec dams and the area of the diverted basin within Eeyou Istchee. Power lines carry energy towards Southern cities. An area equal to that of New York State has been flooded and the entire system can generated enough energy to power New York City.

[ABOVE, FIGURE 2.12] This map illustrates roads and flight routes to communities within Eeyou Istchee from Southern cities.

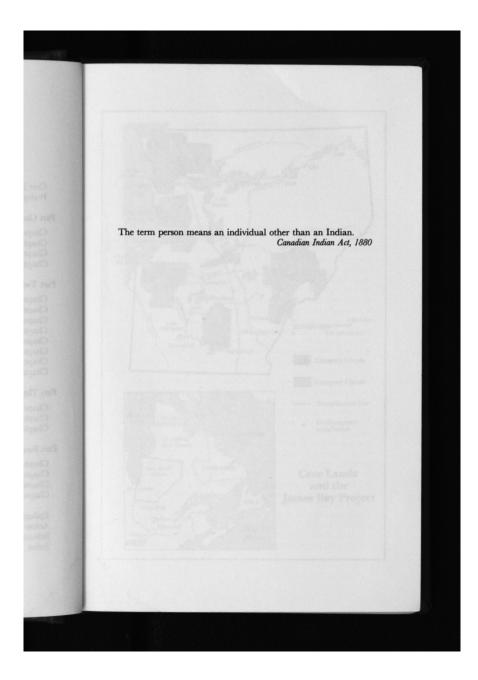


[FIGURE 2.13] History of Hydro Quebec developments in Eeyou Istchee and section through The James Bay Project.

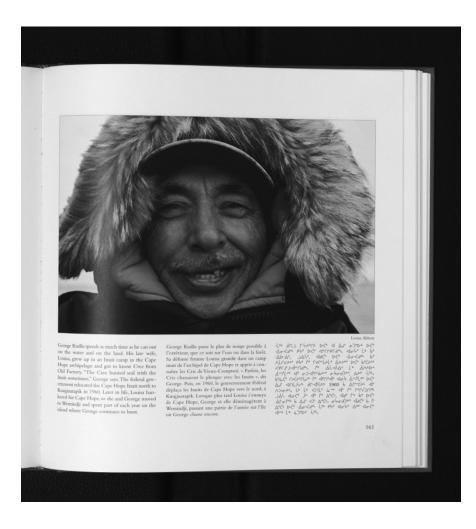
DRAWN, PHOTOGRAPHED, AND INTERVIEWED

KASCHIHUWIN / POWER

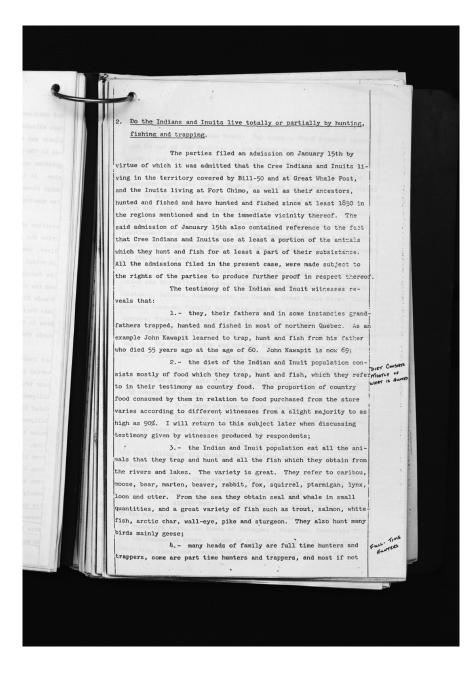
Publications on James Bay history and development describe a variety of 'North's. In any given text, the presence and identity of the Eastern James Bay Cree in Eeyou Istchee might be scrutinized, celebrated, romanticized, or ignored, depending on the authorship. In this small collection of images, leafs of books encountered in research are extracted and reassembled to help describe the multiplex voices on the bay.



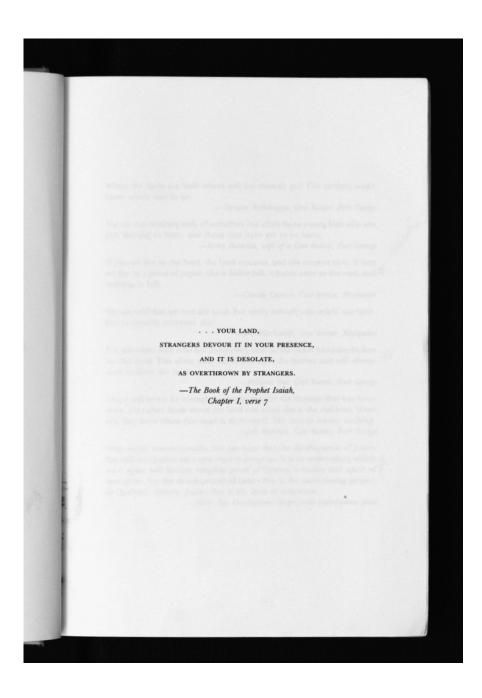
[FIGURE 2.14] The Definition of "person" in the Canadian Constitution: "The term person means an individual otvher than an Indian." From *Chief: The Fearless Vision of Billy Diamond* by Roy MacGregor, 1990.



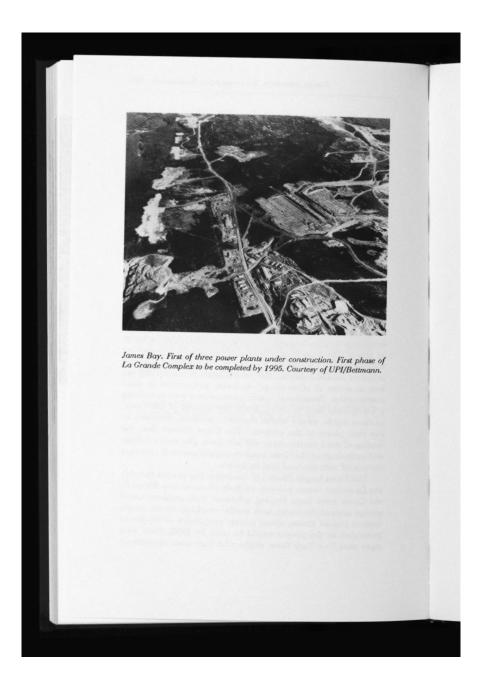
[FIGURE 2.15] George Kudlu, a generous, positive and energetic Inuit elder whose friendship had a profound impact on my experience in Wemindji and the surrounding bush. George is the only Inuit community member. He is a seasoned navigator of the waters, have travelled alone by canoe from the Bay to the Eastern shores of Canada. Here, George appears in a book on Cree territory. From *Eeyou Istchee* by Louise Abbott, 2010.



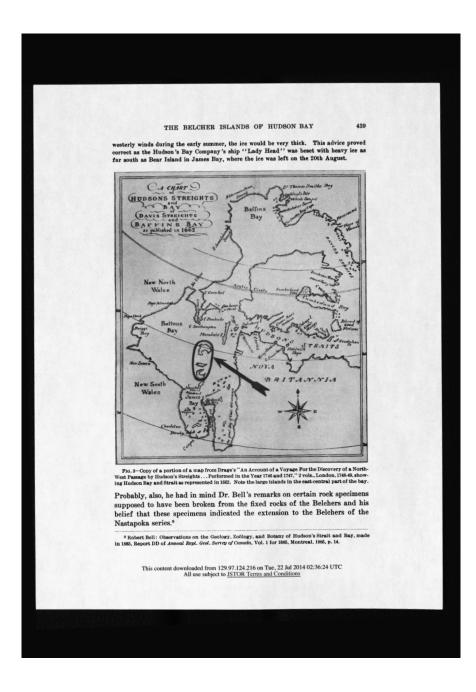
[FIGURE 2.16] In a transcript from the Hydro Quebec Trials the North (1922), the relationship between Cree and Inuit hunters and their land is measured by percentages, years, and lists. From Kanatewat et al. v. James Bay Development Corp, Supreme Court of Canada, 1973.



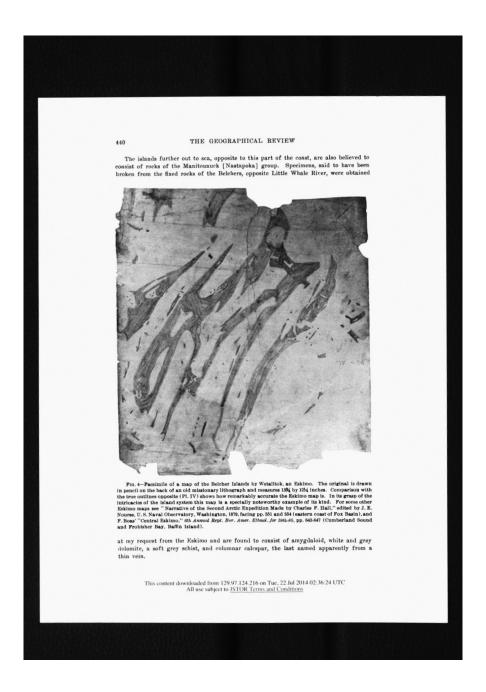
[FIGURE 2.17] Isaiah 1:7, "...your land. Strangers devour it in your presence, and it is desolate, as overthrown by strangers". From *The King James Bible*



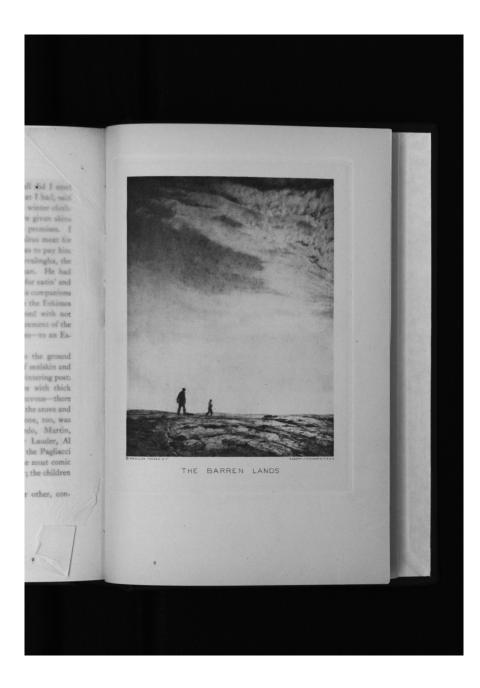
[FIGURE 2.18] An overhead image showing the constructing of Hydro Quebec's La Grande complex, tearing through Eeyou Istchee. From *Ecocide in Native America* by Donald A. Grinde and Bruce E. Johansen, 1995.



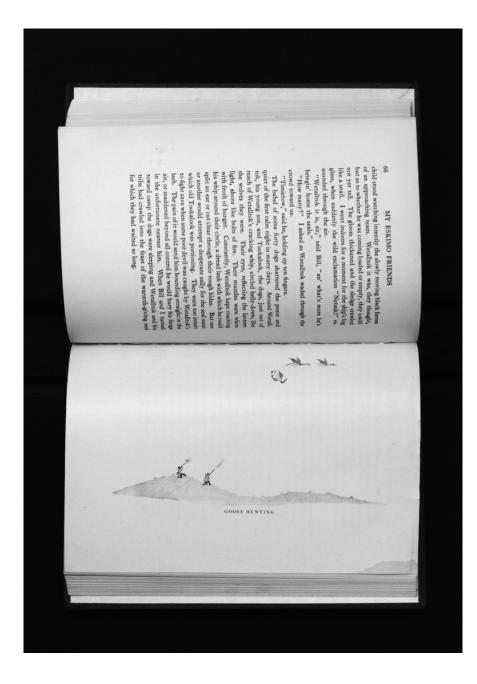
[FIGURE 2.19] Map of Belchers Islands by British explorers. From *The Belcher Islands of Hudson Bay: Their Discovery and Exploration* by Robert J. Flaherty, 1918.



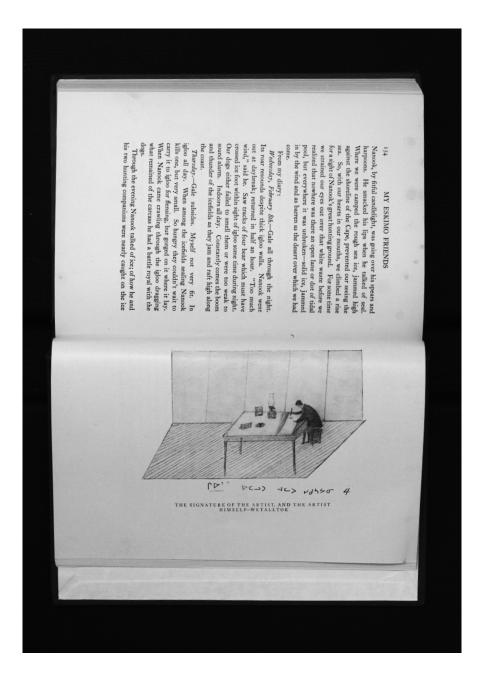
[FIGURE 2.20] Map of the Belcher Islands by Inuit craftsman George Weetaltuk From *The Belcher Islands of Hudson Bay: Their Discovery and Exploration* by Robert J. Flaherty, 1918.



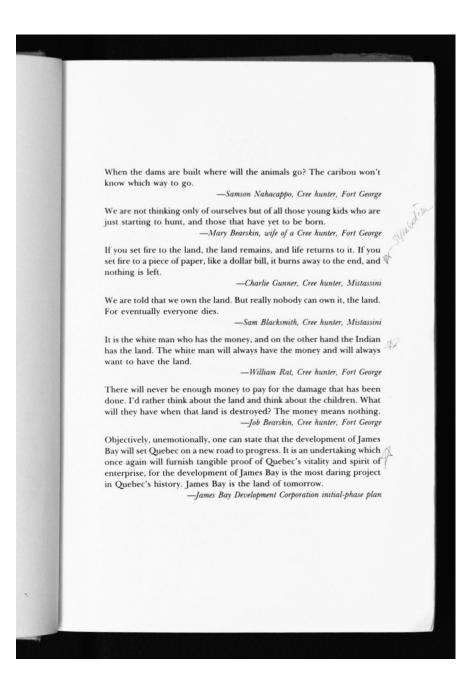
[FIGURE 21] American filmaker and photography Robert J. Flaherty, known for his documentary film, *Nanook of the North* (1922), captured this image of Inuit hunters in the landscape of Northern Quebec. The photo is titled "The Barren Lands", reinforcing the culture of North as empty space. From *My Eskimo Friends* by Robert J. Flaherty, 1924.



[FIGURE 22] Illustration of the goose hunt by George Weetaltuk. From *My Eskimo Friends* by Robert J. Flaherty, 1924.



[FIGURE 2.23] A compelling self portrait of George Weetaltuk drawing at his desk. The skilled drafstman draws in axonometric. From My Eskimo Friends by Robert J. Flaherty, 1924.



[FIGURE 2.24] Sam Blacksmith of Mistissini states, "We are told that we own the land. But really nobody can own it, the land. For eventually everyone dies." James Bay Development Corporation states, "James Bay is the land of tomorrow."

From Strangers Devour the Land by Boyce Richardson, 1975.



JIIYANUU

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OURSELVES

CONTENTS

JIYANUU / OURSELVES

In contemporary landscape and design discourse, hunter cultures are often rejected as belonging to an idealized past. The anthropocene looks toward landscape infrastructures and machines as a way to mitigate the ecological impacts of human behaviours. Considering the disconnect between southern cities and the resources that fuel them, this hunt offers lessons on forging relationships between environments and humans in the pursuit of ecologically good design. This chapter first profiles Cree land and stewardship values, and second proposes a set of ethical considerations for the empathic architect.

JING ECOLOGICAL GOOD
Connect to Resources
XS & BEGINNINGS

[FIGURE 3.1, PREVIOUS PAGE] Cree snowshoes worn during a site visit

PURSUING ECOLOGICAL GOOD

JIYANUU / OURSELVES

Perhaps one day you touch the young branch of something beautiful. & it grows & grows despite your birthdays & the death certificate, & it one day shades the heads of something beautiful or makes itself useful to the nest. Walk out of your house, then, believing in this. Nothing else matters.

- Aracelis Girmay, "Elegy." from Kingdom Animalia¹

I am drawn to stories of lonely victories. They have elements that feed my spirit. I enjoy longing, lessons in pliancy, and lying on my side.

George peers at me through his timeworn skin as if he is a ventifact, the Arctic wind having, over years, carved his face with a motif of creases and crow's-feet. We talk about the RCMP's massacre of sled dogs and Afroman's "Because I Got High." We talk about how to navigate through fog using only the waves that strike against your canoe. Inside his winter cabin, his stories frost my skin—they are as true as ice.

The seekers, the pilgrims, the explorers. These are the Euro–North American heroes, the archetypes whose combined spiritual malaise is celebrated in our culture for collectively moving the human spirit forward. The glorified protagonists in these epics are driven by the belief that there are lessons 'out there' that cannot be found 'in here'. The prize of this hunt is knowledge which, once captured, can be transformed, applied and disseminated at the will of the hunter. George explains to me how he survived six weeks marooned on an ice floe at the age of ten. I become aware of how the supple hide around my feet was once the coarse, heavy back of a moose and thank the hands that made them so.

It seems that if we are not living in a state of self-inflicted exile, we are certainly attracted to the power and stories such a life can build.

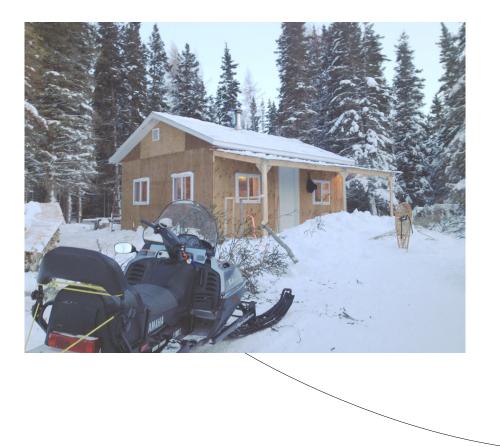
Often the insatiable pursuit of greater spaces has very humble beginnings. Gilgamesh and Enkidu searched for cedars, St. Augustine set out for pears. Darwin dug mulch. These light expeditions were pivotal, however small they seem within the great scale of the epic that contains them. Simple beginnings snowballed into cultural reformations. George Kudlu shares with me these smaller stories. They add up to have the scale of an epic. But George's epic, unlike the explorers celebrated for defining Western culture and domains, never involves him leaving home in order to pursue knowledge. George, like any good Inuit or Cree hunter, is a seasoned explorer of inner space. In order to understand this from a Western perspective, the definitions of what is outer and inner, what is mine and yours, and what makes a nomad, migrant, explorer, or settler, must be set aside. These are some of the fundamental qualities that help describe how bearers of a culture place themselves in the world. The pursuit of knowledge is, therefore, intrinsically linked to worldview.

This body of work is in many ways a call for empathy--a call for the architect to acknowledge boundaries and broaden awareness through looking past ones own perspectives. In his book, *The Empathic Civilization*, Jeremy Rifkin explains, "when we empathize with another being, there is an unconscious understanding that their very existence, like our own, is a fragile affair, which is made possible by the continuous flow of energy through their being".² In order to best learn from and work with community members in Wemindji while also contributing to an academic arena, I had to try, as best I could, to see a Cree worldview. To see a worldview means also means to see where knowledge is positioned, and how a person might attain it.

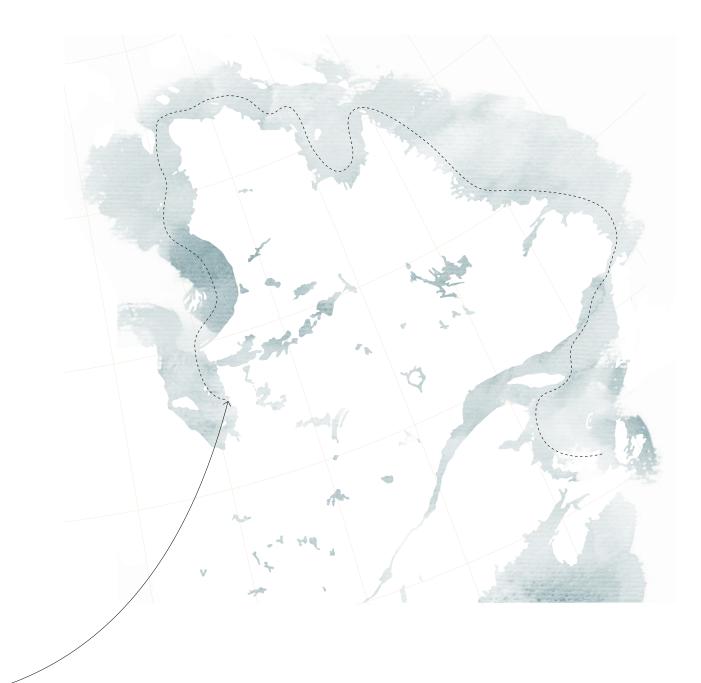
The desire to know is a shared human quality that does not discriminate between cultural or physical boundaries. However, the means to knowledge changes from culture to culture. If desire is something latent in all human beings, what is the power that transforms this into action? Aristotle called this ethereal quality 'phantasia', without which "neither animals nor men would bestir themselves to reach out of present conditions or beyond what they already know".³ Desire is satiated by the creation of fictions: the narratives, both intimate and epic, constructed to situate the human layer in the depth of the universe. Knowledge comes from the evocation of patterns, fuelled by the mortal desire for more love, more information, more time. How one enacts the verb, which is to say how a culture chooses to navigate time and space, is the variable that ultimately describes the core characteristics of a worldview. For the Cree, knowledge is in the land and it can be found by means of the hunt.



[FIGURE 3.2] Ice fishing and kite flying on Loon Lake with George



[FIGURE 3.3] George's winter camp



[FIGURE 3.4] George has travelled from the coast of Nova Scotia to James Bay by canoe.

We are living in what geologists term the anthropocene, an epoch of overwhelming human influence on our planet's ecological processes of selfremediation, replenishment and cleansing. It is an era of ecological crisis, an era filled with greenhouse gases, rising temperatures, ozone punctures, decreasing biodiversity, sinking deltas, rising sea levels, ocean acidification, and freshwater depletion. In recognition of the tipping point that has passed, there is a global rush to assume the role of steward and find ways to tend to our suffering planet. This impulse, coupled with the bitterly painful understanding that our population is rising at an uncontrollable and unsustainable rate, has fostered the utopic vision of the eco-city. The eco-city, coloured green, is a self-cleansing machine that has a neutral impact on the planet. Besides the urban centre, solutions are needed in the zones of imminent crisis, the ulcers populating the earth's surface. An article published in the Journal of Landscape Architecture in 2001 argues for 'landscape machines,' the robust nature of which relies on an amalgam of 'landscape and science.' In them, the former is reinvented as its own processing centre.⁴ Abandoned mines, polluted deltas, sinking landscapes: These sites of damage are promised to be born anew by multifaceted processes of remediation. Visualizations of these projects depict a promise of green abundance: a lush, bursting public garden that holds the social potential for a new definition of a new public. The glaringly obvious worldview supported by the green city and landscape machines is that our species' survival in the wake of ecological crises is unilaterally dependent on the technological evolution we are able to undergo. What is missing from these projects is the sense that, to support the welfare of our ecosystems, we must also evolve socially, culturally, and politically.

We believe the pursuit of ecological good is for our children, but are we expecting them to wake in a world designed to take care of itself? Are we denying the fundamental need to revisit human behaviours and attitudes in the hope that our mega-scale machines will assume full responsibility for ecological stewardship? How can we design architecture that encourages an awareness of human presence and impact?

Our response in North America to the current ecological crisis is not surprising, considering the dominant Western worldview. The position of Western man in the world is quite clear: apart. A wounded landscape is to be salved by machines external to our bodies, and by the eco-city, although it in no way accounts for the increasing burden of the human population. Ross Adams describes this as the self-annihilation of architecture and recognizes these utopic visions as an attempt to, in some way, erase human presence.⁵ The anthropocene is saturated with this

simultaneous hope and despair, as all signs point to the inevitable destruction of ourselves by ourselves—perhaps because we are working outside of ourselves. Junya Ishigami's essay, *Another Scale of Architecture*, discusses the possibility of architecture at the scale of a biome. His articulation of distinct 'worlds' within our world hails from an Eastern disposition. However, it serves as an accurate depiction of the dominant Western worldview of man and ecologies:

The world of subatomic particles and atoms, the world of small insects and animals, our human world, the world that can only be perceived on a global scale, and outer space. They constitute an even larger succession of worlds, each one slightly different from the next...Scale gives a dimension to things, creates classes and hierarchies, and makes each world something concrete. ⁶

Knowledge is an evocation of patterns in the human experience. We classify these patterns: each animal, each layer of information, is its own world. The universe contains this multiplicity of worlds, rubbing and vibrating against each other at paces that are somewhat independent and somewhat interdependent. Still, they are distinct enough to be classified as separate systems. Man has an agency that no other being possesses. Is it any wonder that, with a worldview like this, we are met with the anthropocene, the egocentric celebration and destruction of a species whose unprecedented need to consume is an undisputed 'human right?'

Confronting the future is frightening: a common reflex is to invest our energy and faith into more powerful, more robust, more complex machines. Attempts to look to the past for answers, the same past that brought us into crisis, is wasted time. Erle Ellis writes firmly in *Stop Trying to Save the Planet*:

Nature is gone. It was gone before you were born, before your parents were born, before the pilgrims arrived, before the pyramids were built. You are living on a used planet. [...] Nature just hasn't been the same since well-armed hunters came on the scene.⁷

In truth, the landscape has been cultivated and shaped ever since the tool-bearing man arrived. Words like 'natural' and 'nature' suggest an original and perfect order that does not exist any longer—trying to regain that original order is, as a result, futile. Robert Markley argues in his essay *Time* that sustainability, at its core, is a type of time, one that challenges the longstanding concepts of chronological time (*kronos*) and 'the opportune moment, the "right time," or, as in contemporary Greek, 'the weather' (*kairos*):

Sustainability ultimately refers to an idealized homeostasis between humankind and environment that never existed except in the sense that robust ecological systems could remain unaffected by low-density populations of humans chasing a few bison hither and yon.⁸

Here Markley, too, positions sustainability as an unrealistic, highly rhetorical movement toward a nostalgic ideal. Mankind is at the centre of a time defined by ecological crisis, both yearning for and rejecting the past as it hurries toward an indeterminate future.

In conversations on sustainability, hunter culture is often reduced to an aspect of an idealized past. The success of hunter culture is measured solely in low human populations and outmoded technologies that simply do not apply in the contemporary moment. More accurately, the dismissal of hunter culture as past is an indication of how diametrically opposed its epistemologies and worldviews are to those of the dominant Western world.¹⁰ There is more to be learned from the ways in which a culture, whose understandings of space, home, and ownership are inverse to our own, has persisted within the dominant Western contexture, than simply a sense that the hunt is a relic of a long and lost past. Often, native cultures are smothered with the wing-clipping concept of 'oneness,' an oversimplified ossification of man and nature that does not address what it means to consider man to be a relative to all other species. The hunter's relationship to the world goes against ego, the aspect of the mind that conflates desire with entitlement. This takes a kind of strength, composure, and humility that is not supported by today's dominant cultures. The reward for this behaviour: the landscape knows you.

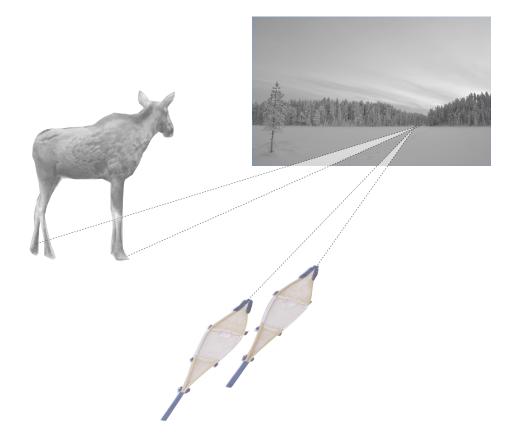
AND CONNECT TO RESOURCES

JIYANUU / OURSELVES

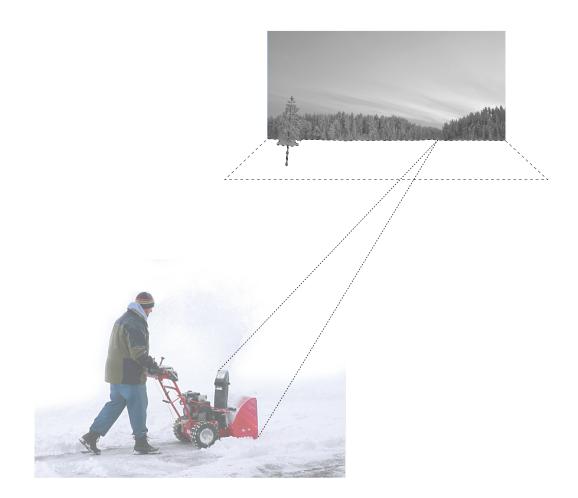
Urban publics are disconnected from the spaces that fuel them. The following set of images is a satirical critique of this distance. Extreme 'solutions' are proposed in order to establish connections to resource territories and control energy use. While these proposals may seem extremist or oppressive, they are in equal weight to the impact of resource extraction on Cree lands. The contamination of Cree ecology is twinned with the intentional and routine flooding of the city. The limited support and resources offered to communities in the wake of development is twinned with energy blocks on communication devices, the close companion of the urban dweller. These provocations offer only a snapshot of the severity of ecological damage in the Bay.



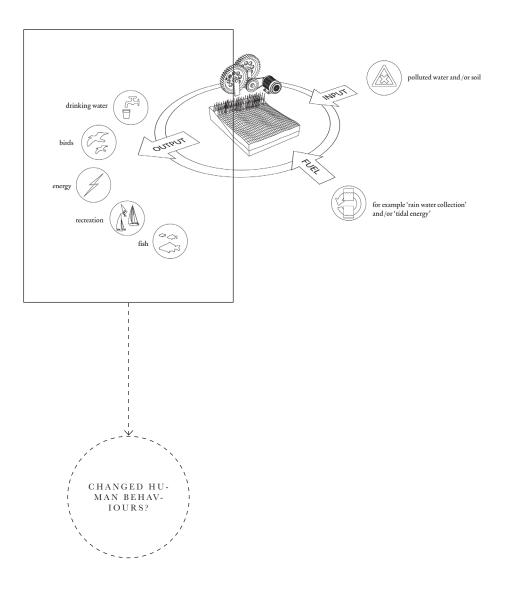
[FIGURE 3.5] Crossing a snowy field. The tool-bearing man had no need to evolve physically. The human brain is capable of evolving objects and landscapes to suit the bodies needs.



[FIGURE 3.6] The moose alters itself. It grows long legs in order to traverse areas of deep snow and water. The human alters itself. It builds a set of legs.



[FIGURE 3.7] The human builds a machine to alter the landscape

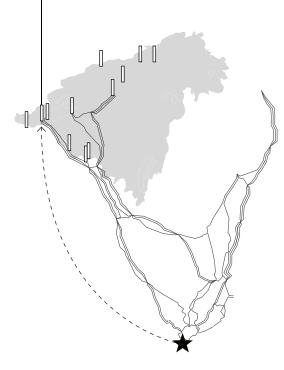


[FIGURE 3.8] Clean water and diverse ecologies are typical 'outputs' of the landscape machine. Nowhere does the machine imply a change in human behaviours, energy consumption or education.

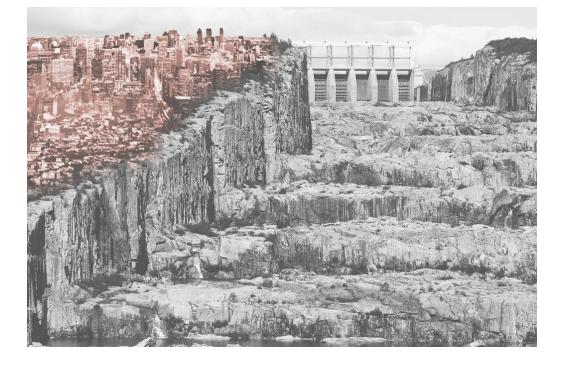


[FIGURE 3.9] Eco-feedback is a relatively new and promising movement that aims to connect publics with resource and energy use. These interventions are often independent, smaller scale endeavours. Projects include Tidy Street, an augmented trashcan called Jetsam projects a live image of its contents onto the sidewalk pavement, an Eco Counter records and displays the total number of pedestrians and cyclists on a street in Montreal, and the slavery footprint application.

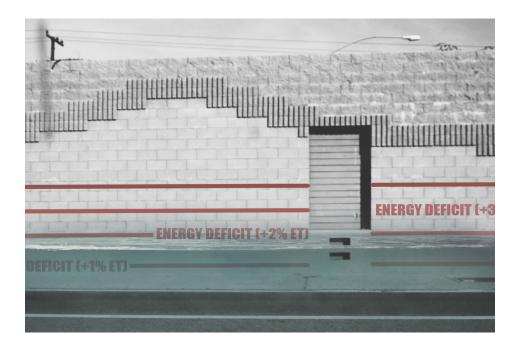




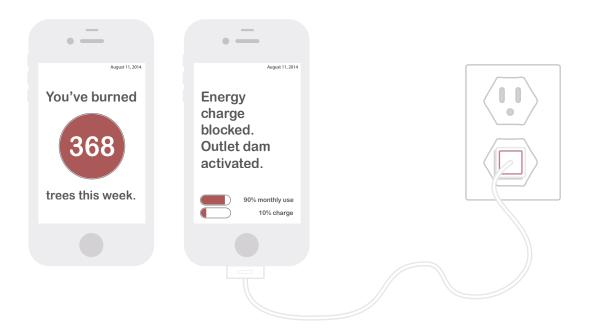
[FIGURE 3.10] Citizens of Southern Quebec cities are disconnected from dominant sources of electricity. A tiered spillway three times the height of Niagra Falls was cut into the bedrock of Eastern James Bay on Cree territory. The spillway is active when the South requires energy. The flow of water is, therefore, arythmically dictated by consumer demand rather than something cyclical, such as seasons.



[FIGURE 3.11] Urban centres are disconnected from the resources that fuel them. Creating adjacencies between the two will foster a greater, stricter and widespread awareness of the implications of energy use. Montreal is resituated to rocky outcrops flanking the James Bay Spillway. When the spillway is active, the city will witness the deafening and terrifying scene as water crashes through the constructed landscape. This image will become connected in the cities collective consciousness to high rates of energy consumption.



[FIGURE 3.12] When energy consumption in urban centres exceeds the acceptable level imposed by 'ecologically good' governance, punishment is enforced on the urban environment. The city is flooded to reflect the flooding in territories of hydrodevelopment. The higher the level of energy consumption is above the standard, the more the city is flooded. Citizens are taxed based on the level of flooding (indicated by a dedicated 'et' or energy tax). Markers of flood levels and deficits are marked consistently along walls in the public environment—a constant reminder of the risks of careless energy consumption



[FIGURE 3.13] Mobile devices always come with permanent apps that cannot be deleted, such as 'calendar' or 'photos'. A counter will be included in these permanent applications. The counter records the energy use of the resident equates the consumption (kJ) to number of trees, (or books, or barrels of oil, or bunnies) burned. This is a controversial twist to the fairly common calorie counter apps used for health and weight loss tracking.

ETHICS & BEGINNINGS

JIYANUU / OURSELVES

Architecture requires an ethics rather than moral prescriptions. No more rules and systems of values, but rather attitudes and ways of being, the poetic and philosophical basis for action: the action of opening itself to life and endowing it with immanence. — Philippe Madec, *Pour Que La Vie Ait Lieu (Fragments)*¹¹

More than the potential of architecture to provide opportunities to connect and change human behaviours, I was interested instead in the behaviour of the architect. How can the architect design for the North, or for any community in which inhabitants have a worldview external to the architect's, without imposing her or his own assumptions? How can the architect honour rather than insist? What is the appropriate behaviour in this context? How should I, as an architect, act?

My current research is in pursuit of these answers—a navigation through the tensions between North and South toward a more responsible practice of architecture in this particular context. Through my experience of being oriented and taking informed action in the North, I have established a set of precepts for the architect. I hesitate to call the guidelines I am advocating steps, rules, or instructions, though I believe it is necessary to follow them in order to do good work. Instead, 'Beginnings' is more appropriate—I infer no potential outcomes.

The first is to live there. My plan to move to Wemindji lingered for a year before it became a reality. During that time, I vacillated between excitement and despair. It was unclear if it would even happen, and I worried my graduate studies would be for naught. I was unwilling to found my ideas on another person's research. They needed, I thought then, to be founded on an 'authentic' experience. I was able to demonstrate my dedication to the community before moving there by persistently making attempts at communication and articulating what I, as an architecture student, could offer. Together, the community and I needed to discern what my place would be—if there was a place for me at all. The second is to make yourself open to learning. Learning from people, that is, not learning about people. This is an important distinction to make in research since, as previously mentioned, the line between honouring and imposing is a fine one. Clear the mind, and arrive "sightless, with stupid love in [your] heart."¹²

The third is to get involved. Be no particular person—not a researcher, or an architect, or a writer. Remind yourself that you are many other things: a daughter, a father, a friend, etc. There is abundance in every corner of the community, in every conversation. Work in the post office, thaw a moose hide, deliver radio notices, crochet with Gookums (grandmothers), and chase rabbits around the community. Do this before designing a community workshop.

The fourth is to involve everyone. All activities in Wemindji, from the building designs to craft activities, were done for, by, and with the community. Researchers interview, but people converse. Choose genuine conversation and let everyone, from Elders to youth, participate.

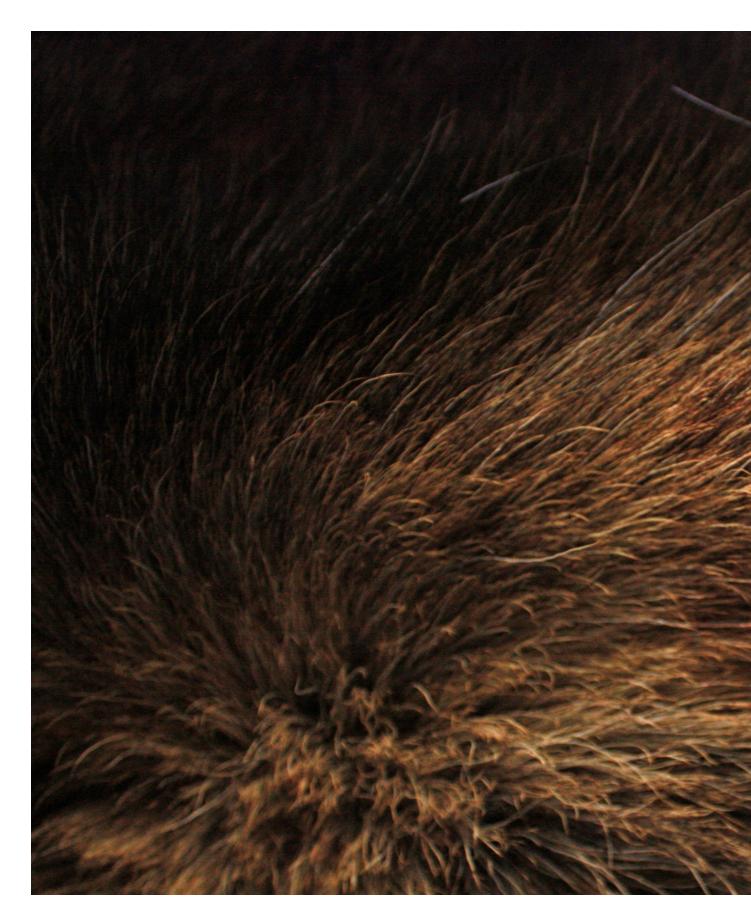
The fifth is to allow yourself to be affected. If your presence is authentic and built on compassion, let that show. Be open to being changed. This is key to transforming research into something more powerful: experience. Research implies a kind of separation, a distinction between the researcher and the subject, a boundary. Dissolve the lens and live. Make real friends and real architectures.

A lived example to illustrate these precepts is appropriate here. I lived in Wemindji for a long winter season. The community 'mini-mall' had caught fire before my arrival. As a result, several community programs, such as the post office, the health and wellness employees, the community store, the snack bar, the radio station and my soon-to-be-office were moved to the community hall. While the organization of the space was challenging, the new hyper-programmed building allowed for positive interactions and collaborations between community members. Sharing space became synonymous with sharing stories, or tea, or photographs. The closest relationships I built in Wemindji and the opportunities I had to experience the bush were in some way due to the temporary state of the community hall.

Knowing the community was integral to my practice. I worked on several architectural projects in Wemindji but imagined, perhaps naively, that my graduate design would be something far more imaginative than what I had proposed to the community. In conversations with Southern researchers and academics in the field, there was an excitement over novel ideas for this not-quite-north community. While compelling, it felt problematic. It seemed to exacerbate the gap between the researcher and the community members, rather than diminish it. An effort must be made to understand hunter culture by the researcher, and the understanding depends in part on experience of the hunt and of the bush.

When the architect approaches cultures and worldviews she has not been conditioned to understand, she must surrender to experience in order to do good work. This isn't accommodated by our traditionally systematic approach to research. The architect needs to live in the community, needs to use her hands daily, needs to have conversations, needs to use her hands again, needs to have more conversations, and use her hands again. Draw, scrape, gut, and hold. The work must be an all-inclusive conversation. John Ralston Saul proposes that multiculturalism, worn proudly as a badge on Canadian identity, has native origins.¹³ The practice of multiculturalism comes to us from the idea of the all-inclusive circle, the cultural framework in which First Nations established and honoured healthy bonds with newly arrived French settlers. The architect must embrace the circle and be changed by what moves through it.

Then let creation spring from this change.





CONTENTS

MOS / MOOSE

In a web of grants, clearances, and abstracts, the visiting architect might hold steadfast to their agenda. Securing a proposal is an investment of time, but upon arriving it may become problematic. While fostering a connection to the place, the architect may find that an agenda must be abandoned in order to truly do good work. This chapter asks the visiting architect to move with the current of experience. A material study in moose fibers and felting becomes a series of communal activities in making and craft. The study culminates in a building design, which provides space for these activities in Wemindji.

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[FIGURE 4.1, PREVIOUS PAGE] Moose pelt

MÔS / MOOSE

Prior to leaving Cambridge for Wemindji, I had spent eight months in hopeful anticipation that one of my messages to the community would be met with a response. I weaved in and out of touch with different community members and for some time it seemed like living in Wemindji while working on my research was an unrealistic aspiration. I was in academic limbo, designing solutions for and making assumptions about people I had never met and a place I had never been.

Feeling disconnected, I sought to keep my hands busy. I began spending time with and learning from a felting artist, Sue Firsker, in Paris, Ontario. Fibers and fabrics hold important value in my family. Since a young age, I have been helping my father prepare his turban fabric through a process of pulling, and folding, and repeating. My grandmother is a talented seamstress. Though we were raised in different worlds, we connected through fibers, filaments, strings, cords, and threads. Felting was an exciting new art to encounter. A small amount of friction and moisture transformed matted fibers into an inflammable, water-resistant, and highly effective insulator. The architectural capabilities of such a material are extremely compelling.

In preparation for a trip to the Hancock Shaker Village in Massachusetts, I read an article on the Shaker craft of wood textiles. Strips of poplar are harvested in the winter, cut thinly, and soaked. A craftsperson described the distinct aroma of the wood and the sensation of relating so intimately to a material. I sought a similar connection. In my research on Cree hunting practices, I became increasingly interested in the coat of the moose, both for its thermal properties and for the fact that it's the only part of the animal that is discarded. The hairs are stripped from the skin and burned away, too coarse to be used in clothing.

I began to imagine the possibility of creating rigid tiles of moose felt that could be used as the skin of a warming hut or a michwaap.

[FOLLOWING PAGE, FIGURE 4.2] First set of moulds, tile prototyping





Experimenting with blends of wools and cottons, from raw to refined, felted panels were pressed in-between CNC-cut wood moulds and coated with plant-based starches and resins for rigidity. The first set of moulds rendered 4 shapes, which were tested for their capabilities of interlocking to form a complete, structural fabric. Adjustments were made to the most successful tile shape and a second set of moulds was cut.

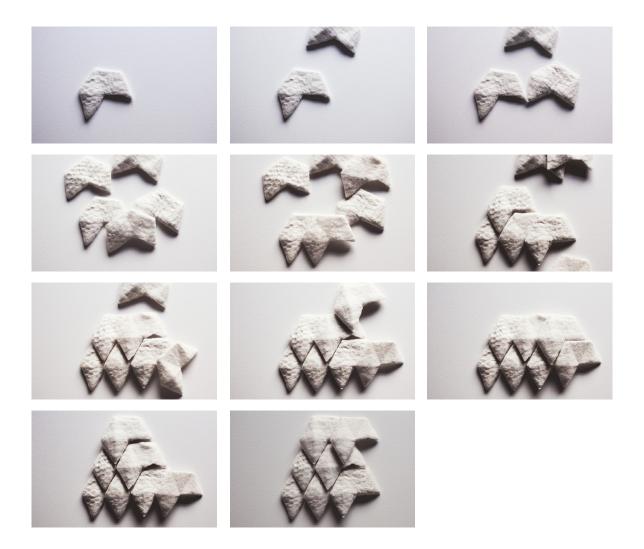
The hope was to hear from the community and to bring the moulds along with me. Eventually I arrived, offering my services, accompanied by this curious wooden box.



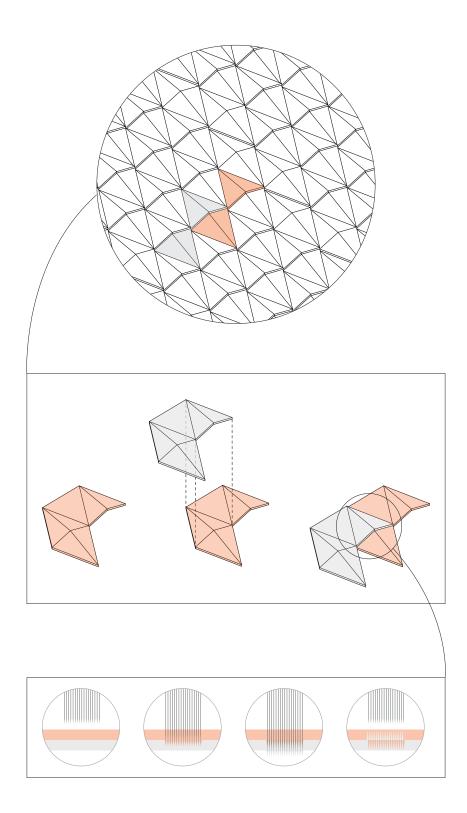
[FIGURE 4.3] Felted tiles



[FIGURE 4.4] Rigid felt tiles as building skin



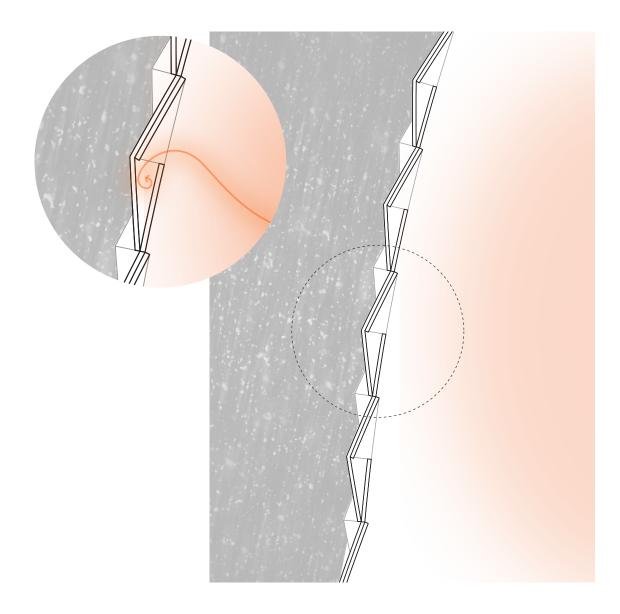
[FIGURE 4.5] Interlocking tiles



[FIGURE 4.6] Tiles are seamlessly connected in a process of punching through two layers with a series of needles (needle puncher). The punctures pull fibers from once tile and weave them into the other. The bond can be reinfoced with natural resins.



[FIGURE 4.7] Sanding the second set of tiles



[FIGURE 4.8] When assembled into a complete fabric, a section through the skin reveals pockets of space. Moose hairs have a high insulating factor due to their hollow nature. These pockets help to trap heat on the interior of the space, increasing the thermal value of an already thermally robust material.



[FIGURE 4.9] Translucent qualities of rigid felt tile skin

I was invited to Wemindji to work as a designer and as an assistant to the Cultural Department. After one month of living there, I asked if Linda Stewart and I could organize a workshop on the preparation of moose hides. We made an event of it and invited several classes from the school to partake in the fleshing and dehairing of the hide. A quarter of the hair was removed, resulting in four garbage bags of hair.



[FIGURE 4.10] Feltsing and pressing process [FOLLOWING PAGE, FIGURE 4.11] Tile mould with panel of moose felt

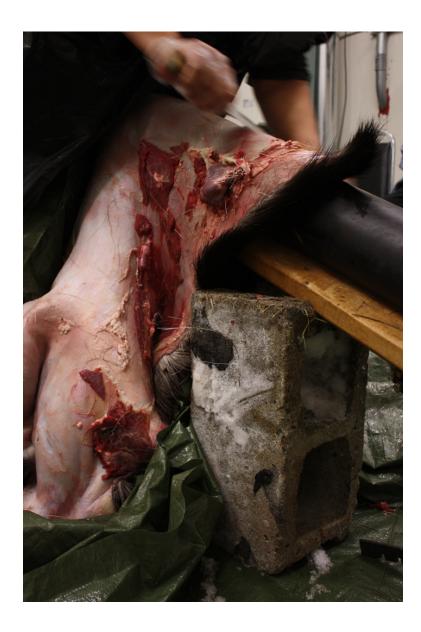








[FIGURE 4.12] Thawing moose hide



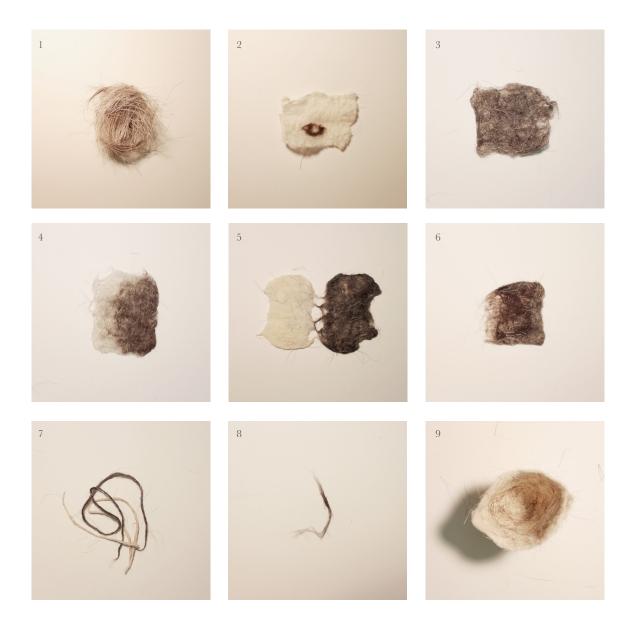
[FIGURE 4.13] Fleshing moose hide



[FIGURE 4.14] Youth dehairing moose hide



[FIGURE 4.15] Hair and flesh is removed with a curved blade called a 'flesher'





1. loose

- 2. undercoat felted over wool
- 3. blended with wool, 2:1 ratio
- 4. cut and blended with wool, 1:1 ratio
- 5. felted as connecting fibers
- 6. felted along edging
- 7. cable felted with wool, 1:1 ratio
- 8. cable felted with undercoat
- 9. as 3d structure, blended with wool
- 10. as above, elevation
- 11. testing translucent qualities

[FIGURE 4.16] Felting iterations with moose hairs

MÔS / MOOSE

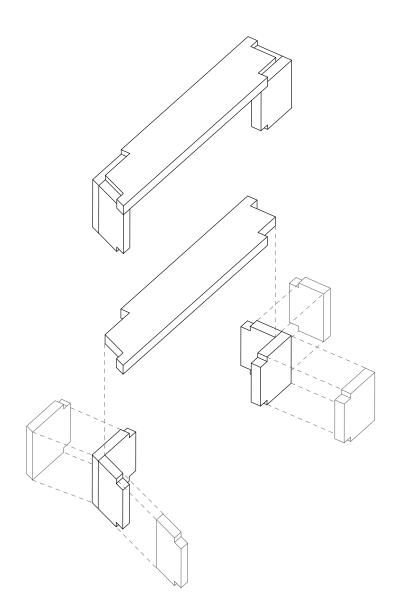
There is no such thing as a neutral education process. Education either functions as an instrument which is used to facilitate the integration of generations into the logic of the present system and bring about conformity to it, or it becomes the 'practice of freedom', the means by which men and women deal critically with reality and discover how to participate in the transformation of their world.

- Richard Shaull, drawing on Paulo Freire

In the process of exploring moose hairs and felting, the most valuable moments were those spent working on the hide with the youth. Teachers were happy to take their students out of the classroom and have them participate in a hands-on, cultural activity. Recognizing an opportunity to engage in making with the youth of Wemindji, Connor O'Grady and I conceived of 'cree8', a design-build platform, as a way to provide resources and space for hands-on learning. Two weeks of design and making activities, including circuitry, photography, and 3d-modeling, were arranged in collaboration with the Youth Department. We felt grateful to have the interest of the youth and to hear words of appreciation from their families.

The Work Oriented Training Path (WOTP) is a school program offered to students as way of accumulating credits through work hours. Organizers of the program at the Maquatua Eeyou School explained how some students experienced an unfulfilling work experience. The majority of the work included shovelling yards or bagging groceries--certainly valuable experiences but lacking variability. Working with the Cultural Department, we had recently covered a traditional dwelling for land-based activities in the community. Discovering that the dwelling was in need of benches, we acquired tools and wood and assembled a quick, stackable design with students of the WOTP program. Another positive experience in hands-on activities, Connor and I only had to provide the space, the tools, and a de-briefing on the equipment, methods and design. We were present to answer questions but the benches were truly constructed by the youth.

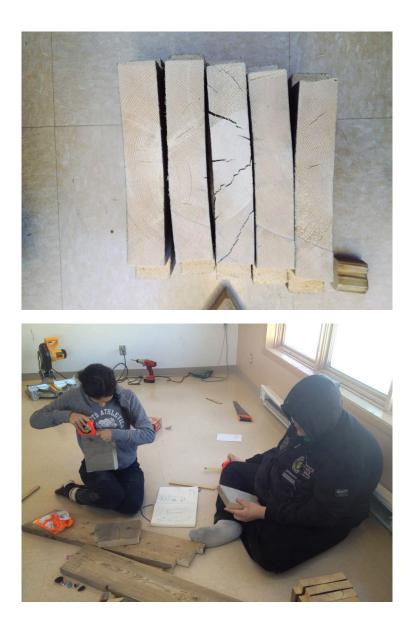
After the benches were complete, we discovered some of the participants in the bench-making did not even need hours. They had already completely the program. 'Work' was no longer an intruction - it had become the simple act of making a bench with friends.



[FIGURE 4.17] Stacking benches design for use in a traditional dwelling



[FIGURE 4.18] Constructing the benches at the Youth Centre [FIGURE 4.19] The team. From left to right: Christopher John, Desmond Georgekish, Austin Mistacheesick, and Johnny Jovan Tomatuk (not pictured: Kenlee Shashaweskum)



[FIGURE 4.20] Wood was reclaimed from leftover contruction materials of the community church[FIGURE 4.21] Johnny and I, measuring and marking up the wood.



[FIGURE 4.22] Austin and Kenlee working on handsawn cuts



[FIGURE 4.23] Bench components

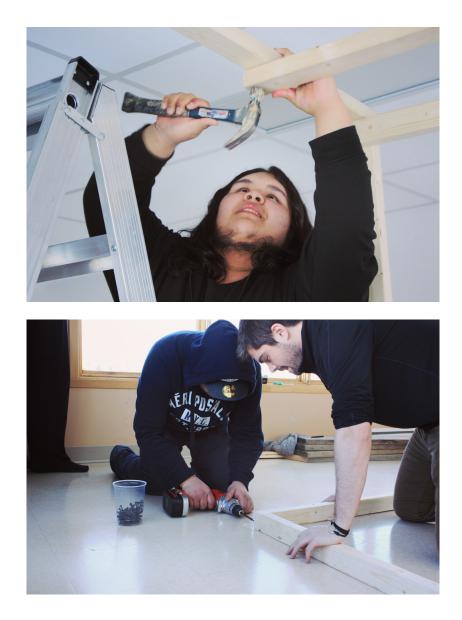


[FIGURE 4.24] Completed benches





[FIGURE 4.25] Kenlee and Johnny [FIGURE 4.26] Kenlee and I



[FIGURE 4.28] Austin working on the frame [FIGURE 4.28] Kenlee and Connor





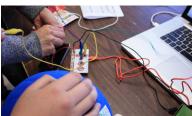








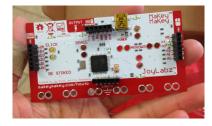
















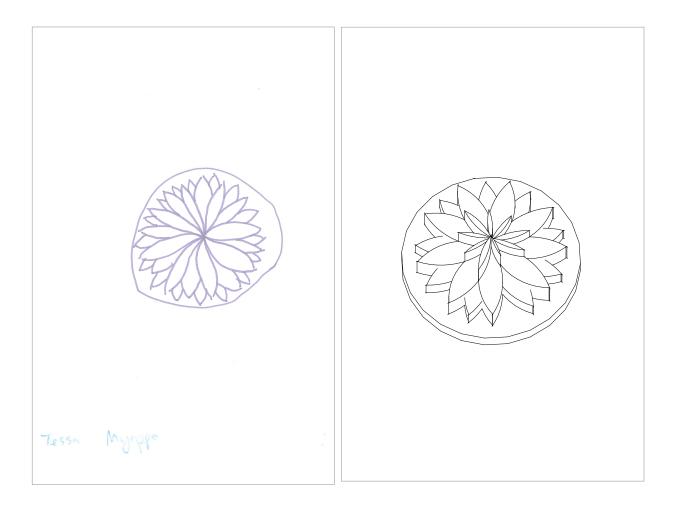
[FIGURE 4.29] Cree8 activities



[FIGURE 4.30] Arduino with Cree8



 [FIGURE 4.31] Green screen and photoshop activities with cree8 for 'dream engine' sessions
 [FIGURE 4.32] Deveren Georgekish and Leander Saganash asked to go skydiving for their 'dream engine' experience



[FIGURE 4.33] Tessa Mayappo's design for an Olympic gold medal [FIGURE 4.34] Tessa creates a 3d digital model of her medal design





Power tools and materials used in the WOTD activities were lent to our group by a range of community members. The second floor of Wemindji's Youth Department became our temporary workshop.

Wemindji's 'canoe factory' is an quonset hut building in the shipping area of town closer to the Bay. Though I was unable to enter the building, I was told by colleagues that it was used as storage for workshop machinery and storage. This building is re-envisioned as a basic woodshop for the town. The west wing contains standard workshop equipment and supplies while the east wing contains open 'cabin' spaces for cultural crafts that do not require machine equipment. A utility corridor and n open courtyard connects to two.

While working on designs for the Cultural Campsite, our team decided that there may need to be a conditioned building on our near the site—if not immediately then at some point in the future. The Canoe Factories could service the adjacent campsite and provide opportunities for multiple generations to dwell in the same location. Community activities were generally attended by very young children, adults and Elders. Perhaps a basic woodshop could serve as a satellite classroom and workplace for young adults. Perhaps it could supplement rigid, classroom schooling with hands-on, interest driven, and culturally aware education, while also providing opportunities for multiple generations to occupy a single building.



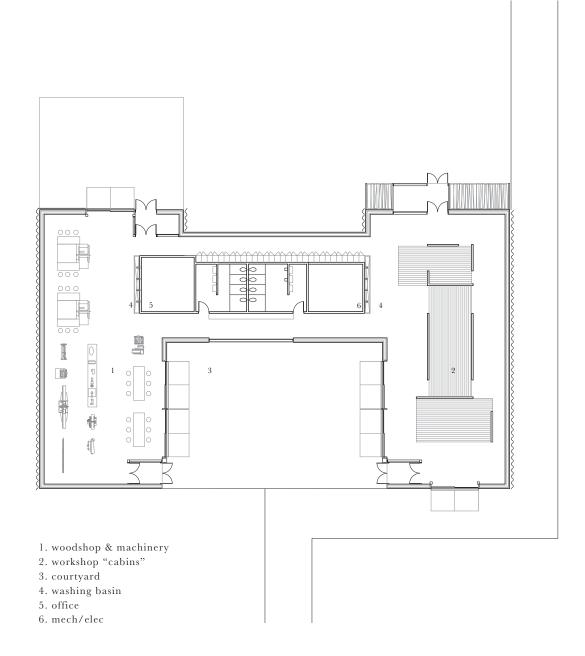
[PREVIOUS PAGE, FIGURE 4.35] The building is located in Wemindji's shipping area where the waters are deep enough to accomodate barge and boat access. [FIGURE 4.36] Wemindji's "Canoe Factory"



[FIGURE 4.37] The east wing entry protudes slightly, creating a depth in the facade to accomodate firewood and other materials or equipment.



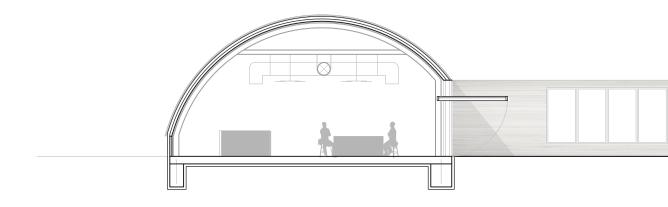
[FIGURE 4.38] Canoe Factory Site Plan @ 1:750



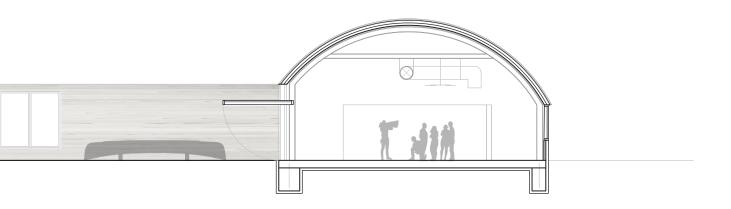
[FIGURE 4.39] Canoe Factory, Floor Plan @ 1:250



[FIGURE 4.40] Workshop "cabins" in the east wing provide suitable spaces for Cree cultural activities, such as paddle-making, moose de-hairing, and snowshoe-making. The spaces follow common cabin proportions found in proximity to the site in order to create quieter, more intimate environments for the workshops which are typically taught by Elders.



[FIGURE 4.41] Canoe Factory, Section through workshop spaces and courtyard @ $1{:}100$





[FIGURE 4.42] A broader network of workshops, goods and materials

Shipping by barge to and from Wemindji is fairly infrequent due to road accessibility. However, barges do leave town in order to transport goods to their Northern neighbours in Whapmagootsui, a community only accessible by water and air. There is a potential for the Canoe Factory to connect to other coastal communities due to its location in Wemindji's shipping area. Goods created in the workshop can tie into existing sealifts and possibly support a more active shipping schedule. If each community had a similar building in their port area, perhaps a small scale economy can be derived from the exchange of goods and materials across the waters.





CONTENTS

WAUPSH / RABBIT

The greatest priority of the visiting architect must be to establish a connection to site. Site is not simply a built environment but a network of stories, people, ecologies and attitudes. This requires the architect to become a practiced listener, a participant in silent conversations. This hunt details the pursuit of a rabbit and its transformation in human hands. Design proposals for spaces of conversation between hunter and researcher precipitate from these lessons on communication and listening.

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Build a Table	
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[FIGURE 5.1, PREVIOUS PAGE] Completed rabbit pelt.

HOW TO HARVEST RABBITS

WAUPSH / RABBIT

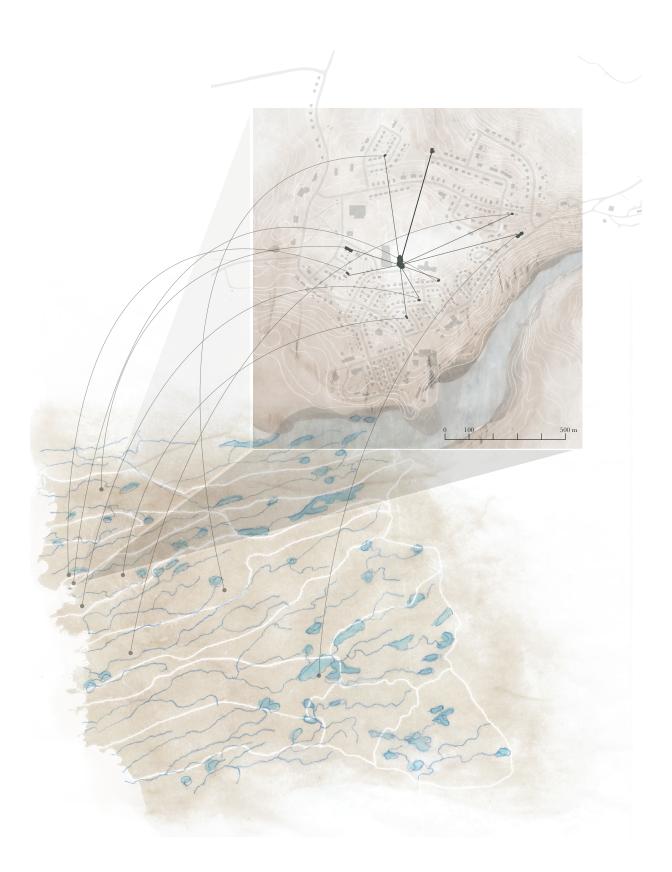
"Find rabbits."

This was one task assigned to me during my time in Wemindji. I am no hunter. In place of brass wire, I had to use different tools: the radio, posters, and speech. Skill, in the Cree culture of learning, is something acquired through failure and self-direction. And silence. The duties entrusted to me in Wemindji provided opportunity for all of these things. I fell gamely down the rabbit hole, without instruction.

Mary, an Elder, had agreed to demonstrate her way of skinning and cooking rabbits to any community members who expressed interest. For two weeks, my conversations with people began with the mention of rabbits. The opportunities to connect with community members through conversations about animals were invaluable. They laid the foundations for many strong friendships that grew during my stay. I was not an intern, or an educator, or an architect arriving in the North to market my knowledge. I was a girl, helping out and looking for rabbits. People would bring them to me in the community hall freshly killed, flexible, and held by the legs, or else frozen stiff in a cardboard box. Occasionally a hunting story was shared with me. I kept the animals, thawing, bleeding, marbling the linoleum tiles of my office floor with red and white.



[ABOVE, FIGURE 5.2] Rabbits in the office. [OPPOSITE, FIGURE 5.3] Speculative path of rabbits from traplines, to homes, to the Community Hall, to the Fellowship Kitchen.



AND ACHIEVE GOOD HEALTH.

WAUPSH / RABBIT

I had welcomed the search for a consolidated form of representation for this book, whether in word or in drawing. Through the process of articulating thoughts and stories, my understanding and awareness has evolved. The fluidities in tone captured in this book are symbolic of this evolution. My personal connection to Wemindji was not simply fostered while I was there—it has increased every day since.

For example, I have noticed changes in my written voice. There are times when conventions and formalities of the language I typically use simply cannot carry the message. For instance, I could write, "This rabbit workshop was organized by the Cultural Department as part of their winter traditional skills programming," but that feels inaccurate and dishonest, even though it is a technical description of the event. Cree language, however, fits like a glove. In the few Cree words and phrases I have learned, I have noticed the gap between the signifier and the signified is minimal—almost nonexistent. There is little room for confusion or miscommunication.

Place names are a clear example. A trapline map of Eastern James Bay might be marked with a single Cree word that translates to "the place where the river splits into five branches," or perhaps "the place where the poplars grow." The placename is characterized by geographical features of the site. The place is its name.

These words, though unembellished, have a depth and fullness of meaning. For instance, the Cree word for health is miyupimaatisiiun, which translates to "being alive well." Good health for the Cree is synonymous with good presence, and is achieved by actively participating in relationships with people, animals, and the environment.¹ "Being alive well" means working hard to strengthen these relationships, for they power the spirit and the body.

In dominant Western clinical practice, the term "health" is rooted in empiricism, biology, and individualism. It describes a body that is free of illness, a body that is not sick. Treatment is a reflection of this outlook—it is delivered after the sickness is already present. The body is seen as a complete kit of moving parts and treated as such, as opposed to a single cog in a broader system of living things. Health is therefore about absence, not presence. It is about being alive, but not necessarily well.

While hunting practices in Eeyou Istchee have certainly changed, they have persisted. The same can be said for the concept of miyupimaatisiiun. In a contemporary context, to be "alive well" means to be in active conversation with the world while acknowledging and interacting with a flux and flow of complex conditions. To not simply to live on the land, but with it. Plumbing this concept was critical to my own development as a designer and as a human being. It continues to be. This idea of establishing a connection to a site has been presented, throughout my education, as a central responsibility of the architect. We celebrate those whose work depends on this intimate connection to site: Scarpa, Zumthor, Murcutt, Wright. The architect at their post. The body of work cultivates looseness; each project fits its site and situation, well, like a glove.² I am more inspired by these designers than by those who repeatedly explore a singular vision.

Site is not a two-dimensional shape on a plan drawing. Site is made of people, stories, conversations, and temperatures. Site is the small, snowy valley where a dog chases you down on your way to work. Site is in Fred's jacket, its aroma of diesel and burning pine. Site is in the couch of a new friend who gives you the opportunity to grieve with her as she recounts her first painful night in a residential school. Site is in the arena, where seven girls push you around, trying to teach you to skate. Site is in the muscles of a rabbit. Site is in the frozen bay, where you hear silence for the first time in your life. Look at the possibilities of a site like this. You cannot find them on a topographic map.

Architecture is filled with personality, so of course design depends on connections

to site. The experience of site informs the ideas in the design, whether intentionally or inadvertently. This is why connections of these kinds must be shaped. Still, I see a single vision continually imposed on the North, whether by architects who enter communities with drafted plans of suburban-type developments or by architects using the romanticized qualities and distant nature of the North to propel their own agendas: to be published and noticed. These architects want monologues, not dialogues. This isn't to say that the work has no value, but to me, it is site-less. I see this practiced in academia and professional work. I see it taught to students. I have experienced it in my own education. What distinguishes us from the developers drawing plans for James Bay hydro-development in the 1970s? Have we really changed?

Without working towards miyupimaatisiiun, or in other words without participating in personal exchanges with people, animals, and environments, balance in architectural work is difficult to achieve. This is especially important to remember when designing in a cultural framework outside of the architect's own. If those relationships are not privileged above all else, the architect risks creating a fetishized product or an unethical solution, one founded on a simplified and skewed image of a place—a two-dimensional shape on a plan drawing.



[FIGURE 5.4] Overlapping animal, human and vehicular tracks.

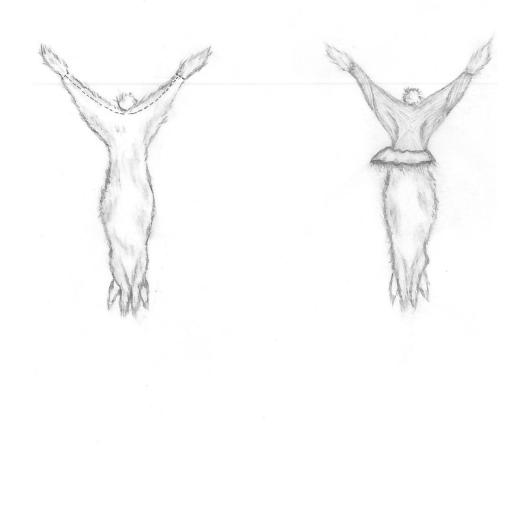
HOW TO SKIN A RABBIT

WAUPSH / RABBIT

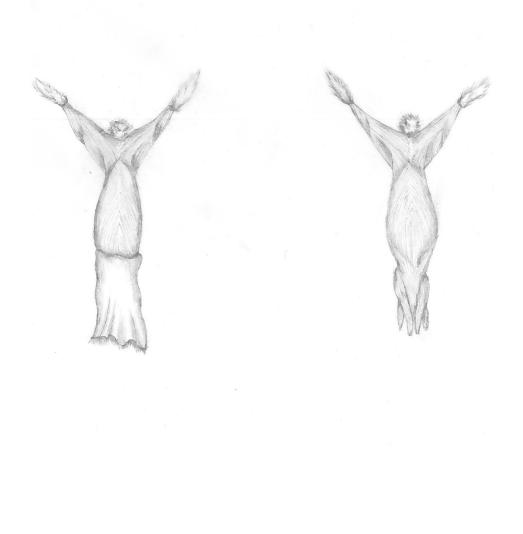
I reached into the Rubbermaid bin and gripped a torso. It packed beneath my palm like snow.

Together in the church kitchen, we sat with our rabbits around two tables that had been pushed together. I gave my animal an affectionate and appreciative rub along the spine and belly. Its fur was as silky as that of the fresh kills, though its cavity was iced.

I had become very familiar with the smell of rabbit. It had settled into all the corners of my office. I was greeted every day by its penetrating scent, a mixture of stale winter air, detritus, and that natural musk reserved only for outdoor animals. Here in the kitchen, we mined the rabbits' bodies with our hands. The aroma became dense. The blood ran in channels away from the bodies to the concrete floor. Muscle, sinew, and bones required sharper flicks of the wrist. Organs unravelled clumsily without their encasements. So much inside a creature as simple as a rabbit.



[FIGURE 5.5] To skin a rabbit using the Cree method, cut 'cuffs' around the ankles and a seam across the legs; roll the animal of its skin.



I had forgotten to lop of the tail of my rabbit (incidentally, the first step) as indicated in the drawing.



[FIGURE 5.6] Sectioning the rabbit.



[FIGURE 5.7] The Fellowship kitchen.

AND WORK TOWARDS GOOD POLICY.

WAUPSH / RABBIT

The myopic approach to health and healing in Western culture is reflected in the indivisible yet undiscussed relationship between architecture and policy. While there is an inherent connection between the two, policy is the primary formgiver of the built environment. Conversely, architects are rarely engaged in the political arena of public life. Consider buildings that should be about improving the health of their inhabitants: prisons and hospitals. These typologies have a strongly regulated design process, dictated by Western ideas of health and treatment. The buildings are largely a physical manifestation of the policies that govern them.

Most prisons in North America are privately owned and operate on a maximum-inmates-minimum-space principle, in order to maximize financial gain. As a result of private ownership, the treatment of prisoners in these institutions is poorly monitored, and solitary confinement, the most contested practice in the Western penal system, is maintained. The prison is sooner perceived as a punitive system than an architectural one. Perhaps this is because these spaces, sealed rooms made for the continued trauma and social disconnection of human beings, are designed by human hands. The prison is hardly humane, and this is a difficult thing to confront.

Because hospitals in Canada are government-owned and most in America are nonprofit, they operate with a similar philosophy of maximum-patients-minimumspace. Space restrictions are certainly less stringent than those in prisons, but this optimization of space is still more about efficiency of square footage than quality of life. Of course, these are public buildings, and in them economic viability is of foremost concern, but quality, treated as separate from the core scheme of the building, is limited to furnishings, finishes, and plants. It seems the hospital and the prison are designed to keep a body alive, not alive well.

The conversation between government officials and designers is often unidirectional. Policy, like the built environment, is a complex maze of committees, industries, and disciplines ranging from high-level government offices to grassroots organizations. Architect and former United States Ambassador to Denmark Richard Swett calls for more robust relationships between policy and architecture:

The creative process of architects is a constructive, inclusive process—therefore more diplomatic than the aggressive and adversarial methods of engagement in politics. Hence, "Design Diplomacy: Public Policy and the Practice of Architecture." Architects are essential contributors, even the actual shapers, of the environment in which we live. Yet they have always seemed to be supporting actors at best or bit players at worst, in the various dramas unfolding on society's main stage.³

Architectural designers must be critical thinkers who consider the experience of the user to be of highest value. Such thinking can become bridled by traditional structures, as it so often does in North American development. In a dated framework, critical questions such as 'How can a building improve the quality of life of its users?' risk being stopped in their tracks.

There are several built examples showing what can be achieved when questions of health are critically pursued and explored. Nordic prisons operate on a philosophy of rehabilitation, in contrast to North American prisons, which accept punishment of the offender as top priority. Norway has adopted a system of "closed" and "open" prisons, the latter of which encourage positive community contributions and social involvement. Inmates are kept engaged in physical craft and agriculture in a low-security setting and are compensated for their labour. The buildings become canvases for large-scale art and the grounds are areas to explore activities such as canoe-building and gardening. The working hand, in its ability to transform material states, is considered an effective healing modality. Cell sizes in closed prisons are modest but allow for a brighter quality of life. In terms of punishment, a loss of liberty is about as far as it goes. For the most part, efforts are made to create space for healing and positive change. Needless to say the return rate of offenders is extremely low.⁴

For those whose lives are compromised by their physical health, the hospital atmosphere can also be bleak and oppressive. The Butaro Hospital by Boston-based architecture firm Mass Design is an example of how the well-being of patients can be improved through simple and mindful design strategies. This Rwandan hospital has no corridor. Through research, Mass Design found this common architectural feature to be a high-risk zone for the transfer of illnesses. Instead, the treatment rooms are separate buildings entirely, connected by open-air pathways. The main spaces of the hospital include a half-wall dividing two bays of back-to-back beds, with operable windows positioned at the foot of each one. As a result, the space is well ventilated. By simply allowing the building to breathe, the quality of life for inpatients is drastically improved. North American hospitals are in need of a similar reinvention:

...hospitals have incorporated soaring architecture and airy, modern open spaces that evoke the feeling of a grand hotel or museum. While these public areas may be inspiring and lovely, there is no research that shows they have a positive impact on quality of care or patient safety. Experts caution that administrators in charge of renovations or new constructions would do better to spend their money where the evidence shows investment matters: on the units and clinical floors. In other words, where the patients are.⁵

Clinical floors in hospital typologies have only recently been reassessed. Nursing stations are becoming decentralized, and operating theatres have been adapted so that patients can receive a range of treatments while at one table, reducing the risk of falls.

In North America, hospital design, like prison design, is dictated by the deeprooted belief that these buildings must be hermetically sealed. Nothing that is inside may go out, and vice versa. In his essay entitled "The Milieu Interieur", published in MIT's 'Thresholds' issue, Matt Johnson describes how the return of the Apollo 11 spaceflight was followed by a 21-day quarantine and disinfection of the astronauts.⁶ The prison and the hospital are much like the astronaut suit: the bulk of the design is positioned at the interface between the contents of the building and the public, such as at a hospital atrium or the security barriers of a prison. Fear of contamination, be it a virus or a convict escaping into the public realm, is the reason for this heavily designed separation.

The word "quarantine" has biblical origins. It refers to the lonely forty-day fast of Christ, during which he faced tremendous vulnerability and temptation. Christ, solitary, confined. It is a state of being that is often inflicted by our supposed spaces of healing: They keep the physical body alive and isolated. The healing of an ill inpatient and a broken inmate require human connection and hope. But these buildings, which reflect a two-dimensional understanding of healing, often miss these critical links. The opportunity to empathize with others, to engage in the social behaviour that is fundamental to human health and survival, is repressed. This connection is at the root of miyupimaatisiiun, being alive well.

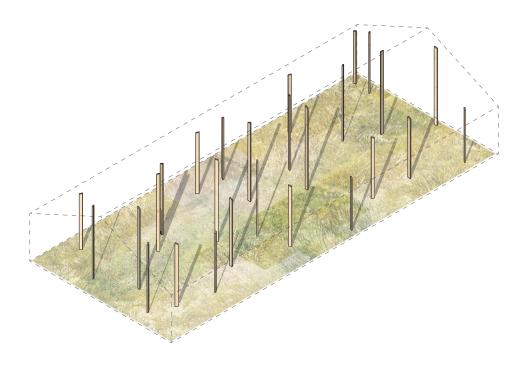


[TOP, FIGURE 5.8] Section through Butaro Hospital by Mass Design Group. [BOTTOM, FIGURE 5.9] Clinical area of the Burato Hospital.





[TOP, FIGURE 5.10] Mural on the walls of Norway's Halden prison. [BOTTOM, FIGURE 5.11] A cell in Halden prison.



[FIGURE 5.12] Iteration of Healing Garden.

In Cree culture, hunting is the event during which those key relationships to the world are forged. Through it, miyupimaatisiiun is attained. The hunt requires a combination of tenacity and humility, and an understanding that there will be times both of plenty and of scarcity. It celebrates the ability to survive on one's own, but requires the close support of family and friends. It is the great exchange, the foremost life-giver and -maker. So much texture in a word as simple as "health."

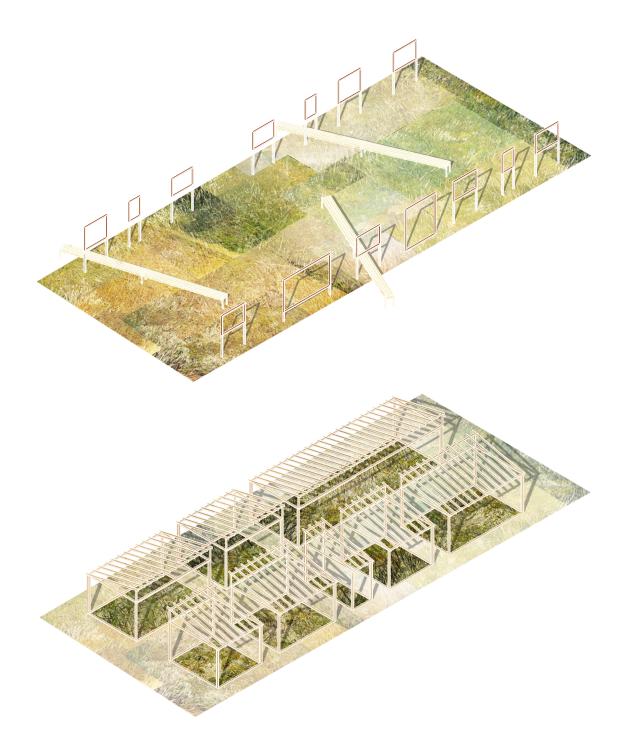
Something needed to be done with Wemindji's old health clinic, a building constructed in 1969 in the very first area of development. The building has been boarded up because of mold issues, and there is controversy about what to do with it now. It was home to many births and many deaths, a chamber for both felicitous and traumatic memories. The deceased caretaker of the building, Willie Matches, is a celebrated figure in the community, having planted trees surrounding the clinic for patients' enjoyment. The idea that this space might become the future research centre of Wemindji had expired after we considered building areas.

In my office, there were essays and journals by previous resident researchers collected on the shelves. I came across a booklet by a resident ethnobotanist who catalogued traditional medicinal plant species in the area, particularly those with the potential to aid diabetes, the most common illness in James Bay. Using this index of plants, I proposed we could retain the footprint of the building or the shapes of its rooms as a faint memory and plant the area with these healing species. The medicine would serve to heal the ground and memories of the site in a way that is culturally specific to Cree modalities of healing, too often shunned in favour of invasive and imported medical systems. The site is now envisioned by the community as a place in which to heal the past and to offer lessons on Cree medicine and ecology.





[ABOVE, FIGURE 5.13] Wemindji's Old Health Clinic. [OPPOSITE, FIGURE 5.14] Iterations of the Healing Garden.



WAUPSH / RABBIT

I withdrew my two hands, numb from the rabbit's cavity, and rubbed them together. My palms were too covered in blood to cause any friction, so I rested them on the table. The inside of a freshly killed animal would be hot. Would the warmth, an indication of the life that was once there, make it more difficult to hollow? A hunter seeing life in its kill would surely strengthen and test the connection between the two. It would foster empathy. I was trying to better connect with an animal, but now I felt like I was merely chopping meat that had come from a freezer. I picked up my knife and drove it through the bone. The rabbit looked menacing without its coat. Much easier to butcher.

Linda boiled the pieces of rabbit in the water, somehow transforming the contents of the pot into rich gravy. She dropped in rounded pieces of bannock dough, simply made of flour and water mixed together. Linda's signature dish, fluffy dumplings and rabbit. Together with six women, I shared this meal of three ingredients. The space of the kitchen had become a frieze, and the length of the shared table told the story of a rabbit transformed by human hands, taken into the human body.

I should have been able to predict the flavour. It sounds obvious that rabbit meat would taste like rabbit, but this was jarring. It tasted no different from the scent of its blood. It tasted like the aroma that hung in my office for days. Never before had I 'seen' an animal through to my plate. It didn't come packaged, unrecognizable, in the refrigerated section of a grocery store. I saw the rabbit, I petted the rabbit, I worked the rabbit, I changed the rabbit, and I ate the rabbit. Then I consumed it and was overwhelmed. Did this bear any semblance to what the hunter feels when he or she must kill in order to survive?

The culture and industry of food cultivation and distribution does not permit an emotional connection to our resources. If this empathic connection to the materials that feed and shelter us were celebrated, how would our habits of consumption change?



[FIGURE 5.15] Mary



[FIGURE 5.16] Linda making bannock dough for dumplings.

I pulled a fan-shaped bone from the animal and removed the morsels of flesh seated neatly in each of the two translucent fins. Mary explained the traditional use of this bone, which would have been held over a fire. Patterns in the blackened cartilage would be read like tea leaves in order to reveal whether or not a bear was within range.

This act is not evidence of mere superstition or legend. It speaks volumes about the Cree worldview. By mining the rabbit, information about the environment is afforded to the hunter. Rabbit is related to bear in its bones. So are bears to humans, humans to beavers, and so on. By acknowledging the presence of a bear in the flesh of a rabbit, the hunter viscerally connects to the great chain of being in which all are a part. The rabbit is the keeper of the bear's secret, and just like these two kindred spirits, we humans have responsibilities to other animals, too.

In Cree culture, the act of pursuing and reading animals is a more accurate definition of hunting than, say, the act of killing and consuming. Embedded in the hunt for a rabbit is a hunt for a bear because of the physical connection between the two. Again, being alive well means being in active conversation with the world, recognizing our own behaviours in other species and understanding our responsibility and presence on this planet. In other words, it means to connect empathetically to all things in the scope of our lived experience.

The architect who has not worked towards miyupimaatisiiun when designing for the North is ill-connected to its people and geography. Without engaging in this great conversation, how can he or she draw a plan?



[FIGURE 5.17] Rabbits scapula bone used to reveal the presence of bear.

WAUPSH / RABBIT

Dr. Katherine Scott, an anthropologist and close friend I made while living in Wemindji, shared a compelling story with me one evening over a roadkill caribou stew. She explained how the missionaries had great difficulty explaining the concept of Christ to the Cree.⁷ They were working to form a Christian vocabulary within the Cree language, essentially to translate words from English to Cree. The fact that there was no cultural basis for this did not occur to them. Eventually they made progress by detailing the event of the crucifixion pictorially. The missionaries took two twigs and placed them in a crucifix to help articulate the story. To the missionaries, it finally seemed the Cree had grasped the iconography of the story and the idea of Christ. They had articulated words in Cree to describe the elements of the narrative. They had found a word for Christ.

Later, the missionaries discovered that they didn't communicate effectively. Either that or they communicated too effectively. The Cree word for Christ was in fact a word that translates to "two sticks, crossed on top of each other."

Cree language is precise. Similarly, vernacular architecture is formally derived from the core functions of the space. The word is the building, and the meaning emanates from the inside out. On my first day in Wemindji I was asked to help pack away the tarps of two large communal michwaaps and to clear up the grounds. Through the season I would sometimes see families performing the same ritual with their own michwaaps, packing away the coverings and leaving a skeletal frame of pine poles, bleached white by the weather. Those left covered were eventually buried in the snow, apparent only as dimples in a blanket of white, smoking out the tops. I enjoyed watching these structures change over the course of the season next to trailers and suburban-type homes whose facades remained static and expressionless.

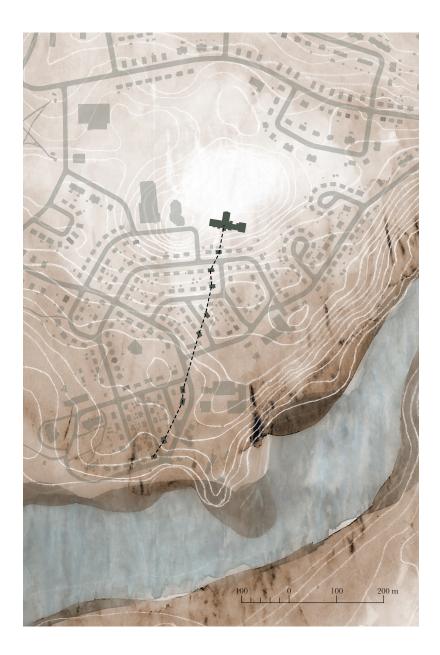
The michwaap follows the shape of the fire within: wide at the base, its flames tapering up towards the sky. Traditionally a summer dwelling, the michwaap and the fire provide a sheltered area in which to keep warm, stay dry, and cook food. The function it serves within the community is similar. Michwaaps and other traditional dwellings are the designated spaces for cooking game. The building is a tool in the preparation of dense, Northern meat. Goose, for instance, requires a slow roast. The bird is suspended by a string tied to the cross bracing of the teepeee. The body is spun over the fire using a carved stick until the string is wound tightly, and then the bird is left to spin clockwise and counterclockwise over the flame until the string needs winding again. Moose meat and organs are hung over the same bracing for smoking. The scent, the structure—the space comes alive in the act of cooking. It is a simple, connective architecture.

In Eastern James Bay communities, architectures like these are juxtaposed against typical North American suburban buildings. The community is reminiscent of a Southern subdivision, apart from the michwaaps, four-wheelers, dogs, topography, lack of fences, etc. The plan is evidently a chronological accumulation of neighbourhood-sized designs without an overarching framework. It is as if each plan for development was accompanied by a disbelief that the community would grow so quickly. Wemindji has approximately 1200 residents, and in 2013 there were almost 100 newborns in the community.

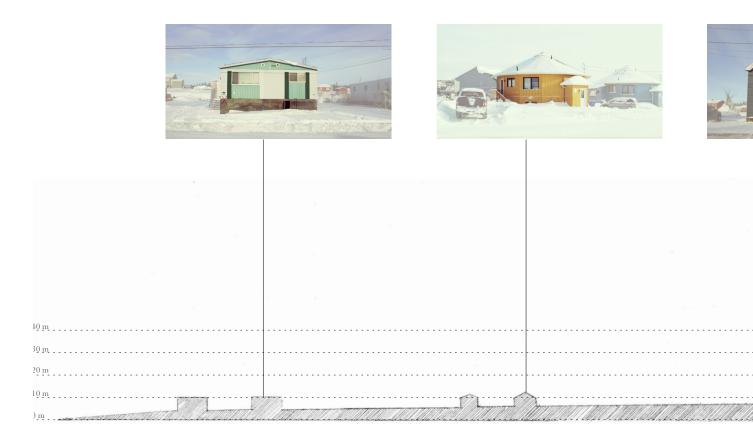
The imported notions of town planning and building design are not often simple, connective architectures. The band office, for instance, is a two-storey building that houses all of Wemindji's departments. It is easy for a designer to be critical of the aesthetics, cost, and finishes of this building, topped as it is with as many gables as could fit. But it is important with any Northern project to be mindful of the building's symbolic significance. This band office stakes presence and announces self-governance. The residual effect of a building like this is pride and pride, in the North, is important.

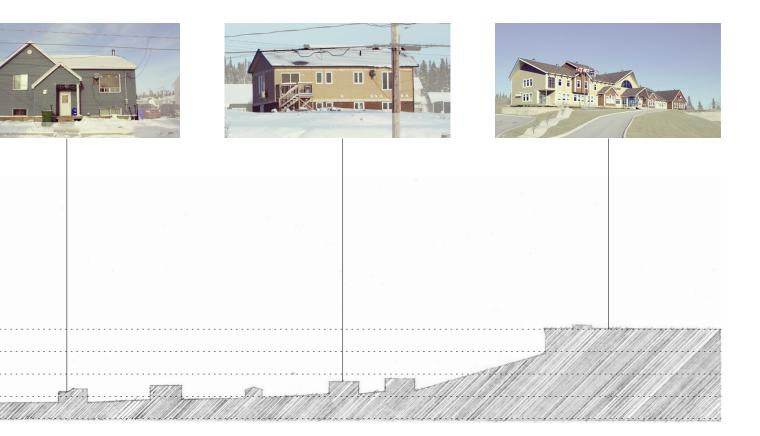
I take issue with a different aspect. The band office was barely designed for its purpose. Like other public buildings in the Cree Nation, it was a quickly assembled, solution sold by an architect in the South for a price disproportionate to the services offered. The Cree were given \$8 million dollars for the construction of a new office. The Harper government restricted the option of spending a lesser amount and diverting the remaining money to other public projects. For this kind of money, a building should be more than just symbolically effective. At the very least, it should function well. In this case, offices on the second floor are only visually connected to each other. They require people to walk down to the second floor, across the building, and up another set of stairs. The largest meeting room, reserved for conferences, band council meetings, and other significant events, sits at the top of a long flight of stairs, making it difficult and painful for Elders to make trips to and from the room. Their only other option is to drive around the building and enter from the back. These sectional problems create a building that, despite its apparent visual prestige among other buildings in the community, celebrates a mere image of connection, as opposed to a genuine human connection. Because the building design is not congruent with miyupimaatisiiun, there are several moments of disconnection.

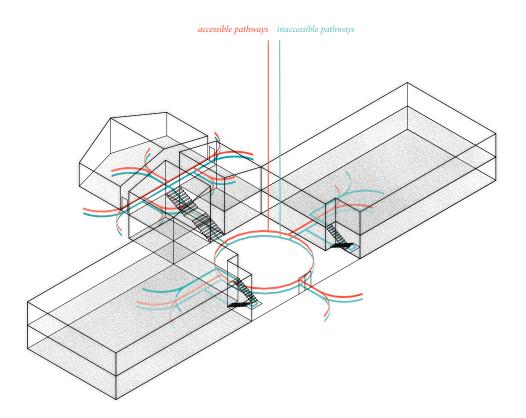
And so, as previously stated, I could tell you this was "a rabbit workshop organized by the Cultural Department as part of the winter traditional skills programming," but that language does not honour the informality and intimacy of the process. Three women decided to come together and invite everyone to practice the craft of skinning, cooking, and stretching rabbits. Workshop, department, and programming are better described as evening, sisterhood, and craft, respectively. These words create boundaries as opposed to honest connection. I feel the band office is a manifestation of these inherited boundaries and terms, imported from a dominant Western model of governance and organization: the idea that you can see, but you cannot touch. This model of architecture exists in these communities. I propose new connections.



[ABOVE, FIGURE 5.18, FOLLOWING PAGE, FIGURE 5.19] Town section from band office at highest elevation in community, through houses to shoreline.



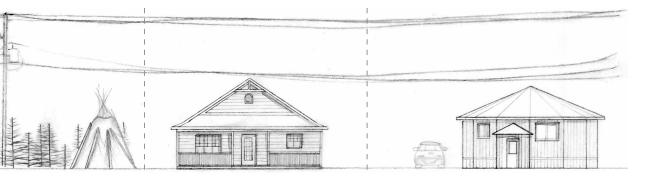


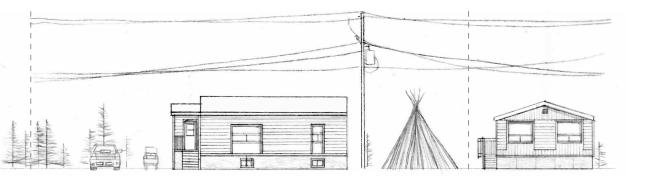


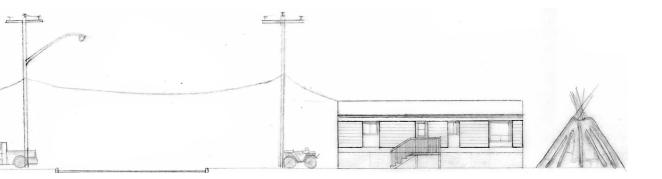
 [ABOVE, FIGURE 5.20] Circulation diagram of band office indicating issues of inaccessibility and disconnect.
 [OPPOSITE, FIGURE 5.21, FOLLOWING PAGE, FIGURE 5.22] Section through various residential conditions in Wemindji.

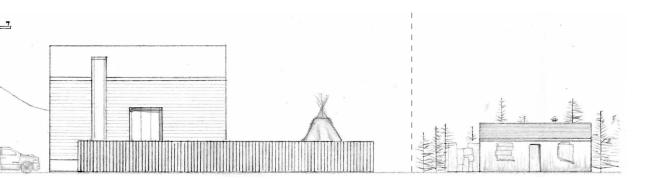










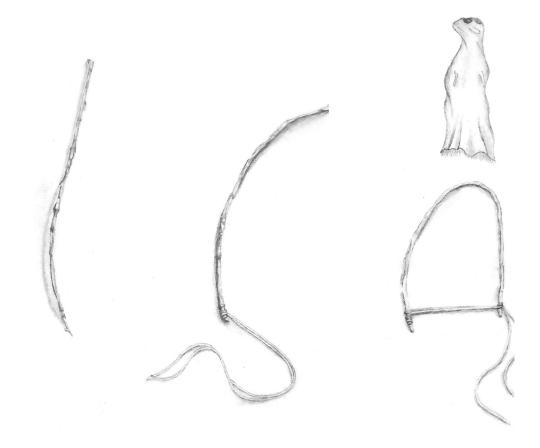


HOW TO STRETCH A RABBIT

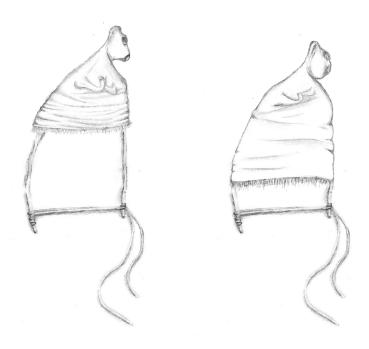
WAUPSH / RABBIT

After the meal, we took the soft sapling branches that Linda had collected, bent them into a U shape, and tied the ends together. Over this hoop, we slipped the rabbit pelt. Linda demonstrated how to fix the coat in place by taking a blade and notching the skin into the wood, forming a simple and effective hook. The coming together of two components transfixed me with a single cut.

The smell of rabbit greeted me at my office once again as I brought the pelts back into the room for drying. With time, they became paperlike. They tore easily and I oiled the skins in hopes of restoring some of their original elasticity. I shared my work with the men sitting downstairs in the community hall and one explained that I have made a duffle—a thick, warm sock to wear beneath boots or moccasins. I slipped the pelt, fur on the inside, over my foot.



[FIGURE 5.23] How to stretch a rabbit pelt for drying.





[FIGURE 5.24] Stretched rabbit skin.



[FIGURE 5.25] Dried and oiled pelt.

WAUPSH / RABBIT

Find yourself a cup; the teapot is behind you. Now tell me hundreds of things. —Saki⁸

On my second day in Wemindji, Linda Stewart told me that her brother, Fred, was inviting me over to his michwaap for supper. I had met him for the first time at the community hall that same day. Fred is the talisman of the Stewarts' trapline, which contains several of the remaining protected areas in all of Eeyou Istchee. On just one hand, I can count the number of days I did not see Fred in town. He was a significant part of my experience in Wemindji and the personal journey documented in these pages. Considering the impact he had on me, it might seem strange that we didn't exchange many words—at least not verbally. Language barriers were sometimes apparent, but the silence they caused was more a gateway than anything else.

On that evening in Fred's michwaap, Linda showed me how to spin geese. I asked questions. I made comments and jokes. Social conditioning in the South had taught me to converse, verbally and actively, when invited to eat with a new acquaintance, because it is the best way to learn about another. It's a sign of respect and interest. However, this evening would be one of several lessons on how silence, listening, and presence are fundamental parts of communication in Cree culture.

Consider a researching architect heading north, or to some place far from their home, on a week-long site visit. Every minute must count, so he or she seeks out answers, making a point of being in constant conversation in order to walk away with the maximum possible amount of information. There is no time for silence. While the architect leaves with a more informed idea of the site and some inklings of how to proceed, he or she has missed the opportunity to learn how the people of that place converse, and with it, the chance to practice this mode of conversation.

Though it took longer than a week to learn a new type of dialogue in Wemindji, I eventually quelled the need to constantly ask questions and make small talk. I

learned to embrace and find comfort in silence while sharing space with other community members. The Eeyou are well acquainted with a loud presence—one that asks questions, wants to converse, tries to extract data, and is totally uninterested in making silence together. Being loud can be easy. Silence takes mindfulness and practice. An idea spoken in the midst of silence may have more weight than the same idea spat out in a rolling conversation. In Wemindji, my practice began in a michwaap. Occasionally, Fred would send a gentle comment into the quiet, often a remark on how tea made over the fire is far better than tea made on top of a stove. The statement was boldly weighed against a sustained silence. It commanded attention.

The word 'palpable' means able to be touched or felt. Implied by the word is a surrounding silence. This pairing of silence and presence is difficult to encounter in today's plugged-in, constantly 'updated' world. In our academic or professional lives, particularly in the field of architecture, day-to-day experience is saturated with visual imagery, speed, information, and sound.

Jun'ichiro Tanizaki's "In Praise of Shadows" asks for the elimination of this electrical buzz. It challenges us to "seek our satisfactions in whatever surroundings we happen to find ourselves, to content ourselves with things as they are; and so darkness causes us no discontent, we resign ourselves to it as inevitable."⁹ Darkness, like silence, has inherent values and lessons for Tanizaki. The muteness he is describing is not simply found in sound, but in light, texture, and composition:

The beauty of the alcove is not the work of some clever device. An empty space is marked off with plain wood and plain walls, so that the light drawn into it forms dim shadows within emptiness. There is nothing more. And yet, when we gaze into the darkness that gathers behind the crossbeam, around the flower vase, beneath the shelves, though we know perfectly well it is a mere shadow, we are overcome with the feeling that in this small corner of the atmosphere there reigns complete and utter silence; that here in the darkness immutable tranquility holds sway.¹⁰

Here, Tanizaki is demonstrating how extremely subtle phenomena are given presence in the dark. That bold presence becomes apparent in silence. He believes we lose sight of these precious and fundamental qualities when our bodies are processing multiple stimuli in our environments.

Similarly, Louis Kahn's lecture entitled "Silence and Light" describes the inner voice that is liberated in silent moments: "When you dig deep enough in the realm of not doing things but simply thinking what you want to do [...] all the various ways of expression come to fore."¹¹ Silence is powerful: It makes room for the presence of other phenomena. Both Tanizaki and Kahn's calls for the consideration of quiet were made in the 1970s. Now, it is not productive to say we should eliminate the diversity and amount of information that we are taking in day to day, whether it be data on our devices or signage on main streets. We are living in the information era, and this drives our existence. There is a fine line between productive criticism and nostalgic uproar. Considering the 'plugged-in' nature of our lives, how can we cultivate silence?

Sean Lally describes his book The Air from Other Planets as being "nostalgic for the future." In his chapter entitled "Material Energies," Lally does not criticize the fact that so much information is being passed around and consumed in our environment, but rather criticizes how it is delivered and how it performs. He suggests that we work towards a new silence, one which demands a change in the way architecture is conceived. Lally describes the idea of phenomena or atmosphere in architecture, which he generally classifies as "auras": "distinct and yet intangible qualities that hover quite literally on top of the surface. Auras are in a subordinate relationship with surfaces: the first requires the second"¹². Lally describes "comfort control," systems that create "desirable weather" within a building by regulating temperature, light levels, and humidity. Auras and comfort control, like the electric hum described by Tanizaki, are for Lally a number of veils laid on top of what is actually "doing the work"-the walls and the surfaces that are transferring loads and spanning distances. The architecture. He is interested in finding materials that have the capacity to do all of these things and letting these materials be the foundation of a new and simplified approach to architecture:

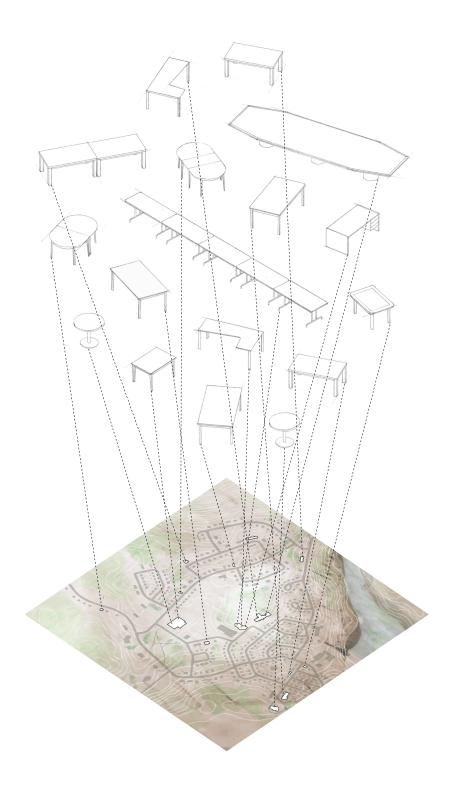
It is necessary to be clear and show the limited discourse of atmospheric effect for what it is: the result of an extremely conservative definition of architecture that sees all avenues for building space to exist in the geometry and walls alone. Architecture in that light is a profession that defines activities and social constructs, a profession that hones techniques for delineating circulation and passage, a profession that imbues materials with the burden of protecting the individual or object from its surrounding context with surfaces... An architect today armed with a vocabulary consisting of glows, shimmers, blushes and the like is nurturing a specialization within an already narrow bandwidth of investigation...incapable of having the strength needed to define and control a physical, architectural boundary.¹³

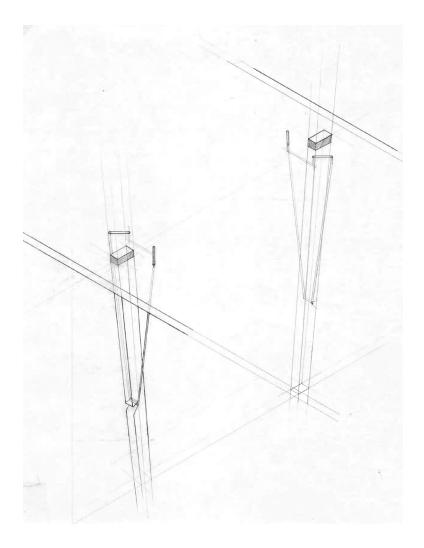
Lally defines this new material, which can perform as structure and effect simultaneously, as a material energy. Using street lighting as an example of the capabilities of a material energy, Lally describes how the shapes and boundaries of light produced by streetlights create a sprawling and linear network. This illuminated area supports acts of commerce and social encounters that, without the streetlight, would not take place at that time. Lally's desire to define a new set of materials in architecture comes out of his interest in narrowing the material focus but not necessarily the responsibilities. He advocates for fewer materials, with the same or more capabilities than before. Perhaps this is how we can achieve silence in the information era. We must limit the number of information channels we are exposed to daily, not the actual amount of information.

Fred's comment on tea over the fire was spoken against silence. This gave it power. After lifting the cup to my lips and sipping my tea, it seemed as if I had tasted it for the first time. Its taste of solace both awakened and calmed the senses. This mixture of leaf and water had grasped all of my attention, mentally and physically, through Fred's careful but simple instruction. In the smoky interior of the teepee, I noticed the deafening cold and quiet. I noticed where I was sitting. I believe Tanizaki's, Kahn's, and Lally's postulations demonstrate a search for this kind of fundamental presence achieved through silence. Lally considers what a "quiet" architecture in the Anthropocene may look like. His projects using material energies are largely conceptual, and whether or not they are a way of streamlining and simplifying communication remains to be seen. But Lally is clear in his aim that the building be a singular presence instead of a shell with layers of both critical and non-critical information stuccoed on top of it. The ideas presented by these three suggest that the pairing of silence and presence can exist in architecture. Consider the timeless fact that a wall, or a shadow, has presence. A detail has the ability to narrow our focus. A building can command attention. Architecture ought to be designed bearing in mind the rooted presence and awareness that silence can offer a space.

I found myself at a table with Fred quite frequently. Sometimes it would be at the hall, sometimes at his house, and sometimes with Ieva, a visiting researcher, at her home with her two children, Jori and Benny. Fred's anecdotes offered at the table were most often insights on bush living, techniques, and memories. He certainly made the same comment about tea many more times, and each repetition helped me to better understand the message. While sitting at the table in his home, Fred would bring all sorts of objects to me: books, bones, maps, photographs, calendars. He showed me pictures of his parents and his siblings, images of him as a little boy. Fred also shared a small number of photos taken on research trips with accompanying archaeologists and anthropologists to the Stewart trapline, taken during the 1970s and 80s. There were some compelling photos of Fred and his family members with researchers seated together at a table, talking and sketching over a map. A researcher and a hunter from different social backgrounds coming together and communicating through a Mercator projection.

When my father is feeling frustrated or stuck, he sometimes will keep quiet and jingle his keys rhythmically from inside his pocket. I find myself doing the same thing from time to time. It is an action I associate with him—something non-verbal but full of expression. When sitting with Fred at a table in silence, we could better notice the nuances of one another's behaviour. With one hand gripping a mug, Fred taps the pads of his fingertips of the other hand on the surface of the table and runs his fingers across it, feeling for changes in surface and texture. The researcher and the hunter seated together, present and focused. I want to design a table for this silent conversation. For Fred's hands.

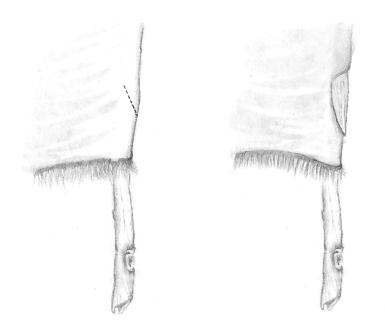




[PREVIOUS PAGE, FIGURE 5.26] Axonometric drawing indicating all the tables in the community that I had conversations over.
[ABOVE, FIGURE 5.27] Detail of stretching connection.



[FIGURE 5.28] Photograph of rabbit skin/sapling connection.



[FIGURE 5.29] Detail of rabbit skin/sapling connection; An upward cut through the skin creates a hook connection, holding the pelt in place.



[FIGURE 5.30] Detail of table leg connection.



[FIGURE 5.31] Axonometric of table design

AND MAKE SPACE FOR CONVERSATION

WAUPSH / RABBIT

Eastern James Bay has a well-established network of researches from scientific, archaeological, geographical and anthropological fields. In light of a recent grant to establish environmental datasets for James Bay, an increase in visiting researchers can be expected in the North. Wemindji is interested in building a cultural centre that also provides space for visiting researchers. Working with anthropologist Katherine Scott and the Cultural Department, I proposed a design for a mixed-use community building, merging gallery, archive, and research lab programs.

In this project, I wrestled with the request to have isolated working quarters and open public spaces while also maintaining access to archive and gallery material. The site, chosen for the symbolic value of being adjacent to the river, was oustide of the small collection of public buildings near Wemindji's centre and seemed to risk decentralizing the communal area. Additionally, the need for offices and labs seem counter-intuitive to the idea of a public building housing transparent research activities.

By the time I arrived in Wemindji, the mini-mall had burned down. This building was a typical commercial, suburban-type plaza with individual storefronts. It housed the community store, the post office and the traditional skills room amongst other departments and services. Construction of a new mini-mall was under way but would not be completed until spring, at the earliest. Mini-mall programs had to be moved to the community hall, a building reserved for public events, entertainment and hearing. Cashiers at the doors of the auditorium, freezers on the stage, a post office spilling into the lobby where Elders would spend their time socializing -- these strange spatial situations, as unfortunate as the circumstances are that made them so, became the centre of the community. With the displacement of the mini-mall, it seemed as though the community hall truly took to its name. It is also the space where I worked.

I was in the hall everyday. In addition to the architectural design I worked on

with the Nation, I also helped in the post office, the store, the cultural and wellness offices, the snack bar, and in events held in the lobby. Eventually, 'hellos' would be exchanged, and sometimes they would turn into conversations a few weeks later. This is how my relationship with Fred Stewart and George Kudlu, Cree and Inuit Elders, respectively, began. These two great men have taught me more lessons than most - certainly about their life and culture, but also on human connection and friendship. I had not much to offer but my company, some tea and a listening ear. Selflessly they shared their spaces, stories, crafts and photographs with me. And most importantly, they gave me the opportunity to leave the community and guided me through the land, the bush, that was so much a part of Cree conversation and my research, but something I hadn't yet seen.

The design for a research centre should answer the question of how to minimize the gap between researcher and community member. How can a building help to amplify accidental intersections between the two? How to recreate the mini-mall situation? Is there an opportunity for shelter to be positioned at the natural meeting point between researches and hunters?

The answer to these questions is at the gas station, the threshold between the community and the bush. It is the last place the hunter goes before leaving, and the first place they go when they return.



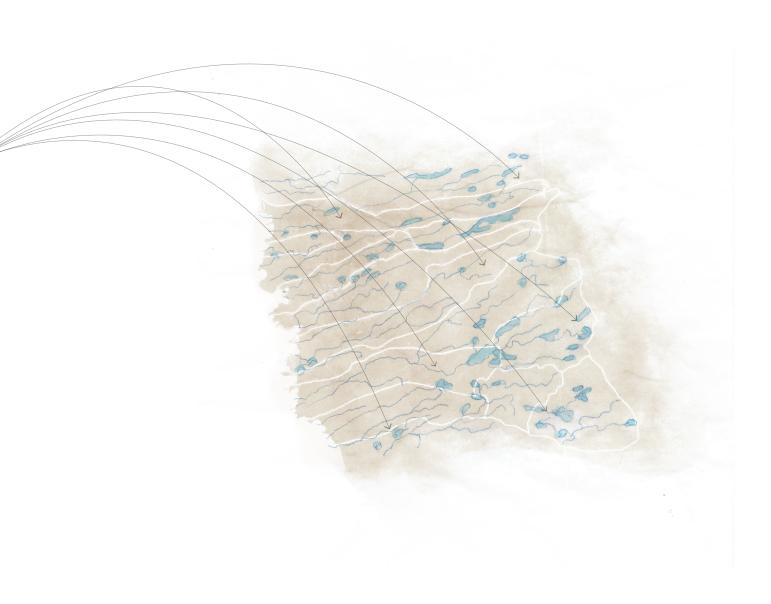
[FIGURE 5.32] Site plan of the original proposal for Wemindji's Research Centre

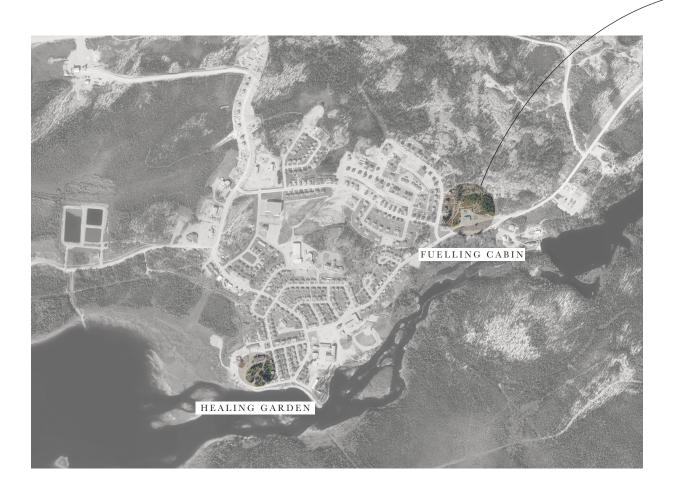


[FIGURE 5.33] The original proposal for Wemindji's Research Centre integrates the remains of the former HBC post (left) and uses Wemindji's oldest surviving cabin (right).



[FIGURE 5.34] The gas station: the interface between the community and the bush.





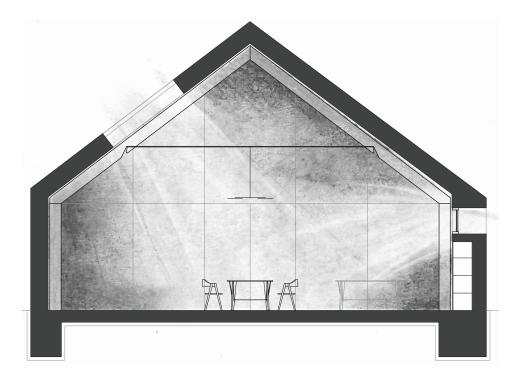
[FIGURE 5.35] Site plan indicating location of Fuelling Cabin and Healing Garden



[FIGURE 5.36] Sibi Gas Station



[FIGURE 5.37] The Fuelling Cabin will be the first building to be seen by those entering from the James Bay Access Road. Those entering the community are greeted east elevation, which is essentially a projection of the buildings section: a shared table, a space for conversation.



[FIGURE 5.38] Fuelling Cabin, Section @ 1:100, A space to warm up, fuel up, and share stories. This is the revised mission statement for Wemindji's research centre. The design for the Fuelling Cabin began with a table, the table for Fred's hands. The detailing of the table is reflected in the timber frame.

[FIGURE 5.39] Canoe Factory, Sire Plan @ 1:1000.Dashed in area indicates fuelling zone (pump location) and auto-repair shop.







l. main hall

2. entry washing basin

3. east (main) entry

4. west (rear) entry

5. office

6. mech/elec

[FIGURE 3.40] Fuelling Cabin, Plan @ 1:250. Tables are unfixed, moving freely with participants. Three basins quarried from local stone are fixed within the main hall. An oversized, shared washing basin, a common desired program between archaeologist and hunter, sits at the east entrance of the building.

	2	3	

LOCALLY QUARRIED STONE

1.000

The



[FIGURE 3.41] Fuelling Cabin, main hall.

On September 12th, 2014, the bronze bell from the wreck of the HMS Erebus was retrieved from Northern Canadian waters. This vessel was part of the 1845 Franklin expedition through the Northwest Passage and quickly became a cultural and literary fixation following its disappearance. The Canadian government had launched six searches for the ship since 2008. The press celebrated "Parks Canada underwater archaeologists" as the champions of this discovery, while offering a nod to the Inuit of Gjoa Haven². The success is attributed to sonar and imaging technologies, while Inuit oral tradition is noted as a positive aid. The hunter is credited with giving the researcher a tip.³

J. Edward Chamberlain, author of "If This is Your Land, Where Are Your Stories? Finding Common Ground" writes on the friction between supposed 'oral' and 'written' cultures, which he terms the 'babblers' and the 'doodlers'. The term 'tradition' is often attached to the former, as if to say that speech is part of a great and ancient lineage of expression and that, somehow, writing is not:

Societies whose major forms of imaginative expression are in speech and performance are classified as oral cultures. Then they are praised for their naturalness and naiveté, while the rest of us lament the ways in which the sophistications of civilization have moved us away from a supposed oneness with the world, which these simple spoken languages represent, into the obstruction and alienation that comes with the written word. Speaking and listening are simple and natural, we say; while writing and reading are cultivated and complex. We wonder how people in these oral cultures recall things so clearly and how they reflect on ideas without the benefit of writing; and then we decide they don't, they merely remember formulae. (...) these societies are "pre-scientific." So we celebrate their primitive consciousness, the kind that children display, and we remark on how it is resonant with an openness to experience that the rest of us lose as the prison house of written language closes upon us. But we also know-and here we brighten up a bit-that with this new phase of our lives comes the compensation of self-reflexive intelligence, the intelligence capable of real thought. Our kind of thought. (...) This kind of thinking-if we can call it that-encourages people to treat other societies with a blend of condescension and contempt while celebrating the sophistication of their own. And it entrenches the misconception that there are such things as "oral cultures" and "written cultures. (...) It is an assumption that understanding

sophisticated oral traditions comes naturally to the sympathetic ear. It doesn't. Just as we learn how to read, so we learn how to listen; and this learning does not come naturally. 4

Chamberlain raises the idea that listening and learning is not an innate reflex but a skill that can become more or less developed. In the context of Erebus, the unearthing of the bell could only happen after a long and imperfect practice of listening to and learning from Inuit knowledge. With each expedition sent to the North, the counsel of Inuit knowledge became more important and more clear. The amount of time this practice required exceeds a handful of short site visits. Inuit memory and speech guided the researcher towards the ship, but only until the researcher was prepared to listen. Despite the ideas communicated by the press, it is probable that the story behind the discovery of the Erebus is a series of kinships between researchers and hunters that developed over time. The Cree have a word for this type of moment: *Aa-Wiichaautuwiihkw*, coming together to walk together. While the bell and its discovery is significant, the journey towards it is perhaps more heavily weighted.

The thoughts and experiences addressed in this book were merely places I was guided towards by my friends and colleagues in The Cree Nation of Wemindji. It took time, but I listened and I learned. And I understand that this listening is a muscle I have only been flexing for a short time. A lifetime of practice lies ahead of me, but the path is carved with possibilities. My hope is that I stay in active and faithful conversation with Eeyou and Istchee – both friends and mentors in my search for a more attentive, dedicated, thorough and humble practice of architecture. Each new hunt brings me closer to the awareness that architecture is enriched through the creation and fostering of relationships, and that the best 'buildings' are the spaces we create in our lives for others to dwell.

NOTES

Goose

- 1. Laura Legge, "Tukisiviit?", (CBC/Radio Canada, 09 Oct. 2014, Web)
- Moki Kokoris. "Duck Down and Thermostats in an Interconnected World." Indigenous Policy Journal 24, no. 3 (2013).
- Beaudoin, J., JE Hughes Clarke, and J. Bartlett. "Usage of Oceanographic Databases in Support of Multibeam Mapping Operations Onboard the CCGS Amundsen." *Lighthouse, Journal of the Canadian Hydrographic Association*, Edition no. 68 (2006).
- 4. This book is an elegant analysis of the Eastern James Bay region and a formative inspiration for this book. Hans M. Carlson, *Home is the Hunter: The James Bay Cree and their Land* (UBC Press, 2008), 221.

POWER

- For an insightful reading of this trend, see chapter 3 of John Ralston Saul's A Fair Country: telling truths about Canada, entitled "Marrying Up". John Ralston Saul, "Marrying Up" in *A Fair Country : Telling Truths about Canada*. (Toronto: Penguin Canada, 2009), 8.
- 2. Carlson, Home is the Hunter, 4.
- Robert McGhee, *The Last Imaginary Place: A Human History of the Arctic World* (Oxford: Oxford University Press, 2006), 10.
- 4. Carlson, Home is the Hunter, 242.
- News, CBC. 8 Facts about the Inuvik to Tuktoyaktuk Highway. CBCnews. CBC/Radio Canada, 08 Jan. 2014. Web. 30 Nov. 2014. Source: http://www.cbc.ca/news/ canada/north/8-facts-about-the-inuvik-to-tuktoyaktuk-highway-1.2488106
- "So Odysseus would have been home a long time before this, but in his mind he thought it more profitable to go about and visit much country, collecting possessions. For Odysseus knew profitable ways beyond all other." Book 19, 282-286, *The Odyssey*, trans. Richard Lattimore.

- 7. Filmmaker, Sculptor and Photographer Louise Abbott captures this unique relationship quite beautifully in her film, *Nunaaluk: A Forgotten Story* (2013).
- 8. Carlson, Home is the Hunter, 20.
- 9. Bechtel Corporation, La Grande Project, at http://www.bechtel.com/james_bay hydro_complex.html
- This story was told to me in Wemindji by Anthropologist and friend Katherine Scott.
- 11. Carlson, Home is the Hunter, 207.
- 12. Ibid, 210.
- 13. LAC, Kanatewat v. JBDC, James Bay Collection, Cabinet 39, AA-20, vol. 13, 102.
- "Hunting and the Quest for Power:." James Bay Cree and Quebec Hydro Development. Accessed June 1, 2014. http://arcticcircle.uconn.edu/ HistoryCulture/Cree/Feit1/feit2.html.
- 15. Approximately 83 terawatt hours are generated. For scale, New York City consumes approximately 60 terawatt hours. Source: http://engineering.mit.edu/ ask/how-many-wind-turbines-would-it-take-power-all-new-york-city
- "The Grand Council of the Crees." (Eeyou Istchee) Cree Regional Authority Environment Cree Legal Struggle Against the Great Whale Project. Accessed June 1, 2014. http://www.gcc.ca/archive/article.php?id=37.
- 17. A second photographer, Robert Flaherty, visited Cape Hope Island long before Bleummer had. The small collection of photographs, sketches and stories by Weetaltuk is afforded to us by these two men.
- Dir. Louise Abbott, *Nunaaluk: A Forgotten Story* (Rural Route Communications, 2013).
- 19. Michael Posluns, Voices from the Odeyak (Toronto: Dundurn Group, 1993), 24.
- 20. Carlson, Home is the Hunter, 22.

OURSELVES

- Aracelis Girmay, "Elegy.", *Kingdom Animalia: Poems* (Rochester, NY: Boa Editions, 2011), 17.
- 2. Jeremy Rifkin, *The Empathic Civilization: The Race to Global Consciousness in a World in Crisis (*Penguin, 2009), 41.
- Read Anne Carson's "Eros the Bittersweet" for a wonderful exploration of the Greek concept of desire. Carson draws parallels between erotic desire and the desire for knowledge. Anne Carson, *Eros the Bittersweet* (Dalkey Archive Press, 1986), 169.
- Roncken, Paul A., Sven Stremke, and Maurice PCP Paulissen. "Landscape machines: productive nature and the future sublime." *Journal of Landscape Architecture 6*, no. 1 (2011): 68-81.
- Ross Adams, "Longing for a Greener Present: Neoliberalism and the Eco-city.", Radical Philosophy 163 (2010), 2-7., Web.
- 6. Junya Ishigami, Another Scale Of Architecture (Seigensha, 2011), 31.
- Erle Ellis, "Stop Trying to Save the Planet", Wired.com, 06 May 2009. Web. 20 July. 2014. Source: http://www.wired.com/2009/05/ftf-ellis-1/
- Robert Markley, "Time, History, and Sustainability", *Telemorphosis: Theory in the Era of Climate Change, Vol. 1* (Open Humanities Press, 2012.), Web, 30 Aug. 2014. Source: http://quod.lib.umich.edu/o/ohp/10539563.0001.001/1:4/--telemorphosis-theory-in-the-era-of-climate-change-vol-1?rgn=div1;view=fulltext
- 9. Philippe Madec, "Pour que la vie ait lieu (fragments)", *Architecture, Ethics, and Technology* (McGill-Queen's University Press, 1994), 98.
- 10. Laura Legge, "Syzygy," Prism 52:2, 2014: x.

Epilogue

 "The 2014 Search for the Lost Franklin Expedition." Parks Canada. Accessed November 26, 2014. http://www.pc.gc.ca/eng/culture/franklin/hist/hist02/ hist02e.aspx.

- Beaudoin, J., JE Hughes Clarke, and J. Bartlett. "Usage of Oceanographic Databases in Support of Multibeam Mapping Operations Onboard the CCGS Amundsen." *Lighthouvse, Journal of the Canadian Hydrographic Association*, Edition no. 68 (2006).
- "PMO Downplayed Rich Inuit Link to Discovered Franklin Ship APTN National News." APTN National News. Accessed November 26, 2014. http:// aptn.ca/news/2014/09/11/pmo-downplays-rich-inuit-link-discovered-franklinship/.
- 4. J. Edward Chamberlain, If This is Your Land, Where Are Your Stories? Finding Common Ground (Toronto: Knopf/Vintage, 2003), 18-21.

BIBLIOGRAPHY

- Abbott, Louise, and Luci Salt. *Eeyou Istchee: Land of the Cree.* Oujé-Bougoumou, Québec: Cree Outfitting and Tourism Association, 2010.
- Adelson, Naomi. 'Being Alive Well': Health and the Politics of Cree Well-being. Toronto: University of Toronto Press, 2000.
- Agamben, Giorgio. What Is an Apparatus?: And Other Essays. Stanford: Stanford University Press (2009): 39-54.
- Arendt, Hannah. The Life of the Mind. New York: Harcourt Brace Jovanovich, 1978.
- Beaudoin, J., JE Hughes Clarke, and J. Bartlett. "Usage of Oceanographic Databases in Support of Multibeam Mapping Operations Onboard the CCGS Amundsen." *Lighthouse, Journal of the Canadian Hydrographic Association*, Edition no. 68 (2006).
- Bélanger, Pierre. "Landscape as infrastructure." *Landscape Journal* 28, no. 1 (2009): 79-95.
- Breton, André. Mad Love (L'Amour Fou). Lincoln: University of Nebraska Press, 1987.
- Bronte, Charlotte. Jane Eyre. Doubleday Book & Music Clubs, 1993.
- Canadian Broadcasting Corporation. "8 Facts about the Inuvik to Tuktoyaktuk Highway." CBC News. January 8, 2014. Accessed September 1, 2014. http:// www.cbc.ca/news/canada/north/8-facts-about-the-inuvik-to-tuktoyaktukhighway-1.2488106.
- Carlson, Hans M. Home is the Hunter: The James Bay Cree and their Land. UBC Press, 2008.
- Carlson, Hans M. "A Watershed of Words: Litigating and Negotiating Nature in Eastern James Bay, 1971–75." *The Canadian Historical Review* 85, no. 1 (March 2004): 63-84.

- Carson, Anne. *Eros the Bittersweet: An Essay*. Princeton, N.J.: Princeton University Press, 1986.Coppola,
- Chamberlin, J. Edward. If This Is Your Land, Where Are Your Stories?: Reimagining Home and Sacred Space. Cleveland, Ohio: Pilgrim Press, 2004.
- Coppola, Nancy, and Bill Karis. Technical Communication, Deliberative Rhetoric, and Environmental Discourse: Connections and Directions. Stamford, CT: Ablex Pub., 2000.
- Cronon, William. "The trouble with wilderness: or, getting back to the wrong nature." *Environmental History* (1996): 7-28.
- Davis, Jennifer Mary, "Religious Experience and Symbols of Presence Amongst the People of Eastern James Bay," PhD diss., McGill University, 2007.
- Davis, L. "Risky stories: Speaking and writing in colonial spaces." *Native Studies Review*, 15 (2004): 1–20.
- Desbiens, Caroline. Power from the North: Territory, Identity, and the Culture of Hydroelectricity in Quebec. Vancouver: UBC Press, 2013.
- Descola, Philippe. *Beyond Nature and Culture*, edited by Janet Lloyd. Chicago : The University of Chicago Press, 2013.
- Feit, Harvey A. "Hunting and the Quest for Power: The James Bay Cree and Whitemen in the 20th Century." *Native Peoples: The Canadian Experience* (1995): 181-223.
- Flaherty, Robert J. "The Belcher Islands of Hudson Bay: Their Discovery and Exploration." *Geographical Review* 5, no. 6 (1918): 433-458.
- Flaherty, Robert J. "How I Filmed 'Nanook of the North" World's Work (1922): 632-640.
- Flaherty, Robert J. My Eskimo Friends : "Nanook of the North". Garden City, N.Y.: Doubleday, 1924.

- Flannery, Regina. Ellen Smallboy: Glimpses of a Cree Woman's Life, edited by John S. Long, Laura L. (Laura Lynn) Peers. Montreal: McGill-Queen's University Press, 1995.
- Francis, Daniel, and Toby Morantz. Partners in Furs: A History of the Fur Trade in Eastern James Bay, 1600-1870. McGill-Queen's University Press, 1983.
- Georgekish, Fred. Iiyiyuu Miichiwaahp: Traditional Architecture of the Wemindji Cree. Wemindji, Quebec: Cree Nation of Wemindji, 1996.
- Freeman, Minnie Aodla. *Life among the Qallunaat*. Edmonton : Hurtig Publishers, 1978.
- Freire, Paulo. Pedagogy of the Oppressed. New York : Continuum, 2000.
- Girmay, Aracelis. Kingdom Animalia: Poems. Rochester, NY: Boa Editions, 2011.
- Greenhalgh, Paul. *The Persistence of Craft : The Applied Arts Today.* N.J. : Rutgers University Press, 2002.
- Grinde, Donald A. Ecocide of Native America : Environmental Destruction of Indian Lands and Peoples, edited by Bruce E. (Bruce Elliott) Johansen. 1st ed. Sante Fe, N.M. : Clear Light, 1995.
- Hayeur, Gaëtan. 2001. Summary of Knowledge Acquired in Northern Environments from 1970 to 2000. Montréal: Hydro-Québec.
- Homer. *The Odyssey of Homer*, edited by Richmond Lattimore. New York: New York: Harper Perennial, 1991.
- Hurd, Jason John. "The Conscious Landscape: Reinterpreting and Reinhabiting the La Colle Falls Hydro Dam." (2007).
- Kahn, Louis I., and Robert C. Twombly. *Louis Kahn: Essential Texts.* New York: W.W. Norton, 2003.
- Kokoris, Moki. "Duck Down and Thermostats in an Interconnected World." *Indigenous Policy Journal* 24, no. 3 (2013).
- Lally, Sean. Air from Other Planets : A Brief History of Architecture to Come. Zürich : Lars Müller Publishers, 2014.
- Latour, Bruno. We have Never been Modern. Harvard University Press, 2012.

Legge, Laura. "Syzygy." Prism International 52:2 Love & Sex, 2014.

- Legge, Laura. "Tukisiviit?" CBC news. October 9, 2014. Accessed October 12, 2014. http://www.cbc.ca/books/canadawrites/2014/03/cbc-short-storyprize-tukisiviit-by-laura-legge.html.
- MacGregor, Roy. Chief: The Fearless Vision of Billy Diamond. Markham, Ontario: Viking, 1989.
- McDonald, Miriam, Lucassie Arragutainaq, Zacharassie Novalinga, and Canadian Arctic Resources Committee. Voices from the Bay: Traditional Ecological Knowledge of Inuit and Cree in the Hudson Bay Bioregion. Canadian Arctic Resources Committee Ottawa, 1997.
- McGhee, Robert. *The Last Imaginary Place: A Human History of the Arctic.* Oxford: World Oxford University Press, 2006.
- Morantz, Toby Elaine. *The White Man's Gonna Getcha the Colonial Challenge to the Crees in Quebec.* Montreal: McGill-Queen's University Press, 2002.
- Ohmagari, Kayo, and Fikret Berkes. "Transmission of indigenous knowledge and bush skills among the Western James Bay Cree women of subarctic Canada." *Human Ecology* 25, no. 2 (1997): 197-222.
- Okakura, Kakuzo. The Book of Tea. London: Kodansha International, 1999.
- Ortega, Y. Gasset. *Meditations on Hunting*. Translated by Howard B. Wescott. Introd. by Paul Shepard. Illustrated by Lewis S. Brown. New York: Scribner 1972.
- Pelletier, Louise, and Alberto Perez-Gomez. Architecture, Ethics, and Technology. Montréal, Quebec: Institut De Recherche En Histoire De L'architecture, 1994.
- Perez-Gomez, Alberto. Built Upon Love: Architectural Longing After Ethics and Aesthetics. Cambridge: MIT Press, 2006.
- Plummer, Henry. Stillness and Light the Silent Eloquence of Shaker Architecture. Bloomington, IN: Indiana University Press, 2009.
- Posluns, Michael. Voices from the Odeyak. Toronto: Dundurn Group, 1993.

- Prinz, Jesse J. Beyond Human Nature: How Culture and Experience Shape the Human Mind. New York: W.W. Norton, 2012.
- Québec (Province), Superior Court. Chief Robert Kanatewat Et Al. Petitioners/ Requerants Vs James Bay Development Corporation Et Al. Respondents/ Intimées and the Attorney General of Canada, Mis-En-Couse: Judgment/ jugement, edited by Robert Kanatewat petitioner, Société de développement de la Baie James (Québec). 1973.
- Richardson, Boyce. Strangers Devour the Land : The Cree Hunters of the James Bay Area Versus Premier Bourassa and the James Bay Development Corporation, edited by Sally M. Weaver. Toronto: Toronto : Macmillan of Canada, 1975.
- Rifkin, Jeremy. The Empathic Civilization: The Race to Global Consciousness in a World in Crisis. New York: J.P. Tarcher/Penguin, 2009.
- Roncken, Paul A., Sven Stremke, and Maurice PCP Paulissen. "Landscape Machines: Productive Nature and the Future Sublime." *Journal of Landscape Architecture* 6, no. 1 (2011): 68-81.
- Ross, Adams. "Longing for a Greener Present: Neoliberalism and the Eco-City." *Radical Philosophy* 163 (2010): 2-7.
- Saul, John Ralston. A Fair Country : Telling Truths about Canada. Toronto: Toronto : Penguin Canada, 2009.
- Spink, John. Eskimo Maps from the Canadian Eastern Arctic, edited by D. Wayne Moodie, Donald Wayne Moodie and Conrad E. Heidenreich. Toronto : B.V. Gutsell, Dept. of Geography, York University, 1972.
- Steinberger, Vera. "Consumers of Indigenous Canadian Aboriginal Textile Crafts." M.S. thesis., University of Manitobe, 2002.
- Strang, Gary L. "Infrastructure as Landscape [Infrastructure as Landscape, Landscape as Infrastructure]." *Places* 10, no. 3 (1996).
- Tanizaki, Jun'ichirō. In Praise of Shadows. New Haven, Conneticut: Leete's Island Books, 1977.
- Tanner, Adrian. Bringing Home Animals: Religious Ideology and Mode of Production of the Mistassini Cree Hunters. New York: St. Martin's Press, 1979.