ABSTRACT

Inuit societies in Canada’s arctic are known for their adaptability and resiliency. However, the Inuit experience of colonization and non-indigenous contact has contributed to a profound disruption of culture, language, and living, with catastrophic consequences for mental health and well-being. This thesis reflects on how architecture/design can respond to the complex issues of mental health currently affecting Inuit societies in Canada, using the flux of ever-changing terrains and landscapes as both context and intervention. In doing this, a series of proposed outposts mark the line of an annual suicide prevention walk, hosted by Qikiqtarjuaq in an attempt to bring recognition and attention to the purpose of the walk and to provide shelter and services to travelers who partake. Working together, the outposts speak to the importance of experience, culture, process, and healing within a landscape of utmost significance.
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Thank You
# ABSTRACT


# ACKNOWLEDGEMENTS


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1.0 | A (COMPRESSED) HISTORY

The Canadian North is a landscape of extremes. Differences and variability in climate, light, accessibility, socio-economic and cultural transformations are extensive. Yet it is always easy to ascribe generalities to the North since it is so vast, so remote in our awareness and perceived geographies, and so sparsely populated. It is in part because of this vastness and these extremes in context, climate, history and awareness that it is impossible to be more nuancedly understood under singular histories and definitions. For the purposes of providing a “general” history, this thesis will specifically focus on the Canadian territory of Nunavut and the Inuit people who live there.

The Inuit experience of colonization and contact with Europeans in Canadian history is recent and still present. Many now adult Inuit grew up living on the land year-round but live today in settled communities. Traditionally, Inuit communities lived a nomadic lifestyle, often closely linked to the migration patterns of their food sources.1 This history is understood and known by Inuit through three particular lenses; Taissumani Nunamiutautilultaluma, Sangussaqaatuiliqtilluta, and Nunalinnguqitauiliqtilluta.2 The story of each community is unique, however they share many common elements. Below are the three lenses as they apply to the Qikiqtarjuaq region of Baffin Island, the focus area for this thesis.

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1.1 | *Taissumani Nunamiutautiluta:* “when we lived on the land.”

This period generally refers to the contact era up until 1955. During this period, the Inuit remained a nomadic society. Hunting groups, made up of multiple families, were the basic element of community organization for the Inuit until 1960.\(^3\) In 1818, while mapping the coastline, a passing Royal Navy explorer, John Ross, named many of the features along the west side of Baffin Bay and Davis Strait, including Broughton Island (the former name of *Qikiqtarjuaq*), with little effort to contact the Inuit that lived here.\(^4\) His work however, opened the western shore to European whalers which led, ultimately, to encounters between the Inuit and whalers from 1824 until the 1840s.\(^5\) The introduction of new manufactured foreign goods available from the whalers and traders shifted the cultural and material practices of the Inuit such as hunting techniques, diet, and clothing. Although this period was generally peaceful, contact with *Qallunaat* (non-Inuit) also introduced new diseases such as influenza, measles, and venereal diseases.\(^6\)

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5 Ibid, 15.
6 Ibid, 17.
FIGURE 1 | Igloos or Snow Village at Oopungnewing

FIGURE 2 | Captain McClintock’s First Interview with the Eskimo at Cape Victoria, 1859

FIGURE 3 | First Communication with the Natives of Prince Regents Bay, 1819
1.2 | Sangussaqtauliqtilluta: “the time when we started to be actively persuaded (or made to) detour (or switch modes).”

A dramatic shift of daily and seasonal routines occurred in 1955 when Qikiqtarjuaq became an auxiliary DEW (Distant Early Warning) Line station site. Many Inuit arrived to look for possibilities for employment or to gather leftover building materials and surplus food. This resulted in the rapid increase in settled population over a short period, with occasional friction between Inuit and the American authorities in charge of the stations.\(^7\) The land around the stations, specifically on the island, was a traditional place for Inuit to establish ilagiit nunagivaktangit (a place used regularly for hunting, harvesting and gathering)\(^8\), however Inuit were told to stay away from these locations, while in some cases, contrarily being asked to work at them.\(^9\)

\(^7\) Ibid, 20.
\(^9\) Ibid, 20.
FIGURE 4 | DEW Line Communications Antenna, Hall Lake, 1960

FIGURE 5 | Inuit DEW Line Temporary Employee, Komakuk Beach, 1962
1.3 | *Nunalinguqtatualilingta*: “the time when we were actively (by outside force) formed into communities.”

This period, 1958-1975, is characterized by the rapid and often forced relocation of Inuit into a centralized community (in this case, at *Qikiqtarjuaq*). Despite anti-loitering policies surrounding some of the government stations, the government was hesitantly trying to centralize populations, which meant partially providing services and building settlements, allowing authorities to exert greater control over the Inuit population.

Federal authorities believed they were doing young Inuit a great service by offering them training that would give them access to the same economic opportunities available to all Canadians. Implicitly, schooling was also considered an efficient way to assimilate the Inuit to broader Canadian society.\(^1\)

During the 1960s and 70s, families were discouraged from living at *Kivitoo* and *Paallavvik* in favour of *Qikiqtarjuaq*. Both enticements as well as harsh tactics were employed to ensure this, such as promises of housing and health care as well as threats of not providing medical care and the killing of *qimmiit* (sled dogs).\(^2\) This was problematic for Inuit as *Qikiqtarjuaq* was limited in terms of wildlife and other key factors for traditional Inuit lifestyles.\(^3\)

> When we were starting to go, [the Qallunaat] told Jacopie our dogs are going to be shot [because] no dogs allowed in *Qikiqtarjuaq*. Our dogs were tied out on the ice while we were getting ready to go back home, back to [Paallavvik] . . . I don’t remember what our response was, we didn’t want to talk back . . . Our dogs were slaughtered. We had no choice but to stay here.\(^4\)

\(^{10}\) *Qikiqtani Inuit Association, “Guide to The Community Histories and Special Studies of The Qikiqtani Truth Commission”,* (Inhabit Media Inc., 2015), 20.

\(^{11}\) Ibid, 22.

\(^{12}\) Ibid, 25.

\(^{13}\) *Qikiqtani Inuit Association, “Nuutauniq: Moves in Inuit Life”,* (Inhabit Media Inc, 2013), 39.

\(^{14}\) Ibid, 26.
The government failed to consider the lasting impact this would have on these communities. For Inuit, the loss of home is more than the loss of a dwelling—it is a disruption of a critical relationship of people with the land and animals. “It represents the loss of independence and replacement of a way of life.”\textsuperscript{15}

\begin{figure}
\centering
\includegraphics[width=\textwidth]{figure6}
\caption{Inuit and RCMP Officer, Broughton Island, 1979}
\end{figure}

\begin{figure}
\centering
\includegraphics[width=\textwidth]{figure7}
\caption{Anglican Church on Broughton Island}
\end{figure}

\textsuperscript{15} Ibid, 26.
Present day Inuit must contend with the aftermath of *nunalinnguqtitaulqilliuta* as much of the community has lived into this stage of Inuit history – and many more are now born immediately into it. Perhaps one of the most common and sadly, consistent, issues in the experience of Inuit families and their children is the crushing legacy of residential schools and its attendant circumstances of abuse and loss – of culture, language and family – and of the impact of sexual violence and trauma. “A disruption of culture, language, and way of life ensued, with dramatic and negative consequences for mental health and well-being.”

“I have an old song that I sing sometimes from when we were living at the camp. ‘I want to go back to the way we were.’ I know we can’t go back to those times and I know we can’t go back to our younger days. We can’t help growing old even though we want to stay young. It seemed as though everything around us was good and everyone was happy, but you can’t be like that forever. – Peter Paniloo”

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2.0 A CULTURAL PERSPECTIVE OF MENTAL HEALTH

“Inuit define mental wellness as self-esteem and personal dignity flowing from the presence of harmonious physical, emotional, mental, spiritual wellness and cultural identity.”

It is essential – when studying places and cultures outside of one’s own experience – to be conscious, present and attentive about positionality. The issues facing the Inuit community are profoundly complex and beyond the purview of a single discipline or perspective. Appropriate frames of references are critical. Acknowledging, checking and fighting against bias is key – particularly with an established legacy of colonial southern-ness that persists, even to this day. This thesis attempts to foreground this perspective – an acknowledgement of diverse cultural perspectives – with respect to a community’s understanding and representation of itself – and of the imaging by others who are outside of it. Contextualizing what mental health and wellness is within Inuit culture (rather than from typically purely Western conceptions of these issues) is central to this thesis.

Inuit embrace a holistic approach to mental wellness that is based on traditional and cultural practices, with support from clinical approaches. Traditional and cultural approaches focus on promoting well-being, enabling people to support each other and draw on community strengths, and taking people out on the land to learn about the traditional Inuit way of life.

19 Ibid., 101.
Inuit approaches to mental wellness are based on traditional and cultural practices including community strengths and learning about traditional ways of living off the land, with support from more ‘western’ clinical services. Many of the determinants of Inuit health, as a result, are directly related to the loss of culture and tradition that characterizes so much of Inuit communities in Canadian history.

*When our children started school we moved to Pond Inlet. We practically threw our children away to the teachers and we expected them to become teachers, doctors, lawyers, and that was a mistake. We gave them up too suddenly and then we started realizing that our children were not totally white and they were not totally Inuit. They didn’t really have a purpose, and we even said that they were good for nothing. No wonder they have become nobody.* – Elijah Erkloo

FIGURE 8| Traces of Melting Ice

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20 Barry Greenwald, *Between Two Worlds*, 32:00.
2.1 | Crisis: Suicide and the Inuit

Mental health is a complex topic that encompasses a broad range of issues including mental illnesses, violence, substance abuse and suicide among many others, all of which currently affect Canadian Inuit communities. As noted earlier, suicide rates in Nunavut are at an alarmingly high number compared to the rest of Canada. This thesis begins with this as a point of departure and engagement for the project that follows.

From 1999 to 2003, the suicide rate among Inuit was 135 per 100,000; four times higher than that of First Nations (24.1) and eleven times higher than the rate for all Canadians (11.8). Between 2004-2008, children and teenagers in Inuit Nunangat were more than 30 times as likely to die from suicide as were those in the rest of Canada. Furthermore, half of all deaths of young people in Inuit Nunangat were suicides, compared with approximately 10% in the rest of Canada.21

While tragic by any measure, an additional dimension to this is the disproportionate impact of suicide on youth. The suicide rates for Inuit youth are particularly high, and with a rapidly growing population, one-third of Nunavut's inhabitants are under the age of 15 (as of 2011).22

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21 Inuit Tapiriit Kanatami, "Social Determinants Of Inuit Health In Canada", (Ottawa, ON, 2014), 9.
FIGURE 9 | Suicide Rates in Canada
The high rates of suicide in Nunavut have sponsored a wide range of opinions on the matter, including the question of whether suicide has always been a part of Inuit culture, or if the rates spiked “when the qallunaat (non-Inuit) came.” A 2015 report prepared for Nunavut Tunngavik Inc. concluded the following:

This report has presented the available statistical data on one aspect of the epidemiological transition that has occurred among Inuit in Nunavut in the last 100 years: from a society with relatively low rates of death by suicide to a society with tragically high rates of death by suicide. The overall pattern of risk factors for suicide behaviour has changed considerably over time, so it is important to differentiate suicide behaviour by Inuit in the past from suicide behaviour by Inuit today. Suicide is not ‘a part of Inuit culture,’ except in the sense that suicide behaviour occurs in all human societies.

Figures 10 and 11 are work from northern artists Abigail Ootoova and Janet Ripley-Armstrong. Both artists reflect on trauma in the Inuit community, including issues of spousal abuse. Figure 10 depicts a broken home and in turn, a broken heart, a wounded body, and an injured soul. “The expression ‘broken home’ is usually used to refer to a family which has broken up, the husband and wife separated or divorced. But home can also be torn apart, even when the family stays together.” A violent home is a broken home. Figure 11 depicts the tragic result of domestic violence. The artist wrote, “I drew this because I really believe that this is what family violence comes to if it is not stopped.” Although these relate to abuse rather than suicide, they illustrate some of the feelings expressed by Inuit regarding these painful circumstances. In a newspaper article from June 2017, Nunavut Tunngavik Inc. President Aluki Kotierk

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24 Ibid, 14.  
26 Ibid, 11.  
27 Ibid, 32.
noted, "I hope we get to a point where Inuit realize that suicide has nothing to do with being Inuk. And, that we get to a point where we have a strong Inuit identity and that we are proud and we are healthy and we are contributing members of a society that is thriving."²⁸

FIGURE 10 | Broken Home by Abigail Ootoova

FIGURE 11 | Family Violence Unstopped by Janet Ripley-Armstrong

3.0 | SITE AND PLACE

The North is vast. Nunavut, likewise, is also immense. The land is such an integral part of Inuit culture that site specificity became a necessity in order to help avoid design generalizations that characterized much of non-indigenous interactions with Inuit communities. A specific site would be key to explore and to offer the potential for a more, hopefully, finer-grained insight into the culture and history of a particular place. The land, as I came to learn, is as much subject as it is object, as much foreground as it is background, as much the focus as it was the context of my thesis investigations.

Figure 12 is a map that illustrates suicide rates within the 25 Inuit communities in Nunavut over the past twenty years with data collected from a 2015 Nunavut Tunngavik Report on death by suicide by Nunavut Inuit. The dashed lines connecting some of these communities show medical travel routes, indicating the distance – some cases, extreme – that many Inuit need to travel to seek certain kinds of health care. The largest circles tend to be within the Baffin Island area of Nunavut – emphasizing the particular challenges these communities face.

30 Inuit Tapiriit Kanatami, "Social Determinants Of Inuit Health In Canada”, 32.
FIGURE 12 | Nunavut Suicide Rates Map
3.1 | The Big Island

The hamlet of Qikiqtarjuaq (formerly known as Broughton Island), located off the eastern coast of Baffin Island, has some of Nunavut’s highest rates of suicide. Qikiqtarjuaq - ‘big island’ - is a hamlet of just over 600 people, 91% of which are Inuit. The hamlet is relatively isolated with no direct southern air routes. Qikiqtarjuaq is the site for this thesis.

Despite the long history of the Inuit, the community of Qikiqtarjuaq was not settled until the mid 1950s. It shares many similarities with much of the other Inuit communities in Nunavut - limited social and community services, small government-built housing, limited supply of manufactured goods, and inadequate access to affordable food. The community planning lacks integration between site and design. It suggests a southern model of suburban style planning with decisions that seem to be made based on factors such as spatial separation for fire prevention, rather than orientation, climate, or cultural practices.

FIGURE 13 | Hamlet of Qikiqtarjuaq

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31 “About Qikiqtarjuaq”, (Government of Nunavut).
32 “Qikiqtarjuaq”, (Government of Nunavut).
33 Ibid.
FIGURE 14 | Qikiqtarjuaq Region History and Timeline
Inuit were a traditionally nomadic society with more than one group of Inuit associated with Qikiqtarjuaq, therefore, surrounding places are just as significant as the hamlet itself. “Kivitoo, a whaling station 64km north of the current community location, and Padloping Island, 96km south of the island, were traditionally the main Inuit gathering points.”

Figure 14 visualizes a general timeline and history of the Qikiqtarjuaq area (including Kivitoo and Padloping). Qikiqtarjuaq is located in the centre of the dashed circle. Orange lines indicate outside contact and movement, while the blue shows Inuit movement and settlement. Many of the major cultural, social and historical shifts happened during the mid 1950s after the construction of six Distant Early Warning (DEW) Line radar stations throughout the area. By 1970, almost all the people in these areas were settled near the most central of these stations - the auxiliary station on Broughton Island, near present-day Qikiqtarjuaq.35

34 “About Qikiqtarjuaq”, (Government of Nunavut).
3.2 | DEW Line

The Distant Early Warning (DEW) Line was a series of radar stations constructed largely by the U.S. government during the Cold War to warn of impending Soviet missile attacks. These were built along the 69th parallel and spanned from Alaska to Greenland with the purpose of providing advanced warning of any Soviet attack through the Arctic.36 “They were built, operated, and paid for by the U.S., but on sites requiring Canadian government approval, subject to Canadian law, and operated with the assumption of eventual Canadian control.”37

The stations at Qikiqtarjuaq and at Kivitoo were especially important for the Inuit. They provided job opportunities during their construction and were large contributors to the acceleration of centralization of the Inuit community in this area, which signalled a fundamental shift in traditional settlement patterns. The DEW Line came to represent a southern idea of northern sovereignty, with a total network of 7 main stations, 23 auxiliary, 29 intermediate, and 3 rearward communications stations.38

FIGURE 16 | Map of Distant Early Warning (DEW) Line

36 Lola Sheppard and Mason White, Many Norths, 328.
37 Ibid., 328.
38 Ibid., 328.
The DEW Line radar stations – in their initial design – no longer exist, however many of them, including the one at Qikiqtarjuaq, have since been turned into NWS, ‘North Warning System’ stations – a Canadian run early warning radar system. Figure 17 shows the original Fox-5 (Site 39) station equipment that was replaced with the North Warning System station shown in Figure 18. The NWS station was built just southwest of the DEW station. It is smaller than the DEW station, and includes a radar tower, a communications facility, and a small storage building. The DEW station at Qikiqtarjuaq was an auxiliary station, the most typical of the DEW Line stations. “There was one long building, the train, composed of 25 pre-fabricated modules. Additional buildings were a large warehouse, a garage and a small house for Inuit employees.”

Because these stations required large quantities of resources and materials, it was typical for a gravel runway to be located nearby. In the case of Qikiqtarjuaq, the runway is located at a ‘lower base’ near sea level, while the station is located at an ‘upper base’ atop a nearby mountain. Figure 19 shows the relationship between these two sites located on opposite sides of the island. The hamlet itself was formed adjacent to the runway, near sea level.

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40 Ibid., 19.
41 Ibid., 19.
FIGURE 19| Qikiqtarjuaq DEW Line Sites Map
RCMP (Royal Canadian Mounted Police) members and the Americans employed at these stations described the Inuit as “loitering” in their reports. Harsh tactics were used in an attempt to stop this. *Qimmiit* (Inuit sled dogs) were killed and the communities were threatened with property destruction. “This was confusing for many Inuit who were asked to stay put in some places and to stay away from others.” The killing of Inuit *qimmiit* – so vital to hunting and travel, and deeply valued as companions - among the other traumas brought on by colonization, has left a lasting imprint on many Inuit. This includes what is referred to as ‘intergenerational transmission of historical trauma’. “For a long time, many Inuit grieved in silence. Others spoke out in anger, aware that their experiences seemed to follow a pattern that was hard to decipher but was important for understanding the problems in communities today.” Although these radar stations were built in the North, their true purpose was to protect the South. The north was merely a non-space, established for the security of the South.

The DEW Line was extremely influential in the initial development of the hamlet of *Qikiqtarjuaq*. It marked a major shift in Inuit ways of life, particularly in terms of stasis and mobility. This flux between two modes of living is emblematic of the current state of Inuit, many of whom are often described and - describe themselves - as “a people caught between two worlds.” The DEW Line stations and consequent events led, in part, to lingering challenges related to mental health.

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43 Ibid., 20.
44 Inuit Tapiriit Kanatami, ”Social Determinants Of Inuit Health In Canada”, 34.
45 Qikiqtani Inuit Association, “Guide To The Community Histories And Special Studies Of The Qikiqtani Truth Commission”, 16.
3.3 | 3 Days

For a time, Qikiqtarjuaq hosted a 3 day, 60km annual suicide prevention walk. The walk took place in mid-May, during the Inuit season Upirngassaaq (early spring). Upirngassaaq lasts from mid-March to late May and is characterized by maximum sea ice cover and thickness. In May of 2013, 15 people from the north Baffin community participated in the walk. “Most of the walkers were teenagers, but the youngest walker was a 10-year old girl, and the oldest a 57-year-old woman, with two women carrying babies in their amautiks.” That year, Qikiqtarjuaq resident Morris Kuniliusee told Nunatsiaq News, “The walk has helped this community in a big way, and the suicide prevention walks in Qikiqtarjuaq used to take place every spring during the 1990’s, but that hadn’t happened in recent years.”

FIGURE 20 | Suicide Prevention Walkers

47 Lola Sheppard and Mason White, Many Norths, 320.
49 Ibid.
FIGURE 21 | Traditional Inuit Travel Routes
The walk itself begins in Kivitoo, the location of another radar station and the site of a former whaling station (a place in the early 20th century where Inuit would meet up with traders) and it ends in the hamlet of Qikiqtarjuaq. Figure 21 shows the traditional Inuit travel routes within the area, highlighting the main route between Kivitoo and Qikiqtarjuaq. The exact route of the walk likely varies from year-to-year and is based on the constantly changing nature of the landscape but for the purpose of this thesis, this path is assumed to be similar to the path of the prevention walk. Inuit culture is traditionally translated orally, and this type of information would likely not have been documented or marked on a map as is common in western culture.

Figure 22 maps the path of the walk through the landscape, showing section cuts of the terrain as the walk progresses. Overlaid are oblique rendered views of the topography and varying times of day throughout this journey. As place names are especially important in Inuit culture as a means of knowledge, wayfinding and navigation, some of these traditional place names are included as part of the representation. It is worth noting that the traditional place name adjacent to Kivitoo - where the suicide walk starts - is Qivittuaq, or ‘angry’.  

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50 Lola Sheppard and Mason White, Many Norths, 236.
51 “Qikiqtarjuaq Traditional Place Names”, (GoogleMaps).
FIGURE 22 | Journey Along the Walk
3.4 | A Subtle Landscape

“Geographic knowledge encompasses core cultural values, especially for people as closely connected to the land as the Inuit.” 52 Geographic knowledge can involve or mean different things to different people, without any particular knowledge set being superior to the other. For Inuit, this type of knowledge is inherently part of their culture. Traditionally, lacking this type of knowledge could be a matter of life or death. Many Inuit cultural values stem from this crucial relationship with the land. The term ‘land’ encompasses not only the physical land itself (nuna) but also the ice (hiku) as both play a key role in Inuit society. “Land is anywhere our feet, dog teams, or snowmobiles can take us.” 53

Traditionally, specific types of spaces are related to specific types of social life, and specific seasons. The land was associated with summer – the hunt for caribou and the seasonal breaking-up of the group. The ice-covered ocean was associated with winter – the hunt for seals and the seasonal reunification of the group. The mainland was the time of the individual, the ice-sheet that of the community. 54

Although the land is still an essential part of this culture, it does not play the same role it once did, especially for younger generations who have not grown up living upon it.

Inuit have a unique geographic knowledge which they gain in two ways; experience gained through practice, and through narrative learned by the transmission of the oral tradition. 55 Not only does this knowledge encompass skills and observations, but also includes the realm of emotions and feelings, something traditional Qallunaat knowledge excludes. “When it comes to the land, it’s very personal” – C.T. 56

52 Beatrice Collignon, Knowing Places, 1.
54 Beatrice Collignon, Knowing Places, 36.
55 Ibid., 63.
56 Ibid., 75.
FIGURE 23 | Qikiqtarjuaq Region Experimental Mapping
Figures 24 & 25 show the landscape between Kivitoo (on the left) to Padloping Island (on the right), with Qikiqtarjuaq roughly in the middle. These images are not to scale. They are not drawn, but carved, to create impressions of the landscape using the landscape (paper) itself. They were studies - created in an attempt to understand the landscape from a process that attempted to separate itself from established (and conventional – and perhaps Western) methods of rendering landscapes.

"The way to explain and represent the importance of [Indigenous cultural] knowledge to the non-Indigenous public is often a struggle because that knowledge is inherently spatialized." Using a map of the area that included traditional Inuit place names, the carving of the paper represented a personal interpretation of how this knowledge or experience might be represented with respect to the land.

Indigenous cartographies are process oriented as opposed to product dependent... They also differ from Western cartography in that they emphasize experienced space, or place, as opposed to the Western convention of depicting space as universal, homogenized, and devoid of human experience. The carved paper is overlaid with stitching that indicates an idea of traditional travel routes in an attempt to give a better understanding of the navigation through the area. The subtle nature of the drawings is meant to reflect both the complexities and the subtleties within Inuit landscape and culture.

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58 Ibid., 110.
FIGURE 24 | Carved Landscape
4.0 | SEA ICE

Surrounding Qikiqtarjuaq, it is far easier to travel along the ice than it is across the land as the land is mountainous and uneven, with many rough fjords. The sea, by contrast, is the opposite. The Inuit see the ice as enabling mobility and providing connection to other communities. The vast number of traditional travel routes in the area, including the line of the suicide prevention walk, happen along the sea ice rather than across the land.

4.1 | Healing Ice

The sea is an essential part of Inuit life. “Life in the Arctic is dependent on movement, and sea ice is integral to this movement.” The vast number of traditional travel routes in the area, including the line of the suicide prevention walk, happen along the sea ice rather than across the land.

The sea is an essential part of Inuit life. “Life in the Arctic is dependent on movement, and sea ice is integral to this movement.”

Traditional Inuit culture and identity is based on free movement and it is this important connection of land to the sea – and sea-ice that enables “a great sense of pride, well-being, and connection to the past.”

“[Sea ice] provides us and heals our hearts and minds as we travel upon it.” – Joelite Sabuyda

59 ICC, “The Sea Ice is Our Highway”, 3.
60 Ibid., ii.
As sea ice is such an integral part of Inuit life, it is also crucial to this thesis. As an agent of change, the sea ice represents ephemerality and dynamism. It speaks to questions of permanence as well as seasonality. Notably, the rate of suicide is slightly higher during summer months (at 60%) than during winter while the sea ice is available for travel.\textsuperscript{62} The journey along the ice is healing. The design of the path of the prevention walk therefore addresses not only the conditions during the span of the walk itself. It does not aim to control the journey, but rather provide potential opportunities for both permanence and temporality.

“Along with my sense of awe, today I also have a sense of concern. As the Arctic continues to change, so does our sea ice. Apart from the physical changes that our hunters and scientists are observing, the sea ice itself is under stress from impacts such as an increase in Arctic shipping. To outsiders, ice is an impediment to transportation and access, something that must be broken or bypassed. It is seen as a barrier, blocking rather than enabling human activity. We view sea ice as enabling.” – Duane Ningaqqiaq Smith\textsuperscript{63}

“When I live, the sea ice never stops. It's a living thing.” – Jayko Oweetaluktuk\textsuperscript{64}

Figure 26 shows the changing sea ice conditions for the year 2016. It illustrates the ice as a material that is constantly shifting and changing. This change is seasonal and is an essential part of Inuit life, health, and well-being. In May - the time of the suicide prevention walk - the ice is continuous and thick, allowing for smooth travel.

\textsuperscript{62} Jack Hicks, “Statistical data on death by suicide by Nunavut Inuit, 1920 to 2014”, 11.
\textsuperscript{64} Ibid., i.
FIGURE 26 | Monthly Regional Ice Charts
4.2 | A Short Story on Ice Printing

Considering that ice plays such an integral role in Inuit life, it was important for this thesis to explore ice as a material. Figure 27 is an exploration in using ice as a medium to present influential aspects of the landscape. Images of the radar stations are printed onto the ice, expressive of how they were imposed onto this landscape and people. The act of printing onto ice revealed the struggles of imposing foreign technological processes onto such a delicate landscape, in this case, the material.

FIGURE 27 | Ice Prints
Figure 28 is an illustration representing this challenge. It explores the process of printing on ice – one that involved a process of multiple physical spaces and time. Because ice is a material that is constantly changing states, the time span to get the ice to the printer, printed, and back to the freezer, was a challenge in and of itself. The exercise of illustrating this experience was a method of storytelling that was based on process. This was done because, as I have come to learn, in Indigenous culture, often the process is more relevant than the result. A fundamental Inuit belief is that one cannot assume one has control over the world.65 It is perhaps because of this that Inuit tend to emphasize the importance of process. “If one is unable to predict what will get done, how things are done becomes important.”66 Additionally, storytelling is often how knowledge is gained within Inuit culture. This drawing is an attempt at telling this story visually. This experience was fundamentally spatial and therefore a visual representation seemed most fitting as the method for storytelling.

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66 Ibid, 7.
FIGURE 28 | Story of the Ice Prints
Figure 29 shows the ice drawing melting. The image was transferred onto the surface below once the ice melted away, just slightly deformed from the original. Where the image finally settled onto the surface was uncontrollable. This was indicative of Inuit beliefs on time and the future. Because environmental conditions are always in flux, there is an awareness that the future cannot be predicted.

Inuit have often told me, “Today is today, and tomorrow is tomorrow. Don’t bring today into tomorrow, and don’t bring tomorrow into today.” What is important is to take each moment as it comes rather than to assume that one may have control over the future.67

This lack of control does not mean that Inuit do not plan ahead, but rather that there are no absolutes. There is an Inuit saying “Ajurnarmat” which means “it can’t be helped”.68 Patience and the ability to accept those realities that are beyond one’s control are valued character traits.69

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67 Ibid, 6.
68 Ibid, 7.
FIGURE 29 | Melting Ice
Figure 30 shows a projection of the ice melting. At first, the image was hardly visible but as the ice melted away, the image was slowly revealed. This concept is intriguing in the way that it is so closely related to time. In Inuit culture, the experience of place is linked to that of time. Notably, in Inuktitut, the suffix ‘-vik’ means both ‘time’ and ‘place’. This thesis attempted to use this concept in its design and explorations, creating a temporary architecture in the sense that the experience of the place can change, be revealed, or concealed depending on seasonality, time, event, and so on.

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FIGURE 30 | Melting Ice Projection
This thesis has explored the line of an annual suicide prevention walk. As noted earlier, the walk lasts 3 days, beginning at the former Inuit gathering point, Kivitoo, and ending at the hamlet of Qikiqtarjuaq. This walk is not only relevant to the current challenges of suicide within this community but speaks to broader issues regarding mental health in many other Inuit communities within Nunavut. Furthermore, the walk speaks to a culturally sensitive approach in dealing with topics of healing and wellness, both physical, mental, and spiritual. The walk hosts all demographics, including people who are suffering with mental health, as well as people who are simply there to be supportive and help raise awareness. It promotes community togetherness and support, while simultaneously allowing for individual healing and connection to oneself.

As the walk seems to be such a strong entity in approaching mental health and suicide, this thesis aims to bring further recognition and attention to this journey; one that is both physical and emotional. A series of outposts mark the line of the prevention walk in an attempt to bring awareness to the purpose of the walk. The outposts also provide shelter and services to travellers within the area, which works to help promote traditional cultural practices such as hunting and living on the land. Working together, the outposts speak to the importance of experience, process, and healing within a landscape of utmost significance.
The walk is an annual event and the resultant design is contingent on the specificity of the walk’s seasonal occurrence. This specificity was important to avoid generalizations and stereotypes that unfortunately have become common in the history of ‘the north’. Because this walk happens at the end of May (May 27-29), the path has been designed specifically with those dates in mind, with the possibility that it could be used at other times. Based on Inuit beliefs of time and place – time and place are always in flux – the walk does not claim to be absolute and therefore has been designed as a possibility. The NEW (Northern Esteem Walk) Line acts in a kind of opposition to the imposition and linearity of the DEW Line. Time is non-linear and therefore the line of the walk has been designed to be a series of potentials, rather than an itinerary meant to be precisely followed.

The following drawing shows the location of the walk lasting three days (two sleeps). The path is not definitive - there are multiple paths one could choose to take along this walk. This may mean moving back and forth between travelling across the land versus across the sea ice. One set of designed outposts have been placed along the surface of the sea ice with an alternate path placed along the coastline on the land, allowing for this flexibility in movement. These travel options relate to both the uncertainty that travelling across this landscape brings as well as to the eras in the recent history of the Inuit. These paths are meant to allude to some of the actions throughout the past; from living on the land, to detouring from regular routes, to being actively persuaded or forced to move.
Along with the overall plan of the landscape, the sun elevation above the horizon line is also illustrated below, as time and place are synchronized. During the dates of the prevention walk, the sun is above the horizon line for nearly the entire duration. “The idea of time is often perceived as durations or moments that flow into one another.”\textsuperscript{71} With this in mind, each of the outposts along the walk are meant to be individual points that together are part of the experience of the prevention walk with one potentially leading to the next.

\textsuperscript{71} Nicole Gombay, "Today Is Today and Tomorrow Is Tomorrow", 8.
“Inuit Qaujimajatuqangit (IQ) refers, in Inuktitut, the Inuit language, to the Inuit way of knowing, or traditional knowledge.”72 IQ is used by the government of Nunavut and by Inuit as a set of guiding principles to live by. Those principles are as follows:

- **Inuuqatigiitsiarniq**: Respecting others and caring for people.
- **Tunnganarniq**: Fostering good spirit by being open, welcoming and inclusive.
- **Pijitsirniq**: Serving the community through advice and resources.
- **Pilimmaksarniq**: Knowledge and skills developed through observation, effort, and practice.
- **Aajiiqatigiltingniq**: Decision making through discussion and consensus.
- **Piliriqatigiltingniq**: Working together for a common cause.
- **Qanuqtuurniq**: Being innovative and resourceful in seeking solutions.
- **Avatittinnik Kamatsiarniq**: Respect and care for the land, animals and environment.73

Along this path there are 3 main outpost typologies; the land-based rest stop, the sea-based rest stop, and the intermediate sea-based checkpoints. Each of these stations aims to incorporate the use of the IQ principles as much as possible into the design planning, process, and result.

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5.1 | The Land

The land-based rest stops are located at approximate points along the duration of the walk where one might want to rest for the night. There are two of these station types along the walk as the walk encompasses two sleeps. The stations are made from repurposed DEW Line station equipment. The DEW Line acted as a catalyst for many communities including Qikiqtarjuaq, thus its significance to Inuit history is crucial. Yet, the stations themselves do not provide services or use to the Inuit, short of providing limited employment. Repurposing the stations and placing these adaptations at key points along the walk could be a way to turn them into something that addresses Inuit culture and lifestyle.
The station consists of the long ‘train’ – pre-fabricated modules – and the radar tower that sits above one of the modules. The first module has been repurposed to house a kitchen space that can hold supplies and other resources. The other few modules contain sleeping spaces, similarly to the ones already contained in the DEW stations. The radar tower is repurposed as a contemplation space that is designed to allow for community gathering and events such as story-telling or traditional dance. Within the kitchen module, there is a ladder that leads down to an underground permafrost freezer. A permafrost freezer is a natural way for Inuit to store country food, without worrying about the cost or availability of energy to power the freezer.

The modules are situated to point in the direction of Qikiqtarjuaq. This not only references the stations role in the overall journey of the prevention walk, but also can help assist walkers and travellers to find their direction based on landmarks - a common way to navigate in traditional Inuit society, and manifest in the role of inuksuit. Additionally, strategically placed glazing in the radar tower’s geodesic dome structure alludes to the direction of a corresponding sea-based station that belongs to the prevention walk journey.

The land-based rest stations particularly emphasize the IQ principle Qanuqtuurniq (being innovative and resourceful in seeking solutions). These stations are designed to be an alternative option for shelter during the walk but could be advantageously used by other travellers during any season.

74 Inuksuit are placed throughout the Arctic landscape acting as "helpers" to the Inuit. Among their many practical functions, they are used as hunting and navigational aids, coordination points and message centres (e.g., they might indicate where food was cached). Norman Hallendy,"Inuksuk (Inukshuk)", (The Canadian Encyclopedia).
FIGURE 33 | Land Station Perspective
5.2 | The Sea

The second outpost typology is the sea-based rest stop. These stations correspond to the locations of the land-based stations but are located off the coast, out along the path across the sea ice. As they are also rest stops, there are two of these station types, again, to correspond with the two sleeps that occur during the walk.
These stations represent uncertainty and seasonality. They are meant to act as a growing medium for the possibility of an enclosure. They are designed as a framework from which the elements can perhaps begin to accumulate on, in, or around, with the hope of creating a shelter. These are the most temporal of all the outpost typologies. Depending on weather, season, time, and other factors, these stations have the possibility to be used as rest points along the walk. Their uncertainty, however, also suggests the possibility that they may not be able to be used under other circumstances.

The stations are built with a steel frame structure and are designed to have multiple tiers. This is to allow for varying possibilities for use, depending on multiple factors such as sea/ice levels, snow accumulation, wind, etc. The surfaces are made of durable Kevlar sheets, that still allow for some flexibility. Snow fences are strategically placed to the northwest of the structures, at optimal distances to enhance the potential for snow accumulation in the ideal places during the time of the prevention walk. The top of the structure extrudes upwards to form a light tower. The tower is lit by solar powered LEDs inside a translucent glass shell. It is subdivided into sections, so the lights can be controlled separately from one another. Turning sections of the tower lights on or off allows the tower to symbolically act as a memorial for those lost to suicide within Nunavut. The light tower is meant to function as a new type of lighthouse. It is about making visible the path of the prevention walk and spreading broader awareness about those affected by mental health issues.

The unpredictability of these outposts speaks to the subtleties of the landscape and the uncertainties that it brings. They act as catalysts and markers of adaptability and resiliency. These traits are also often closely linked to healing and well-being. While the land-based rest stations express stasis within the overall path, the sea-based stations embody ephemerality and dynamism.
FIGURE 35 | Sea Station Perspective
5.3 | The Intermediate

The third typology is a series of buoy checkpoints along the walk. They are located far enough from one another that a person can nearly see the light – produced from solar panels – from the buoy ahead. In this way, they act as guides along the path.

The shape is designed to be buoyant, with space that can house resources and power storage equipment, as well as create the potential of a place to sit and rest. The buoys are meant to act as potential resting places, although with limited equipment. They are not intended to serve as camps, but rather to offer potentials for refueling and temporary shelter.

FIGURE 36 | Intermediate Station Sketches
They are designed to withstand the freeze and thaw cycle of the sea-ice and are anchored to the sea floor. This allows them to have a limited range of mobility, meaning when the sea freezes, their exact location and height within the ice may change. Attached to the anchors are a series of sensors that indicate the height of the tide below the ice. The LED light at the top of the buoy changes colours to represent and visualize the changing tide.

The interior of the buoy contains two closed compartments, meant to store animal skin tarps and rope. The centre is open with space to store two folding metal ladders. When folded on two sides, the ladder becomes a structure that the animal skins can be tied to. This creates a shelter from the wind and could be used as a space to rest and eat. The design is inspired from the traditional Inuit tent – *tupiq* – which consists of a frame typically made from whale bones, with animal skins sewn together and draped over the frame. When fully extended, the ladder can be used to travel beneath the sea ice, during low tides, to collect mussels, clams, or other food sources. The intent of these stations is to provide a range of possibilities for use, depending on seasonality, time, purpose, etc.
FIGURE 37 | Intermediate Station Perspective
Although these station typologies are unique, they work together to create the overall journey of the prevention walk. As with time, the experience exists as a series of individual moments that flow into one another. The event will vary each time, creating new interactions, experiences, and stories for walkers.

The following image reveals the ice melting process used to create some of the previous drawings. As process has played such an integral role in this thesis, the documentation of the process is as equally important as the end results. In each case below, the image itself became clearer as the ice melted away, however the image’s final location on the drawing was sometimes shifted or obscured.
The goal of this thesis was never to “solve” the extremely complex challenges surrounding Inuit mental health. As an outsider, I have been keenly aware that my role in this project is not to come up with a “better solution”, as I do not think that this can come from the South. I believe much of the issues Indigenous cultures have faced are, in part, a result of outside forces that operate under the impression that they know or can do better.

This is not to say however, that we should collectively do nothing, as ignoring the problems will not make them go away. For me, our role should be about spreading awareness and support for the people who are facing these challenges. Architecture on its own, will not resolve suicide, within any culture. However, as architects, we can use architecture and design as a platform to make more manifest, visible and present the challenges of these subtle and intricate landscapes. That is what this thesis attempts to achieve.

Although the thesis culminates in a design project, the primary outcome I have drawn from this work is the importance of process rather than solely product. Colonization has had deep impacts on Inuit ways of life. Within Inuit culture, because the future – and accordingly the result – is uncontrollable, process is what becomes important. Process makes the difference between life and death. The process, therefore, of this thesis is exploratory. The drawings, representations, and designs are all process
based. I think this is emblematic of a way in which to move forward when dealing with issues of mental health and well-being for Inuit.

Organizations such as the Truth and Reconciliation Commission of Canada\textsuperscript{75} and Inuit Tapiriit Kanatami\textsuperscript{76} are notable examples of outreach, awareness, advancements, and acknowledgements when it comes to tackling some of the challenges the populations face. I believe that real change can come from Inuit themselves, but as a Canadian, my role is to be sensitive, supportive, and cognisant about the history and current state of affairs within these communities.

\textsuperscript{75} The TRC is a component of the Indian Residential Schools Settlement Agreement. Its mandate is to inform all Canadians about what happened in Indian Residential Schools (IRS). The Commission will document the truth of survivors, families, communities and anyone personally affected by the IRS experience. "What Is The TRC?", (Truth and Reconciliation Commission of Canada).

\textsuperscript{76} Inuit Tapiriit Kanatami works to improve the health and well-being of Inuit. The work includes research, advocacy, public outreach and education on the issues affecting the population. They work closely with the four Inuit regions to present unified priorities in Ottawa. "Health and Wellbeing For Inuit Communities In Canada", (Inuit Tapiriit Kanatami, 2018).
APPENDIX A | GLOSSARY OF INUKTUT TERMS

**Aajiqatigilingniq**: Decision making through discussion and consensus

**Ajurnarmat**: “it can’t be helped”

**Amautiks**: a parka with a built-in baby pouch in the hood

**Avatittinnik Kamatsiarniq**: Respect and care for the land, animals and environment

**Hiku**: sea ice

**Ilagiit Nunagivaktangit**: a place used regularly for hunting, harvesting and gathering

**Inuit Qaujimajatuqangit**: the Inuit way of knowing, or traditional knowledge

**Inuksuk/ Inukshuk (pl. Inuksuit)**: a figure made of piled stones or boulders constructed to communicate with humans throughout the Arctic

**Inuuqatigiitsiarniq**: Respecting others and caring for people

**Nuna**: land

**Nunalinnguqtitauliqtilluta**: the time when we were actively (by outside force) formed into communities

**Pijitsirniq**: Serving the community through advice and resources

**Pilimmaksarniq**: Knowledge and skills developed through observation, effort, and practice

**Piliriqatigilingniq**: Working together for a common cause

**Qallunaat**: non-Inuit

**Qanuqtuurniq**: Being innovative and resourceful in seeking solutions
Qikiqtarjuaq: big island
Qimmiiit: sled dogs
Qivittuq: angry
Sangussaqtaliqtiluitula: the time when we started to be actively persuaded (or made to) detour (or switch modes)
Taissumani Nunamiutautilluta: when we lived on the land
Tunnganarniaq: Fostering good spirit by being open, welcoming and inclusive
Tupiq: a traditional Inuit tent made from seal or caribou skin
Upirngassaaq: early spring
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