



INUIT CULTURAL HUB

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A Place Where One Moves Forward:
A Framework for Design Empathy in Nunavut

by Mona Duale

A Practicum submitted to the Faculty of Graduate Studies of The University of Manitoba
in partial fulfillment of the requirements of the degree

OF

MASTER OF INTERIOR DESIGN

Department of Interior Design Faculty of Architecture

University of Manitoba

Winnipeg

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The Naming of the Project

ᓴᓄᓴᓴᓴ **Sivumuarvik**

The word *Sivumuarvik*, in Inuktitut means "a place where one moves forward,". This name graciously given to the practicum project by Theresie Tungilik, the external examiner. The name beautifully encapsulates the essence of this research, which explores empathy-driven design practices to reimagine the built environment in Nunavut to one that reflects the values, culture, practices, and identity of Inuit. The goal of this project is to reengage the community in the design and building process, fostering a shared vision for Nunavut's future through collaboration.

Thank you, Theresie for this meaningful and thoughtful contribution to the project.

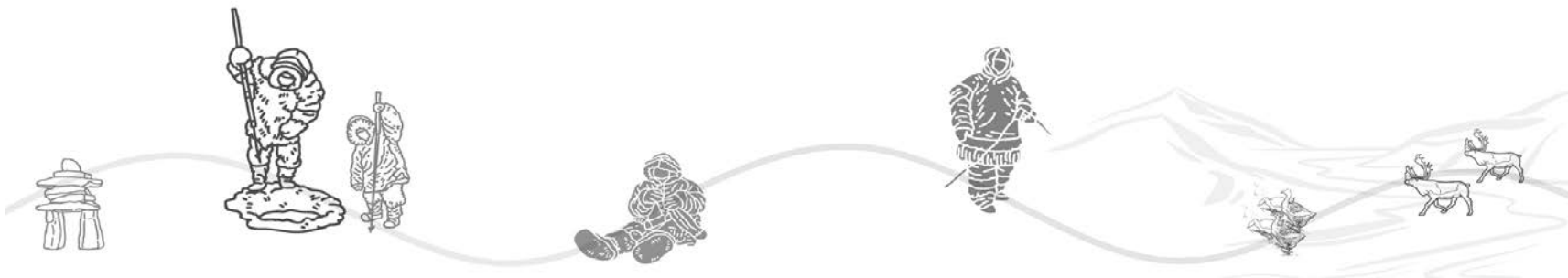


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Abstract

‘Country food’¹ is central to Inuit identity, communities, and the local economy in Nunavut (QIA, 2019). Spaces that facilitate the acquisition, processing, sharing, education, and storage of this food are essential for strengthening Inuit identity, building resilient communities, supporting food security, and adapting architecture from a southern model to one suited to northern and Inuit contexts.² The previously nomadic Inuit way of life deeply connected food and place, with housing built from elements of the land (snow) or harvested animals (caribou skins). However, this intrinsic connection between place and identity is often lacking in the current built environment. This practicum explores Inuit cultural values that shape and reinforce identity, as expressed through their material culture. It considers placemaking and a sense of place as key methods for revitalizing the built environment’s relationship with people and the land. Ultimately, proposing a design approach rooted in Inuit societal values, employing a hybrid methodology that integrates Aajiiqatigiingniq, an Inuit research framework and empathy design into the architectural and design processes. The result is a new typology for community food-related infrastructure in Nunavut, in the design proposal of ᓴᓴᓴᓴ Our Place, an Inuit Cultural Hub.

Keywords: *Inuit, Inuit Qaujimajatuqangit, Placemaking, Sense of place, Place and Identity, Empathy design*

¹ “‘Country food’ refers to the traditional Inuit food, which include wild game, migratory birds, fish, and foraged items like berries. It encompasses animals like narwhal, ringed seals, walrus, beluga whale, caribou, arctic char, polar bear, and various birds. Beyond being a source of nutrition, country food is deeply connected to Inuit identity and culture, playing a crucial role in supporting self-sustaining communities” (Robinson, 2018).

² "Southern" refers to Southern Canada, indicating urban environments that differ in culture, landscape, architecture, community organization and services. In this practicum, "southern" is used to describe regions in Canada that differ geographically, culturally, and contextually from Nunavut.

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To my family and friends, I am eternally grateful for your support, encouragement, and understanding throughout my journey in this master's program. Thank you to everyone in Nunavut who has welcomed me over the years, to the family and friends I have made during my time there. Thank you for embracing me within your culture, sharing openly, and always allowing a space for learning. Your contributions have been invaluable and have had a lasting impact on my life.

-Mona Duale

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Glossary of Inuktitut Terms

Aajiiqatigilingniq: Decision making through discussion and consensus

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

Avatittinnik Kamatsiarniqq: Respect and care for the land, animals and environment

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 to communicate with people passing by and as a navigation tool

Illuralaaq: Cabin

Inuuqatigiitsiarniq: Respecting others and caring for people Nuna: land

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

Maligarjuat: Inuit cultural laws or ‘big things that must be followed’

Pijitsirniq: Serving the community through advice and resources

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

Piliriqatigiingniq: Working together for a common cause

Qallunaat: non-Inuit, ‘white people’, previously whalers

Qanuqtuurniq: Being innovative and resourceful in seeking solutions

Inuit Nunangat “place where Inuit live” referring to NU, NWT, QC & Greenland

Inuit Qaujimajatuqangit: Inuit Knowledge or Inuit Epistemology

Qulliq: lamps carved out of stone fueled by whale oil, were originally used for survival and heat.

Sangussaqtauliqtilluta Disruption (referring to centralization of Inuit into settlements

CHAPTER 1 | INTRODUCTION

Purpose

Interior Design practice in Nunavut lacks an Inuit context which reflects their culture and practices. This is evident in the creation of spaces outside the home to support traditional practices such as hunting and harvesting. Community freezers are an example of such spaces and were developed in various communities to offer safe and secure storage of harvested country food year-round and is an inclusive and accessible space for those in need of country food donations. The lack of spaces in the built environment that reflect the lifestyle and practices of Inuit is an example of a building model lacking empathy for its users. To establish an alternative to the current southern building practices in Nunavut towards one that is culturally and contextually sound, this research examines various empathy design methodologies, including user-centered design and participatory design approaches. The aim of this practicum is to integrate these methodologies within the context of Nunavut by incorporating core Inuit Societal Values. This approach enables designers to develop a deeper understanding and empathy for Inuit culture and identity, leading to the creation of meaningful spaces that foster a strong sense of place and identity, while supporting resilient communities and architecture.

"Inuit" specifically refer to Canadian Inuit from Nunavut, whose culture, identity, and history are connected to this geographic region of Canada.

The research explores Inuit concepts of place and identity, as well as an analysis of spatial behavior using space syntax conducted by Dawson (2006, p.111-128).³ This analysis helps identify the cultural and traditional hunting and harvesting practices currently occurring within homes, which will inform the spatial planning and programming required of the Inuit Cultural hub.

Rationale

Nunavummiut face some of the highest rates of homelessness and food insecurity in Canada⁴, with nearly 70% of Inuit homes being food insecure -- over eight times the national average (NFSC, 2018). While this may appear to stem from inadequate infrastructure, high transportation costs, and reliance on southern resources, the deeper issue lies in the lasting impacts of settler colonialism and Inuit resettlement (QIA, 2019). Resettlement has created significant barriers for Inuit to hunt and harvest in urban communities today, putting pressures on sustaining Inuit identity, impeding food sovereignty, and resulting in a disconnection from a way of life that once sustained Inuit culture, identity was nurtured through a connection to place.

The Inuit Cultural Hub supports ongoing community efforts to preserve and promote traditional hunting practices, helping to alleviate food insecurity and promote food sovereignty. The proposed Inuit Cultural Hub will be a space for sharing, learning, and transferring knowledge of traditional hunting and harvesting, reinforcing Inuit identity and practices. These spaces are crucial for combating food insecurity and, more

³ Dawson, P., C. (2008). The spatial distribution of activity categories by integration. *Unfriendly Architecture: Using Observations of Inuit Spatial Behavior to Design Culturally Sustaining Houses in Arctic Canada*. *Housing Studies*, 23:1, 111- 128, DOI: 10.1080/02673030701731258

⁴ Statistics Canada Census Report (2016). Food Insecurity in Nunavut. <https://www150.statcan.gc.ca/n1/pub/99-011-x/99-011-x2019001-eng.htm>

importantly, for ensuring that cultural skills and traditions are passed down to younger generations. As Inuit culture is primarily oral, skills are often shared through storytelling, making spaces dedicated to education, preservation, and cultural continuity essential.

The Inuit Community Hub aims to restore the values, connectedness, and relationship between the built environment and Inuit culture, particularly around hunting and harvesting. It focuses on preserving these practices by examining Inuit material culture, which will guide programming, design, and spatial considerations. Material culture reflects the connection between people and the objects they create and use (Center for Material Culture Studies, 2024).⁵ By exploring Inuit material culture, this practicum identifies the need for spaces that preserve cultural heritage, while incorporating these elements into the design proposal for the Inuit Cultural Hub. This Hub will extend the tradition of country feasts, where hunters share their catch with the entire community in a communal space.

Research Questions

1. How do Inuit traditional and cultural values shape and reinforce an Inuit identity?
2. How is material culture reinforced through hunting and harvesting practices, and how can these practices inform the programming of the Inuit Cultural Hub?
3. What spatial strategies can support the cultural preservation and practices in the Inuit Cultural Hub?
4. How can an empathy framework be applied to explore design approaches rooted in Inuit societal values in the design of the

⁵ Material culture is defined as the **physical objects**, artifacts, and **spaces that people create**, use, and interact with, which reflect the beliefs, values, norms, and social practices of a particular society or group. These objects can include **tools**, clothing, artwork, **architecture**, and **technology**, and they provide insight into the ways of life, cultural priorities, and historical developments of various societies (Oxford Reference, 2024).

cultural hub?

Learning Objectives & Methodology

The objective of this practicum is to understand the inherent value of Inuit hunting and harvesting practices, their material culture, and the spaces where these activities take place. Additionally, I will identify how these cultural values contribute to Inuit identity, well-being, and community connection. As I explore the research questions outlined above, I will delve into the underlying principles of the Inuit traditional hunting and harvesting practices, its impact on both individual and community levels, and explore design approaches that can best support the continuation of these practices and the preservation of their material culture in ᐃᓂᕐᕐᕐᕐᕐᕐ Our Place: Inuit Cultural Hub.

1. Develop a comprehensive understanding of Inuit societal values and its influence on Inuit identity, community dynamics, and activities within the built environment. (Specifically, examine Inuit Qaujimajatuqangit and how its principles can be applied to strengthen an empathy-based design approach.)
2. Investigate how architectural practices grounded can be reimaged through an empathy-driven framework that deeply considers the cultural significance of hunting and harvesting practices in the design of the Cultural Hub.
3. Consider the effects of ineffective spatial planning and how these insights can inform strategies that promote the preservation of both material and cultural heritage within the built environment.
4. Examine underlying values of place, sense of place in a Nunavut context and its connection to Inuit identity.
5. Demonstrate how a user-centered design framework within the built environment can strengthen Inuit communities in Nunavut and contribute to cultural preservation.

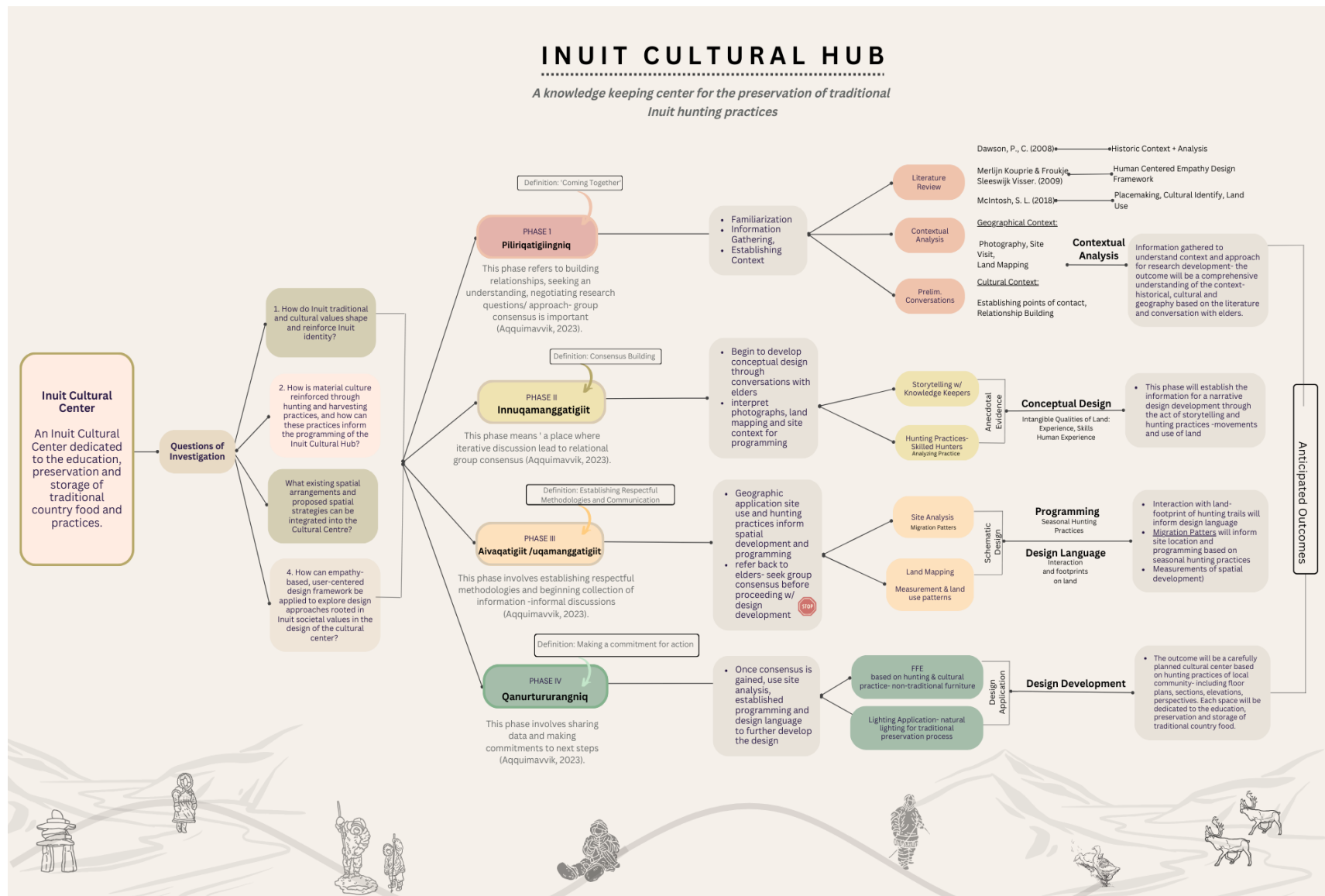


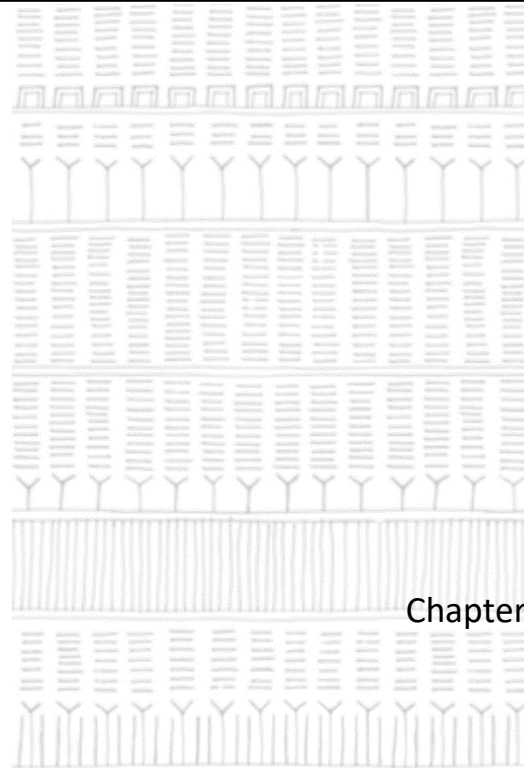
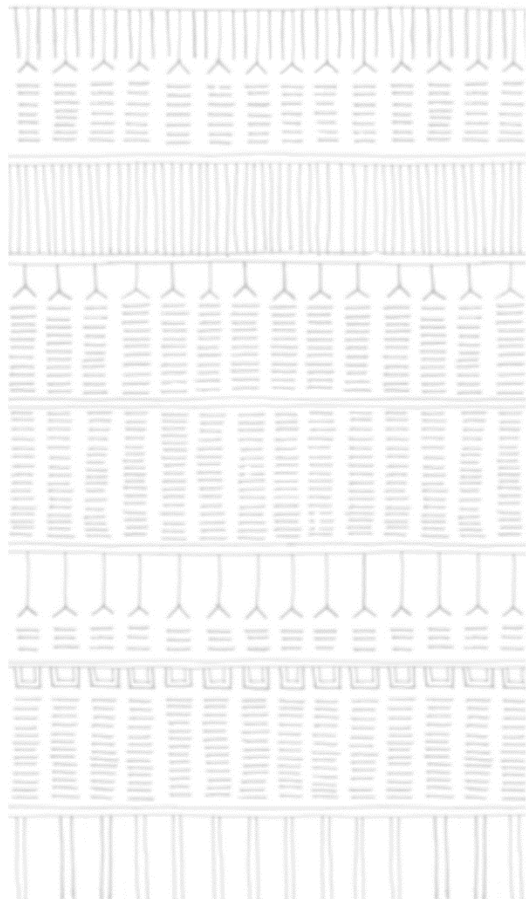
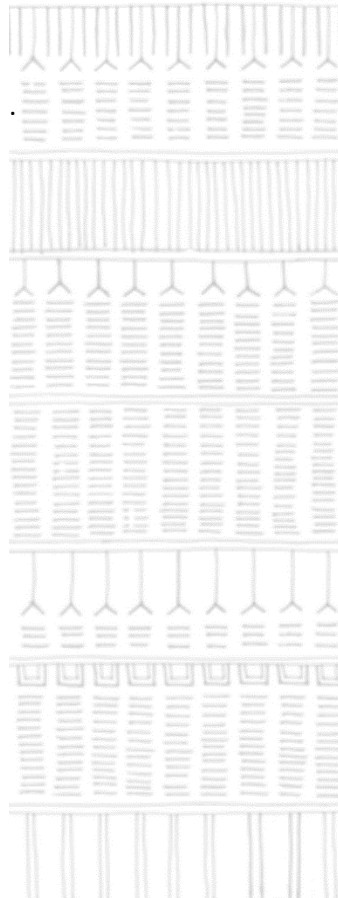
Figure 1: Theoretical Framework for Our Place; Inuit Cultural Hub

Limitations & Assumptions

It was not feasible to conduct consultations or interviews with the communities in Nunavut due to the remote location and short timeline to complete the practicum research required to fulfil the degree. Consequently, the ideas presented in this practicum may not fully encompass the valuable insights that would result from direct community engagement, discussions with elders, and the inclusion of Inuit traditional knowledge. Nevertheless, I remain dedicated to incorporating Inuit Qaujimajatuqangit throughout the entire process, from research to the final design proposal. It is also essential to acknowledge that, while this design proposal focuses on the Kivalliq region, each community within it is distinct in terms of geography, language, cultural practices, and specific needs. Therefore, the design proposal presented is not intended to be representative of all Nunavut communities. Instead, community-specific consultations would offer a more tailored approach to design interventions, ensuring that the solutions are responsive to the unique characteristics of each community and region.

Land and Indigenous Practices Acknowledgment

I acknowledge and respect that the proposed practicum is situated on the traditional lands of Inuit in the Kivalliq region of Nunavut. Additionally, I recognize that the University of Manitoba, where I am pursuing this Master's program, is located on Treaty One Territory, the ancestral lands of the Anishinaabeg, Anishininewuk, Dakota Oyate, Denesuline, and Nehethowuk Nations. I further acknowledge that Manitoba is part of the homeland of the Red River Métis, and that northern Manitoba encompasses lands that were and continue to be the ancestral lands of the Inuit. I honor the spirit and intent of Treaties and Treaty Making and am committed to upholding the values of truth, reconciliation, and collaboration in my work with all Indigenous communities.



Chapter 2: Literature Review

Practicum Framework

Historical Context

Inuit Epistemology

Inuit Culture & Food Sharing Economies

Memory, Place & Identity

Material Culture

Space Syntax Analysis

Empathy

Placemaking

CHAPTER 2 | LITERATURE REVIEW

Disclaimer: I am not Inuk nor of Canadian Indigenous descent. My understanding of Inuit identity, culture, and practices is based on a thorough literature analysis, and my personal observations during my time in Nunavut over the past decade. I do not intend to infer or speak on the lived experiences of the Inuit. Rather, this research will consist of personal stories and testimonies from Inuit derived from the literature, poem of Inuit artist and stories from Elders, to highlight their sense of culture, identity, and values.

Practicum Framework

The objective of this practicum is represented in the figure below, which seeks to examine new typologies for architecture and design in Nunavut. The framework is categorized into three research themes; understanding and reflecting **what was** (the past), analyzing **what is** (present), and exploring **what could be** (future). The objective of the framework is gain knowledge and insight into the historical context of Nunavut, the impact of colonization and influence on material culture, identity and traditions shaped by the experience of resettlement and exploring new strategies of how the built environment can support Inuit cultural presentation and identity. This knowledge will guide the design approach, programming and spatial planning of the Inuit Cultural Hub. The framework will illustrate the value of contextual and cultural knowledge in the design and building practices in Nunavut. Where the future users' needs and values are placed at the centre of this project through a thorough understanding of what was, is and could be in the context of Inuit traditional hunting and harvesting spaces that will shape

ᓴᓂᓴᓴᓴᓴ Our Place: Inuit Cultural Hub.

Framework Objective:

- Method of understanding and documenting information
- Prioritizing literature analysis into specific learning objectives and outcomes
- Underscore cultural values established through the research on previously nomadic lifestyle
- The chronology of pre-contact era, post contact and current, provides a landscape to understand what was lost and what might be reclaimed in empathy design spaces that foster community and place in strengthening identity.

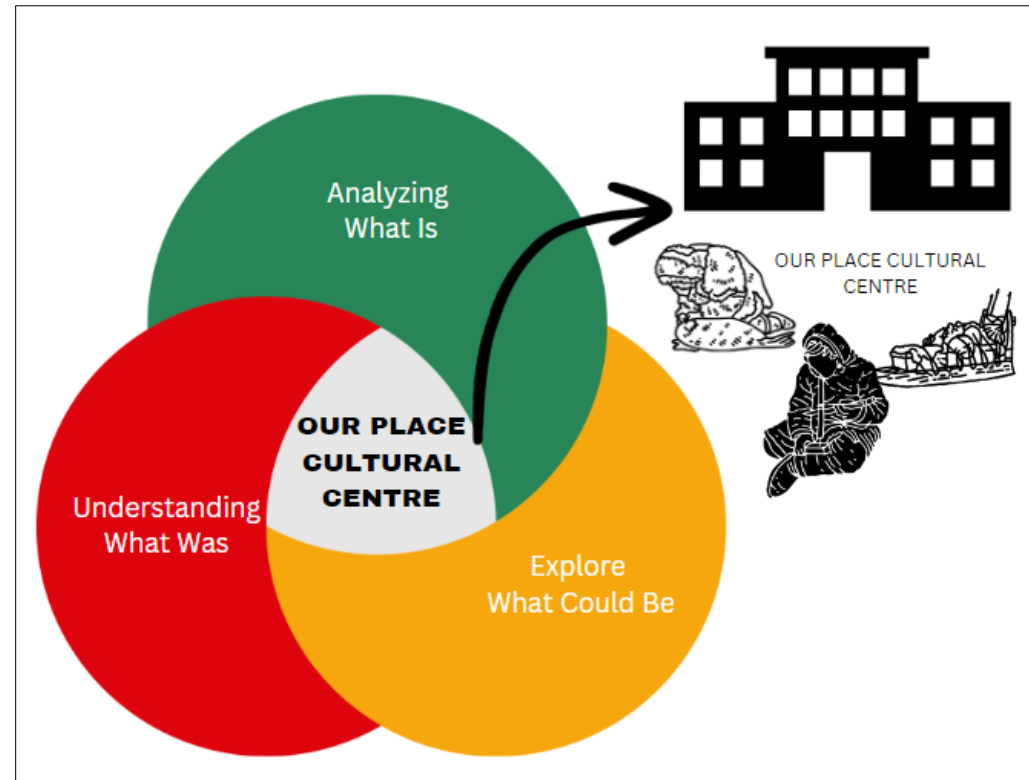


Figure 2: Theoretical Framework for Our Place; Inuit Cultural Hub

What Was | Understanding the past |Analyzing the present | Exploring future possibilities.

This section investigates the historical context of Nunavut, the values and practices of a traditionally nomadic Inuit lifestyle, principles that govern community dynamics and the resulting impact of the resettlement into sedentary communities. It offers insight into the past which is essential in identifying the cultural values that will shape the design and function of the Inuit Cultural Hub. This involves recognizing how these values have shaped Inuit culture and identity through traditional Inuit knowledge and analyzing how material culture—particularly hunting and harvesting—plays a role in practicing these cultural values.

[illegible]

A BRIEF HISTORY —

Introduction

This research illustrates the timeline of the Inuit way of life in Nunavut spanning the pre-contact era, when Inuit primarily led a nomadic lifestyle, through the post-contact period marked by interactions with Qallunat (colonial settlers), up to the present day (Goldring, 2015). The objective is to underscore the lasting and profound effects of colonization in Nunavut, particularly focusing on how architectural practices have frequently neglected and undermined Inuit cultural values (ibid, p.493), thus contributing to the threat of the loss of Inuit material cultural⁶, community and identity that are interwoven and strengthened by *place*⁷.

This historical context of colonization and continued threat of cultural loss has shaped the present-day realities of Nunavut, impacting not only its societal fabric but also its architectural landscape. The imposition of settler colonial structures, such as modernist housing, combined with a disregard for the distinct needs and values of Inuit communities, has led to a disconnection between the built environment and Inuit cultural identity and practices today (Dawson, 2006, 114). To understand how to move forward, we must first establish the impacts of the relocation of Inuit into settlements, identify which aspects of the building practice and environment have contributed to the resulting loss of culture, language, and identity and explore how processes centered on sovereignty can better support Inuit in regaining control over their food sources, land, resources, and infrastructure (QIA, 2019).

⁷ In this practicum, the concept of "place" will be described as either a fixed or ephemeral space that plays a critical role in the reinforcement and cultivation of Inuit identity, sense of belonging, community and culture.

Historical Context

The communities we see today in Nunavut have been shaped by a series of historic interactions between the Inuit and external forces, including the Canadian government, the military, and industries such as the Hudson's Bay Company and mining. These interactions profoundly disrupted and transformed the traditional Inuit way of life (Golding, 2015).⁸ Prior to contact with external forces, Inuit were entirely self-sufficient, relying on hunting and harvesting for sustenance, clothing, and shelter which met all their physical needs. Inuit lived in small, autonomous, multi-family nomadic groups, traveling together throughout the seasons following animal migration patterns (Pauktuutit, 2006). These hunting and harvesting practices formed the foundation of a rich material culture, sustained through the technologies they developed (Pauktuutit, 2006).

However, by the twentieth century, increased contact with outsiders led to rapid changes in Inuit culture as it adapted to modern influences such as grocery stores and fixed housing (Goldring, 2015, p.494). Inuit were forced to grapple with this loss of autonomy and sovereignty achieved through a symbiotic relationship to the land and animals. Inuit took care of the land and animals, so that the animals and land may care for them (Pauktuutit, 2006). This relationship had enabled them to provide for their families while fostering a strong sense of belonging, identity, and connection to both the land and their community (McIntosh, 2018).

⁸ "Golding examined historians' contributions to the seminal Qikiqtani Truth Commission (QTC) from 2007 to 2012, to provide an analysis of historical trauma and public memory in relation to Nunavut Inuit's experience of colonization and resettlements" (2015, p.2). *Canadian Journal of History*, Volume 50, 3, 2015.

According to Inuit, these historical events are typically categorized into three phases⁹: Taissumani Nunamiutautilluta, representing the time when Inuit lived on the land; Sangussaqtauliqtilluta or disruption, signifying the period when they began to face active persuasion or coercion to deviate from their traditional ways; and Nunalinnguqtitauliqtilluta, marking the time when they were actively forced into communities by outside forces (McIntosh, 2018). The early twentieth century (1910–1930) can be characterised by the rise in foreign markets for white fox fur resulting in the Hudson’s Bay Company, the first significant point of contact to shift the traditional way of life for Inuit (Goldring, 2015, p.487-498). Goldring (2015) states that two critical events that delineate recent Inuit history which can be broadly understood as the “contact traditional” era, reflecting a balance between change and continuity (1910-1955) and the “centralization” era characterized by rapid relocation of Inuit into settlements by the late 1950s (p.498). The changes in contact resulting in the relocation of Inuit can be directly attributed to the “institution of a universal program of Family Allowances in the late 1940s, resulting in a growing Qallunaat (non-Inuit) presence at weather stations (DEW) and airfields” (Goldring, 2015).

⁹ Note: These Inuktitut phases are described as an account of historical events in the Baffin or Qikiqtaaluk region in Nunavut, although similar, the various regions have different experiences and descriptions of their colonial past and present.



Figure 3: Inuit igloos, Fullerton Harbour, Nunavut

Several communities today exist primarily due to the establishment of military sites, known as Distant Early Warning (DEW) Line stations. During this time, federal authorities decided to develop programs, housing, and schools in centralized communities, which the Qikiqtani Truth Commission (QTC) defines as the dispersal period into the "welfare state" (Goldring, 2015). This period followed what the Inuit refer to as Sangussaqtauliqtilluta, during which Inuit experienced rapid sedentarization and centralization into designated communities, moving away from their access to the land and traditional activities (McIntosh, 2018). Inuit were promised access to housing, education, and health care. While

these incentives encouraged some to relocate, for others, they were forced tools of negotiation used by federal authorities to push the remaining Inuit into assimilation (McIntosh, 2018, p.17). It is crucial to acknowledge that, while there is consensus on the significance of these events, notable discrepancies exist in their interpretation, particularly regarding the distinction between government coercion and Inuit agency in the rapid centralization process (Goldring, 2015). For instance, by the late 1960s, the majority of Qikiqtaaluk Inuit had experienced Sangussaqtauliqtilluta, with nearly one hundred multi-family hunting groups dispersed into permanent settlements. This dispersion was not culturally neutral; as Goldring (2015) points out, it undermined the Inuit's relationships with each other and the land (p.499).

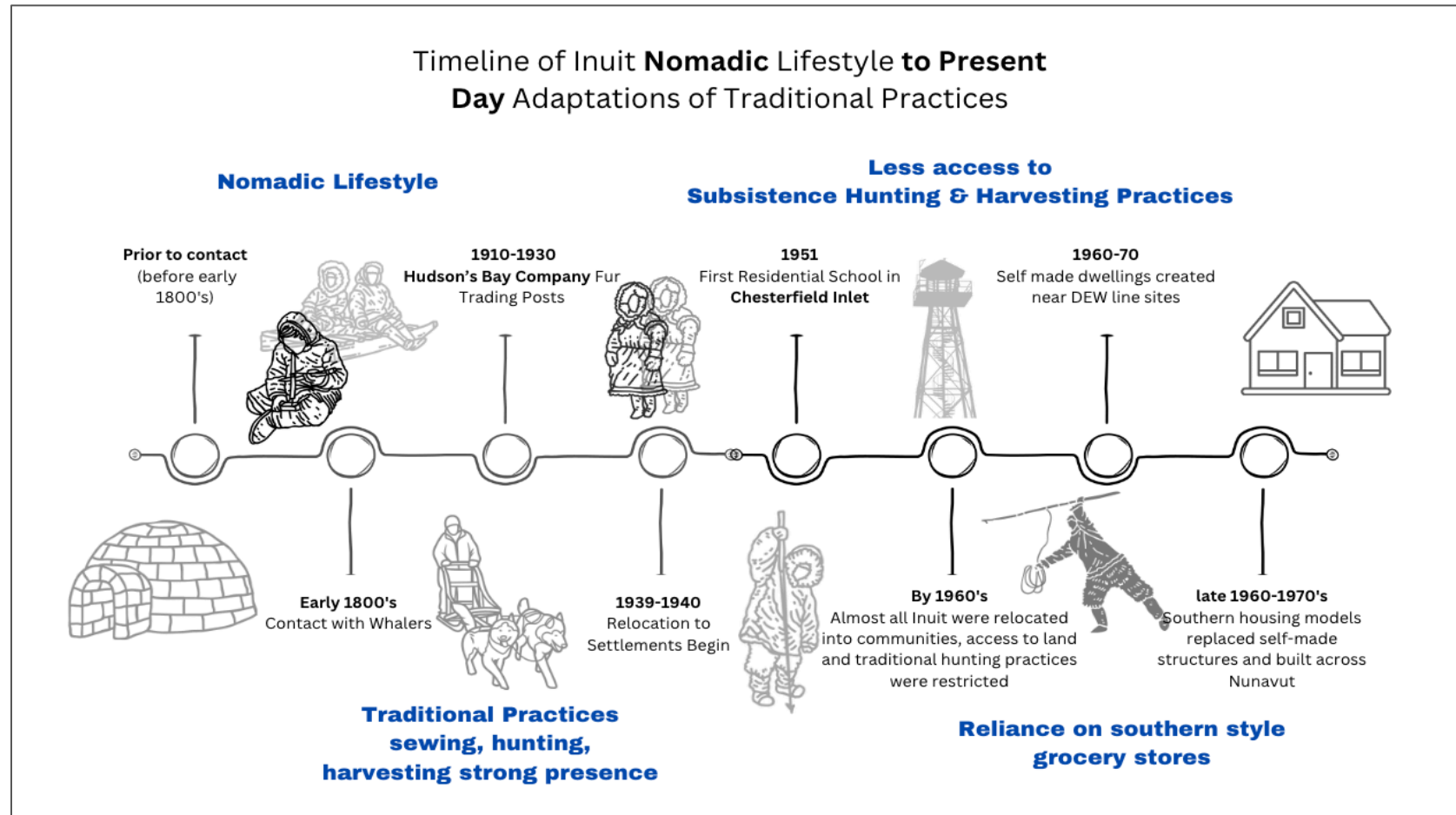


Figure 4: Timeline of Nomadic Lifestyle, Transition from Land Into Settlements

Despite this centralization, material inequalities, such as housing and access to health care, between southern and northern Canada continued to widen. These issues, which were gaining global attention in the media, pressured federal authorities to act. Their solution was to centralize programs and services within communities, drawing Inuit populations into these hubs (Goldring, 2015, p.498). From the government's

perspective, this was not seen as a disruption but rather as a necessary period of adjustment, with ‘the expectation that Inuit would assimilate into conventional North American roles as consumers’ (Goldring, 2015, p.497).

The 1970s to early 1990s marked another important moment in recent Inuit history, which was the advocacy initiatives across the nation by Inuit organizations fighting for recognition of land claim rights for Inuit in Nunavut. After decades of valiant efforts by national Inuit organizations to challenge the Canadian government on Inuit rights under the Canadian Constitution and driven by concerns over subpar living conditions, health, and overall well-being of Inuit in Nunavut—the 1973 Inuit Land Use and Occupancy Report was presented to the Government of Canada. This report initiated negotiations with the federal government, without it, negotiations for a lands claim agreement would not have been possible. According to Tunngavik¹⁰ (NLCA, 2004), ‘the study indicated where the Inuit live today, where their ancestors lived, and how land is, and was, used’ (p.4), which was critical in illustrating Inuit occupancy and traditional use of the land. In 1993, the Nunavut Land Claims Agreement (NLCA) was signed between the Inuit of the Nunavut Settlement Area¹¹ and the Government of Canada, granting rights related to land, water, and resource management and use.

¹⁰ Nunavut Tunngavik Inc. is the designated territorial Inuit organization mandated to represent Inuit rights and obligations under the land claims agreement and to defend and promote Nunavut Inuit interests under the agreement.

¹¹ The Nunavut Settlement Area is a region of Nunavut consisting of Arctic Islands, Mainland and Eastern Arctic and adjacent areas that delineate the area under the lands claim agreement (NTI, NLCA, 2004). See Map https://nlca.tunngavik.com/files/32_schedule_3-1.png

Timeline of Historic Events:

Pre-colonization (pre-1940s): Traditional Inuit architecture, characterised by igloos, sod houses, and other structures tailored to the Arctic environment and cultural practices that supported Inuit ways of being.

Post-war period (1940s-1950s): The start of government-led initiatives to establish settlements in the Arctic, primarily for military objectives and resource extraction, resulting in architecture primarily focused on providing rudimentary shelter, disregarding cultural relevance and community needs.

Late 1950s-1970s: Rapid urbanization and forced settlements, driven by government assimilation policies, then led to the relocation of Inuit into larger communities and centralized towns; where modernist-style housing were constructed, often lacking cultural sensitivity and failing to accommodate traditional practices.

1973: Inuit Land Use and Occupancy Report was presented to the government, which began negotiations for a lands claim agreement.

1993: Canadian Government signs Nunavut lands claim agreement.

1990s-present: Efforts to rectify the deficiencies of prior architectural practices and foster cultural revitalization have seen an increase in collaboration among architects, city planners, designers and Inuit communities. This collaboration aims to develop designs rooted in indigenous values and lifestyles. However, challenges persist due to limited resources, bureaucratic hurdles, and the enduring effects of historical trauma.

1999: Nunavut established as a territory.

Despite the imposition of southern¹² influence and the transition from a nomadic lifestyle on the land to fixed settlements, Inuit continue to practice and take pride in their culture and heritage (Pauktuutit, 2006). Far from being a relic of the past, Inuit culture is rich, robust, and enduring. However, to ensure its continued vitality, thoughtful architecture and well-designed spaces are crucial to support the practices that sustain both the land and the people.

The following sections will illustrate key aspects of Inuit culture and identity, exploring the values that shape Inuit identity and its relationship to place, which will inform the design development. Beginning with Inuit epistemology as a foundation of community and individual identity, guiding cultural practices and shaping a holistic way of being. The role of storytelling in carrying these principles forward will be discussed, along with governance structures that reinforce values and provide framework for having a good life. Examples of these principles will be shown in the food-sharing economies and overall value of country food in Inuit culture. Examining how *place* shapes *identity*, with elements like inukshuk symbolizing this connection. Finally, illustrating Inuit material culture developed over millennia, showcasing innovative tools, objects, and architecture that reflect Inuit values and can inform new ways of addressing connection to place in the built environment in Nunavut today.

¹² "Southern" refers to Southern Canada, indicating urban environments that differ in culture, landscape, architecture, community organization and services. In this practicum, "southern" is used to describe regions in Canada that differ geographically, culturally, and contextually from Nunavut.

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Inuit Qaujimajatuqangit: An Inuit Epistemology

Inuit Qaujimajatuqangit (IQ), in Inuktitut, refers to the Inuit way of knowing, or traditional knowledge. It directly translates to ‘that which Inuit have always known to be true’ (Karetak et al., 2017). It is the foundation for which social, physical, spiritual and emotional well-being are cultivated. Inuit Qaujimajatuqangit (IQ) principles serve as a guide for achieving a good life and 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.

Aajiiqatigilingniq: Decision making through discussion and consensus.

Piliriqatigiingniq: Working together for a common cause.

Qanuqtuurniq: Being innovative and resourceful in seeking solutions’

Avatittinnik Kamatsiarniqq: Respect and care for the land, animals and environment.

Inuit Qaujimajatuqangit (IQ) is more than a philosophy—it is an ethical framework and a comprehensive guide for living a good life. It offers a way of thinking that connects all aspects of life in a unified way, prioritizing the interconnectedness of all beings (ibid, 4). Karetak and Tester describe it as “a holistic, integrated, and mutually supportive system of beliefs, cultural practices, and principles-based social processes” (2017, p. 4). As Karetak et al. note, “Inuit laws are powerful in the way they connect to cultural beliefs and values. Being made into a human being is said to leave one deeply respectful, with positive attitudes. Laws are to be internalized rather than externally applied. Social well-being is the result of applying these laws” (2017, p. 6).

Inuit Culture

Inuit culture is shaped and reinforced by the application of this traditional knowledge in practices such as hunting, harvesting, community and family dynamics, and the relationship to the land. While, storytelling serves as a key means of transmitting this knowledge (Pauktuutit, 2006). However, the shift to modern dwellings, which often lack both private and communal spaces for practicing and strengthening traditional knowledge, threatening its continuation to future generations. Elders today express concerns about the erosion of the Inuit language, Inuktitut, and the loss of cultural practices and traditions. They emphasize the importance of storytelling, hunting trips, and time spent on the land as essential for re-instilling these shared values (Karetak et al., 2017, p. 6).

“Inuit continue to have a strong, unique culture that guides us in our everyday life—our close ties to the land, a dedication to community and a strong sense of self-reliance (Pauktuutit, 2006).”

Inuit reinforce cultural identity through the use of language, adherence to cultural laws, and the importance of family and community dynamics, which are central to Inuit life (Pauktuutit, 2006, p. 8). These behaviors and practices offer insights into the values that shape Inuit culture and society that can inform design strategies, spatial planning, and programming for the Inuit Cultural Hub. Honing in on what the users have identified as valuable, preserving Inuit material culture, language and traditional practices—these elements can guide the creation of spaces that support and sustain this cultural identity.

The Importance of Storytelling

Inuit Culture is an oral culture, historically knowledge was transmitted verbally across generations, information that was essential to survive and thrive in the arctic. Inuit Qaujimajatuqangit (IQ) was passed down by ancestors, however, fundamental changes in Inuit life since the 1950s, including the introduction of schools, wage-based employment, and settlement living, severely disrupted this transmission chain and its contribution to the daily life of Inuit (Bennet & Rowley, 2004, p.1). In raising children for instance, (Karetak, et. Al, 2017) one way of instilling these principles in a child is through the telling of stories, often retold time and again (p. 7). The same story told in various renditions that highlight difference places and vary in those telling it, emphasizing the ethical principle that is needed by the child at that time. The laws or principles governing Inuit society were established through Inunnguiniq, (the process of making a human being), says Karetak, et. al (2017), which are designed to instill strong adherence to these ethical principles in children, making them inherent elements of the individual's identity (p.7-8).

Storytelling is deeply embedded in Inuit culture, serving as a vital means of passing down knowledge, history, and values from one generation to the next. Through stories, lessons about the land, relationships, survival, and spirituality are shared, preserving cultural identity and fostering a sense of belonging (Pauktuutit, 2006). Therefore, physical spaces designed to foster storytelling is an essential component in the built environment in Nunavut, for instance, informal gathering spaces where elders can share knowledge with younger generations.

Governance Structures

There are four cultural "laws," or maligarjuat, that shape Inuit society, community and family dynamics and provide a framework for living a good life (ibid). These laws guide how individuals interact with communities, the land, and animals, resolve disputes, and fulfill responsibilities to one another, such as food sharing during times of scarcity. They serve as guiding principles that help maintain harmony within Inuit culture. The four maligarjuat are:

1. Working for the common good, rather than for personal interest or gain;
2. Living in respectful relationships with every person and thing one encounters;
3. Maintaining harmony and balance; and
4. Planning and preparing for the future.

These ethical principles are applied universally within Inuit culture and are considered unchanging, carrying the weight of law. Failing to adhere to them endangers not just the individual but the entire community. Inuit culture is deeply rooted in ethical values, that are reinforced through the practice of these values in Inuit society (Karetak, 2017, p. 3). For instance, food sharing economies are common in Inuit culture, not

only as a means of survival but as a method of building community bonds, responsibility to one another and strengthens ones cultural and personal identity as they serve the overall good of the society (Karetak, et. al, 2017).

Food Practices and Identity

The Qikiqtani Inuit Association (QIA) highlights the central role of country food and harvesting in Inuit culture, community, and well-being in its 2019 report on food sovereignty and harvesting. QIA asserts that "colonization has disconnected us (Inuit) from harvesting, the very cultural practice that reinvigorates our sense of identity, feeds our communities, and stimulates our local economy" (2019, p. 4). The report emphasizes the alarming rates of food insecurity in the territory, with over 70 percent of Inuit households. It links this crisis to the loss of sovereignty over food acquisition and the management of environmental resources. The report argues that shifting the focus from food security—defined as access to both nutritious and culturally appropriate food—toward food sovereignty, which involves regaining control over natural resources and the food supply, is essential for revitalizing this crucial Inuit cultural practice of food and food sharing (QTC, 2019, p. 5).

Food Sharing Economies



Furthermore, many Inuit believe that sustenance from the land cultivates individuals who are both intelligent and moral. Inuit assert that facing the elements of the sea, snow, ice, and wind fosters the development of isuma, or reasoning ability (Searles, 2010, p.155).

Inuit believe that engaging in hunting and related activities, such as processing and sharing meat, shapes individuals into moral beings by instilling awareness of their responsibilities to others and the animals they hunt (Searles, 2010, p.156). Thus, the disconnection from the land

and resettlement into individual housing models has significant impacts on an individuals sense of being, responsibility to others and impacts the collective interaction activated through these food sharing economies.



Figure 5: Inuk woman ice fishing, Fullerton Harbour, Nunavut

“Inuit believe that engaging in hunting and related activities, such as processing and sharing meat, shapes individuals into moral beings by instilling awareness of their responsibilities to others and the animals they hunt”



Figure 6: Inuk Man Feeding a Child

Traditional food or country food plays a crucial role in Inuit cultural identity, often fostering family integration through sharing and interpersonal interactions. Inuit would historically gather in large regional groups referred to as bands, during the winter months for seal hunting season and would taper off into smaller 2 to 5-member groups during the remainder of the year (ESRI, 2021). These groups were critical for social and political relationships and offer insights into the importance of community interconnectedness that frames Inuit cultural values of sharing knowledge, skills and resources (ESRI, 2021). Furthermore, Inuit families still heavily depend on the land as a primary source of food and

cultural identity (Dawson, 2006, p.122). For Inuit, being "out on the land" (maqainniq) — engaging in hunting, camping, and fishing — is a vital aspect of their culture and fosters a deep sense of connectedness to place (Heyes & Jacobs, 2022, p.245).

Food and food sharing is a central value to the Inuit way of life, influencing practices, community interconnectedness, and personal identity. These values are reinforced through the knowledge of Inuit Qaujimajatuqangit and influences the daily life of Inuit. Hunting and harvesting are at the heart of this, embodying respect for the land and providing nourishment for oneself, family, and community (QTC, 2019). Therefore, the design of the Cultural Hub must include spaces that support and reflect this vital aspect of Inuit life. For example, food sharing spaces, processing of meat, preserving of harvested goods in anticipation of long winters ahead.



PLACE
PRACTICE
IDENTITY

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Place and Identity

This section aims to contextualize Inuit cultural identity through the stories and experiences of individuals such as Alootook Ipellie, an Inuk graphic artist and activist. The goal is to highlight the lived experiences and first-hand accounts of how Inuit culture shapes personal identity and the defining characteristics of that identity. It focuses on narratives of identity loss and the desire for reclamation through the cultural preservation and practice of Inuit traditions.

Alootook Ipellie's Poem and Stories

Alootook Ipellie was born in 1951 in Navuququq, a camp near Frobisher Bay (now Iqaluit) on southern Baffin Island. At the age of four, he moved with his family to Iqaluit, where he lived into his teenage years. During this time, he witnessed the transition from the traditional nomadic Inuit way of life to living in government-established settlements (Desrochers-Turgeon, É, 2020, p.54). Ipellie's work in the 1970s and 1980s showcased in *Inuit Today* reflects important moments in Inuit history, focusing on representations of space from an Inuit perspective. His work is particularly interesting as he challenges the boundaries between the dwelling and land, people and place and spatial construction, building and planning while emphasizing the deep connections between Inuit communities, animals, and the land says Desrochers-Turgeon (2020, p.53). For instance, in his 1979 poem, Ipellie begins by celebrating Inuit's traditional knowledge of and deep respect for the land, the animals, and the sea. He highlights encounters between Inuit and Qallunaat, portraying the history of trade, invasion, and settler laws. Ipellie's drawings and stories capture memories, including his transition from a semi-nomadic life to settling in Frobisher Bay's government-built houses (Desrochers-Turgeon, É, 2020, p.54). Ipellie writes, "wooden igloos were built/ mind you they never bothered/ to ask for permission to do/ what they were doing" (1979, 21). In her text, Desrochers-Turgeon (2020) emphasizes Ipellie's significant impact in challenging depictions of land,

amplifying Inuit and non-Inuit viewpoints, shedding light on land exploitation and housing challenges, while honoring traditional Inuit knowledge (p.81). She showcases a series of his poems and cartoon illustrations as catalysts for discussions on Inuit sovereignty and activism. Ipellie used drawings and stories to remember, to bring his memories into a tangible world, he says. In the following excerpt, he recalls when he moved from a semi-nomadic lifestyle to the settlement of Frobisher Bay and government-built houses:

“

My earliest memories of Iqaluit have to do with living in a hut in the wintertime and then moving into a tent from the start of spring until early fall. Most of the Inuit families who had moved to the community did the same. We simply could not stand living in a dark hut when we could enjoy so much light inside the white canvas tents. These seasonal rituals slowly died when the government began building pre-fabricated houses for all Inuit families. So each year, the numbers of the Inuit-built huts dwindled, until one day the last one was torn down. We were well on our way to living in a semi-modern world as set out by government workers and administrators. It was during the same time that we were slowly forgetting and abandoning our distinct way of doing things and looking at the world. On the other hand, unbeknownst to many of us, it was being taken away from us. Our world would never be the same as it had been. (Ipellie 2001, 27).

”

As seen in the illustration (right), Ipellie's artwork illustrates the land not bare but textures, topographies, wildlife, snow, and human dwellings. These ‘fillers’ (seen in figure below) he refers to, are not just depictions of the land but contribute to a poetic engagement with the environment (Desrochers-Turgeon, É, 2020, p.82). Ipellie's artistic representations of land, architecture, and diverse voices challenge the realities of contemporary Nunavut. Using writing and drawing, he ‘occupied the spatial and temporal thickness of lines’, Desrochers-Turgeon (2020) says,

thus shattering the concepts of boundaries of space and cultures and criticizing the lines of settler-colonialism, boundaries, frontiers, roads, pipelines, spatial construction, buildings, and planning (Desrochers-Turgeon, É, 2020, p.60).

Ipellie dances on this proverbial line of what he deems a non-existent boundary between the dwelling, land and history, emphasizing the interconnectedness of place, memory, and identity (Desrochers-Turgeon, É, 2020, p.61).

Strengthening Identity Through Place

There is a strong connection between strengthening one's identity through the relationship to familiar and affirming *places*, much like closeness to friends and family, this relationship is to the land. For example, mental health programs in Nunavut often organize land-based activities to help individuals regain a sense of self through relearning traditional practices that promote

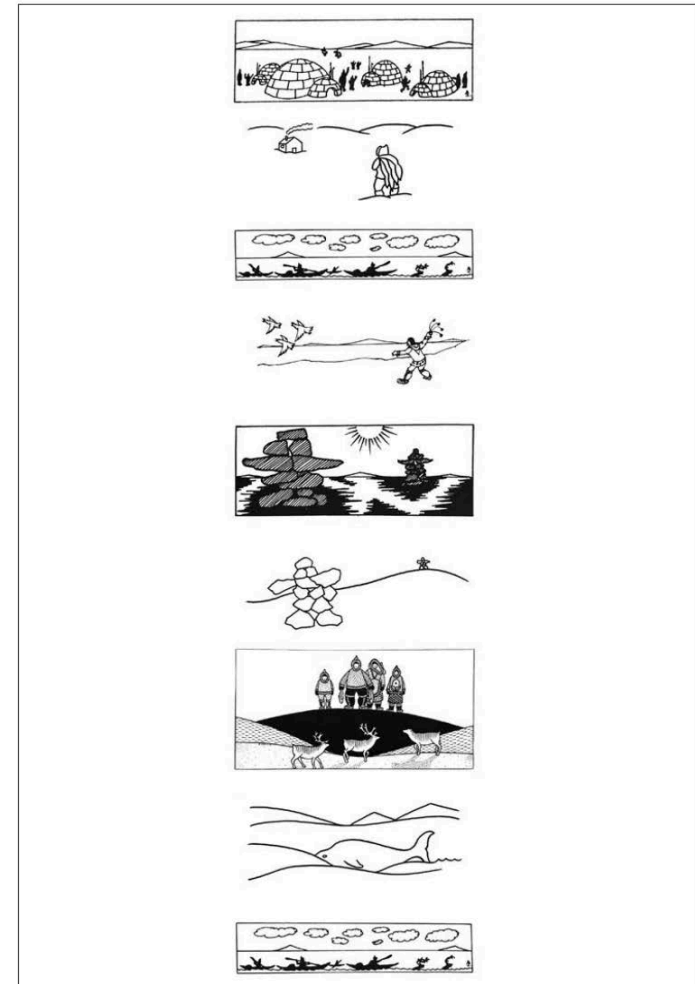


Figure 7: Alooook Ipellie, 1974-82, 'Selected Filters' Illustration

confidence (Lyons, et., al, 2010). Given that suicide rates in Nunavut are 25 times higher than the national average, with the highest-risk being Inuit males aged 15-29, whose rates are almost 40 times higher than the national average, there is a clear need for more integrated and contextually appropriate solutions to address these complex issues (Statistics Canada, 2016).¹³

As such, community programming offered in Nunavut focuses on cultural regeneration as the foundation for healing from within, addressing issues such as mental health, homelessness, and substance abuse through an Inuit holistic lens (Movember, 2018).¹⁴ In this approach, strengthening Inuit identity through knowledge, practices, and skill-sharing is recognized as crucial for addressing secondary symptoms of mental health issues or food insecurity. Healing through a connection to place will be a guiding principle for the design of the Inuit cultural hub to reflect the programs and initiatives such as these, focused on cultural preservation and strengthening identity.

¹³ <https://www150.statcan.gc.ca/n1/pub/99-011-x/99-011-x2019001-eng.htm>

¹⁴ Movember (2018). Meet the Boys of Nunavut : A program helping at-risk Indigenous youth in Northern Canada. <https://ca.movember.com/story/view/id/11775/the-program-helping-at-risk-indigenous-youth-in-northern-canada>

Memory, Place and “Thing”

Inuit are tied to *place* in profound and fundamental ways. Hunting and harvesting traditional food is a great example of this connection, as hunters must remember safe trails, navigate the sea ice, changing climate, and recognize migratory patterns to locate areas with food sources (Lyons, et. al, 2010). Inuit hunting and harvesting practices therefore, strengthen a sense of place through the act of traditional practices (Heyes & Jacobs, 2022). Places define Inuit identities, their relationships to each other, and their claim to inhabit certain landscapes and utilize its resources, says Aivilingmiut Elder Mariano Aupilaarjuk:

“The living person and the land are actually tied up together because without one the other doesn't survive and vice versa.

You have to protect the land in order to receive the land . . . that's why we treat it as part of ourselves”

(Bennett and Rowley 2004:118 (Lyons, et.al, 2010).

The land (nuna) holds deep significance for Inuit, as it is where their elders walked, ancestors are buried, and memories are preserved (Searles, 2010, p.173). Specific locations on the land are connected to place names passed down through generations, containing stories of hunting tragedies, legendary figures, the spirit world, and important historical events (Goehring, 1990; Müller-Wille, 1987; Collignon, 2006).



Figure 8: Inukshuk

“A traveller who knows the names of places in a particular area will use them not only for purposes of orientation but to feel connected to the land in a familiar way” (Collignon 1996, 117). As such, memory and place are deeply connected in Inuit history and present. According to Hallendy (1994), place names serve a mnemonic function in Inuit societies. “They are literal signifiers of ‘things’ on the landscape, acting as physical and metaphorical descriptors of a much richer set of memory and embedded knowledge (Collignon 2006; Grosset and Suluk 2007).” Therefore, archeological sites where remnants of Inuit material culture (e.g. Inukshuk) have been found, serve as important tools to teach younger generations about an Inuit collective past (Lyons, et. al, 2010).

For example, the Inukshuk (Figure 10) or Inuksuit (Plural) are human shaped stones used for wayfinding, communicating safe trails and continues to be used as a significant communication tool across Nunavut. These structures, big and small are built on the land using stones found to indicate directionality guiding travellers to safe paths and routes, signifying good hunting trails or fishing spots, and marks where a family has camped or hunted prior, some would even indicate where a hunter has stored caribou meat and skins (Pollock, 2010). Some inuksuit were warnings of danger ahead while others were used during caribou hunting season to guide caribou towards hunters (Pollock, 2010). These ‘things’ on the land and the meaning they carry can be translated into the architectural landscape within communities. For instance, the Arviat community freezer, which will be discussed in chapter 3, utilizes the verticality of the inukshuk in positioning the building form, the sea can vertically as a wayfinding symbol within the community while embracing the cultural significance of Inuksuit.

The diagram (right) illustrates the interconnectedness of person, place, and things in strengthening Inuit identity. For instance, there are no boundaries between the built environment and the person, activity, land, or animals. The form is created in harmony with animals, with respect for the land, promoting a holistic and circular perspective (Lyons, et, al, 2010). It shows how the built environment cultivates the creation of place through the practice of cultural values, forming a distinct material culture, Inuit identity, which all interwoven and reinforce one another.

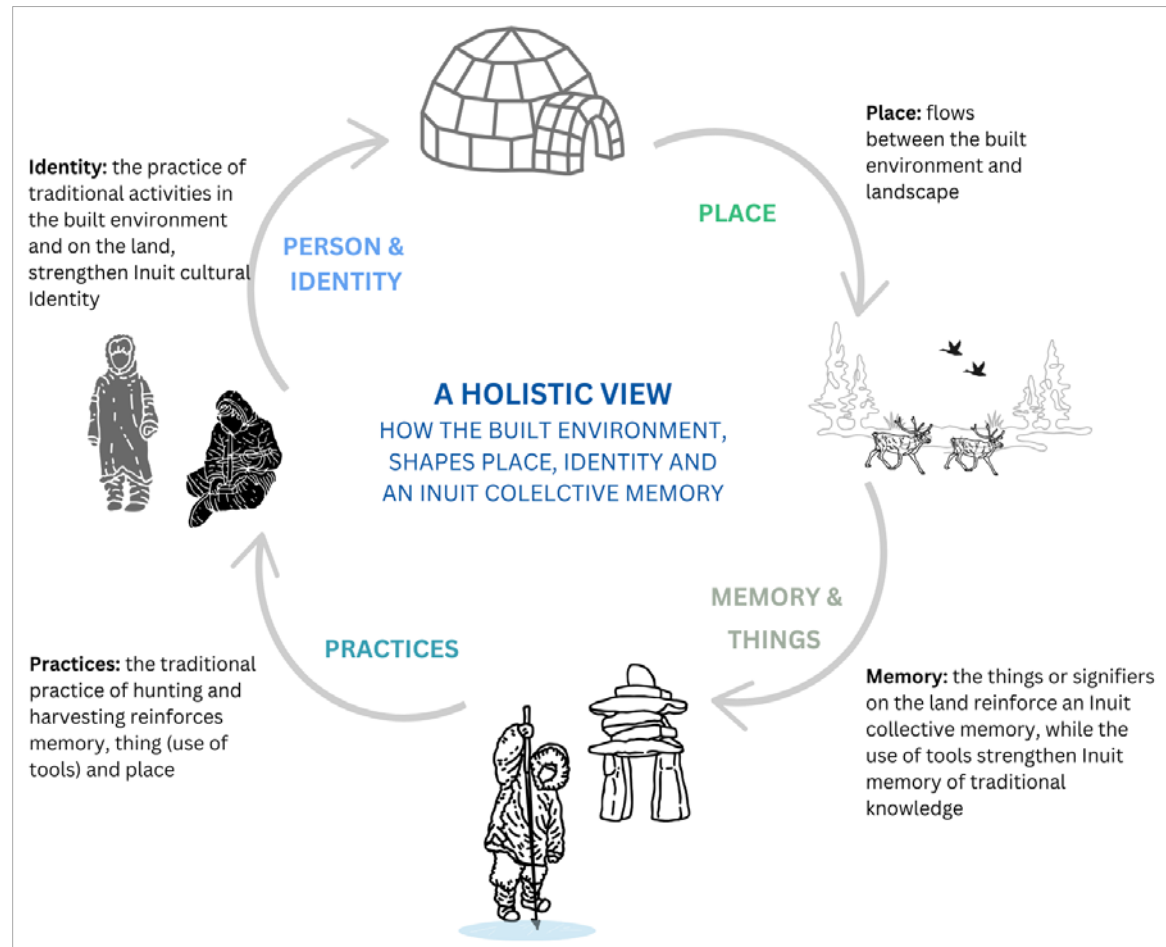


Figure 9: A Holistic View: Built Environment Shaped by Place, Cultural Practice, Memory, Things

Material Culture

Inuit are well adapted to arctic climate and are widely celebrated for their resiliency and ingenuity in thriving in the arctic conditions. In part, due to an impressive array of tools, technologies, and hunting strategies developed to sustain in the Arctic environment, these tools form a rich Inuit material culture (Pauktuutit, 2006). Material culture has various definitions and is studied in disciplines across archaeology, anthropology sociology, history. Material culture is defined as the physical objects, artifacts, and spaces that people create, use, and interact with, which reflect the beliefs, values, norms, and social practices of a particular society or group, providing insight into the ways of life, cultural priorities, and historical developments of various societies (Oxford Reference, 2024). In its simplest form, it attempts to explain the relationship between people and their things (Centre for Material Culture Studies, 2024). In this case, it would look to how architecture, tools, technology, objects, shape Inuit culture which offers insight into the aspects which may be necessary for preserve through thoughtful spaces in the built environment. Inuit attribute the success of surviving in arctic conditions to Inuit traditional knowledge – providing guidance in creating and using these tools. ‘These places and objects, much like individuals, have life histories influenced by both culture and environment, evolving over time’ (Appadurai, 1986; Bradley, 2002; Stewart et al., 2004). The connection to place is reinforced through the use of traditional tools and hunting practices that link Inuit to the land and environment. The material culture of Inuit society therefore includes built forms of shelter, such as the igloo, which are intricately tied to the land, sea ice, and surroundings (See figure 5).



Figure 10: Traditional Inuit Tools

For Inuit, material culture also includes spears, harpoons, arrows, bows, knives, ulus (traditional women's knife for skinning), traps, nets, qulliq or oil lamp (ESRI, 2021). There many tools, some made from ivory, caribou antler and stone. Women's tools were different, and were used for preparing sealskins and scraping caribou hides (see ulu in figure 5). Hunting and harvesting tools, along with traditional technologies, reflect the importance of subsistence from the land. This also includes traditional clothing made from animals, which not only provides warmth but also holds cultural significance, as sewing and using these garments for hunting is an integral part of Inuit identity. Today, elders are actively involved in safeguarding this wisdom for present and future generations, acknowledging that their previous lifestyle, deeply rooted in the land, and the complex social and economic structure it entailed, are now distant memories for their descendants living in settlements (Collignon 2006; Grosset and Suluk 2007). This threatened loss of material culture forms the basis for the typology of a new Inuit Cultural Hub, one that is dedicated to the preservation, education and knowledge sharing of traditional practices and storage of country food.

AMAUTI: a women's parka made with a pouch to carry a child on her back. ANNURAAT: clothing made of caribou skin, sealskin, or other animal skins. IGIMAK: the head of a harpoon that sticks into the animal. Used for walrus, beluga and bearded seals, in winter and summer. KAKIVAK: fish spear (a type of harpoon) with a central point flanked by two arched pieces of ivory tipped with barbs. Once the fish was impaled on the central point, the arched pieces kept it from slipping	QAMUTIIK: traditional sled pulled by a dog team, used today to transport people and harvested animals pulled by ATV or Snowmobile. QIPIIK: blanket made of caribou skin. QULLIQ: oil lamp made of soapstone, lit using fat from marine mammals such as whale blubber. Used to heat home, dry clothing, & provide light. UMIAQ: large boat made of sealskin or walrus skin. It was used for transporting larger groups of people, tents and equipment when
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off. PANAK: snow knife used for making igloos. QAJAQ: a kayak, used in summer to travel anywhere on the water. Paddled by a single man.	moving camp. It was also used for whale hunting, travelling longer distance and often tied together with sinew. UNAAQ: harpoon or spear used for seal hunting, walrus, beluga, narwhal, and polar bear in summer and winter month.
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Table 1: Inuit Material Culture.

Inuit Material Culture

Inuit sustainably and resourcefully use all available materials, from natural elements like stone, ice to build shelters, and animals for their hides, ivory, antlers, bone, fur, and sinew (fibrous tissue used in sled making), to create a wide array of tools, clothing and technologies essential for surviving and thriving in the Arctic. Some example of Inuit material culture include¹⁵

¹⁵ Avataq. (n.d.). The Tools of Our Survival. Avataq Cultural Institute Webpage. <https://www.avataq.qc.ca/en/Nunavimmiuts/The-land/Our-tools>

Uses of Inuit Material Culture

Transportation

Qajaq (kayak)

Qajaqs were traditionally made with a frame covered in seal or walrus skins, and used to navigate water bodies in search of country food. This vessel was ideal for hunting aquatic animals because it is lightweight and durable (Isuma, 2009).

Qamutik (Sled)

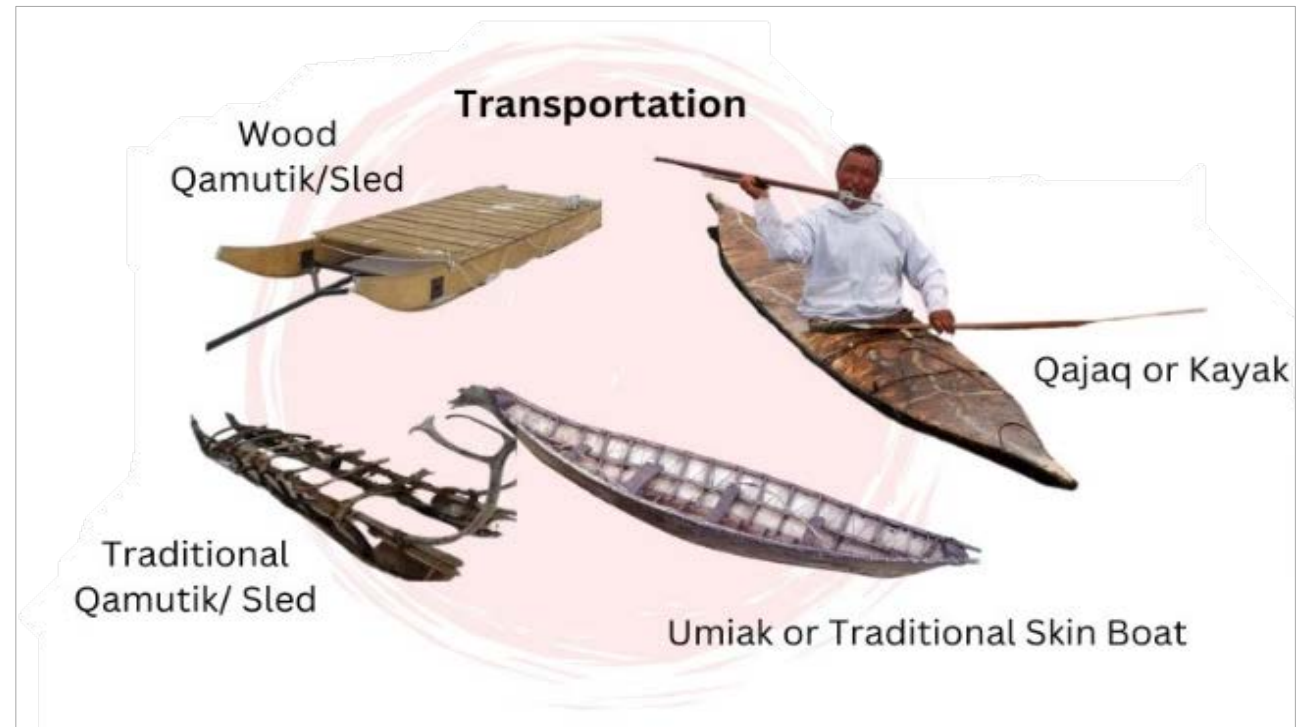


Figure 11: Inuit Material Culture, Transportation

Similarly, the traditional qamutik (figure 13), could be crafted from caribou antlers and bone, carefully laced together with sinew cord. Water was poured over the runners until frozen, creating a smooth surface, which was further polished with a piece of fur. This technique ensured swift and efficient travel across ice and tundra (Isuma, 2009). Today, qamutik's are primarily made of wood, due to the accessibility of imported wood materials by air and sea.



Figure 12: Traditional Qamutik (Sled) made from Caribou Antlers.

Umiak (boat)

This vessel was used when transporting larger groups of people, travelling long journey's during whale hunting season, or when moving families from one camp site to another (Isuma, 2009). These transportation technologies can inform the material culture in the architectural form of the Inuit cultural Hub. The shape, joinery and use of materials can all play a role in the design of the cultural hub as a way of transferring traditional knowledge in new ways and continuing the use of traditional practices and materials into the built environment to evoke a collective cultural memory.

Qulliq (Oil Lamp)

The qulliq is a highly respected tool traditionally used by Inuk women to provide warmth and light to the home, be it the igloo or sod house. It could also be used as a cook top or to dry clothing. The qulliq carved of soapstone is ignited using whale blubber or seal, and a woman is said to be ready to

care for her own home when she is able to tend to and keep the Qulliq lit for 24 hours (Urban Inuit Identity, 2024). The wick is made of natural found materials such as moss or arctic cotton. Today, the qulliq is lit during important ceremonies and meetings to foster safe spaces and preservation of Inuit culture (Urban Inuit Identity, 2024).¹⁶ This technique can inspire a unique feature for heating and/or providing light within the Inuit cultural hub.



Figure 13: Qulliq, or Inuit Traditional Oil Lamp

¹⁶ John, S. (2024). Urban Inuit Identity Project; Qulliq. <https://urbaninuitidentityproject.ca/qulliq/>

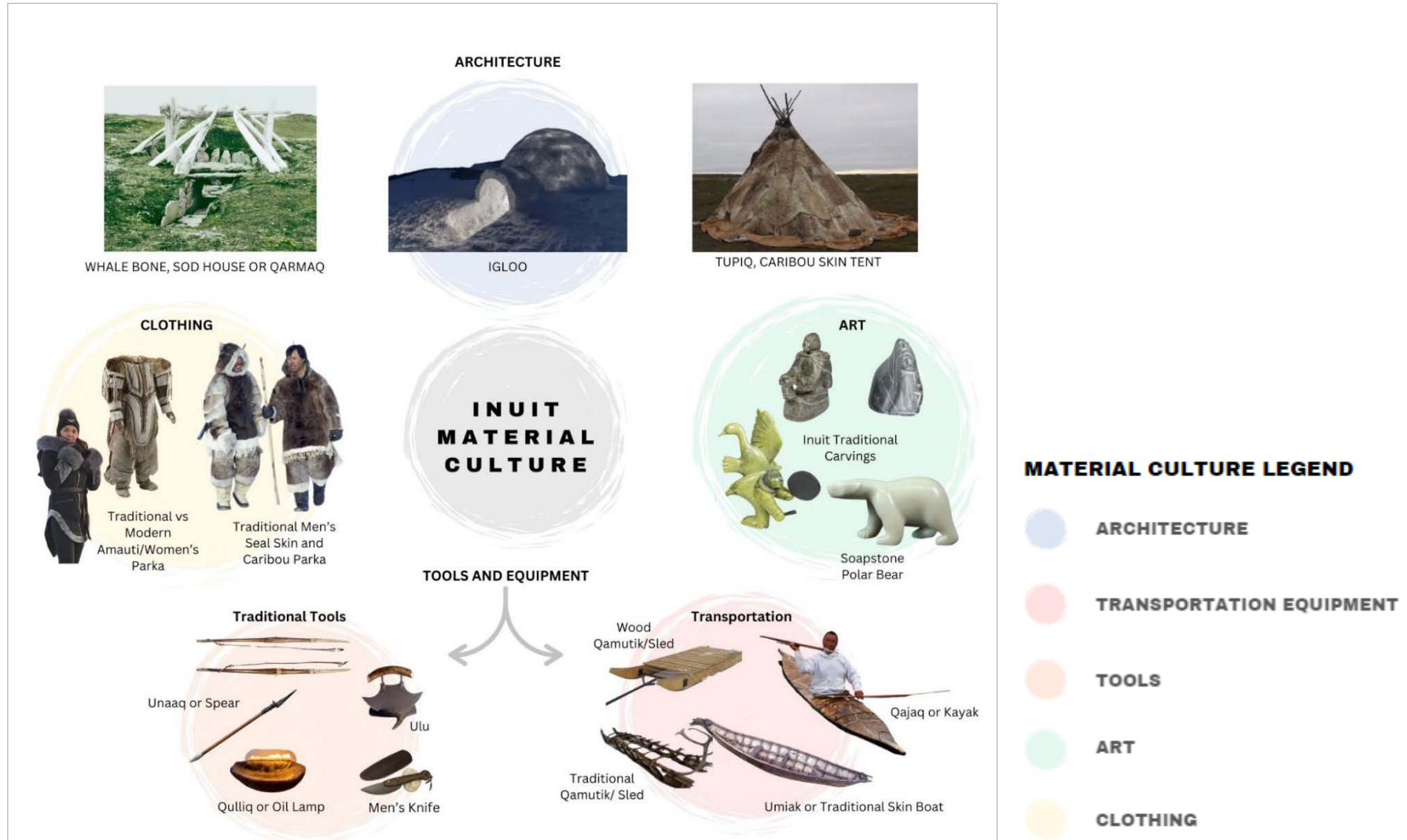


Figure 14: Material Culture Chart

Material Culture: Architecture

Inuit dwellings were constructed depending on the region and season (ESRI, 2021). Each of these traditional dwellings—the igloo, tupiq or tent, and qarmaq/sod house—can inspire the features, material use (such as whale bone), form, function, and visual characteristics of the Inuit Cultural Hub as a method of preserving, celebrating and carving a new typology for the built environment in Nunavut centered on cultural preservation. Features of traditionally nomadic dwelling include (ESRI, 2021);

Igloos

- **Form and Insulation:** Constructed in spiral form and often lined with caribou skins for insulation.
- **Entryways and Occupancy:** often consisting of multiple passageways, housing 15-20 people each.
- **Function:** used during sedentary months in larger communities or built smaller and simpler for winter travel.
- **Interiors:** Furnished with cooking pots, oil lamps, and low platforms, and kept at temperatures just below freezing (ESRI, 2021).

Tupiq (Tents)

- **Form and Insulation:** used in warmer months, easy assembly and disassembly required to follow animal herds.
- **Construction & Material Use:** Made entirely of animal products, with driftwood poles and sealskin or caribou skin as a cover.
- **Lighting Preferences:** Skins were sewn together for water resistance, and while the back of the tent had animal hair remaining on the skins to provide a darker sleeping area, the front of the tupiq had no hair on the hide to allow for sunlight into the living space.

Qarmaq:

- A **qarmaq**, a traditional dwelling that combines features of both an igloo and a tent.
- **Function:** Typically used during transitional seasons like spring and fall, it was constructed with a combination of snow, earth, stone, and animal skins.
- **Construction:** The lower walls were usually made of sod, stone, or snow blocks for insulation, while the upper portion, including the roof, was often covered with animal skins or other materials.
- **Use:** semi-permanent dwellings, offering better insulation than tents but being easier and quicker to build than full igloos.

They were well-suited for families during hunting trips or in periods of semi-nomadic activity, allowing Inuit to stay warm and protected in colder conditions without committing to a full igloo structure.

Seasonal Adaptations

- Igloos suited for colder months and sedentary living, while tents were ideal for summer mobility.
- Cooking occurred outside the tents in summer to keep smoke out, improving living conditions inside.

Inuit shelters also evolved over time, from semi-buried pit houses to sod, stone structures, and large tents, with the igloo being the most recognizable, these structures. However they all share common features, 1) the boundary between land and shelter was fluid and 2) the structures were temporary, aligning with the Inuit's nomadic lifestyle (Heyes & Jacobs, 2022, p.245).

Non-Material Culture

An important aspect of material culture to consider is the intangible qualities that also shape culture. This will help glean a better understanding of what was lost with resettlement by going beyond the physical objects and architecture of Inuit culture to how these objects and spaces shaped ones identity, world view, beliefs and values. In sociology, this is referred to as non-material culture (n.d, 2024). This includes intangible ideas about culture, including beliefs, values, rules, norms, morals and language. Sociologists suggest that non-material culture shapes thoughts, belief and behaviours through four primary processes; symbols, language, values and norms. As previously noted, Inuit Qaujimajatuqangit or traditional knowledge, along with the maligarjuat or cultural laws, shaped ones identity and behaviours in society with the goal of living a good life (Karetak, et al. 2017). Taking into consideration the significance of material and non-material culture in shaping Inuit practices and identity, this next section investigates the implications of a shift from a previously nomadic dwelling that supported a traditional lifestyle of hunting and harvesting, community interconnectedness and access to the land (supporting subsistence lifestyle) to Euro-Canadian standardized housing model (Dawson, 2006).

What Is | Understanding the past |Analyzing the present | Exploring future possibilities.

This section examines the effects of the post-contact period, focusing on the loss of material culture, Inuit identity, and the traditional architecture that once supported Inuit ways of life. The tangible, physical environment and use of material culture (hunting and harvesting tools) as well as the intangible qualities of nomadic lifestyle that served to strengthen identity, sense of place and community were impacted by disruption period. The section seeks to understand how contemporary architectural environments fail to accommodate Inuit traditions, through a spatial analysis conducted in the community of Arviat, Nunavut, by Peter C Dawson, researcher and professor at the University of Calgary Department of Archeology. This study explores the intended versus actual uses of space in the residential context in Nunavut using a space syntax analysis.¹⁷ Ultimately, this study will inform ways in which the Cultural Hub can address the spatial inefficiencies derived from the syntax study to inform programmatic and spatial strategies, as well as regaining a sense of place within the built environment that was once a fixture of the traditional home (land).

¹⁷ Space Syntax analysis was developed in the 1970s as a way of formalizing the relationship between spatial **form** and **space use** by means of topological graphs (Hillier & Hanson, 1984).

Leaving the Home (land): From forced settlements into failing architecture



Figure 15: Inuit women and children at summer camp, Fullerton Harbour, Nunavut

“The government failed to consider the lasting impact this [*relocation*] would have on communities. For Inuit, the loss of home is more than the loss of a dwelling—it is a disruption of a critical relationship between the people and the land and animals. It represents the loss of independence and replacement of a way of life” (McCintosh, 2018, p.6).

Housing in Nunavut: Then & Now

Context

In the years following the Second World War, during the resettlement period, Inuit were introduced to Euro-Canadian architectural styles that shaped the spatial layout of their homes and communities (Dawson, 2006). According to Dawson (2008), these houses and the communities they formed were designed based on Euro-Canadian concepts of family, community, economics, and administrative control (p. 112).



Figure 16: Home in Qikiqtarjuaq

The design of these homes reflected the modernist ideals of standardization that were prevalent at the time. Many post-war architects, having experienced two World Wars and the Great Depression, embraced modernist principles that sought to "universalize" the design process by addressing basic, supposedly *universal* human needs (Dawson, 2006). However, in their focus on providing immediate shelter, they often overlooked cultural, gender, and age-specific considerations (p.113).

The Canadian government's subsequent housing programs and policies adopted this universal approach, aiming to meet Inuit needs by alleviating poverty and addressing perceived dangers in traditional Inuit life. This resulted in one-size-fits-all design solutions (Dawson, 2008, p. 113). According to Dawson (2008), several Canadian officials and administrators viewed this approach as a solution to the challenges of life in the Arctic, believing that the basic needs of Arctic communities could be met through standardized housing (p. 114).

The 1959 report *Eskimo Mortality and Housing* served as a catalyst for the widespread adoption of standardized housing models in Nunavut. It highlighted substandard housing conditions, high infant mortality rates, and poor health among Inuit, which were attributed to self-built homes (Dawson, 2006, p. 113). While there were early attempts to create structures that resembled traditional Inuit architecture, such as igloos made from 6-inch Styrofoam blocks and double-walled canvas tents insulated with moss—urgent housing needs, high labor costs, and the expense of shipping materials to remote areas led to the use of "universal" designs rather than culturally specific ones tailored to Inuit families (Dawson, 2006, 114). Dawson (2008) examines the implications of this standardized housing model in the observational study of an Inuit family in Arviat, to determine how spaces are being utilized and the effects the lack of programmatic spaces and layout suited to the cultural and traditional Inuit practices in the home (p.112).

This resettlement exposed Inuit to new spatial organizations that reflected the routines and practice of another culture and affecting the ways in which Inuit utilized spaces (see figure 15) in the home to accommodate for layout that were not designed for an Inuit traditional lifestyle, says Dawson (2008,112). According to agency theory, individuals' actions are shaped by the institutional structures they create through daily practices. When people are forced to live in houses designed for another culture's family life, they may either adopt the new domestic practices or retain their traditional ways as a form of resistance and necessity (Dawson, 2008).

Dawson (2008) uses agency theory as a theoretical framework to help explain this phenomenon of how people adapt to situations where the space and the intended use are incongruent, resulting in unique expressions of spatial layout and organization to meet their needs (p.114). According to Bayle (2020), the link between the form of the house and social life has been lost in the Nunavut context. The standardization of housing leaves little room for integration of local practices and cultural values of Inuit (p.162). Similarly, Dawson's (2006) observational study of an Inuit family in Arviat revealed that Inuit families often do not conform to the programmatic categories typically found in Euro-Canadian homes, such as bedrooms, kitchens, living rooms, and porches (p.111). While this apparent discrepancy between intended and actual uses of space may seem arbitrary, it tells us a lot about how Inuit actually utilize the built environment (Dawson, 2006, p.111), which can inform a new building typology in Nunavut centered on Inuit culture and practices and spaces that reflect this.

Space Syntax Analysis

The study was conducted in 2002 and observed the daily activities of 47 Inuit families in Arviat, Nunavut, documented over three months. The activities observed are categorized in figure 19, include socializing, sewing, craft making, eating, cooking, storing, maintenance of hunting and fishing equipment and personal needs.

Table 1. Actions and activities documented in the study

Activity	Action	Activity	Action	Activity	Action
Cooking	Char	Eating	Fresh Caribou meat	Other	Using computer
	Caribou		Dried Caribou meat		Operating small business
	Seal		Char	Personal Needs	Sleeping
	Beluga		Dried Char		Washing up
	Bear		Beluga		Brushing teeth
	Narwhal		Narwhal		Laundry
	Bannock		Bannock	Maintenance	Honda
	Cooking marrow		Country food		Snow machine
	Northern store food		Tea/coffee		Boat
	Miscellaneous country food		Store-bought food		Fishing nets
Hunting/Fishing	Butchering animals	Storing	Hides/hide clothing	Socializing	Rifle
	Cleaning Char		Store-bought clothing		Komatiks (sleds)
	Drying Char		Hunting equipment		Miscellaneous
	Preparing hides		Sewing equipment		Watching TV
	Making dry meat		Tools	Socializing	Playing with children
	Splitting bone for marrow		Toys		Visiting with family and friends
Sewing	Hide		Char		Eating country food with family
	Cloth		Bird eggs		Talking on CB radio
Crafts			Sea mammal	Socializing	Listening to radio station
	Carving		Northern store food		Smoking/chewing tobacco
	Jewelry		Large cooking pots		Drum dancing
	Wall hangings		Miscellaneous		
	Doll making				
	Miscellaneous				

Figure 17: Observation Study: Actions and Activities. Arviat Nunavut. Image Cited.¹⁸

¹⁸ Dawson, P., C. (2008). Unfriendly Architecture: Using Observations of Inuit Spatial Behavior to Design Culturally Sustaining Houses in Arctic Canada. Housing Studies, 23:1, 111- 128, DOI: [10.1080/02673030701731258](https://doi.org/10.1080/02673030701731258)

These activities were mapped onto the layout of their homes and analyzed for integration and segregation, providing insights into how Inuit spatial practices fit within Euro-Canadian house designs (Dawson, 2006, 120). The observations of these activities indicate several important outcomes that indicate how Inuit families organize, use and reshape spatial layouts in home to suit their lifestyle, family and community dynamics. They are as follows¹⁹;

1. **Extended Family Structure:** Inuit families often engage in domestic practices that reflect their extended family structure, rather than the typical nuclear family model common in Euro-Canadian homes. Large family gathering and communal living across multiple generations is fairly common.
2. **Challenges with Traditional Food Preparation:** Inuit families face spatial challenges when preparing traditional foods like seal and caribou, which are often too large and messy for small Euro-Canadian kitchens (Dawson, 2006). As a result, these foods are sometimes prepared outside or in cold porches and eaten communally, often requiring furniture rearrangement to accommodate larger family sizes.
3. **Storage Space Limitations:** Specialized hunting and fishing equipment, as well as animal hides or sealskin boots (Kamik) and clothing require a cold storage, which is severely lacking in standardized housing models. As a result, many items are stored in less ideal spaces, contributing to a cluttered appearance and reduced household efficiency (Dawson, 2006, p.123). Community freezers are at times used to store country food or clothing, but the lack of privacy and security in storing these items can be a deterrent.

¹⁹ Dawson, P. C. (2006). Seeing like an Inuit family: The relationship between house form and culture in northern Canada. *Etudes Inuit*, 30(2), 113–135.
<https://doi.org/10.7202/017568ar>

4. **Need for Specific Segregated Areas:** Carving, an important income source for many Inuit families, requires segregated, well-ventilated spaces due to the dust and noise it generates. However, inadequate ventilation in existing homes poses health risks and creates challenges for integrating these economic activities into daily life. As such, these activities are often performed outside or in make shift sheds.
5. **Importance of Socializing and Cooperation:** Socializing was the most frequent activity observed, highlighting the importance of cooperative interaction within extended families (ibid, p.122). These activities support subsistence planning and pooling of resources, reflecting the central role of community and family in Inuit life.
6. **Spatial Integration of Activities:** Inuit families often disregard the functional labels of rooms (like kitchens) and instead distribute activities according to spatial integration, with public areas used heavily (ibid, p.124).

Dawson (2006) says that rather than interpreting this data to suggest large open rooms with little privacy is the solution to a communal Inuit lifestyle, he suggests that future home designs should increase room connectivity to better accommodate multi-functional uses and support the social and economic needs of Inuit families. Rather, connect high integration spaces with the activities often performed creating critical adjacencies by lumping these areas together (p.123).

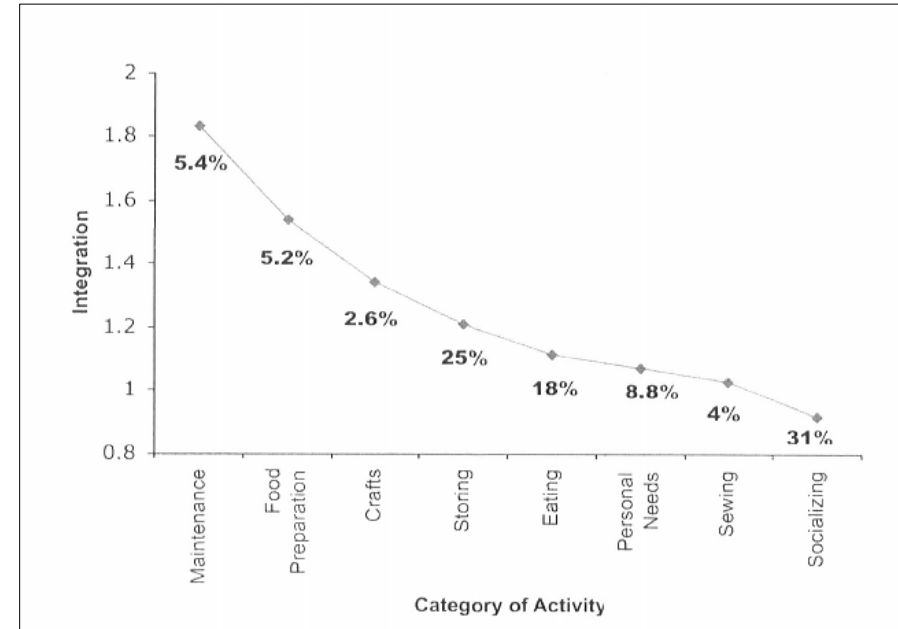


Figure 18: Dawson,P. (2006). Spatial distribution of activity categories by integration.

The graph above (figure 18) shows the frequency of each activity displayed as a percentage to indicate how close these activities are performed to one another, how integrated they are (public or private) and how well they reflect the intended use of such spaces (e.g. kitchen). Presenting the data in this way offers a way to quantify and illustrate trends in Inuit spatial practices while also providing a way to assess how well these practices align with the layouts of Euro-Canadian houses. The values on the graph below 1 increased integration, while values above 1 tend to increase segregation accordingly to the space syntax analysis. For example, maintenance of equipment would be done in a shed or cold porch isolated from main socializing area such as the living room (Dawson, 2006, p.123).

Summary of the Study

Dawson (2006) concludes that Inuit families in Arviat continue to organize domestic activities differently from Euro-Canadian families due to their cultural values, which prioritize family solidarity, mutual assistance, and a land-based economy (p.128). Additionally, Inuit families concentrate activities in a few integrated spaces, while Euro-Canadian families distribute activities throughout the house. This reflects differing cultural values related to social interaction, individuality, and privacy, says Dawson (2008, p.114). The study suggests that documenting these differences can help inform future housing designs that better reflect Inuit lifestyles and cultural values. Furthermore, the continuation of these building practices today demonstrates a clear lack of empathy in addressing the unique needs of Inuit communities in Nunavut. While these standardized approaches may have become the cost-effective and routine solutions to housing shortages, they fail to consider the cultural and practical requirements of Inuit families. To effectively address the issues outlined in the study, it is crucial for architects and designers to adopt new approaches that prioritize Inuit values, practices, and cultural context in the programming, spatial design, and outcome of housing projects in Nunavut.

Reimagining Co-Designed Spaces

Most communities in Nunavut are organized similarly, where the architecture is often indistinguishable from one community to the next. Each community typically includes a grocery store (Northmart or Co-op), Canada Post, government and private offices, multiplex housing, individual and social housing, a community freezer, a utilidor, a fuel supply station, a few hotels, and sometimes a restaurant or two, see Figure 18 (Sheppard, 2020, 331). However, these communities generally share limited social and community services, inadequate government-built housing, a restricted supply of manufactured goods, and insufficient access to affordable food based on the remote location (McIntosh, 2018, p.17). The community planning often a facsimile of southern planning, lacking integration between site and design where decisions are evidently made primarily based on aspects such as fire prevention and southern building codes rather than consideration for cultural practices and location (McIntosh, 2018, p. 17). Furthermore, there is a noticeable absence of cultural spaces or designated public areas for cultural activities, where community autonomy over these spaces is limited. For instance, while community freezers, an essential infrastructure in each of the community required for storing country foods, typically have restricted hours and managed by local organizations.

One objective of this practicum is to promote the appropriation of both public and private spaces to identity unmet user needs through placemaking. The Inuit Cultural Hub should serve as a space where the community can occupy, repurpose rooms, and foster a sense of place through cultural practices that strengthen identity. It is crucial to empower communities to define, shape, and co-design their spaces to reflect their cultural and traditional values.

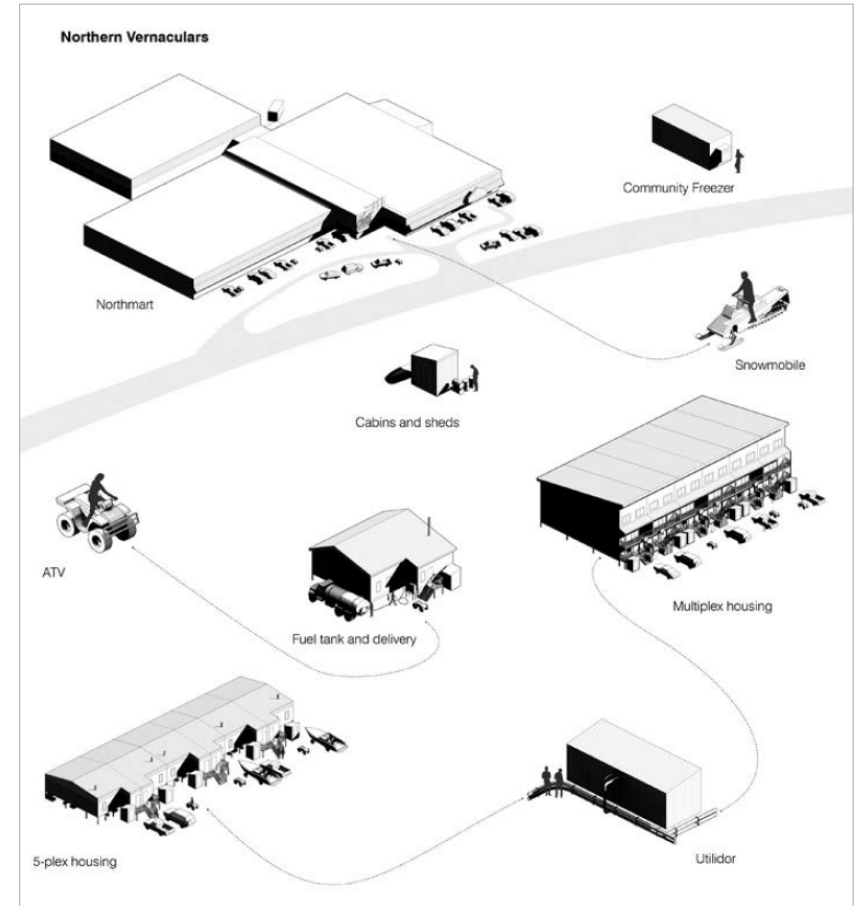


Figure 19: Northern Vernaculars, Lateral Office

Housing Sovereignty

The Qikiqtani Inuit Association, as previously mentioned, advocates for a shift from food security - defined as access to nutritious and culturally appropriate food -- toward food sovereignty, which emphasizes regaining control over natural resources and the food supply. This shift is essential in supporting Inuit self determination and is a vital Inuit cultural practice (QTC, 2019, p. 5). Similarly, a new typology for public spaces, such as a cultural Hub, should prioritize Inuit sovereignty in building practices, design, programming, and outcomes. Traditional Inuit dwellings represented autonomy and sovereignty, allowing families to adapt, relocate, and construct homes based on their needs, cultural practices, and the local climate and seasons (ESRI, 2021). Urban architectural approaches in Nunavut should aim for housing sovereignty, emboldening communities to participate in policymaking, community planning, and building development, ultimately restructuring building models to support the culturally vibrant lifestyles of Inuit families and communities today. This approach would create an architectural landscape where Inuit culture, identity, and practices are celebrated, programmed, and designed within a Nunavut context.²⁰ These spaces would support sovereignty by empowering users to practice their culture effectively, thereby strengthening their identity and connection to place.²¹

²⁰ National Farmers Union (2007). Food Sovereignty: Nyéléni Declaration. NFU website. <https://www.nfu.ca/learn/food-sovereignty/#:~:text=Food%20sovereignty%20is%20the%20right,own%20food%20and%20agriculture%20systems.>

²¹ **Definition of Food Sovereignty;** Food sovereignty is the right of peoples to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems.

Proposed Definition for Housing Sovereignty: The right of Inuit to define the built environment around cultural and traditionally significant spaces. Inuit have the right to participate in building policies, systems and to shape built landscape on Inuit societal values of sustainable and culturally invigorating.

What Could Be | Understanding the past |Analyzing the present | Exploring future possibilities

In the book *The Inuit Way*; A Guide to Inuit Culture and Traditions, the foreword highlights the need for its creation as an acknowledgment of the significant cultural gap between Inuit and non-Inuit, a gap that continues to reflect the challenges faced by many Inuit today (Paukuutit, 2006, p. 7), including that of the architectural landscape in Nunavut.

“It had become apparent that non-Inuit were encountering challenges in some of their interactions with Inuit, challenges that had as their basis a lack of understanding and familiarity with our culture. Pauktuutit decided that a **broader understanding of and empathy for Inuit culture** would turn challenges into opportunities and enhance more positive interaction between members of both cultures.”

-Inuit Way Excerpt (Paukuutit, 2006, p. 7)

EMPATHY DESIGN

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Fostering Empathy

Broadening understanding and empathy for Inuit culture, forms the foundation for this literature review and the concepts that will inform the design strategies of the Inuit Cultural Hub. By understanding *what was* and analysing *what is*, this section now explores future possibilities through an empathy-driven design lens. It examines how integrating a unique empathy framework with specific Inuit societal values can shape the design proposal for the Inuit Cultural Hub. The unique framework draws from the Aquimavvik Society's research methodology, which is informed by Inuit Societal Values, to propose a design process that incorporates these techniques. Concepts such as place, placemaking, and sense of place will guide how well the community's values are embedded in the design. The design's success could then be evaluated by the activities that occur in the space (intended vs. actual), the community's engagement, and their overall comfort and satisfaction with the space.

Two key insights from the literature offer a direction for addressing the design needs of the cultural hub and establishing a new urban typology for Nunavut. First, the connection between place and identity, strong in traditional nomadic Inuit communities, is lacking in the modern built environment (Dawson, 2006). To restore this connection, the design must center on placemaking and cultural activities that reinforce the sense of place and identity. Furthermore, for the cultural hub to preserve material culture, it must engage users in activities essential for maintaining these traditions, such as hunting, meat processing, skinning, and tool making and crafting. While placemaking fosters the connection between place and Inuit identity, an empathy-driven design framework ensures that spatial planning, environmental connection, and Inuit societal values are embedded throughout the process.

Empathy Research

Demystifying Empathy

Let us begin by clarifying the term empathy, often confused with sympathy or compassion, despite their distinct meanings. Sympathy involves sharing or being able to share the feelings of another, according to Merriam-Webster's Dictionary (2024), whereas empathy is defined as the action of understanding, being aware of, being sensitive to, and vicariously experiencing the feelings, thoughts, and experiences of another. In design, a sympathetic approach with the client does not yield a deeper understanding of the 'other'; rather, it is a passive act (Swaranjali et al., 2020, p. 1). Various models of empathy design exist within the emerging literature, these include participatory design, user-centered approaches, design charrettes, and empathy toolkits, each fostering empathy among designers and within the design process to varying degrees of success. Below, I will examine a few of these approaches derived from the literature.

Zingoni (2019) highlights a differentiation between participatory design and empathy design, suggesting that the former enables the designer to listen to and comprehend the users needs, leading to a sympathetic design response. Whereas, in contrast, empathy design necessitates establishing a fundamental connection with the individuals being observed. This represents empathy at its essence, where the objective is not to generate new knowledge, test a theory, or validate a scientific hypothesis, but rather to translate observations into insights and insights into products and services that enhance lives (Zingoni, 2019, p.356). Similarly, several other researchers have explored integrating empathy into design practices as Zingoni notes (2019, p.354). Mattelmamki (2005) suggests techniques like charrettes, field observations, and mapping for understanding user needs. Whereas, Johnson et al. (2014) examines how empathic design impacts student outcomes. Leonard and Rayport (1997) outline a five-step process involving direct user

engagement: observation, data collection, reflection, brainstorming, and prototyping. Whereas, Kouprie and Visser (2009) propose a four-phase model emphasizing active user interaction, based on psychological literature (Zingoni, 2019, p.354).

Additionally, Interior Design professors Swaranjali, Patel, and Espersen-Peters sought to foster empathy in their students through a studio project focused on designing transitional housing for refugees, testing forms of empathetic engagement using a 'toolkit' (Swaranjali et al., 2020). This reflective case study examines the studio pedagogies and student work, ultimately proposing new design parameters that challenge the notions of 'self' and 'other' through various reflective and reasoning strategies (Swaranjali et al., 2020).

Empathy Design Approach #1

Swaranjali et al. (2020) distinguish between passive empathy and transformative empathy, whereby the former recognizes the 'other' but does not change the 'self.' For instance, a designer might consider what it is like to walk in the client's ('other's') shoes but does not change their own worldview (p.2). This empathetic approach focuses on cultivating intrinsic forms of empathy that are continuously evaluated through reflection on one's own worldview and biases, with the aim of creating meaningful empathetic engagement that can sustain beyond this study (ibid). In the case of Nunavut, most designers or architects commissioned for work in the North lead diametrically opposing daily lives compared to, for example, an Inuk man who lives a semi-traditional lifestyle of hunting and harvesting, resides with three groups of extended family, and lives in a community of under 1,000 people. Rather, transformative empathy, as proposed by Swaranjali et al. (2020), is defined as an "act of self-reflection and willingness to part with one's worldview or frame of understanding in order to try and encounter and resonate with the other" (ibid, 3).

Swaranjali et al. (2020) suggest that we must challenge our notions of self and the perception of the other (see Figure 24) as separate; instead, engaging empathetically requires active involvement and a willingness to change one's opinion (p. 13). As such, they propose a toolkit designed to foster empathy by emphasizing understanding, reflection, recognition, and respect (Swaranjali et al., 2020, p. 1).

1. **Understanding and Reflection:** This involves critically examining existing knowledge, identifying gaps, and questioning assumptions to better understand the user group or context, while group activities are recommended to foster collaboration and reflection in the absence of direct user interaction.
2. **Recognition:** Achieving an empathetic understanding of the user group and the programmatic needs of the, for instance Inuit Cultural Hub, requires reframing the design problem to develop authentic solutions (ibid, p.10). This involves a shift to explorative making rather than problem-solving, a typical linear thought process common in design processes. This encourages the designer to draw connections from their research and generate context-appropriate solutions.
3. **Respect:** The basis of this toolkit is intended to encourage engagement, reflection and respect for all those involved in the design process (ibid, 10). Swaranjali et al (2020) suggests by not relying on a prescriptive approach, this toolkit fostering an open-ended process that embraces diverse perspectives and respects the unique needs of each user without prescribing a single solution.

Swaranjali et al (2020) proposes these phases as a toolkit encouraging empathetic thinking strategies “that are not solitary exercises but a constant iteration and reflection with the “Self and the Other” (p.11).”

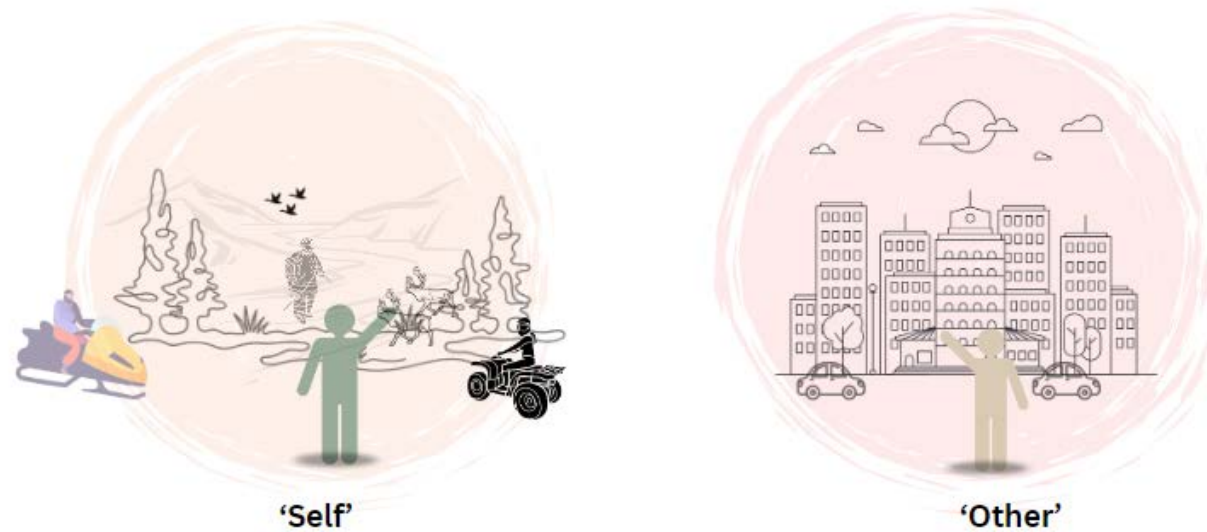


Figure 20: Identifying with the 'other'. Illustration by author.

Empathy Approach (Transformative Empathy) → Identifying the 'self' and the 'other' → From Passive to Transformative Empathy

Empathy Design Approach #2

Similarly, Kouprie & Visser propose an empathy framework consisting of four phases, based on the idea that a designer steps into the user's life, explores their world, and then steps back with a deeper understanding. The phases are: (1) discovery, (2) immersion, (3) connection, and (4) detachment. Kouprie and Visser (2009) emphasize active user interaction in this four-phase user-centered design model, drawing from psychological literature (Kouprie & Visser, 2009, p.444-446). User-centered design is an iterative approach that helps designers empathize with the individuals they are designing for. However, despite the development of techniques and tools for empathetic design, clear definitions and frameworks for empathy are still lacking (Kouprie & Visser, 2009, p.437; Zingoni, 2019, p.353). In Nunavut, for example, designers, engineers, and architects have often aimed to apply a user-centered approach by involving communities in the early design phase through community consultations. Yet, the consistency of this practice, and how effectively gathered insights are incorporated into the design process and outcomes in Nunavut, remain uncertain.

The empathy design phases include²²;

1. **Discovery:** The designer begins by cultivating curiosity and motivation to understand the user's world, preparing to step into the user's life.
2. **Immersion:** The designer spends time exploring and experiencing the user's environment without judgment, gaining deeper insights into their world. This phase requires patience and an open mind.

²² Kouprie, M, & Visser, F, S. (2009). A framework for empathy in design: stepping into and out of the user's life. *Journal of Engineering Design*, 20:5, 437-448, DOI: [10.1080/09544820902875033](https://doi.org/10.1080/09544820902875033)

Empathy Framework

For the most part, designers understand the need for empathy in the design process; however, what is lacking is a comprehensive procedure that is both contextually and culturally rooted and tied to design processes and outcomes. Based on research on empathetic design, I propose a hybrid model that incorporates Inuit methodologies derived from *Aaajiqatigiingniq, an Inuit Research Methodology*, combined with two methods highlighted previously, proposing a new unique framework for empathy design in Nunavut.

The fundamental basis for establishing empathy begins with a constant reflection on and challenge to one's own beliefs, creating the internal checks and balances necessary to foster and sustain empathetic practices. It is not a fixed process where one is simply taught the values of empathy in design and becomes cognitively aware. As Swanranjali et al. note, it is a transformative process requiring active consideration of empathy at all stages. These two approaches to empathy will form the foundation for the proposed framework. The phases of understanding and reflection, recognition, and respect proposed by Swanranjali et al. will form the core of this empathetic approach. These phases should be continuously integrated throughout the design process, serving as fundamental aspects crucial for authentic empathetic engagement (p. 2–10). Meanwhile, the four phases of the empathy framework proposed by Kouprie and Visser (2009) will provide actionable steps for applying empathy during specific parts of the design process.

The empathy model has two main components: a core reflective methodology (understanding, reflect, recognize and respect) and the active application of empathy in the design process (discovery, immersion, connection and detachment). For instance, one would engage respectfully, recognize opportunities for collaborative design solutions, and continuously reflect on their own biases and worldview. Whereas, discovery, immersion, connection, and detachment phases will be the action-based steps that align with the appropriate design phases. Additionally, while the empathy

models themselves incorporate components of Inuit Qaujimajatuqangit, it is crucial to include specific Inuit epistemologies to ensure a holistic and reflective framework for a Nunavut context. Aajiiqatigiingniq is an Inuit research practice that acknowledges pre-existing Inuit methodologies embedded in Inuit Qaujimajatuqangit and will serve as a guide for framing this unique empathy framework. The Aajiiqatigiingniq is a consensus research method is used across Nunavut to promote and utilize integrated research methodologies that foster and preserve Inuit traditional knowledge and systems (Aqqiumavvik Society, 2023).

This includes phases that includes;

1. **Piliriqatigiingniq (Coming Together):** This phase means building relationships, seeking an understanding, negotiating research questions and approach- group consensus is important.
2. **Inuuqatigiitsiarniq (Consensus Building):** This phase means ' a place where iterative discussion lead to relational group consensus.
3. **Aivaqatigiit /uqamanggatigiit (Establishing Respectful Communication And Methodologies):** This phase involves establishing respectful methodologies and beginning collection of information -informal discussions.
4. **Qanurtururangniq (Review, Assess, Validate Data & Make Commitment for Action):** This phase involves sharing data and making commitments to next steps.

Finally, the proposed framework envisions these phases as part of a circular model, requiring the designer to continually engage with the community, question assumptions, foster consensus-building, and re-evaluate the understanding of information shared throughout the implementation

of a designed space. This framework is not a rigid or prescriptive process; rather, each aspect of empathetic design can be integrated at various stages of a project, as appropriate.

The proposed model (below) was developed by aligning key empathy design concepts with relevant phases of the interior design process. For instance, Kouprie & Vesser (2009) describe "discovery" as the phase where the designer makes initial contact with the user, or begins researching which sparks curiosity and willingness to enter the user's world (p. 443). This phase is most applicable during the preliminary stages of design, such as consultation and conceptual development. However, it may also be revisited later in the project when seeking additional knowledge or addressing emerging challenges.

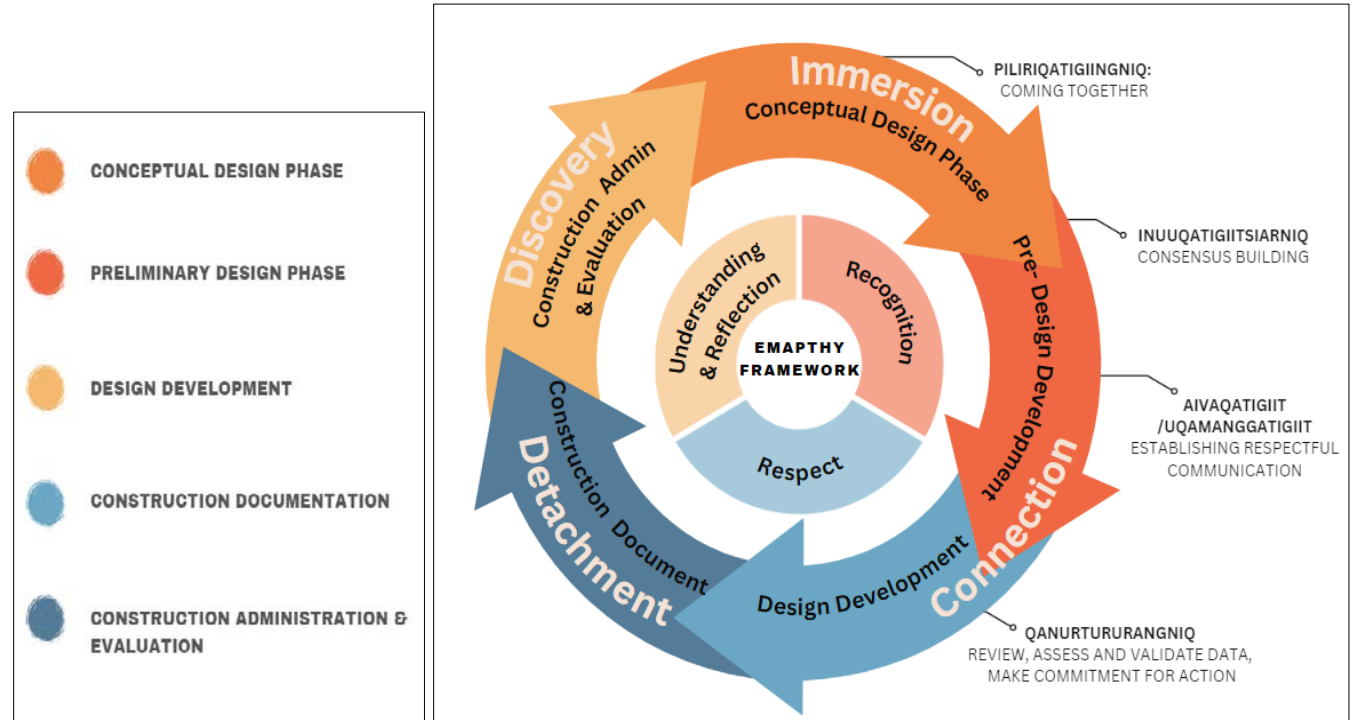


Figure 22.1: Unique Empathy Framework: Illustration by Author.

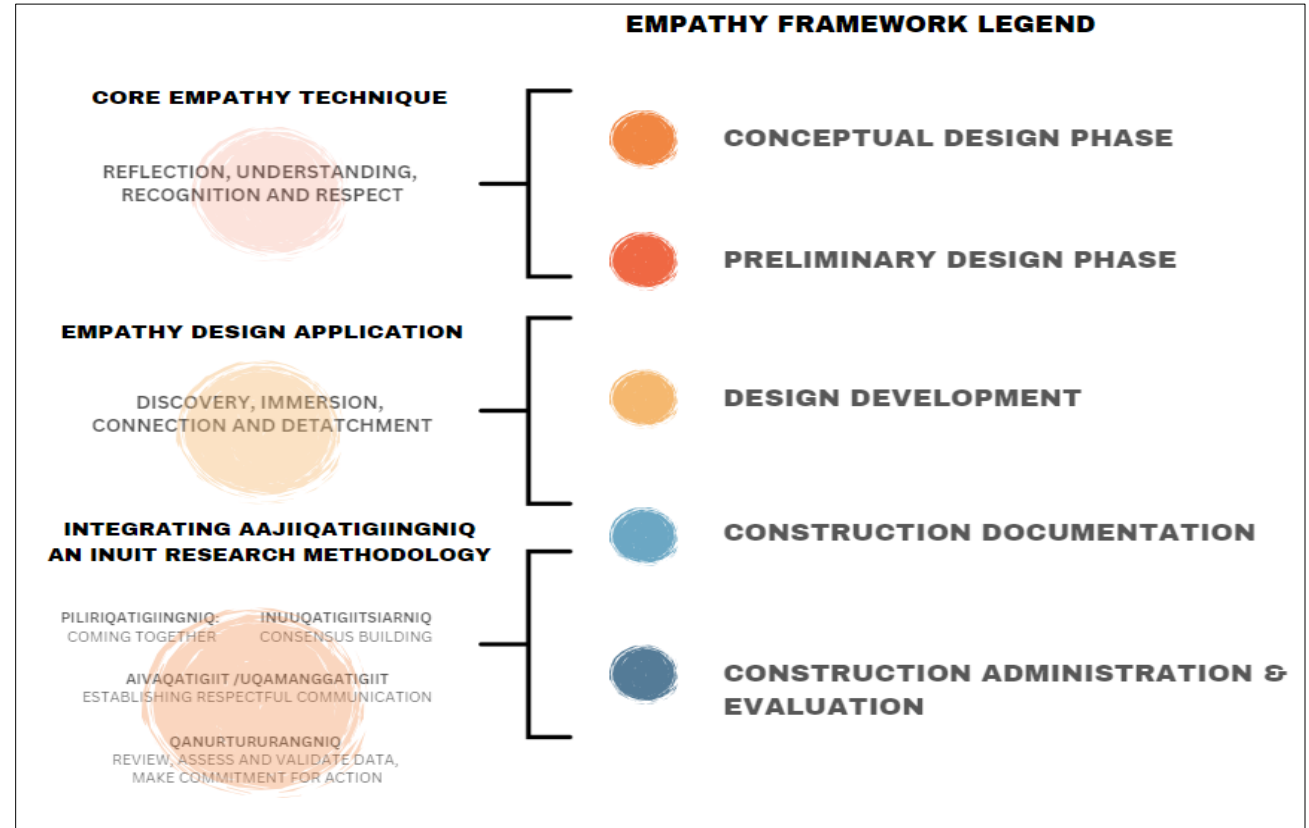


Figure 23: Unique Empathy Framework, Legend. Illustration by Author.

Empathy Framework Application

An example of this approach can be seen in the design of the recent Nunavut Inuit Heritage Centre proposal (figure 27). The Lateral Office in Toronto specializes in building and design in Nunavut and employs an empathy-based approach in community engagement by creating unique communication design tools between the user and the firm. During the preliminary design phase, the team developed a series of "design priority" cards which helped them organize a hierarchy of ideas and concepts that should be integrated into the organization of the design vision, says the Lateral Office (2023). The team held several meetings with community members forming an advisory committee, to share perspectives of priorities. This is one method of applying design inquiry card created in phase one and identifying your level of understanding of the users needs, any constraints in the project and drawing connection to the research.



Figure 24: Lateral Office (2023). NIHC: Design Inquiry Cards

placeMAKING

ΔσcΔnG⁹

placeMAKING

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Place, Sense of Place and Placemaking²³

This section will examine the role of *place*, sense of place and *placemaking* concepts to guide the design proposal of the Inuit Cultural Hub, as a meaningful space that fosters social interaction, cultural preservation, and a sense of connection with the users.

Place

Before considering the urban design concept of placemaking in the proposal for the Inuit Cultural Hub, it is important to first understand the meanings of ‘place’ that form the process and action involved in **place** – *making*. There are many definitions of ‘place’ but it is generally understood, in contrast to space, as representing a deep emotional bond between an individual and a specific setting (Najafi, et. al, 2011). In essence, places are spaces with meaning. Place is imbued with human values and principles, which transform a space into a place that is filled with meaning and significance for its users (ibid, p.1051). For the purposes of this practicum and the knowledge derived from the literature of Nunavut Inuit context of place, I suggest an expanded definition of ‘place’ one that refers to a fixed or ephemeral space that plays a crucial role in reinforcing and cultivating Inuit identity, a sense of belonging, community, and culture values.

The benefit of employing theories and concepts like 'place,' 'placemaking,' 'place attachment,' and 'sense of place' is that, as previously demonstrated, Inuit have a deep connection to place that reinforce their identity, connection to their community, land and animals (Heyes & Dowsley, 2018, p. 290). Both historically and in the contemporary landscape, Inuit cultivate *places* within their communities, such as self-built cabins on the land or communal gathering spaces like annual harvesting and fishing sites that foster a connection to these environments. These spaces offer valuable

insights into the significance of place and placemaking in the urban Inuit landscape that can inform the design programming and considerations of the Inuit Cultural Hub. The concept of ‘place’ has long been fundamental to planning and design process, however, recent trends show a growing focus on shaping the ‘experience’ and ‘feeling’ of spaces to positively influence community dynamics, says Cilliers and Timmermans (2013, p.414-429). While placemaking is a valuable tool for designers and community planners alike, it must be paired with a deep understanding of contemporary social dynamics, community values and the impact these places will have on the users (p.414). In this practicum, utilizing the empathy design model paired with the integration of Inuit Societal Values, would offer the designer this deeper understanding of the values for place and the users experience of it.

Place-making

Placemaking is a participatory and collaborative process that involves designing and shaping public spaces that enhance the quality of life of its users (Cilliers & Timmermans, 2013, p.414). Placemaking ultimately seeks to transform ordinary spaces into meaningful, engaging *places* that connect people to their surroundings. This collaborative process aligns with the Inuit Qaujimajatuqangit (IQ) principle of Piliriqatigiingniq, which emphasizes working together for a common cause. In working together for a common cause, these places become welcoming, vibrant, and reflective of the local community's culture, identity, and needs (ibid, p.114-115). In this practicum, the concept of placemaking is particularly relevant as it focuses on creating spaces that encourage social interaction, strengthen identity, and cultural practices, key component in the proposed typology of the Inuit Cultural Hub.

Inuit communities have engaged in placemaking since time immemorial, and continue shaping the urban landscape of Nunavut through new forms of placemaking, such as self-built cabins and makeshift sea cans used for storage, equipment maintenance, or carving activities today (Heyes & Dowsley, 2018). Heyes & Dowsley (2018) note that “Inuit have been making, shaping and naming places on the land and the sea ever since their ancestors, the Thule people (Tunnit), migrated eastward from present-day Alaska over 2 000 years ago” (p.285). Placemaking, the act of imbuing land

and waters with both tangible and intangible meaning, is a long-standing tradition that the Inuit have upheld on the tundra and sea ice for generations. Although, Inuit no longer reside in igloos or travel between camps by dog teams, they continue to engage in new ways of living, knowing, and interacting with their environments, thereby shaping place (ibid, 286). Furthermore, archaeological records show that “Inuit material culture strongly suggest that they maintained practical and spiritual understandings of places and sites. Not only did these former Arctic residents make places, but they also seemed to have a sense of place that was distinct to their cultural beliefs” (ibid, p.286-287).

Sense of Place and Placelessness

Place concept describes the relationship someone has to a space, whereas the ‘sense of place’ expands on this concept to understand level of the attachment someone has to the space and the meaning it carries (Najafi, et. al, 2011, p. 1054). The concept of ‘sense of place’ refers to the emotional connections and meanings people assign to specific locations, influenced by their experiences, expectations, and interactions with the space (p.1054).

In fact, places are not only defined by their physical attributes but also by the messages and meanings perceived by individuals, making sense of place crucial for environmental quality and human well-being (ibid). In contemporary environments such as communities in Nunavut, rapid lifestyle changes, standardized community planning and introduction of technological advancements contribute to the phenomenon known as "placelessness," where locations lack distinctive identity and cultural recognition, resulting in environments that feel indistinguishable and unrecognizable (p.1057). Najafi, et. al (2011), says that placelessness are environment which do not have “any distinctive personality or sense of place (p.1057). In one study, the sense of place was defined as “a combination of relationship with place and social activities” (p. 1056). Therefore, the concept of ‘sense of place’ can be

used to gauge the extent to which individuals in the proposed Inuit Cultural Hub feel connected to the place and how often programmed social hunting and harvesting activities are performed in the space. This can serve as a measure of its success in reducing feelings of placelessness. Najafi, et. al (2011) identity stages of cultivating and acknowledging the extent to which a place has fostered of a sense of place, involving three components; belonging, attachment and commitment²⁴.

1. **Knowledge of Being Located:** Familiarity with a place's symbols without emotional connection.
2. **Belonging:** Emotional connection to the place, respecting its symbols.
3. **Attachment:** Strong emotional ties, with the place having significant meaning and identity.
4. **Identifying with Place Goals:** Integration with the place's goals, leading to deep attachment.
5. **Involvement:** Active participation in the place, investing time, resources, or talents.

Ultimately, the objective of the Inuit Cultural Hub is to cultivate a deep connection to place by reflecting the community's interests, values, and desired activities in the programming and design of the space. This approach encourages community members to care for, take pride in, and feel a sense of ownership over the space, making it truly their own.

²⁴ Najafi, M, Shariff, M, B. (2011). "The Concept of Place and Sense of Place in Architectural Studies." *World Academy of Science, Engineering and Technology*, vol. 80, 2011, pp. 1100–06.

Conclusion

To move forward, it is essential to understand the challenges and opportunities in the current building and design practices in Nunavut, to propose solutions that are contextually and culturally appropriate. The built environment plays a crucial role in supporting traditional hunting and harvesting practices. Reflecting on the literature, it is clear that Inuit Qaujimajatuqangit (IQ) and societal values shape not only these practices but also strengthen Inuit identity through the sharing of knowledge and cultural values, which in turn fosters strong communities. By centering an empathy-based approach rooted in IQ and employing placemaking to assess the effectiveness of fostering community and interaction, we can enhance the design of the Inuit Cultural Hub. While, centering placemaking and place identity aims to revive a renewed sense of connection to place essential for the Inuit way of life. The figure below illustrates a bottom-up approach to reshaping design processes and practices in Nunavut, guided by Inuit values, community engagement, and a desire to foster strong communities through collaboration and the preservation of Inuit places, language, values, and practices in the design proposal for the Inuit Cultural Hub.

Inuit Cultural Hub: Literature Review Considerations

Preserving material culture is a means of building strong communities and therefore, resilient architecture as communities utilize, care for and are connected to these spaces which become a 'place'. Moreover, the use of material culture in terms of hunting and harvesting strengthen one's identity by practicing an Inuit traditional way of life, confidence is built in the skill development and communal responsibility in providing for the family and extended community. Ultimately, the goal of preserving material culture as a foundational element in the design process underscores the values of the user and employs an empathy framework in understanding, reflecting, recognizing and respecting the user needs for the space.

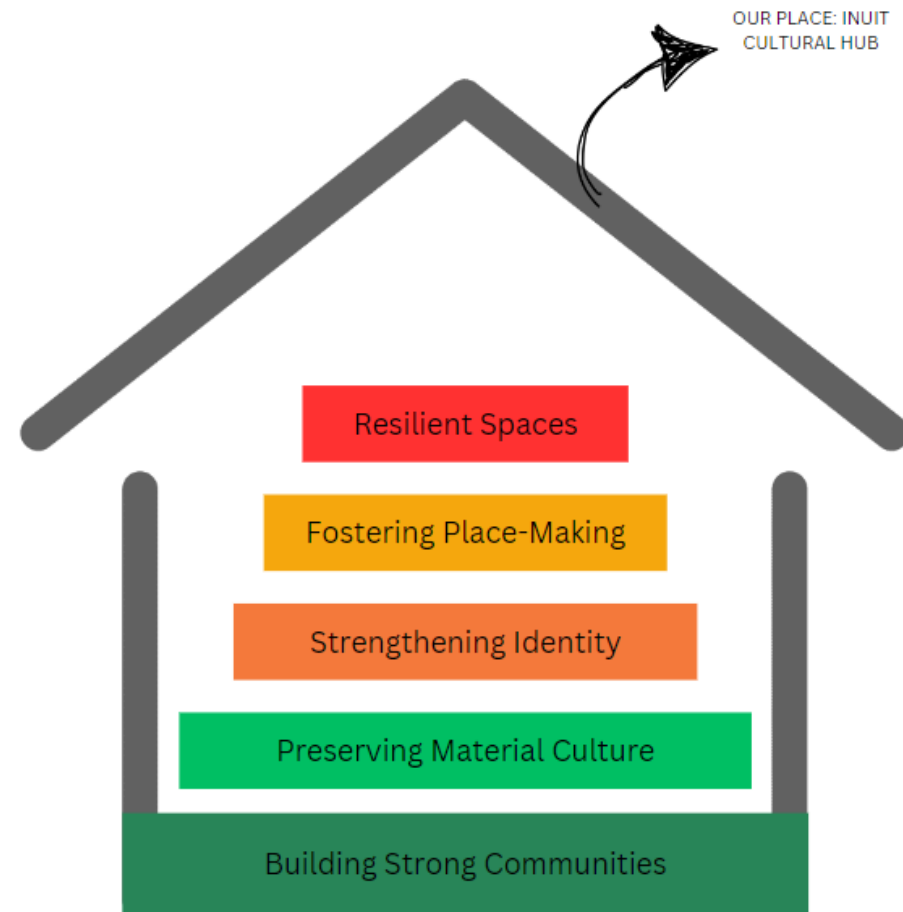


Figure 25: Inuit Cultural Hub Framework, Illustration by Author

CHAPTER 3 | PRECEDENT ANALYSIS

Arctic Food Network: Regional Food-Gathering Cabins, Baffin Island Region, Nunavut

Nunavut Inuit Heritage Center, Iqaluit Nunavut

Arviat Community Freezer Project, Arviat, Nunavut

Piqqusilirivvik Inuit Cultural Learning Center, Clyde River, Nunavut

The following precedents have been chosen for their relevant design applications to the Inuit cultural hub typology, specifically focusing on the use of **empathy design strategies** and the integration of Inuit **values** and **material culture**. These examples highlight spaces that nurture Inuit **identity** and foster a connection to **place** throughout the design process, iteration, and programming.

This chapter will examine the tools and techniques used in the design projects of the Arctic Food Network, Arviat Community Freezer, Piqqusilirivvik Inuit Cultural Centre, and Nunavut Heritage Centre. The programming, design, and spatial strategies will be assessed, as well as the use of landscape and surrounding areas, contribute to creating culturally and contextually aware spaces. These insights will be applied to the upcoming programming and design concept for ᐅᐅᐅᐅᐅ Our Place: Inuit Cultural Hub.

Highlights

Contextual and Cultural Considerations

Environment and Landscape Integration into Design

Empathy Design Application (Research- Design Priority Cards)

Placemaking Strategies

1. Arctic Food Network



Figure 26:Lateral Office. (2011). Arctic Food Network Project

Type: Regional Food-Gathering Cabins, 2011-12

Design Firm: Lateral Office

Client: Gold Prize, Holcim Awards (project not realized)

Location: Baffin Island Region, Nunavut

“

We are an adaptable people. There is no doubt about that. We've had to be. That's how we have always traveled season to season looking in pursuit of animals. We've weathered this storm of modernization fairly well - going from dog teams to snowmobiles, and flying jumbo jets and going from igloo huts to permanent homes, and of course, going from our environment - which is our supermarket - to now having supermarket-like stores in communities - all within a few decades.

This has not been without consequences. But through it all, we have always had our land. Our very predictable environment and climate and the wisdom of our hunters and our elders that they have gained through the millennia - and that always helped us to adapt to the situation. Because the hunting culture is not well understood - it is not only about the killing of animals, or the pursuit of animals. In fact, the real process of the hunt is extremely powerful. Eating and hunting personifies what it means for us to be Inuit. These skills and traditions are passed down generation to generation”, excerpt from Lateral Office Site.²⁵

Sheila Watt-Cloutier,

Former Chair of the Inuit Circumpolar Conference

²⁵ Lateral Office. (2012). Arctic Food Network Project. <https://lateraloffice.com/ARCTIC-FOOD-NETWORK-2011-12>

Project Overview: This testimony from Sheila Watt-Cloutier, Inuk activist and former Chair of the Inuit Circumpolar Conference underscores the basis for the Arctic Food Network project, an innovative model for food preservation, gathering and sharing and a call to return to hunting and harvesting practices. This project responds to the rapid sedentarization of Inuit into fixed communities and subsequent reliance on southern grocery store models contributing to the increased rates of food insecurity. As Qikiqtani Inuit Organization states, “colonization has disconnected us from harvesting, the very cultural practice that reinvigorates our sense of identity, feeds our communities and stimulates our local economy (QIA, 2019).”

The Lateral Office based in Toronto specializes in building and design in Nunavut and successfully completed several projects across the territory, rooted in an empathy design approach by creating spaces reflective of Inuit values and practices, and heavily involving community engagement. In this project, the Lateral Office designed food-gathering cabins to address Nunavut's growing youth population and food insecurity, aiming to create a sustainable, exportable economy for the North. The project focuses on integrating environmental and traditional factors to improve food security, sharing, and intercommunity trade. This Arctic Food Network project is of particular interest because of the contextual factors it considers in its design, that is, growing youth population, threatened cultural practices and food culture, and analysis and integration of existing hunting trails and pathways to create a logical ‘food highway’ based on traditional and contextual Inuit knowledge. In addition to the interpretative methods it uses with the information gathered, the project utilizes research cards to distill significant information gathered from the community, research, landscape and northern ecology.

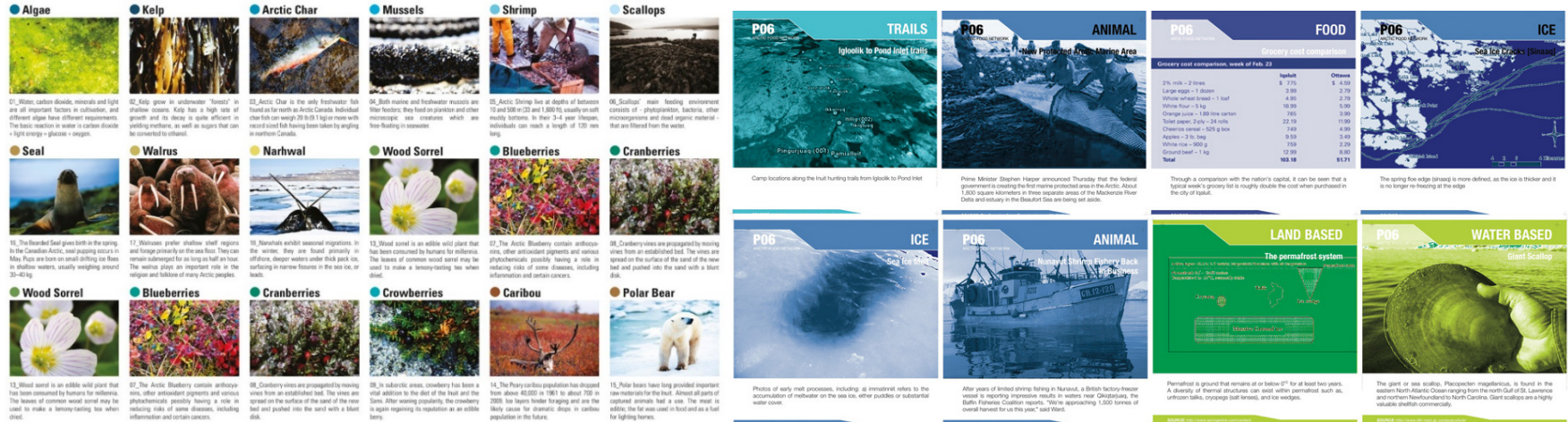


Figure 27:Arctic Food Network Project. Hunting and Harvesting Types. (2011). <https://lateraloffice.com/ARCTIC-FOOD-NETWORK-2011-12>

Figure 28: Arctic Food Network Project. Ecologies Study. (2011). <https://lateraloffice.com/ARCTIC-FOOD-NETWORK-2011-12>

The Lateral Office created a series of research cards that influenced the design and location of the AFN hubs (See figure above). They analyzed

the following that made up the 8 research cards, with 3 of particular interest:

- o Existing camp location trails between communities of interest in the region (Igloolik to Pond Inlet)
- o Restricted Areas (Marine Mammal Protected Area)
- o Food Cost Comparative analysis (Food Insecurity in the Region)
- o Sinaaq or Floe Edge (Seasonal changes in the floe

edge)

- o Sea Ice Melt Analysis
- o Fisheries Industry Profitability and Sustainability Assessment
- o Permafrost System Study

Mapping Out Hunting and Harvesting Patterns

A critical aspect of this precedent is the thorough research into the specific Arctic ecologies that influence seasonal and annual hunting and harvesting practices in Nunavut. The figure above illustrates each species and its location, while the figure on the right presents Lateral Office's analysis of hunting and harvesting trends throughout the year. This information is invaluable for programming the space, as it highlights the need for adaptable areas that align with changing hunting and harvesting patterns. It also reflects respectful relationship with the land, seasons, and migration patterns, and how these factors inform Inuit cultural hunting and harvesting practices.

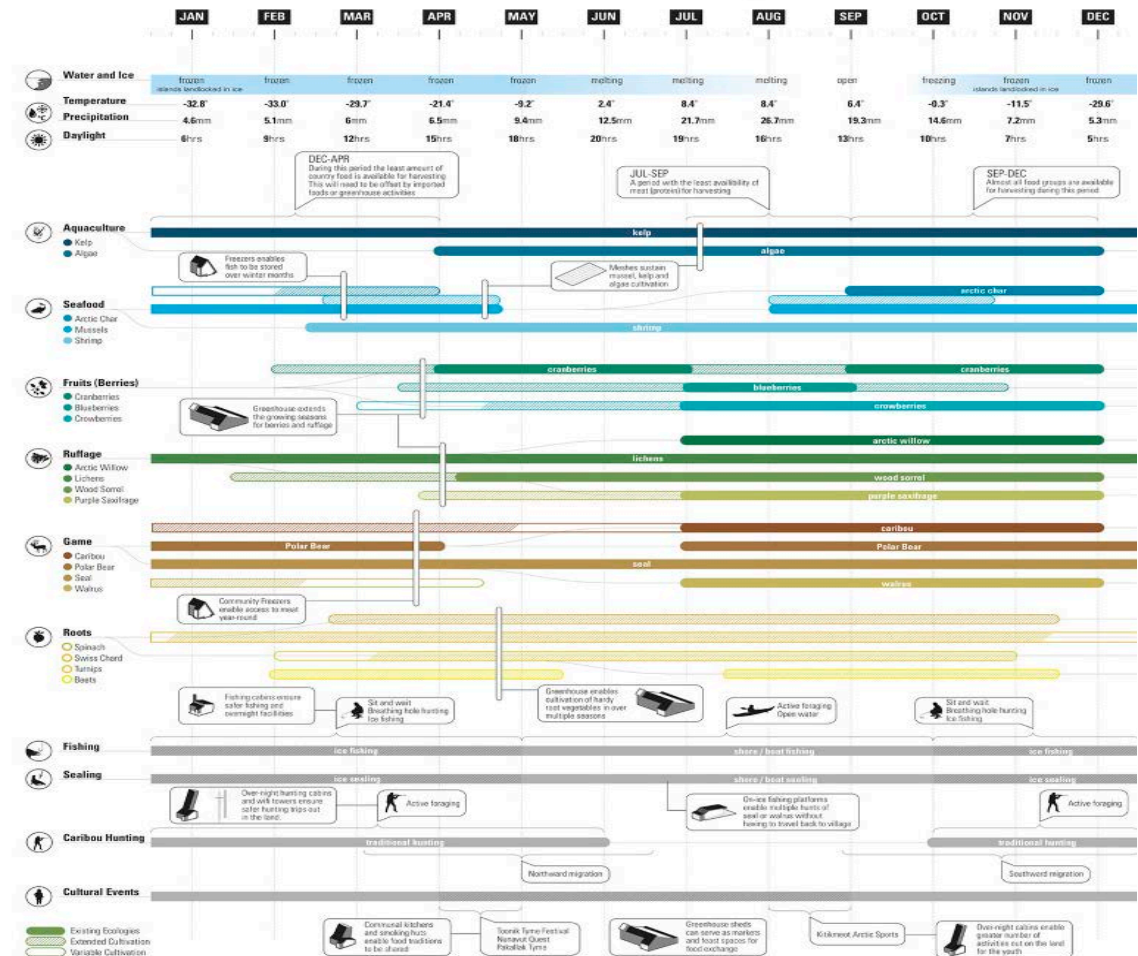


Figure 29:Lateral Office. (2011). Arctic Food Network Project

Additionally, the project examined transportation methods throughout the year for various harvesting activities. This analysis is crucial for understanding spatial needs for storage and processing, and for connecting with seasonal behaviors related to food sharing, processing, and preservation.



Figure 30:Lateral Office. (2011). Arctic Food Network Project

There is a network of what the Lateral Office refers to as sheds, meshes, and poles, which refer to a set of uniquely integrated elements merging architecture, landscape, and technology (Lateral Office, 2012). These integrated elements assist in negotiating the harsh dark winters and treeless landscape of the Canadian north. The AFN project is a regional agriculture, seasonal camps, data transmission centers, and ecological management stations inclusively. In addition to providing a secure food and travel network, AFN seeks to merge new technologies with traditional practices to support an emerging and possible food economy in Nunavut.

Use of Underground Freezers and Preservation Centered Programming:

- 1 Smoke stack
- 2 Drying racks
- 3 Fire pit for smoking meat
- 4 Kitchen area
- 5 Food prep. area
- 6 Snowmobile parking between poles
- 7 Link to underground freezer
- 8 Aquatic farming mesh
- 9 Overnight stay bunk beds
- 10 Storage and food preparation
- 11 Thermal piles for underground freezer
- 12 Lighting poles

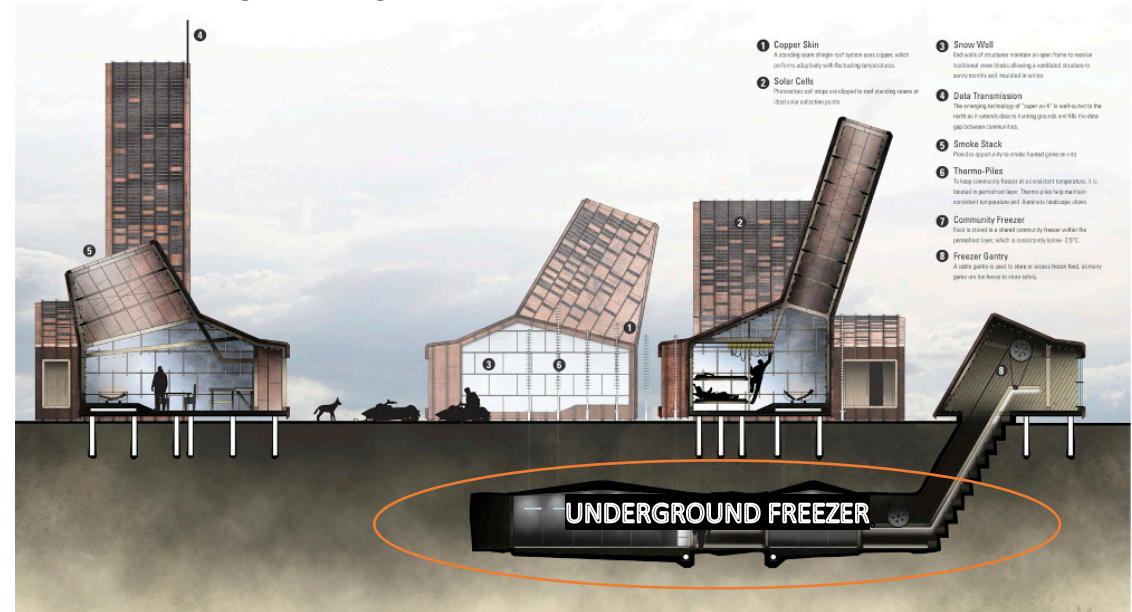


Figure 31: Lateral Office, Toronto. (2012). Hub Section showing cabins, and underground freezers



Figure 32:Lateral Office. (2011). Arctic Food Network Project

Each of the hubs were strategically placed along the trails in relation to existing food sources, and proximity to communities. The hubs are spaced at intervals that can be reasonably traveled by snowmobile. There are three hub types: Type A, located in towns; Type B located 30-60km from town, and Type C, located out in the land, between communities. Each type is centered on the Inuit way of life through emphasizing country food and making a unique place for food, communication, and mobility (Lateral Office, 2012).

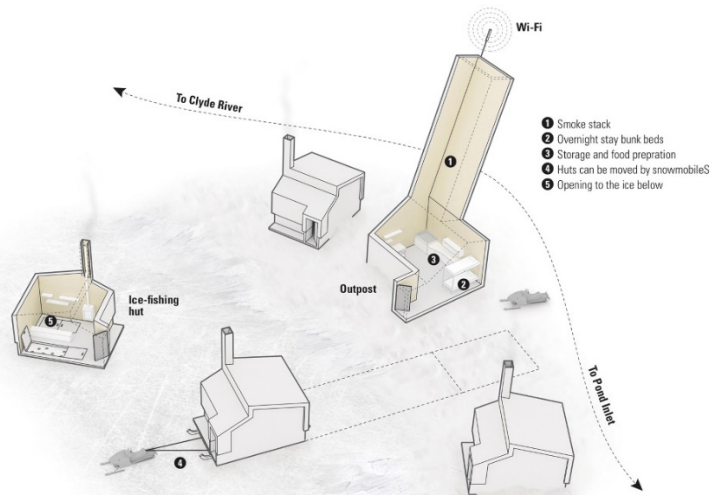


Figure 33:Lateral Office. (2011). Arctic Food Network Project



Figure 34:Lateral Office. (2011). Arctic Food Network Project

Design Application: Assembly

The cabin frames use ready-made as well as prefabricated joinery. The frames are tied together using a method similar to Qamutik construction (traditional Inuit sled) and Umiak construction (large Inuit canoe). “The Arctic Food Network posits, as a departing point, the critical role that architecture and infrastructure will play shaping northern identity – not simply in imagining new northern vernaculars that bridge traditional and contemporary practices, but more significantly, in imaging new roles and programs for social infrastructure – adapted to the unique geography and culture of the Arctic, says the Lateral Team (Lateral Office, 2012).”

Use of Material Culture in Building Expression (Qamutik or Sled)

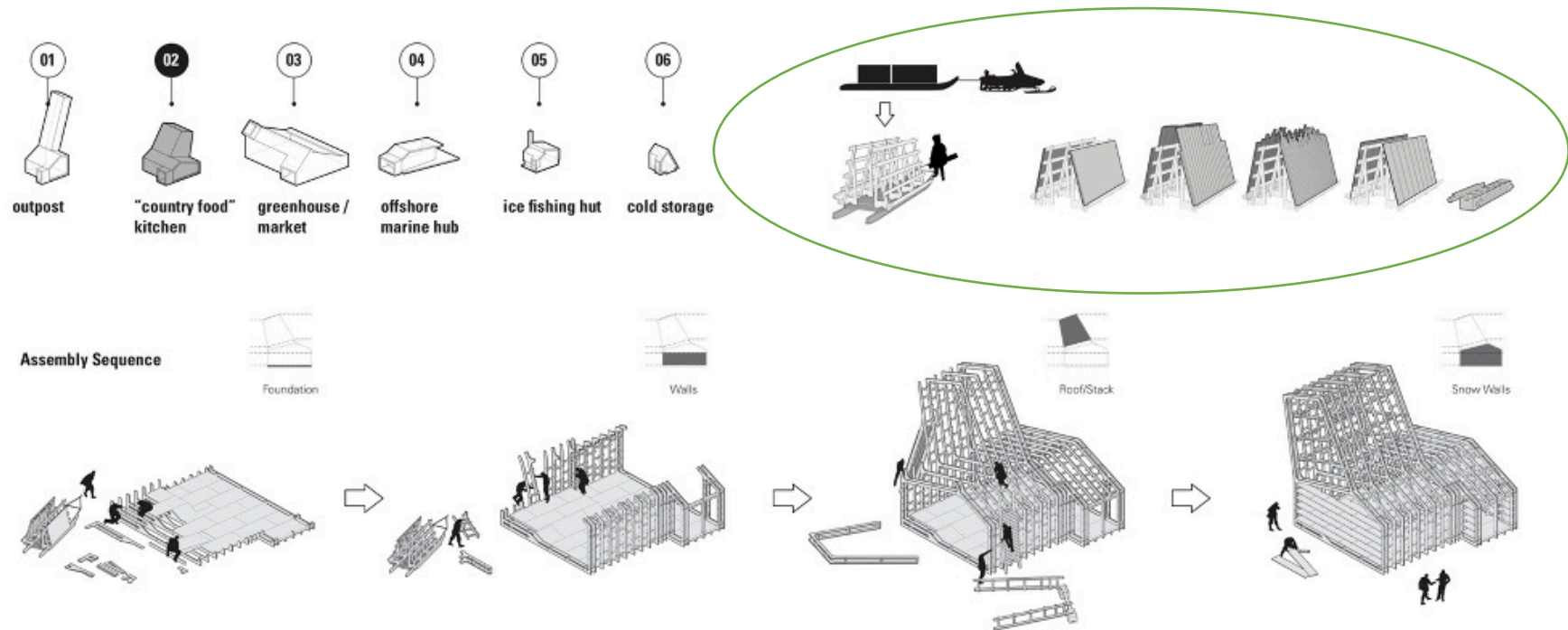


Figure 35:Lateral Office. (2011). Arctic Food Network Project

2. Nunavut Inuit Heritage Centre



Figure 36:Lateral Office. (2023). Inuit Heritage Center

Type: Inuit Heritage Centre, 2023

Design Firm: Lateral Office, Toronto ON

Client: Inuit Heritage Trust Competition

Location: Iqaluit, Nunavut

Building Overview:

The Nunavut Inuit Heritage Centre is a building designed to celebrate Inuit creativity and is a welcoming space for Nunavummiut and global visitors to learn about Inuit heritage. Designed with input from the Inuit Design Advisory Council, the centre aims to protect Inuit artifacts and connect present and future generations.

Design and Landscape Integration:

The building adapts to the site's natural features, including rocky outcrops. It features a single floor that connects two courtyards: a south-facing winter courtyard with spaces for a daycare, café, and winter activities, and a north-facing summer courtyard with an open areas for construction and crafts.

Consultation and Design Process:

An advisory committee was selected to gather community input, leading to 'design priority' cards that shaped the project. Five key meetings focused on vision, site response, organization, Inuit Qaujimajatuqangit, and material expression. Three main design priorities emerged:

- The building will be welcoming and feel like home.
- It will protect and celebrate traditions and artifacts.
- It will create diverse connections between inside and outside, reflecting all seasons.

The design process uses collaborative sketches, reference images, and annotated plans, resulting in a vision co-developed with input from several community advisors. The series of "design priority" cards helped the design team and advisory committee organize a hierarchy of ideas and concepts that should be integrated into the organization of the design vision. This is an example of empathy design that can be utilized in the design of the Inuit Cultural Hub.



Figure 37: Lateral Office. (2023). Inuit Heritage Center

Building Vision and Organization

The building is organized into three primary zones: (a) collections and storage; (b) social and generational area with offices above; and (c) galleries, theatre, and lab. These areas are linked by a sequence of visible storage display units that flow throughout the main circulation space. The visible storage weaves through the main space and envelopes key program areas such as conservation lab, theatre, qarmaq, IQ lab, children's gallery, clean workshop, and culminates in a stunning unique space that is reserved for a qulliq and ceremony.

The vision for the building enclosure and materials is inspired by the layers of material found in traditional Inuit clothing. Each material layer performs to suit its environmental need, and each material also carries with it the ideas of protection, home, and connecting inside and outside. Zinc panels as our outermost protective layer, wood as the middle layer, which can be found in exterior walls of the qulliq, daycare, cafe, and elders lodge and insulating glass as our innermost layer. This can be seen in the lobby and through the circulation space leading to the qulliq. The design included four key aspects (See Figure 10); highlighting moments of home distributed through the building; overlapping journeys that each individual can curate; spatial moments focused on sharing oral and visual stories; and integrating aspects of Inuit material culture into the building expression (Lateral Office, 2012).

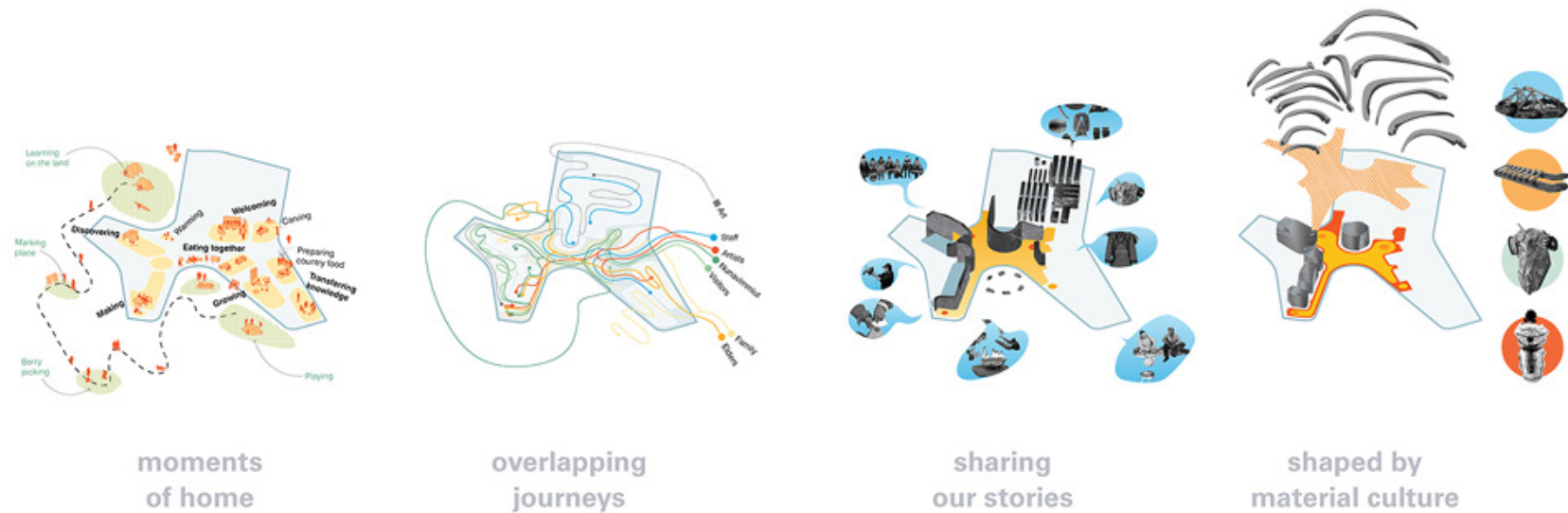


Figure 38:Lateral Office. (2023). Inuit Heritage Center, Design Priority Cards.

Highlights

Design Application Using Design Priority Cards

Spatial Organization + Programming based on Cultural Activities

Incorporating Intangible Qualities Gleaned from Consultations

Consideration of key moments of interaction, factoring in the time of year, activity and individual needs into the way in which these spaces will be layered and interactive with the experience of the space.

3. Piqqusilirivvik Cultural Centre



Figure 39: Piqqusilirivvik Cultural Centre

Type: Piqqusilirivvik Cultural Centre

Design Firm: Stantec, FSC Architects and Engineers

Client: Nunavut Arctic College, Government of Nunavut

Location: Clyde River, Nunavut

“Piqqusilirivvik is dedicated to **enabling the transfer of traditional culture and knowledge**, taught in the Inuit language and based on the guiding principles of Inuit Qaujimajatuqangit.

The role of Piqqusilirivvik within Nunavut is envisioned as a place of excellence that **enriches and strengthens Inuit culture**²⁶. “

–Nunavut Arctic College

Piqqusilirivvik is an **Inuit Cultural Learning Facility** in **Clyde River** with satellite programming in **Baker Lake** and **Igloolik**. It is dedicated to the transfer of traditional culture and knowledge, taught in the Inuit language and based on the guiding principles of *Inuit Qaujimajatuqangit*. Piqqusilirivvik

²⁶ Nunavut Arctic College. (n.d). Piqqusilirivvik Cultural Learning Centre. <https://www.arcticcollege.com/piqqusilirivvik>

is unique. The facility stands out for its architectural innovation, spatial empathy, and holistic educational approach. Its success stems from extensive community involvement throughout the design, planning, and operational phases. The centre integrates Indigenous knowledge into its framework, challenging conventional educational standards. Central to its mission are the values of lifelong learning and harmony with the land, which are deeply embedded in Inuit culture. The centre is designed as a 'home' rather than an institution, with integrated residences for students, teachers, and elders. It features a flexible central gathering space and specialized areas for group learning, including communal 'niches' for diverse teaching methods.

During the design and building of this centre, consultations with Inuit elders emphasized the importance of using the land as a learning environment and moving beyond the constraints of traditional built spaces. The activities were programmed to align with seasonal patterns, promoting collaborative living and continuous learning throughout the day. The environment of the space is open, warm and welcoming with ample gathering spaces, a central component to Inuit societal value of Tunnganarniq. The space should provide many opportunities to talk and listen, not just in formal classroom situations, but throughout the building(s) and throughout the day and evenings.

Programming and activities in the space :

- o Traditional Games
- o Making Drums
- o Drum dancing
- o Throat singing
- o Cabin building
- o Individual projects



Figure 40: Piqqusilirivvik Cultural Centre

This precedent informs key programmatic spaces within the Inuit cultural hub, including spaces designed for storytelling and knowledge transfer. This also shows ways of creating communal zones based on the cultural practices; food preparation areas versus traditional games and drum dancing public areas.

Key Space for ᓱᓄᓴᓴᓴᓴᓴᓴ Our Place: Inuit Cultural Hub

1. Transfer of Traditional Knowledge:
Workshops (3,6,4,9)
2. Preparation and Preservation:
Skin Preparation Area (9)
3. Gathering Space (2, 10)

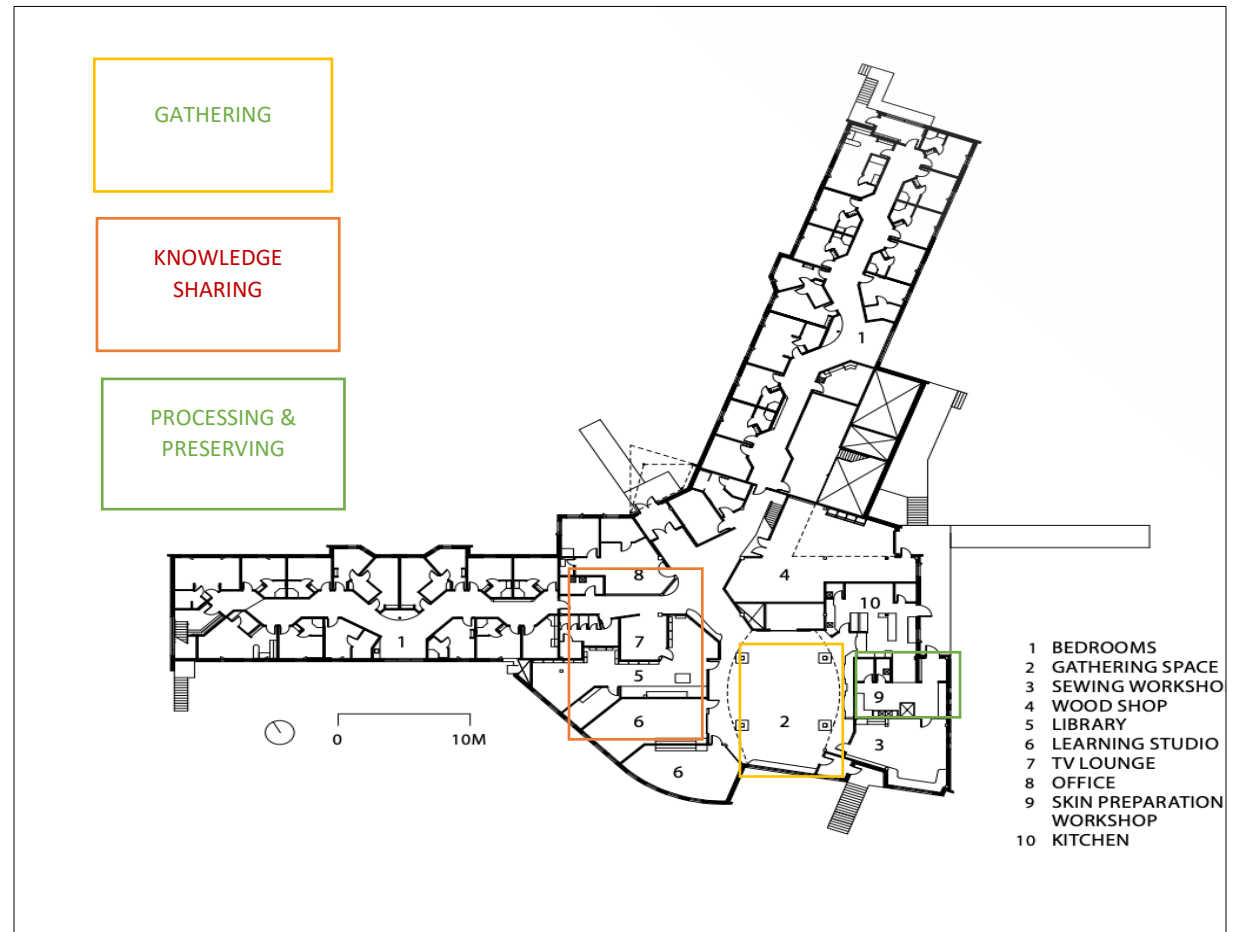


Figure 41: Piqqusilirivvik Cultural Centre

4. Arviat Community Freezer



Figure 42: Arviat Community Freezer, Stantec Architects

Type: Community Freezer

Design Firm: Stantec Architects

Client: Economic Development and Transportation, Government of Nunavut

Location: Arviat, Nunavut

Program Background:

The Country Food Distribution Program, funded by Economic Development and Transportation, supports the development of community freezer projects in various communities across Nunavut. Community freezers are an essential piece of infrastructure in the community supporting the traditional economy and access to country foods for Nunavummiut. This community freezer project is unique due to its use of traditional preservation methods using the permafrost to maintain natural cold storage of country food combined with a typical sea can cold storage model. The use of this underground freezer integrates Inuit traditional knowledge as well as providing a solution to high operating costs of typical community freezer in Nunavut.

Proposed Design Option:

- **Structure:** The design features four horizontal sea cans placed side-by-side and one vertical sea can. The horizontal seacans will house the office and freezer components, while the vertical sea can will serve as the entry at the lower level and house mechanical components at the upper level.
- **Functionality:** The design offers clear spatial separation, aiding in freezer layout understanding and visibility within the community. The office will be minimally heated and equipped with a desk and filing cabinet.

Construction Features:

- **Semi-Buried Freezer:** The design includes a semi-buried setup with seacans protected by a gravel/dirt hill. Containers will be joined with a torch-on roof membrane for waterproofing.
- **Insulation:** A 100mm layer of rigid insulation will be applied on top of the seacan roofs beneath the gravel/dirt layer, providing protection and maintaining interior temperatures.

Benefits:

- **Low Maintenance:** The gravel/dirt layer offers protection from the elements and insulation, reducing maintenance needs.
- **Temperature Control:** The insulation layer helps maintain consistent interior freezer temperatures, lowering operating costs in summer and reducing refrigeration needs in winter.

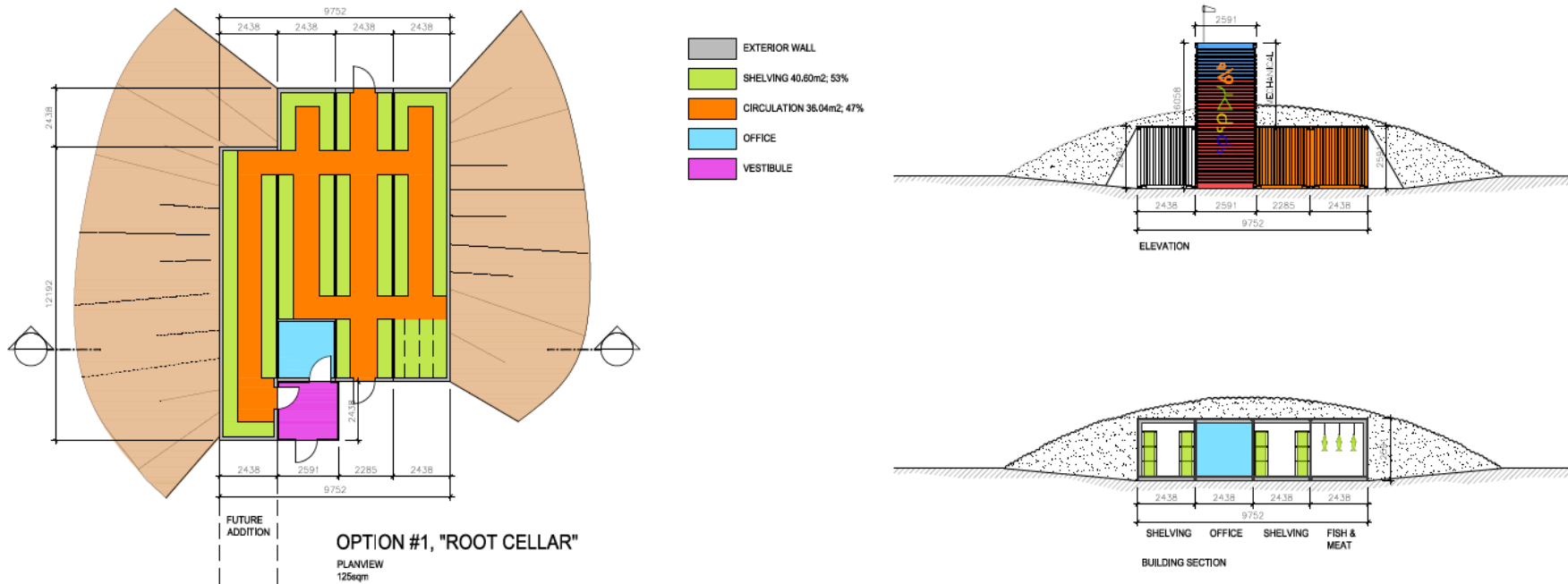


Figure 43: Arviat Community Freezer, Building Plans. Stantec Architects

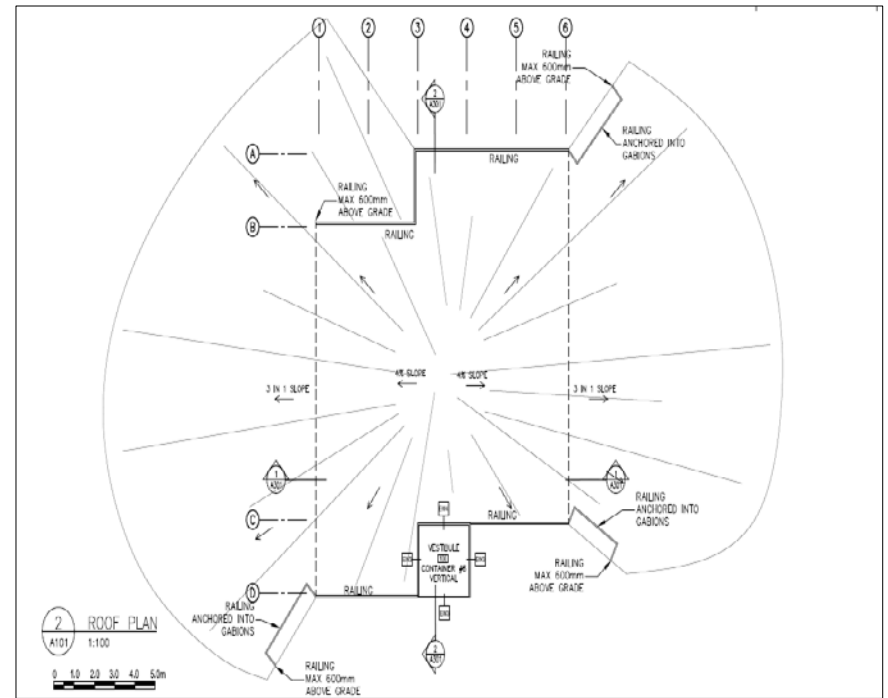


Figure 44: Floor Plan, Arviat Community Freezer. Deep Freezer Sizing Requirements, Stantec Architects

Chapter Summary

The precedent analysis of the four relevant cultural spaces, community freezer and heritage centre has highlighted several design strategies, programming, spatial layouts and unique qualities that contribute to a culturally and contextually driven space that will be used in the development and design of Our Place, Cultural Hub.

PRECEDENT	DESIGN HIGHLIGHTS + PROGRAMME APPLICATION	DESIGN APPLICATION FROM FINDINGS
Arctic Food Network	- o Harmonious relationship with hunting and harvesting trails and location of the site - o Assess hunting and harvesting patterns to locate cabins, identify seasonality and use - o Modes of transportation affected location and distance to community - o Use of material culture to delineate space and inspire building expression - o Cabins integrated with landscape, site and climate (e.g. ice fishing openings in cabin, underground 'natural' freezer)	- o Use and examination of 'place' - o Contextual and cultural <i>placemaking</i> - o Material culture used in the design and spatial organization
Nunavut Inuit Heritage Centre	- o Use of 'design priority cards' to ensure values and hierarchy of needs are being met for space development - o Use of material culture to design exterior shell of the building using pattern of traditional Amauti	- o Empathy application using design priority cards - o Material Culture- Amauti inspired building expressions and form
Piqqusilirivvik	- o Programming spaces dedicated to preservation and processing of country foods - o Workshops and educative space for community to practice and hone traditional skills	- o Programming- spaces for preservation and processing of country food - o Spatial layout and considerations informed by traditional activities
Arviat Community Freezer	- o Vertical shipping container as wayfinding element in community, similar to Inukshuk - o Use of underground natural cold storage, reduced operating costs for facility	- o Inukshuk, inspired wayfinding tool integrated into building- fosters connection to place - o Cold storage, using permafrost- traditional Inuit knowledge integrated into design solution

Table 2: Precedent Analysis Highlights

CHAPTER 4 | PROGRAMMING

Project Overview

Inuit Societal Values; Program Application

User Analysis

Spatial Requirements

Project Overview

ᐃᓴᓴᓴᓴᓴ Our Place is designed for the community of Rankin Inlet as a Hub for knowledge exchange, gathering and performing Inuit hunting and harvesting practices. This space is dedicated to the storage, preservation, education, processing, sale and sharing of country food. A hub that supports the practice and sharing of Inuit traditional knowledge of hunting and harvesting practices with the aim of strengthening Inuit Culture, guided by the principles of Inuit Qaujimajatuqangit. The three key aspects derived from the literature review and precedent analysis that will inform the design and programming of the Inuit Cultural Hub include IQ, storytelling, fostering a strong sense of identity through skill-building, and creating a sense of place through expressions of material culture.

PROJECT TYPE	
- o Processing Facility - o Cultural Learning Centre - o Community Gathering Space - o Country Food Market	SITE LOCATION - o Undeveloped Industrial Zone - o Rankin Inlet, Nunavut
USERS - o Rankin Inlet Community Members - o Other Community Members Visiting (within Nunavut)- - o Intercommunity Cultural Knowledge Exchange - o Visitors and Tourists	SQUARE FOOTAGE: o ~ 10,000- 15,000 sq. ft., 3 levels (2 above ground, one below for cold storage) Project Objective

The Inuit Cultural Hub should have the ability to grow with the community and be designed for further cultural and building innovation adapted in the spatial layout and programming. As hunting and harvesting practices are centered on seasonal patterns, migration, climate, hunting regulation, it is essential that the programming of this space is adaptable to various uses and requirements at different times of the year. Although, the essence of all the Inuit Societal Values guides the design, research and development of this project, four values have been identified as particularly relevant to this building typology and will guide the programming and design of this space (See Figure 7). These values will inform the programming, circulation and zoning of the Inuit Cultural Hub into areas for; **food sharing, gathering, learning/knowledge transfer, preservation, processing and storage of country food.**

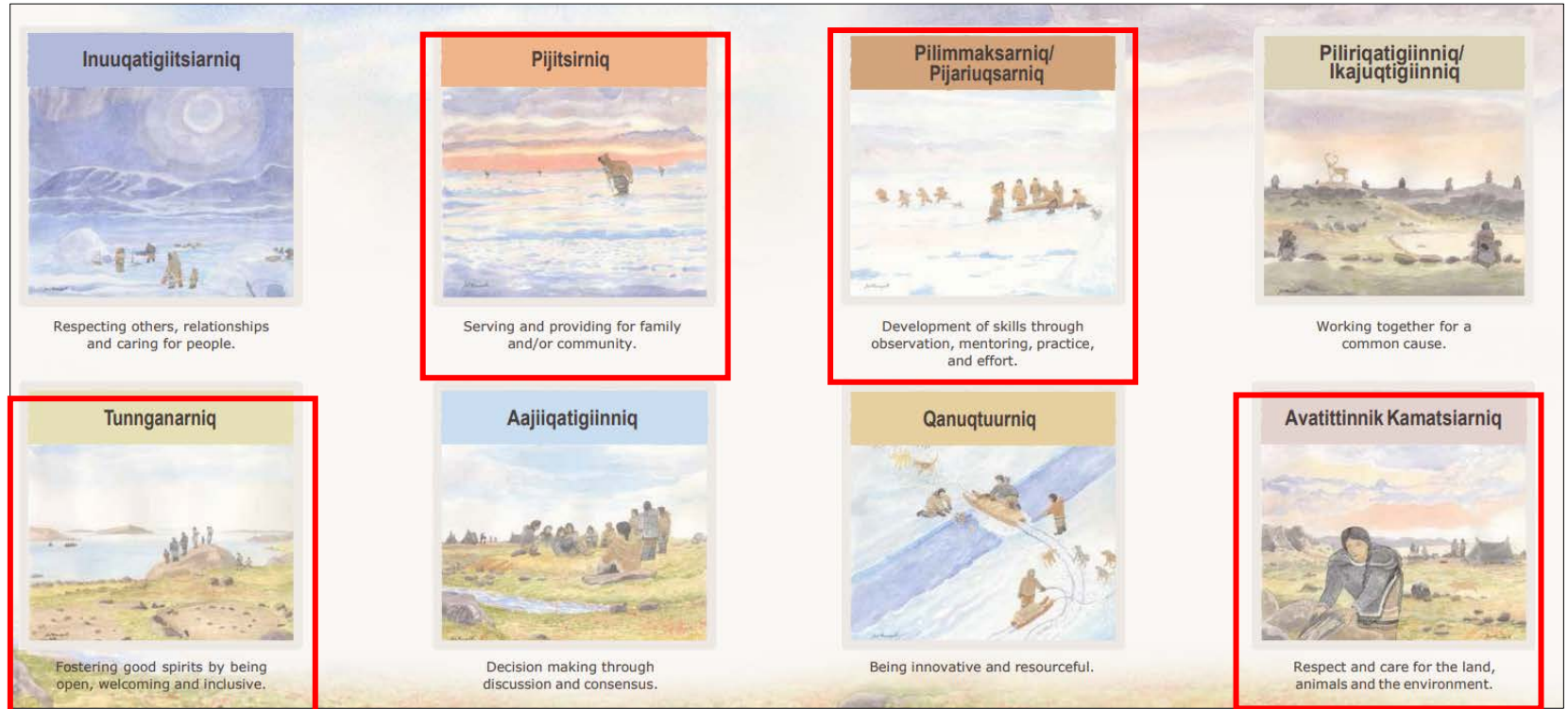


Figure 45: Government of Nunavut, Culture and Heritage Department. Inuit Societal Values Brochure. https://www.gov.nu.ca/sites/default/files/publications/2022-01/ig_brochure_draft_1.pdf

1. **FOOD SHARING: PIJITSIRNIQ** (serving and providing for family, community, or both)

This value is about serving and providing for family and community. It is about leading through doing for other people and serving the greater good.

Design application: The space will include zones for communal food-sharing practices, as well as areas for processing and storing country food.

2. **GATHERING: TUNNGANARNIQ** emphasizes the role being open, welcoming and inclusive plays in fostering positive relationships. The space must be dedicated to taking the time for people, creating an environment where all are comfortable.

Design application: The design will reflect Inuit gathering traditions, offering spaces where people can sit on the floor or surfaces adaptable for multiple uses, such as preparing, skinning or sharing seal meat. The Atrium will be the central gathering space for the community.

3. **PRESERVATION, PROCESSING AND STORAGE: AVATITTINNIK KAMATSIARNIQ** (respect and care for the land, animals, and the environment)

Avatittinnik is about respect and care for the land, animals and the environment. Inuit enjoy a long-standing relationship with the land.

Design application: Our Place, cultural hub will recognize the benefits of this relationship and create spaces that invite a moment of pause and reflection in the respect for animals as a processing facility. This will be evident through the intentional placement of thresholds throughout the space.

4. **LEARNING/KNOWLEDGE TRANSFER: PILIMMAKSARNIQ OR PIJARIUQSARNIQ** (development of skills through practice, effort and action).

Pilimmaksarniq is about learning and mastering new skills through observation, mentoring, practice and effort.²⁷

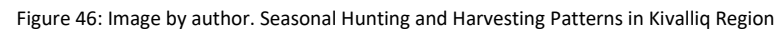
²⁷ Tunngasugit. Inuit Qaujimajatuqangit / Traditional Inuit Values. <https://www.tunngasugit.ca/about/inuit-qaujimajatuqangit-traditional-inuit-values/>

Design Application: The spatial layout will foster storytelling through adjacencies and delineation of knowledge-sharing spaces. It will be embedded in the material culture displayed within the space, such as traditional hunting parkas, which are intended to inspire cultural practices and dialogue.

Finally, all spaces will consist of pathways leading to the central gathering, sharing, and communal zone (atrium space). This core embodies IQ (Inuit Qaujimajatuqangit), serving as a place where food is shared, knowledge is passed on, community is fostered and a sense of belonging strengthens its users.

Project Function

To determine the function of these spaces, the key findings from the research highlight the hunting and harvesting practices in the region which will inform design, spatial planning and layout of the Inuit Cultural Hub. The diagram (right) illustrates the common animals harvested at different times of the year. The spaces will be designed with consideration for these seasonal patterns, including the processing and preparation areas required, the exchange of information and knowledge, distinctions between public and private activities, and the division between outdoor and indoor practices.



Spatial Requirements Based on Hunting and Harvesting Indoor/Outdoor Activities

The combination of IQ principles and analyzing hunting and harvesting practices in the region has resulted in the following zoning of the Cultural Hub. The figure (right) depicts activities that are naturally suited for the land. Whereas, the hub should provide areas that complement these practices and address gaps in public spaces available for processing and preserving country foods. Based on research and observed activities in Nunavut, the hub will follow a sequence reflective of harvesting traditions, creating spaces that are beneficial to communities. The layout will begin with a threshold, a space for reflection and preparation before processing the catch. This stage honors the existing practice of allowing the animal to rest before butchering, a practice that hunters believe improves meat quality. As the animal cools, its nervous system relaxes, resulting in more tender meat and allowing lactic acid levels to decrease before skinning begins. The threshold will be followed by various cleaning zones demarcated by type of harvesting product to avoid cross contamination. This will then lead the user in preparation zones, followed by preservation, storage, sharing, learning and gathering areas (legend provided on Page 136).

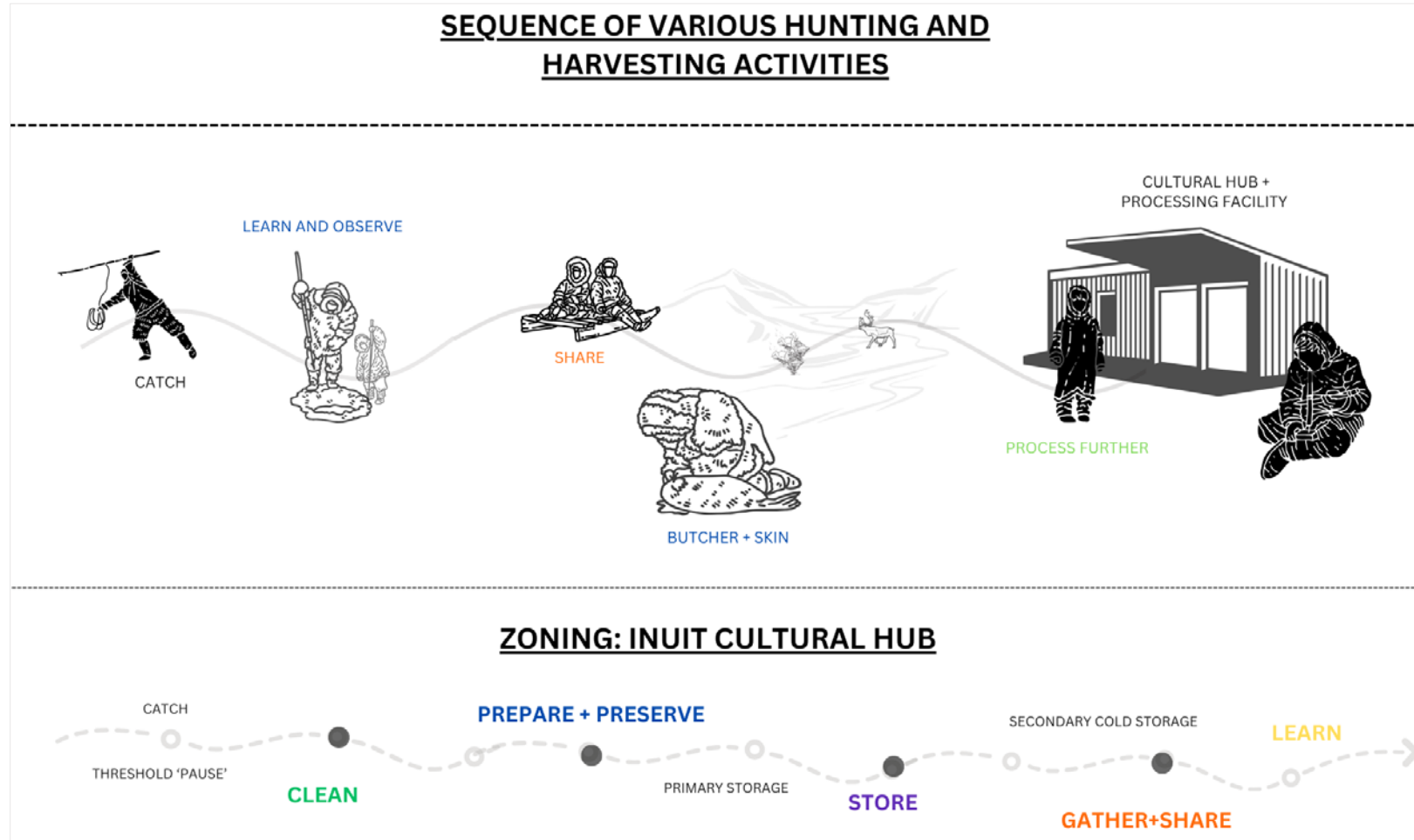


Figure 47: Sequence of Hunting and Harvesting Activities, Image by Author

Programming: Bubble Diagram

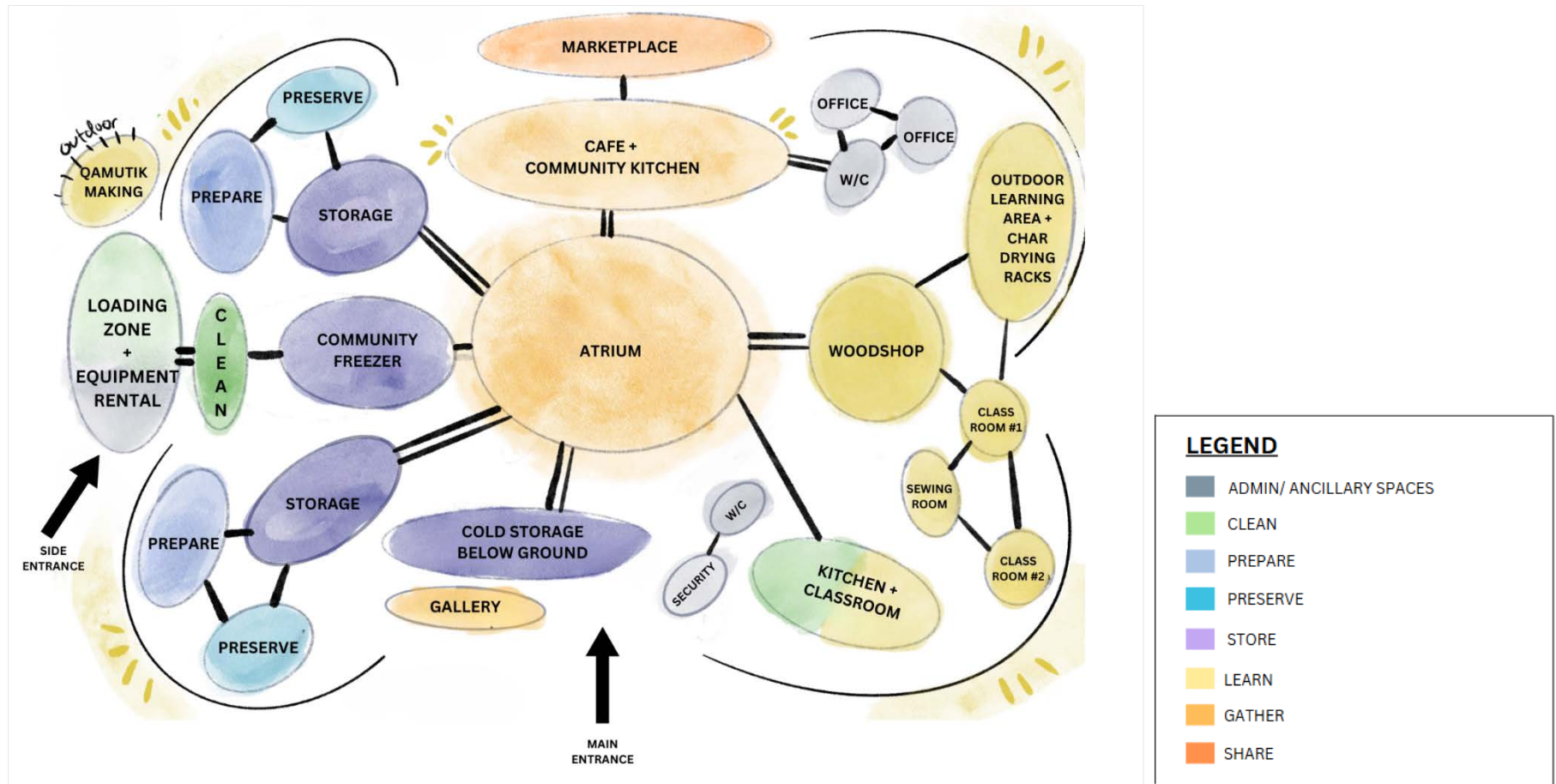


Figure 48: Programming Bubble Diagram, Image by Author

Zoning & Activities (*land* and sea access)

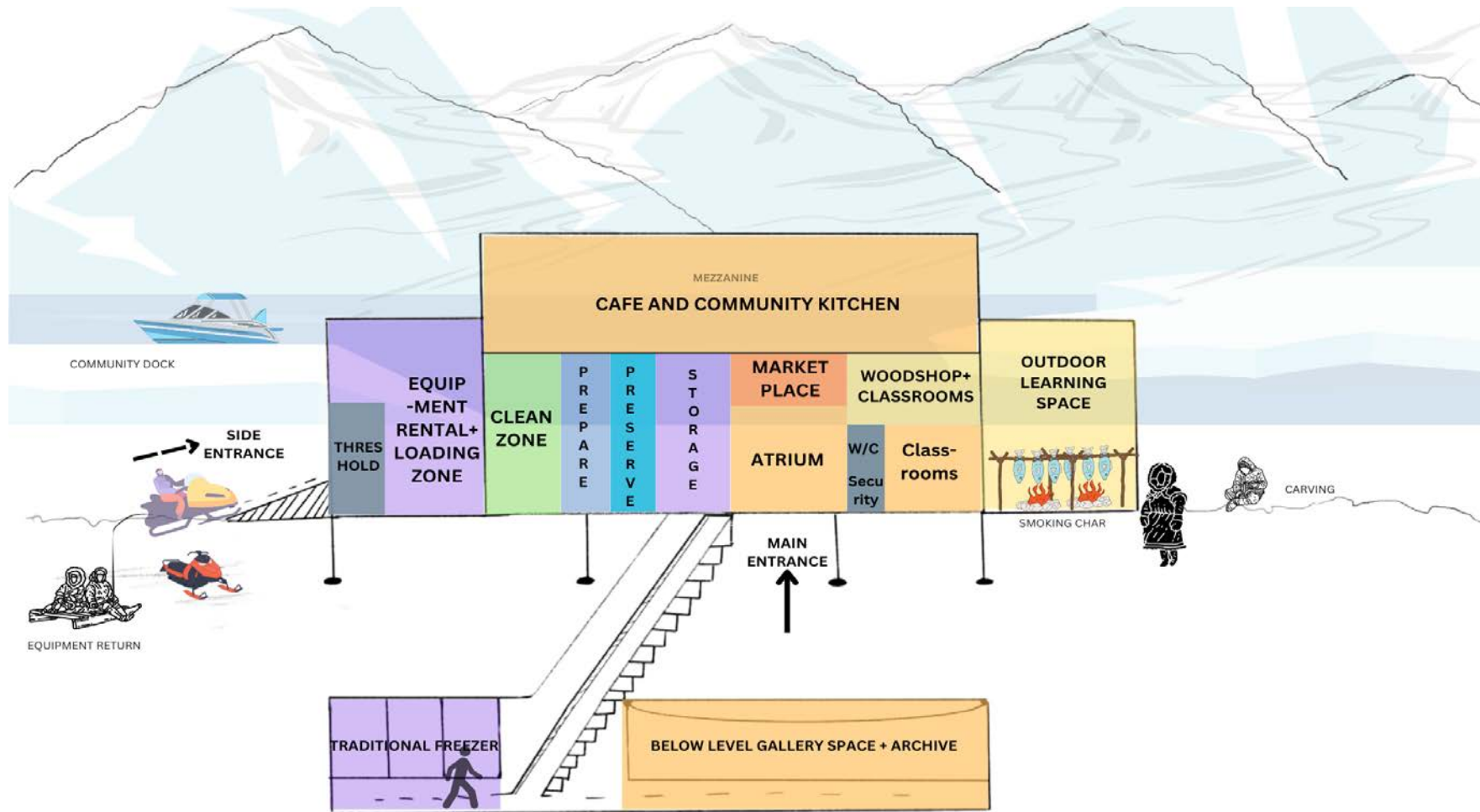


Figure 49: Zoning and Programming Diagram, Image by Author

Zoning Legend



THRESHOLD

After an animal is caught, there is typically a rest period to allow its body to cool, showing respect and appreciation for the animal. This zone will be represented in the design as a *threshold space*—a moment to pause before beginning to clean, process, and consume. This space also allows users to select the appropriate pathway leading to the designated processing area for their catch.



CLEAN

This zone serves as a dedicated cleaning area, intended to meet specific spatial, furniture and storage requirements, as well as safety measures to prevent cross-contamination. It allows for the preparation of animals for further processing, with users selecting the appropriate cleaning zone based on the type of animal—Zone 1 for marine animals and Zone 2 for terrestrial animals.



PREPARE

This zone is dedicated to preparing harvested products, with tasks such as butchering, grinding, gutting, and skinning to break down the catch into manageable pieces for preservation. Equipment such as table saws, grinders and various knife and ulu's will be required in this zone.



PRESERVE

This zone is dedicated to preserving the catch through various methods, including vacuum-packing for winter storage. The user may also choose to further preserve the harvested item by dehydrating, pickling, canning or jellifying the product.



STORE

This zone includes several storage areas: a main public community freezer with lockers for storing country food, an underground freezer for long-term storage or of delicate products such as gallery items, and a cold storage area in the classroom for teaching preservation methods like jamming, pickling, and jellifying.



LEARN

This zone is dedicated to sharing preservation techniques, skill building, qamutik making, skinning, and more. It includes both indoor and outdoor areas for hands-on learning activities, simulating the experience of practicing these skills on the land.



GATHER

This zone serves as a gathering space for the community, centered around the atrium and café/community kitchen. It is designed for sharing country food, informal teaching and knowledge exchange, and provides an event space for community or ceremonial gatherings.



SHARE

This zone is divided into two main areas: the country food marketplace and the donation area. Both spaces are designed to offer a place where country food, art, carvings, jewelry, and clothing related to hunting and harvesting activities can be shared and purchased.

Figure 50: Zoning Legend, Image by Author

Building Form and Aesthetic Features

The design language and building form should reflect Inuit material culture, creating connections between memory and place while facilitating knowledge transfer through programmatic activities, such as ceremonial spaces for Qulliq lighting. The design should integrate unique material expressions in the form, layout, and physical connections of spaces, as well as the activities conducted within them. This approach aims to strengthen Inuit identity and foster a sense of place and community in Rankin Inlet. Further exploration of these concepts will be detailed in the design proposal and conceptual development in Chapter 5.

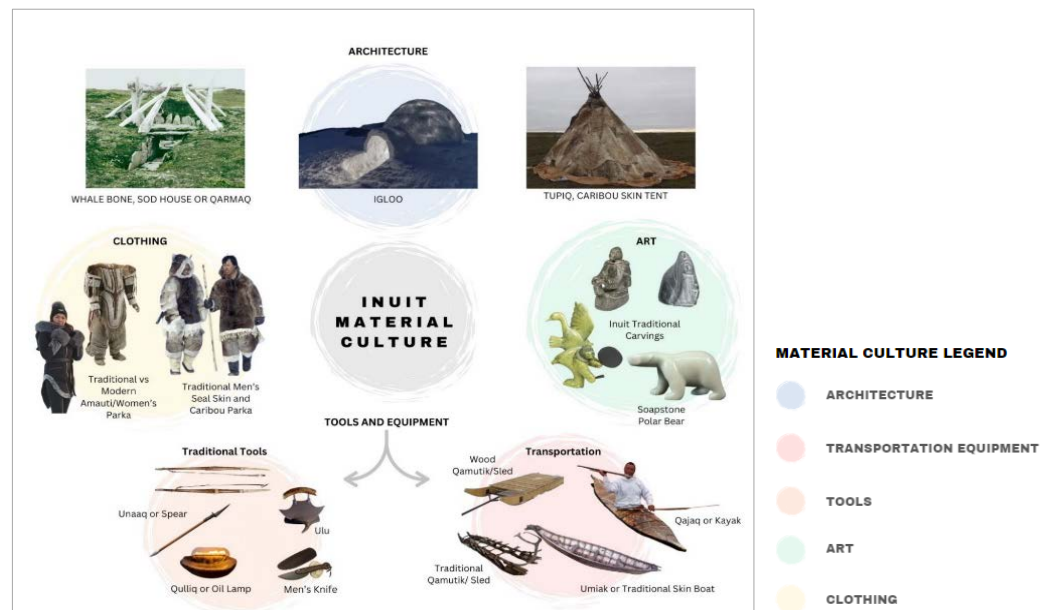


Figure 51: Material Culture Chart. Image by Author

User Analysis

Client Overview

The Hamlet of Rankin Inlet has commissioned this project as an identified gap in community spaces designated for Inuit cultural preservation and practices of traditional hunting and harvesting activities. The space should accommodate a variety of activities from processing, storing, sharing, learning and event/ceremonial spaces for the community to use. The occupancy of the building is a maximum of 350-400 persons according Nunavut building and occupancy regulations.

Table 3: User Analysis

USER TYPE	DESCRIPTION	OCCUPANCY TOTAL	ACTIVITY	FREQUENCY	USER NEEDS
PRIMARY USER	CORE EMPLOYEES Director of Operations Site Manager Program Officer Receptionist Elder Advisor Café Staff- manager, customer service staff x2 Human Resources x1	8-10	The core staff handle the daily operations, run programming and assist visitors with any questions about the facilities. They report to the director of operations, except Café staff which is privately run.	The core staff are present daily, business hours from 9am to 5pm, and weekends during programs or events. The café is open 7 days a week and is staffed fulltime.	Office Space Lunch Room Storage/Locker Space Meeting Room Classrooms (programs) Reception Area Cafe
			This staff will be cleaning and maintaining	This cleaning crew is present daily to	

	Cleaning Staff & Routine Maintenance	2-4	the facility daily, during business hours.	maintain the facility to safe food handling and storage regulations. The routine maintenance of the freezer and cold storage is conducted twice daily.	Storage/Lockers Break/Lunch Room
	Artists and Craftsmen/women	2-3	The artists and craftspeople use the space to make traditional clothing, tools or goods for sale.	The artists will use the workshop and carving, sewing rooms at their leisure. Often between 4-6 hours per day.	Access to workshop room, sewing room and storage spaces.
	Community Members	20-50 daily	The community uses the space to process, storage, preserve, or gather and share country food.	The community is free to utilize the space during hours of operation, at their leisure. We expect 15- 20 guests on average per day	Access to storage, processing areas, preservation spaces, workshop, communal gathering space and shared areas (e.g. atrium).
SECONDARY USERS	Secondary Staff: Seasonal Instructors Visiting Speakers	2-4	These staff members are hired on an ad hoc basis to run programming (seal skin class), speak and share cultural knowledge at the event held at Our Place.	The facility often hires sessional instructors and knowledge keepers to hold events in the space. This can be expected once a month with at least 2- 3 visitors at any given time.	Event Space Classrooms Storage Processing and Preservation Areas

	Volunteers	1-3	Youth volunteers from the community assist in cleaning and prepping the areas for programs to be held. They clean and prepare the spaces before and after classes are held and is a way for youth to be involved in the cultural practices by learning about the preparation required.	There are 1-3 volunteers each week, on a rotational schedule. We expect 5-10 volunteers on days where events are held in the space.	Event Space Classrooms Storage Processing and Preservation Areas
	Maintenance staff	2-3	The maintenance staff is responsible for ensuring the cold/freezer storage is consistently serviced and maintains the electrical, plumbing and other maintenance of the property routinely as well.	Regular maintenance checks are performed biweekly, and thorough check is conducted monthly.	Access to maintenance areas: electrical panel, plumbing, ventilation system, cold storage systems. Storage/Lockers
TERTIARY USERS	Occasional visiting community members, or regional guests	5-10	These visitors typically come from neighboring communities to use the facilities, at times, visitors from out of region or territory use the facility as well.	There is typically 2-5 guests visiting per week, on occasion a maximum of 10 visitors.	Event Space Classrooms Storage Processing and Preservation Areas
	Tourists (out of territory)	1-10	At times there are out of territory visitors to see the facility, participate in programs or conduct research on the hunting and harvesting practices.	These guests are expected once every few months, or 2-3 times per year.	Event Space Classrooms Storage Processing and

					Preservation Areas
--	--	--	--	--	--------------------

Spatial Requirements

SPACE	QTY	SQ FT.	DESCRIPTION FURNITURE & EQUIPMENT	ATMOSPHERE
Atrium	1	300-600	Welcoming space, large community feast held here and drum dancing + throat singing. Must be able to seat 50-100 people in the space.	Welcoming, open and inclusive environment. Natural materials and open space plan. Following the principles (Tunnganarniq)- fostering good spirits by being open, welcoming and inclusive.
Reception Area	1	200-300	Reception desk, chair, filing cabinet, desk lighting, storage. Ideally opposite the security office.	Welcoming, open and inclusive environment. Natural materials and open space plan.
Loading Zone	1	300-400	Two zone area: exterior loading zone for boats, skidoos, atv's, vehicles, and secondary loading zone with ramp for equipment return (qamutik, atv's, skidoos) Security cameras, loading track, insulated/ secure doors. Automatic loading dock.	Must be accessible by the public, with security entrance. The space offers a secure storage for self-returns of equipment after hours. Well lit space with enclosed areas of insulation from outdoors.
Walk in-Freezer Space ¹	6 (units)	800-1000	Must contain deep freezer space with separate, lockable compartments for storage of country food. Each unit will be used for one country food category.	Must contain adequate storage space with private lockers for storage of country food.
Walk in- Cold Storage ¹	6	800-1000	Must contain deep freezer space with separate, lockable compartments for storage of country food. Each unit will be used for one country food category.	Must contain adequate storage space with private lockers for storage of country food.
Offices	3	100-200	Desk, chair, storage unit, guest seating area, coffee table, fax and printing station.	Private offices for administrative staff. Natural lighting, carpeted office with bright coloured furniture.

Ceremony/Event Space	1	400-500	Round tables seating 5-6 pp, foldable chairs,	Welcoming, adaptable space with accessible seating and communal area
Multipurpose Room	2	200-250	Foldable table and chairs, whiteboard, elevated floor seating.	Welcoming, versatile, natural light and bright coloured accent furniture.
Sewing Room	1	250-300	Sewing tables, chairs, elevated seating area for floor seated sewing.	Warm, welcoming and functional space with all the sewing equipment required.
Preservation Area	4	500-700	Stainless steel tables, stools, specific preservation equipment (dehydrator, grinder, vacuum sealer).	Area must be sterilized multiple times daily, or after use. The area is well lit, easy to clean and accessible for all age groups
Processing Area ²	4	500-700	Stainless steel tables, stools, specific preservation equipment (dehydrator, grinder, vacuum sealer)	Area must be sterilized multiple times daily, or after use. The area is well lit, easy to clean and accessible for all age groups
Kitchen (2) public + processing kitchen	2	300-500	Stainless steel counter top/island, stools, fridge, stove, dishwasher, 4 industrial sinks, wash basin, drying racks, storage cabinet	Area must be sterilized multiple times daily, or after use. The area is well lit, easy to clean and accessible for all age groups
Classrooms	3	200-500	Desks, chairs, low seating for seal skin demonstrations and practice, whiteboard, projector, screen.	Welcoming, open and inclusive environment. Natural materials and open space plan. Following the principles (Tunnganarniq)- fostering good spirits by being open, welcoming and inclusive.
Qamutiq Building Area (Outdoors)	1	300-350	Open area outdoors- adjacent to the woodshop	Outdoor space, welcoming to all who wish to participate in traditional making of tools and equipment
Drying Area (Racks Outdoors)	1	300-350	Vertical Drying racks for traditional dehydration of country food- mesh enclosure, table and storage unit.	Welcoming, open and inclusive environment.
Woodwork Shop	1	200-250	Table, stools, woodstorage rack (custom for equipment storage); Tablesaw, router, sander, handsaw, dust collector, jointer, planer, miter saw, drills.	Welcoming to all who wish to participate in traditional making of tools and equipment
Equipment Rental Space	1	500-800	Storage spaces for equipment, automatic lift, desk, computer, chair, security cameras, storage lockers.	Open to public, welcoming, secure storage space for equipment handling and rental.

Café + Lounge	1	800-1000	Round table (2-4 pp), chairs, overhead lighting, coffee machine, food display unit.	Open, bright, welcoming communal spaces to lounge and share artisanal country food.
Communal Space (Food sharing, country feasts)	1	300-500	Floor seating with minimal elevated seats for accessibility (custom built in).	Warm materials, wood and carpeting areas for floor seating.
Tanning Facility	1	500-700	Tanning equipment, stainless steel tables, overhead lighting , storage	Safe, accessible and welcoming environment to learn about tanning skins
Locker Room	2	300-400	Storage Units	Secure access
Marketspace	1	600-800	Foldable stands, overhead light, stools and versatile seating, installation cabinets for art/carvings	Open, versatile and adaptable market space for the sale of traditional clothing, jewelry and tools..
Universal Washroom	4	80-100	UTR Standards	----
Public Cold Storage (Country Food Market)	1	500-600	Cold storage cabinets, mirror, bulletin boards, cashier desk, fridge, freezers	Accessible, bright and welcoming unique space with multiple local harvesters goods for sale
Staff Lounge	1	150-200	Lounge chairs, round tables, fridge, microwave, ample counter space.	Welcoming, warm, relaxing environment with ample seating
Custodial Room	1	80-100	Storage rack, lighting, locker cabinet	Secure access, fob entry
Mechanical Room	1	80-100	Storage rack, adequate lighting, locker cabinet	Secure access, fob entry
Electrical Room	1	100	Storage rack, locker cabinet	Secure access, fob entry
Security Office	1	120	Desk, chair, screen (3), filing cabinet and locker	Secure access, fob entry
Storage Closet	2	100	Storage cabinet, out shelving units	Adaptable space for storage of furniture, equipment or event items
Total square footage	Approx.. 10-13,540 sq ft			

Table 4: Spatial Requirements

***Note¹:** There are various freezer and cold storage organized by country food type, food regulations and processing requirements.

1. Freezer Type 1a/Cold Storage 1b: Fish and Marine Country Food Products

2. Freezer Type 2a/Cold Storage Type2b: Wild Game (Terrestrial)

3. Cold Storage Type 3: Clothing, Skins, Arts + Crafts

***Note²** The processing areas are delineated by species type and may not be used interchangeably.

Proposed Activities

Programming and activities Include:

- | | |
|--|--|
| ☐ Community Feasts | ☐ Jewellery Making |
| ☐ Country Food Markets | ☐ Community Gathering |
| ☐ Processing Country Food | ☐ Traditional Games |
| ☐ Preservation of Country Food | ☐ Making Drums |
| ☐ Art and Crafts events/Tradeshow | ☐ Drum dancing |
| ☐ Café and communal lounge | ☐ Throat singing |
| ☐ Tool making/ skill building classes | ☐ Qamutik building |
| ☐ Skinning Course/ Tannery | |

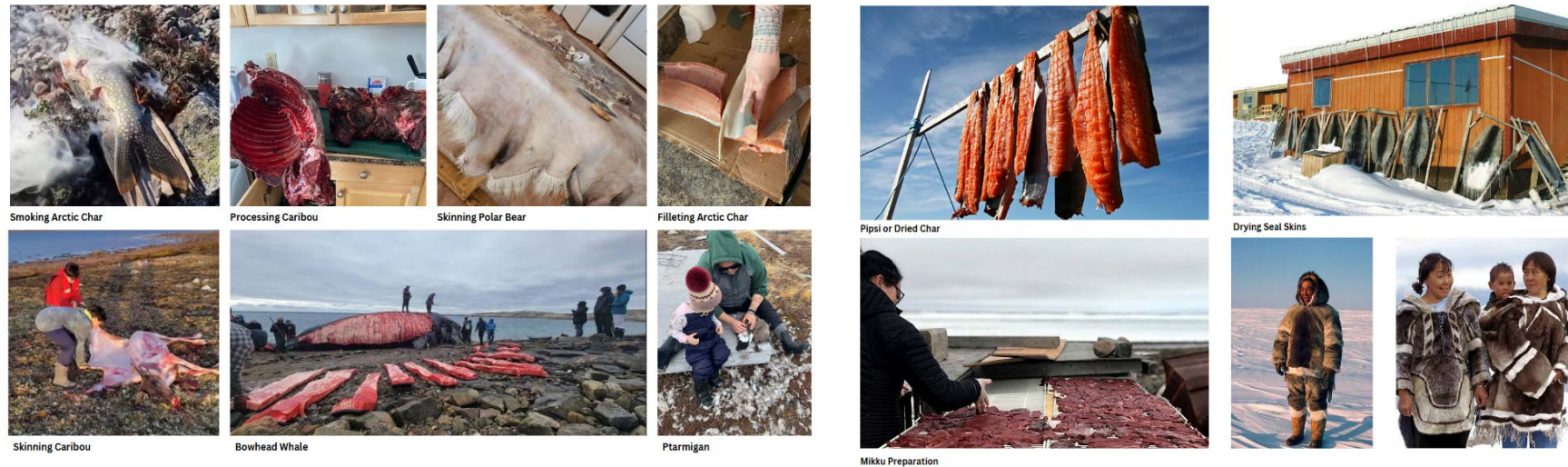


Figure 52: Inuit Cultural Hub, Programmed Activities, Image by Author

Primary Processing

- Butchering
- Skinning/ Plucking
- Gutting
- Handling and Cleaning
- Drying (Preserving Meat)
- Packaging (Vacuum Packing)
- Freezing

Secondary Processing

- Grinding
- Dehydration

Preservation (cold storage, treating skins, jamming berries, pickling meat, canning)

Adjacencies

Primary Adjacency

The most critical adjacencies lie between the processing and storage of country food (See figure 8). To minimize the distance between processing and storage, activities such as butchering, grinding, skinning, and vacuum sealing should occur in Zone 1 of the processing area, with the storage area for these products located nearby to prevent cross-contamination.

Secondary adjacencies

Communal gathering spaces should be positioned near the atrium and other open, welcoming areas to facilitate interaction. Additionally, classrooms should be located opposite their corresponding workshops or sewing rooms. For instance, the woodshop should be adjacent to the outdoor qamutiᑦ (sled) making area.

Undesired Adjacency

Private and public areas should be kept distinct and not located in close proximity to each other. Additionally, the tannery must be situated in a separate, enclosed area with its own dedicated ventilation system to mitigate risks from potential toxic inhalation.

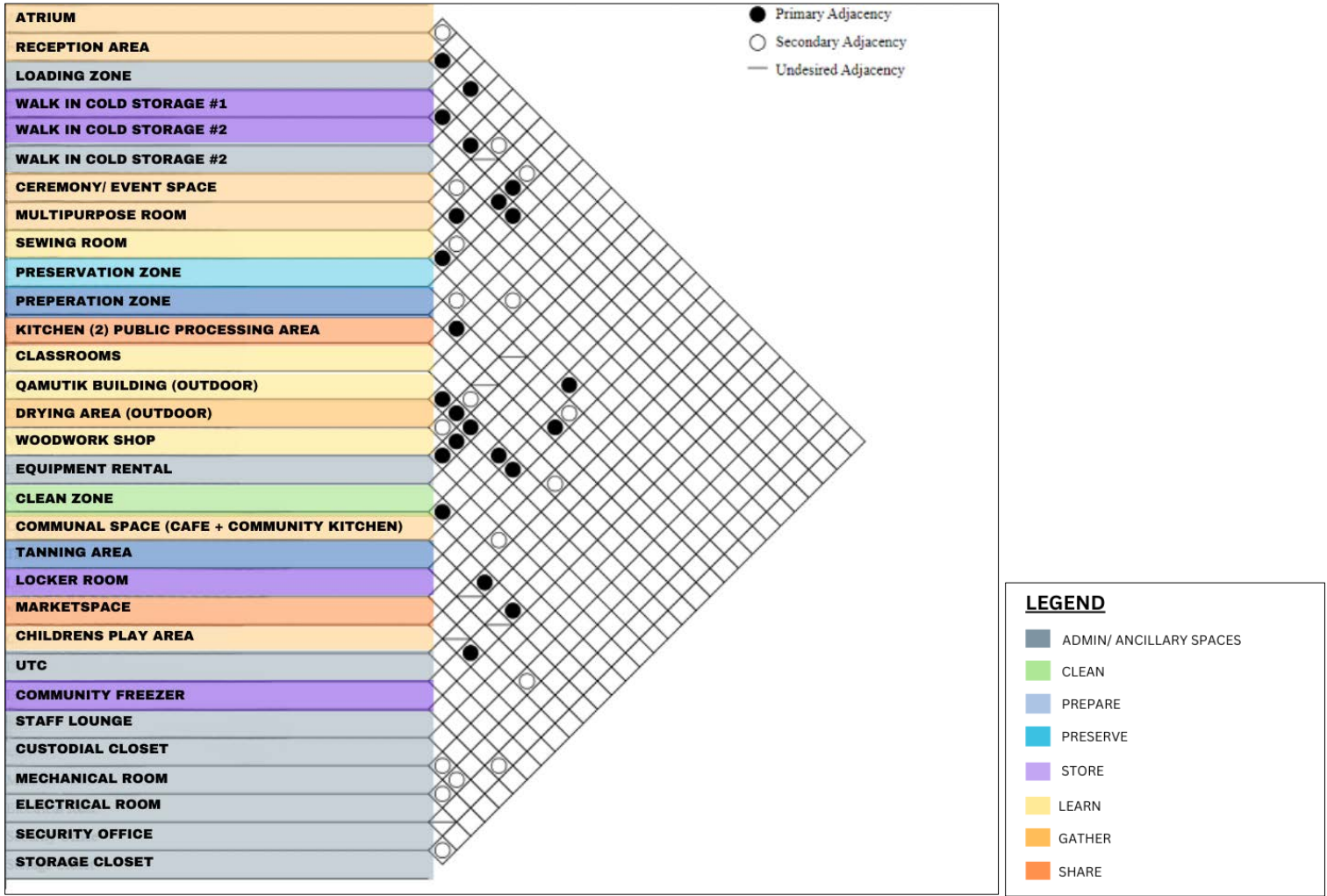


Figure 53: Inuit Cultural Hub, Adjacency Diagram, Image by Author

CHAPTER 5 | SITE & BUILDING ANALYSIS

Project Overview

Site Context & Analysis

Wind & Sun Study

Zoning and Building Regulations

Project Overview

Location & Significance:

- Rankin Inlet is on the west coast of Hudson Bay, about 300 km north of Churchill.
- It serves as the transportation, health services, and business hub of the Kivalliq Region in Nunavut.
- Nunavut is divided into three main regions, each with its own unique geographical and cultural characteristics. These regions are: Qikiqtaaluk or Baffin Region, the eastern part, Kitikmeot, the western part and Kivalliq, the central part of Nunavut and location of **Rankin Inlet**.

Historical Background:

- The town developed around the North Rankin Nickel Mine (1957-1962), employing Inuit miners from across Nunavut.



Figure 54: Regions and Communities. Photograph. Statistics Canada.
<https://www150.statcan.gc.ca/n1/pub/89-657-x/89-657-x2019010-eng.htm>

- Today, many residents of Nunavut and Kivalliq specifically are employed by the Meadowbank Gold Mine and other mineral explorations in the area.

Economic & Community Life:

- Rankin Inlet is a hub for government, education, and private business, including arts & crafts, tourism, country food processing, and various services.
- Key facilities include a downtown area with offices, RCMP detachment, Hamlet office, five hotels, a bed & breakfast, several restaurants, a dental clinic, pharmacy, convenience

Contextual Information:

- 84.9% of Nunavut's population is Inuit (38,780 persons).
- Inuit make up over 90% of the population in most communities, with exceptions including Iqaluit (56.6%), Rankin Inlet (82.2%), Cambridge Bay (82.5%), and Resolute Bay (86.8%).

stores, hardware stores, a health centre with hospital and birthing centre, and Nunavut Arctic College.

Kivalliq Ecology:

The region features rocky islands, healthy peregrine falcon populations, fishing opportunities for arctic char and grayling, berry-picking, and sightings of tundra swans, sandhill cranes, arctic ground squirrels, Arctic foxes, hares, caribou, seals, beluga whales, and polar bears.²⁸

- The official languages in Nunavut is **Inuktitut**, Inuinnaqtun (Western Inuktitut Dialect), English and French.

Language Vitality:

- There is a decline in those who are able to converse in Inuktitut, Statistics Canada reports, in 2016, 89.0% of the Inuit population could converse in Inuktitut, down from 91.6% in 2001.

²⁸ Rankin Inlet Website (n.d.). Introduction to Rankin Inlet <https://rankininlet.ca/>.

- There was some resurgence of Inuktut between 2011 and 2016, especially in public domains, however, non-transmission of Inuktitut is a significant issue affecting the vitality of the language and transfer of cultural/traditional skills today.
- language and transfer of cultural/traditional skills today.

Site Analysis

The selected site is located at the edge of town, opposite the boat dock and close to hunting trails, ice fishing sites, and an informal sea can storage area where community members store hunting equipment, ATVs, snowmobiles, and other harvesting tools. This location was chosen because it allows easy access to the cultural hub's loading dock for those returning from hunting trips with snowmobiles or ATVs. Boats transporting beluga whale, seal, or narwhal will have a short drive to the cultural hub for processing and storage. Additionally, the site is convenient for those without harvesting vehicles; the nearby ice fishing site can be reached on foot, and harvested catch can be processed at the cultural hub upon return.

Wind Study

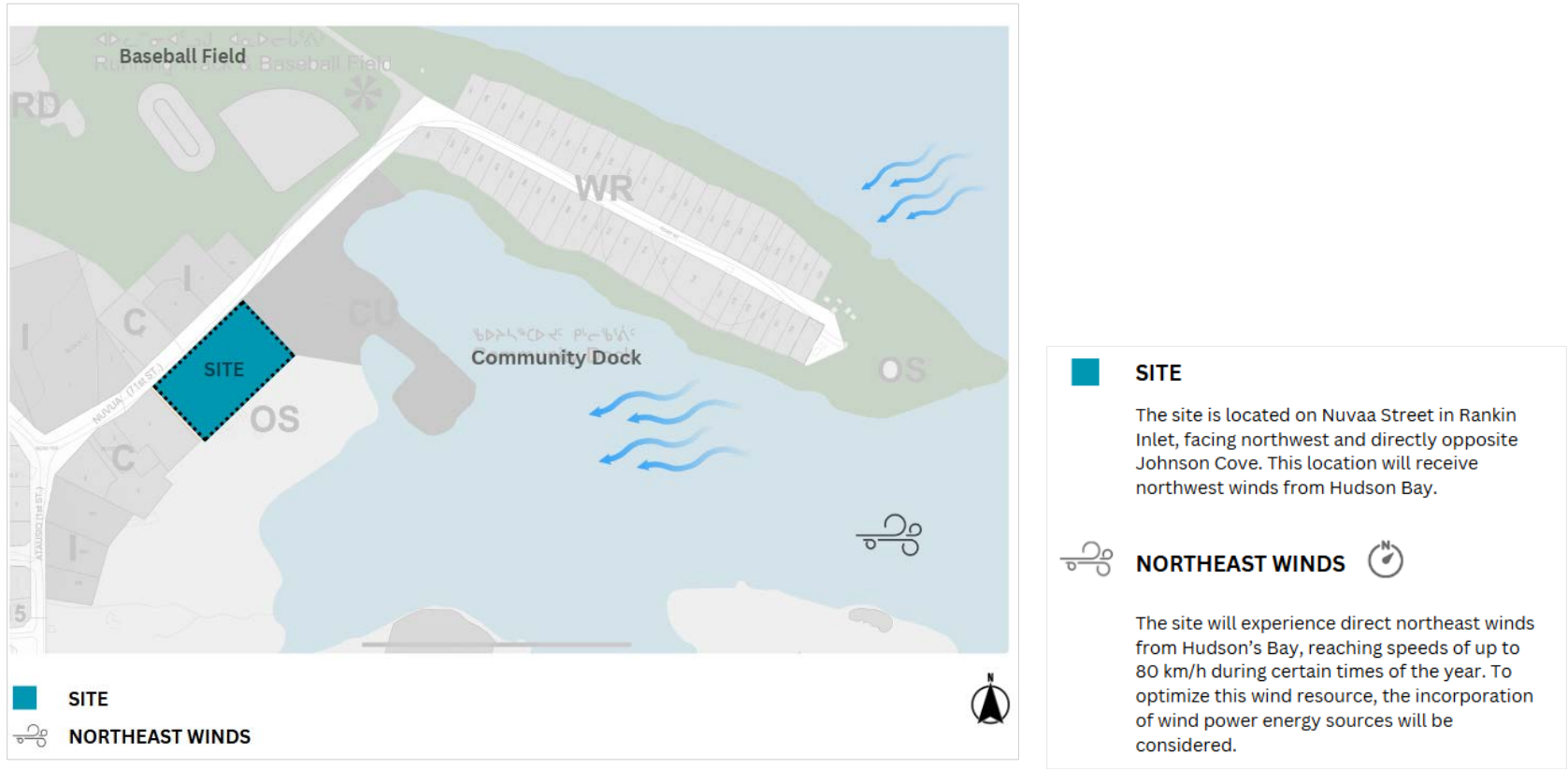


Figure 55: Wind Study, Image by Author

Access Trails

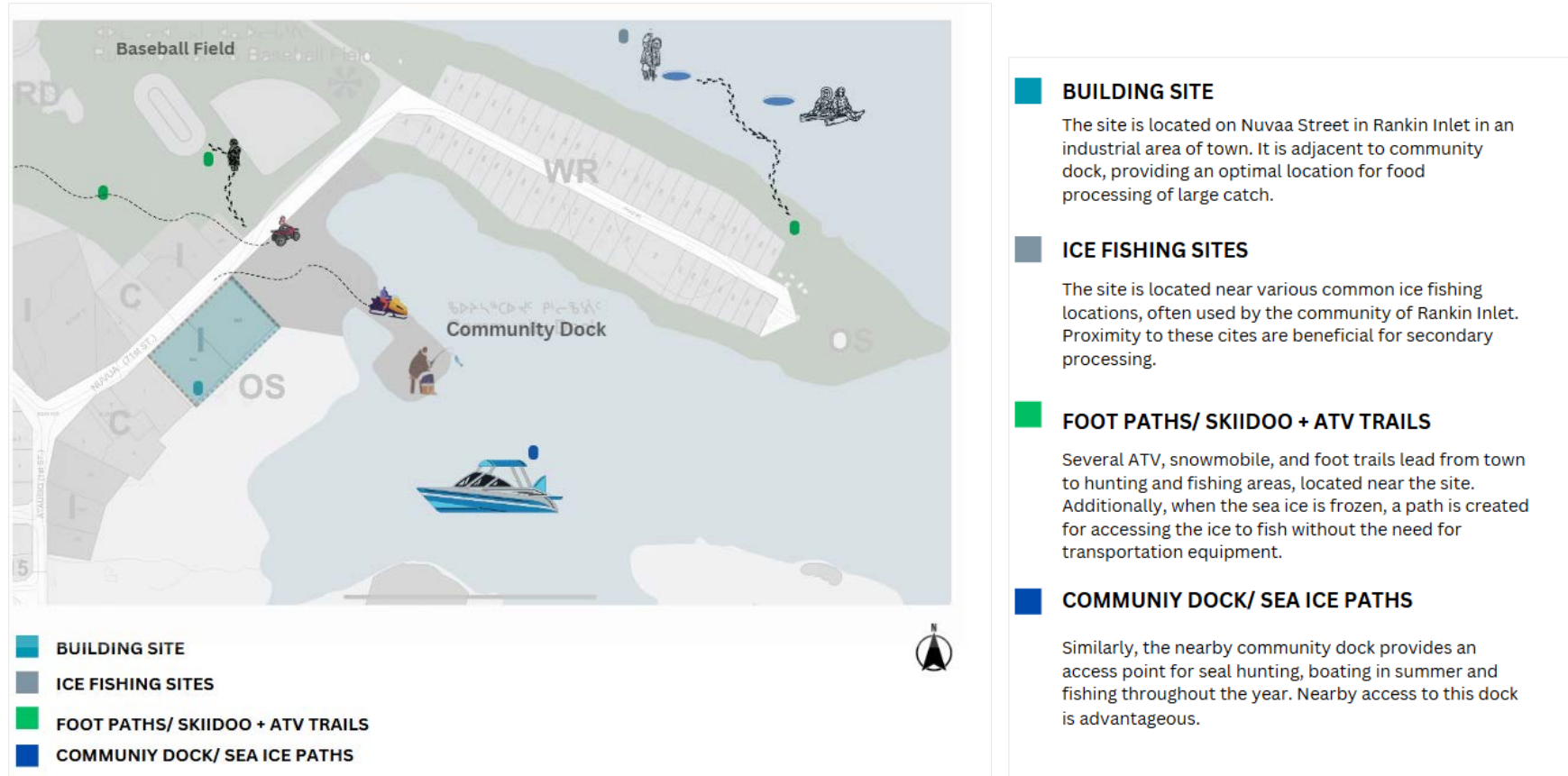


Figure 56: Access Trails, Image by Author

Sun Study

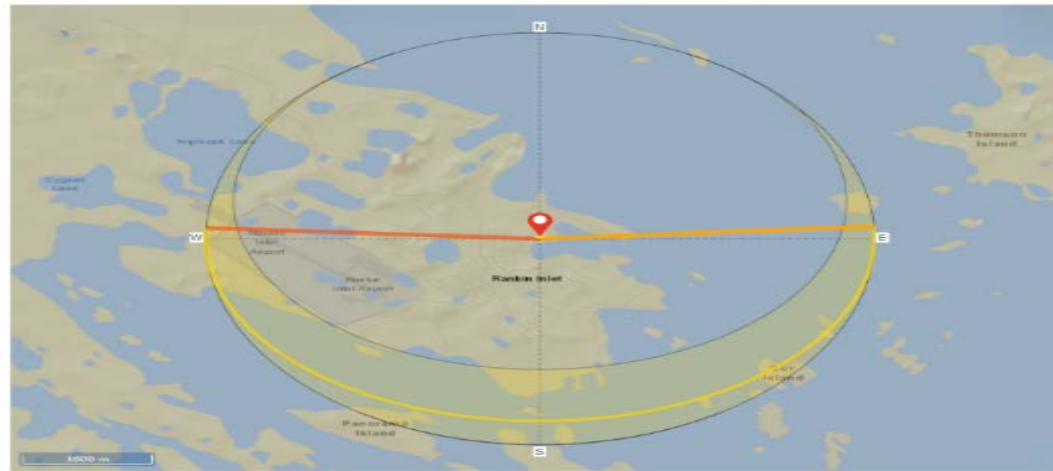


Figure 1: Sun Path Study, Rankin Inlet

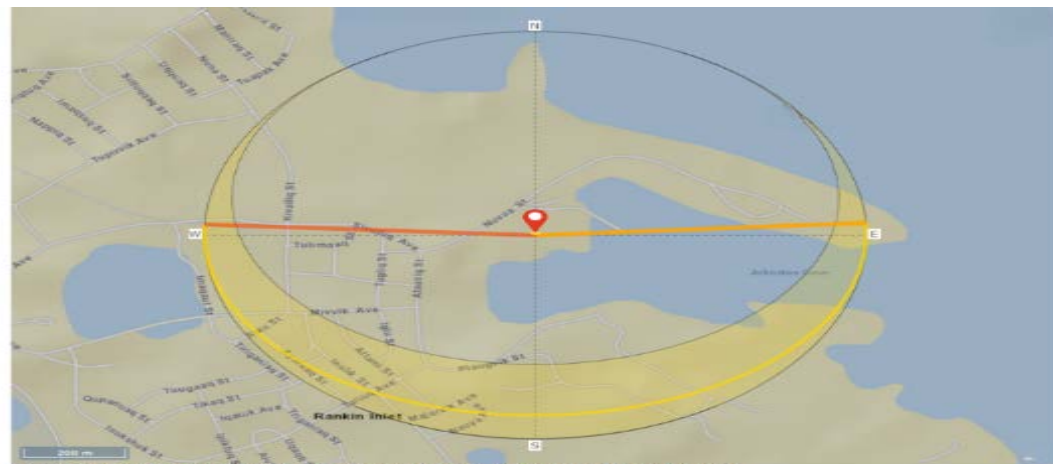
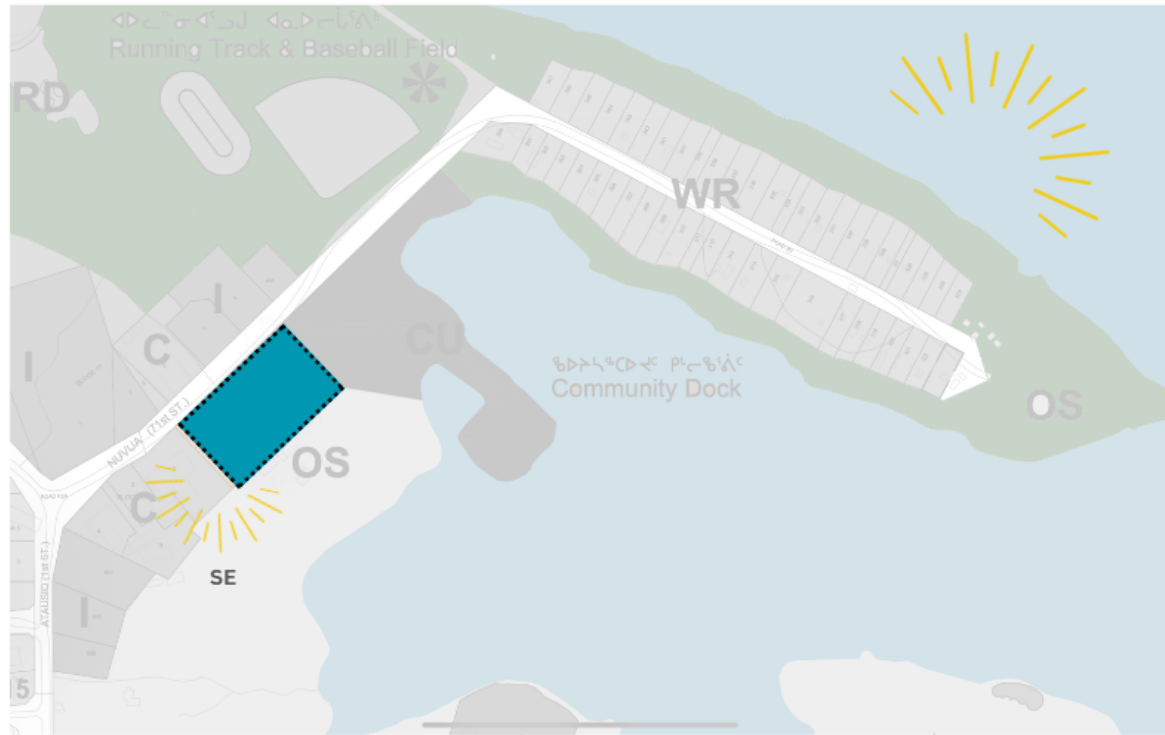


Figure 1: Sun Path Study, Inuit Cultural Hub Site, Rankin Inlet

Figure 57: Sun Study, Image by Author



SUN ANALYSIS

The southeast (left side) of the site will receive the most sunlight throughout the day, featuring numerous windows to optimize daylight and outdoor drying racks for the traditional drying of meat.



Figure 58: Sun Study, Image by Author



Figure 59: Rankin Inlet Community Plan, Image by James Sandy. ²⁹

²⁹ Community and Government Services. Rankin Inlet Community Plan Brochure. https://downloads.cgs-pals.ca/rankin_inlet/community_plans/community_plan.pdf



Figure 60: Site Map

Adjacencies

- Wildlife Office
- Hunting Trails
- Ice Fishing Suites
- Community Sea Can Storage Containers
- Fish Plant
- Boat Dock



LEGEND

- RESTAURANTS
- GROCERY STORES
- HOTEL
- ART GALLERY/ GIFT STORE
- AIRPORT/ VISITORS CENTRE

Figure 61: Site Map and Legend

Zoning

The site is zoned as an industrial area, which is well-suited for the cultural hub, especially if it includes a processing facility. This zoning is particularly advantageous if a tannery is integrated into the space, as it will necessitate specific measures for managing fumes, gases, and other toxins associated with the tanning process.

CHAPTER 6 | DESIGN PROPOSAL

Design Proposal

Conceptual Development

A New Design Typology

Design Proposal

The objective of the Inuit Cultural Hub is to serve as a new typology for the built environment in Nunavut, one that celebrates, preserves and provides supportive spaces for the practice of hunting and harvesting. This place will blend the need for physical spaces that support hunting and harvesting activities, while acknowledging that certain activities are best conducted on the land. From the research, the design proposal will build off of the zoning identified in the programming, which reflects the sequence of hunting and harvesting activities. To determine the function of these spaces, the key findings from the research highlight the hunting and harvesting practices in the region which will inform design, spatial planning and layout of the Inuit Cultural Hub. The spaces will be designed with consideration for these seasonal patterns, including the processing and preparation areas required, the exchange of information and knowledge, distinctions between public and private activities, and the division between outdoor and indoor practices. The design will propose a new typology by negotiating the rigidity of current built form, through the use of modular units that allow for adaptability and participation of community use determining the delineation of spaces. While modular units have become widespread in Nunavut to address immediate housing needs, they risk prioritizing utility over culture, identity, practice, and community - elements that are essential for building resilient communities and a central theme of the Inuit Cultural Hub. One critical challenge in Nunavut's building practices is the slow lead time and barriers within the supply chain due to its remote location, the high cost of materials, and limited access to sea ports (only 3-4 months of the year). This means construction projects often take years to complete, whether it is personal homes or cabins, with work continuing over several summers when supplies, labor, and time is available. This design proposal chooses to optimize this perceived challenge as a way to invite dialogue with the community and incorporate the uses of space into the future programming of the site.

Design Concept

This design proposal will be implemented using the lessons from material culture as a foundation for envisioning "what could be." Inspired by the spatial appropriation observed in Arviat, the design does not predetermine how spaces will be used; rather, it intentionally encourages adaptability so the space can evolve to genuinely reflect the community it serves. The objective is to employ modular units that create **systems** capable of being dismantled, adapted, and reconfigured, ultimately reflecting the community's culture and practices.

Material culture, rooted in Inuit nomadic traditions, will shape connections to memory, place, and practice in the Inuit Cultural Hub. The design concept for this space is the making of kamiit (sealskin boots), an object that embodies slow, careful craftsmanship, innovative modular techniques, and carries deep cultural significance, like kamik-making, the hub's construction will use modular elements to thoughtfully integrate tradition with functionality, fostering connection and community. The design proposal, informed by the literature, will focus on the key areas of **modularity** and the incorporation of **material culture**.

Process of Making Kamiit (Building Process)³⁰

Kamiks are traditional Inuit boots made from sealskin or caribou hide and are considered a form of Inuit art which can take months to create (Ashley, 2016). The kamik-making process aligns with the design principles of this practicum, encompassing many core themes. Kamiks not only serve as an art form but also provide essential warmth for hunters and harvesters, enabling the practice of traditional activities.

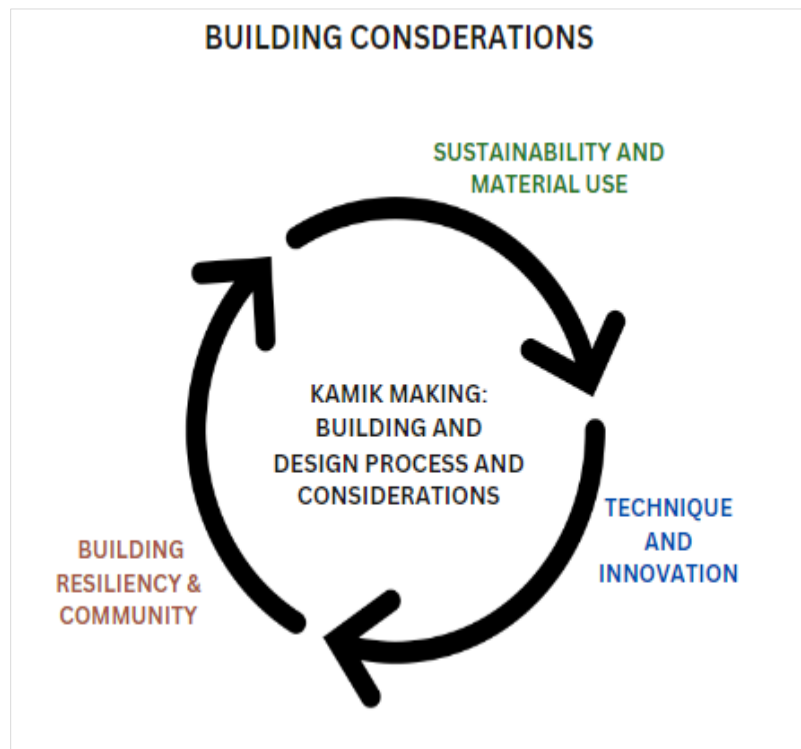


Figure 61: Site Map

Furthermore, the use of animal hide reflects a sustainable approach, where each part of the animal is utilized, fostering interdependence and community connection through shared skills and support. This process forms the foundation for the design proposal.

The Kamik making process is one that relies on a circular economy, it depends on the land to provide, the hunters to hunt, the dedicated seamstresses to produce kamiit and the community to carry on the tradition of using and wearing the kamiit. This circular model means that each component is reliant on one another and is greater than the sum of its parts, thereby, building strong community through support of one

³⁰ Ashley, K. (2016). Inuit Kamik Making.

another and respect for land. This will be the design driver for this practicum.

The building considerations informed by the kamiit making process are; **sustainability and material use, techniques and innovation and building resiliency**. Sustainability will be achieved by prioritizing long-lasting materials and incorporating techniques that allow for adaptability and continued use. While drawing on innovative methods inspired by traditional *kamiit* making processes—such as waterproof stitching techniques will inform methods of durability in arctic climate. Finally, strengthening the community's connection to and autonomy over the space through participatory modularity fosters placemaking and resilient architecture. As users develop a sense of care and ownership, their connection to the environment is deepened.

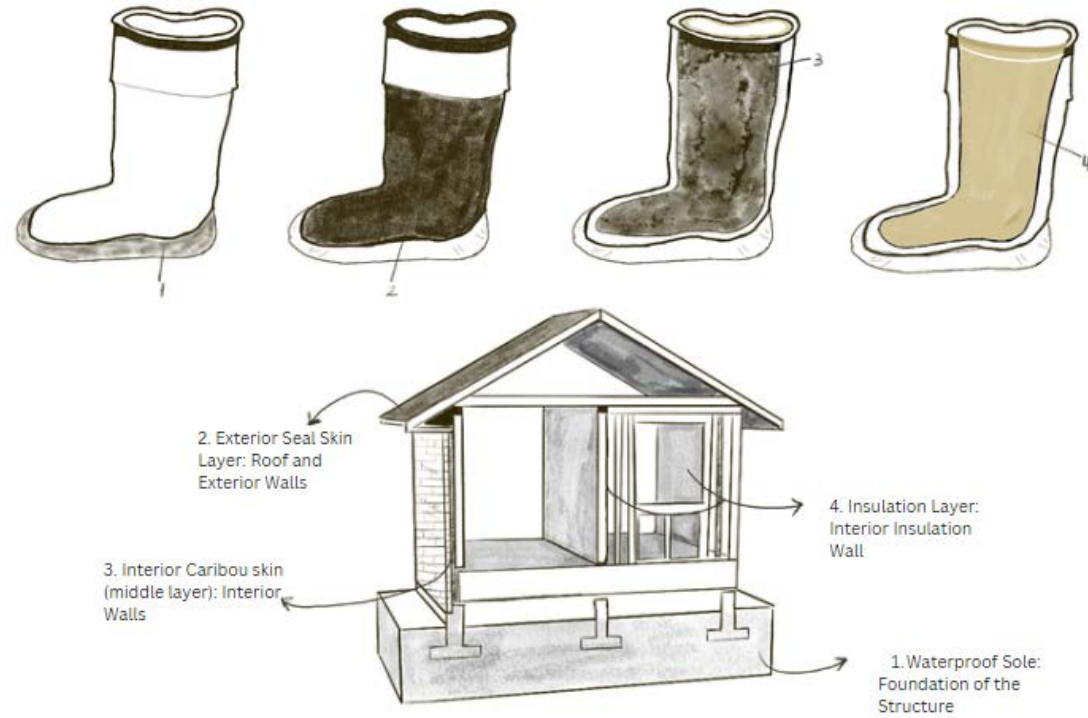
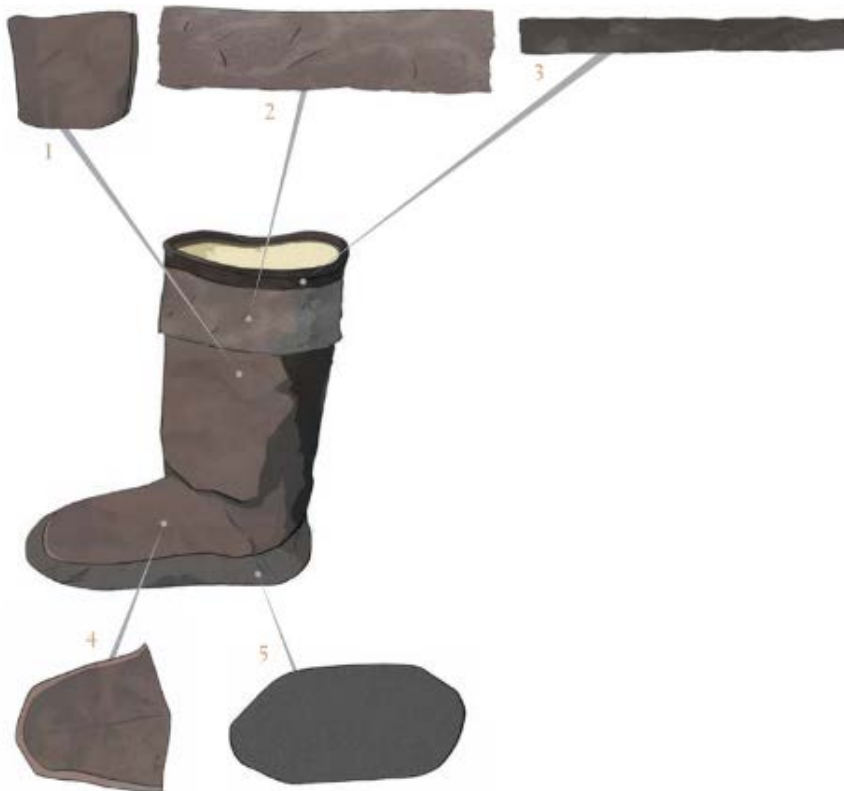


Figure 62: Kamik Making Process, Building Expression

Design Language Inspired by the Making of Kamiit

The kamik's layered construction, adaptable design and modular aspects of removing and adding layers for warmth- translates directly into the building's structure:



Layers: The kamik's layers inspire the building's exterior wall (outer layer), insulation (middle layer), and interior wall (inner layer). Kamiks can have 2-5 layers for warmth and flexibility.

Waterproof Sole: Represents the roof and protective building materials. Waterproof stitch technique ensures durability and protection.

Sections: The calf, sole, and pattern reflect the adjacent and connecting spaces.

Sinew and Stitching: The sinew and waterproof stitching are reflected in the building's joinery, connecting the various components.

Figure 63: Image by Mary Akulukjuk. Making Kamiit Book



This design language combines the modularity of the kamik's construction with the building's programming, creating a unique architectural expression. It incorporates an exterior skin, insulation, inner shell, intricate design details (embroidery), and sinew (joinery), bringing together all elements into a cohesive manner.

Figure 64: Kamik Making Process, Circular Economy

Modularity

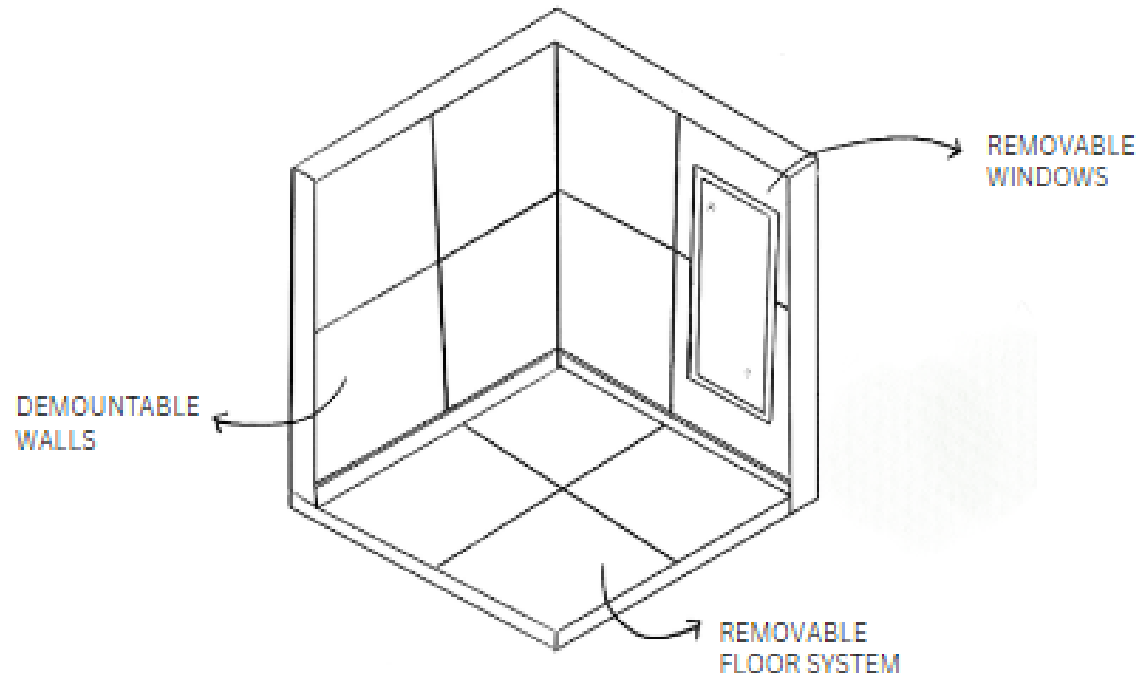
The design of the Inuit cultural hub will leverage the prevalent modular vernacular to encourage dialogue with the community about space usage. The design will feature flexible spatial layouts, adjustable walls, and seating, allowing for different interpretations of the built environment. For instance, a classroom may function as a sewing room but could be adapted in warmer months to connect with the qamutik building area outdoors. The atrium might transform into an event or ceremony space, demonstrating how the Inuit Cultural Hub evolves in response to the community needs.

Modular design offers adaptable and innovative solutions through sustainability, flexibility, and innovation. The seasonal Inuit homes provide an excellent example of such modularity, with the qarmaq serving as a key reference to illustrate various layouts, demountable walls, partitions, and expandable spaces that extend into the outdoors during warmer months. This adaptation allows for activities like harvesting and preservation to be performed outdoors. Modularity not only provides users with



Figure 64: Unknown. (2023). Traditional Spring/Summer Home. Qarmaq. Photograph.

flexibility and customizable components but also enhances resilience, enabling the structure to withstand the effects of time.



Modular Systems

ALL WALLS AND FLOOR SYSTEMS ARE
DESIGNED ON **4X4 GRID SYSTEM** TO
COINCIDE WITH BUILDING MATERIALS
FOR COST EFFECTIVE, FUTURE
ADAPTABILITY.

Figure 66: Modular Wall Systems, Image by Author (2024).

Demountable Walls: Open Gathering Spaces

The modularity of the design allows for flexibility across seasons and as the community evolves over time. The diagram below highlights key programmatic spaces and how they can be adapted by the user. For example, one might choose to preserve country food using traditional methods, utilizing the permafrost and outdoor space, thereby extending the preservation area beyond the original program. Similarly, the gathering zones could expand during the summer months to accommodate outdoor harvesting activities, such as drying char or caribou (*Ikuktitut*: pipsi and mikku).

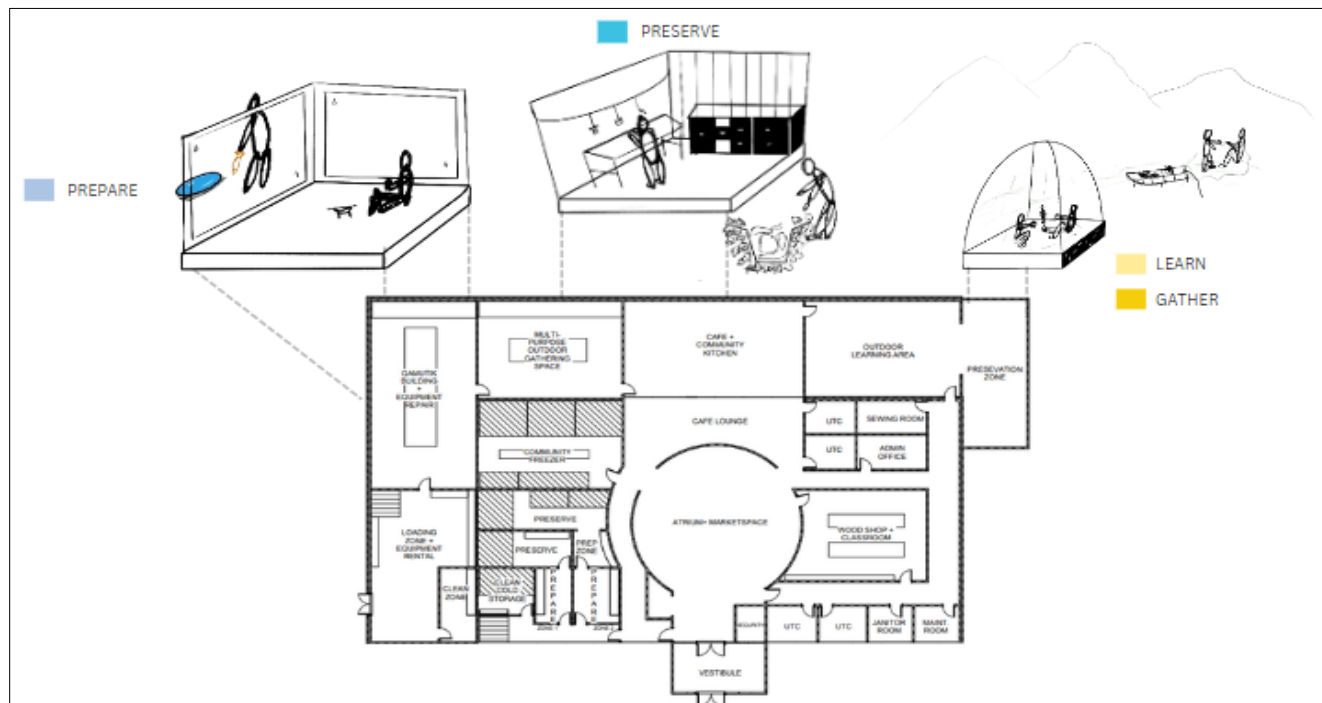


Figure 67: Expansive Programming, Modular Wall Systems, Image by Author

Demountable Walls: Open Gathering Spaces

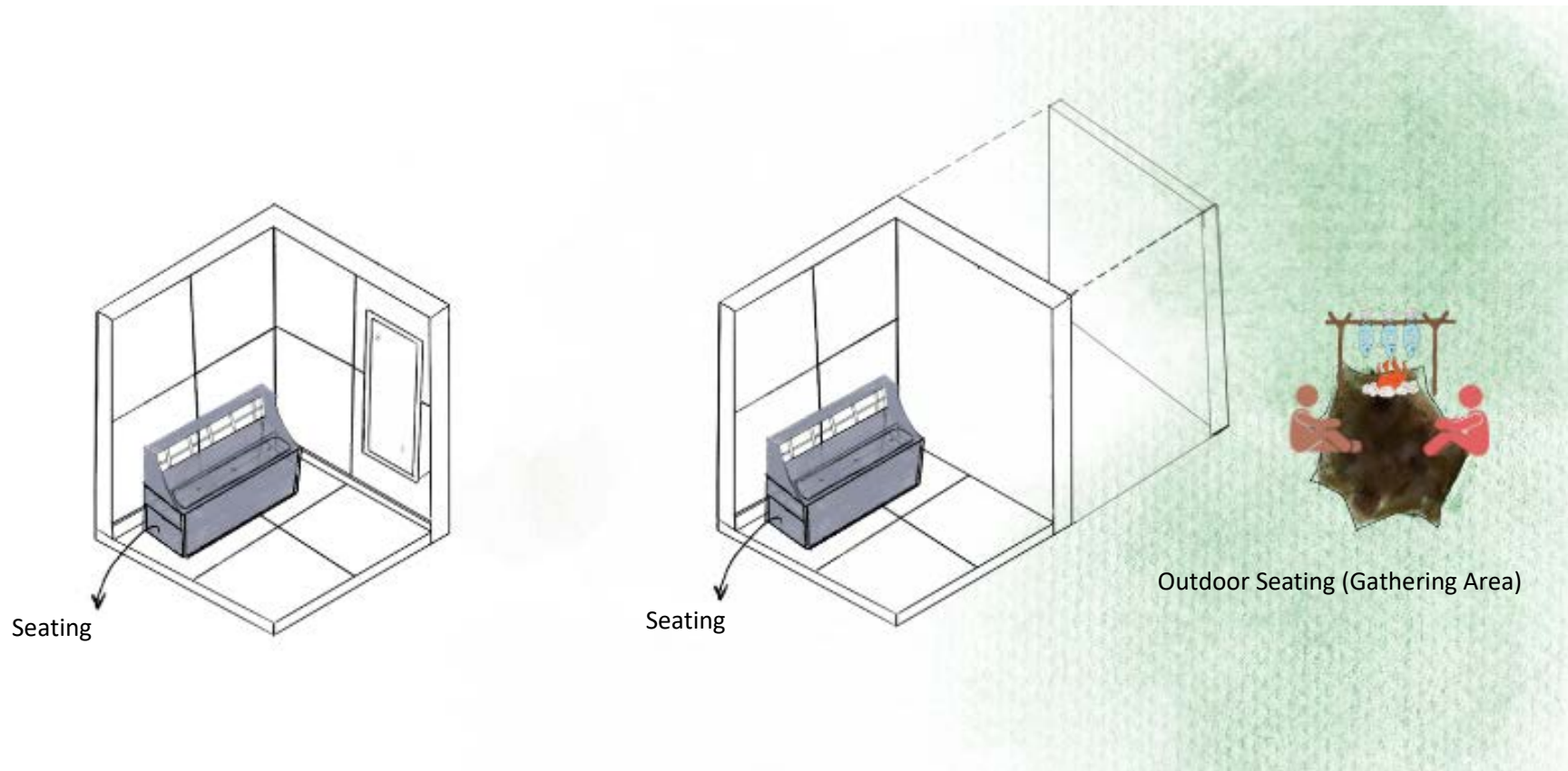


Figure 68: Expansive Programming, Modular Wall Systems, Image by Author

Adaptable Floor Systems: Underground Traditional Freezer

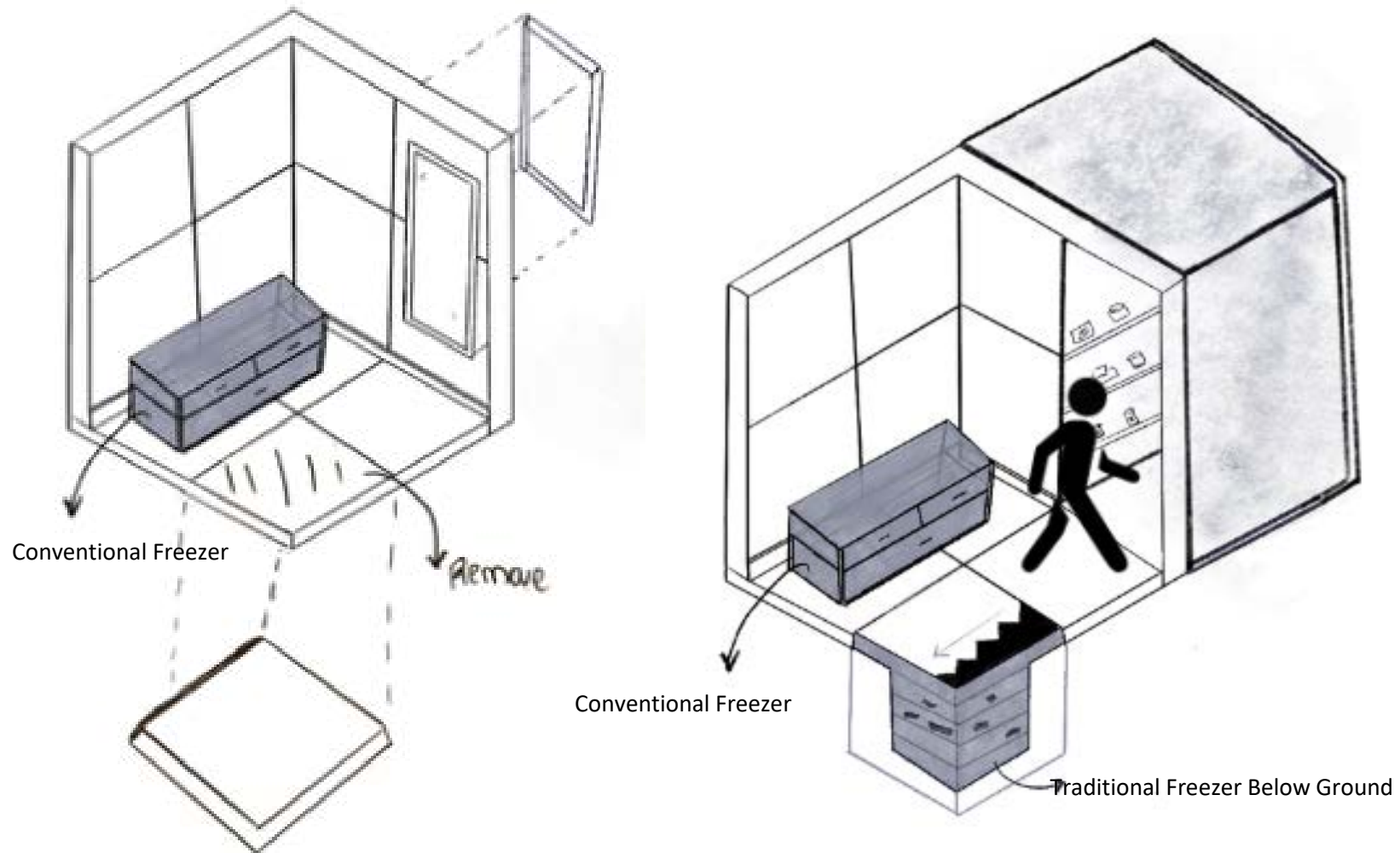


Figure 69: Modular Wall Systems, Image by Author (2024).

Removable Windows: Open Preservation Spaces

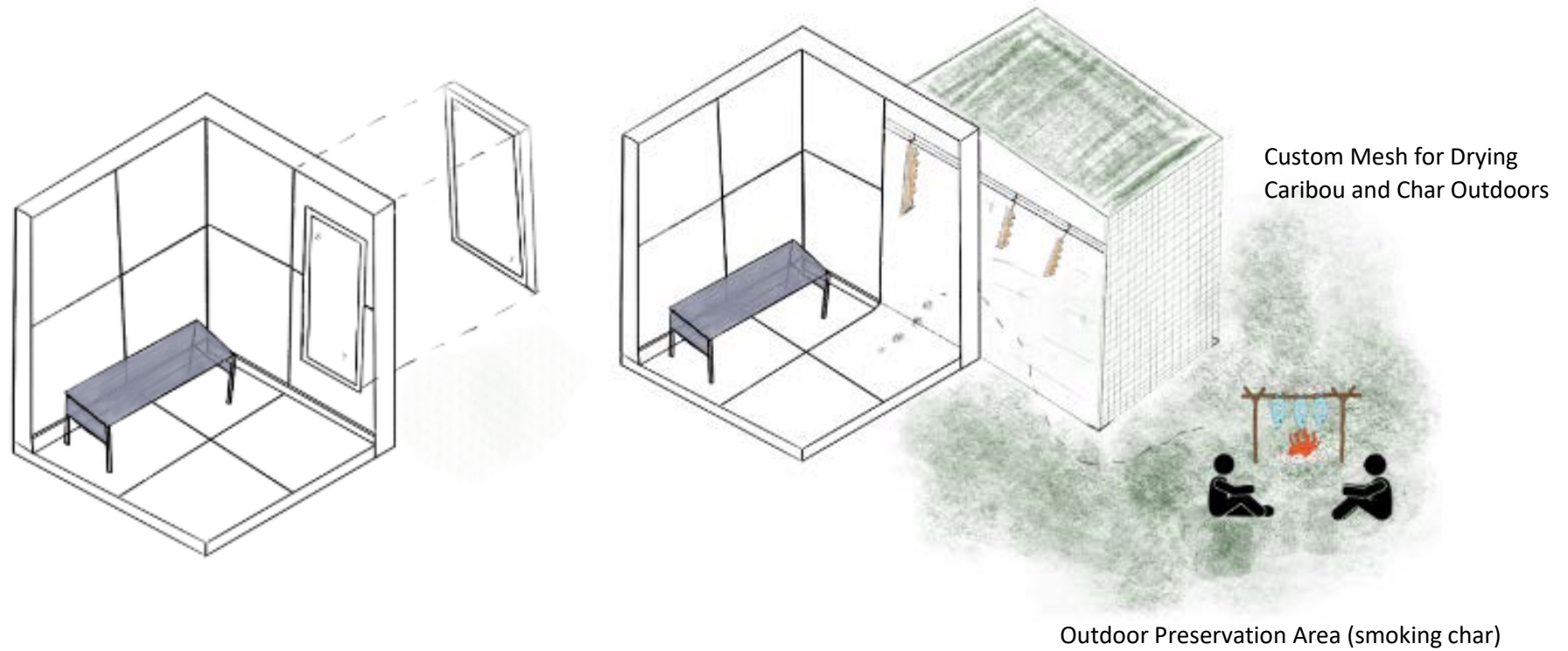


Figure 70: Modular Wall Systems, Image by Author (2024).

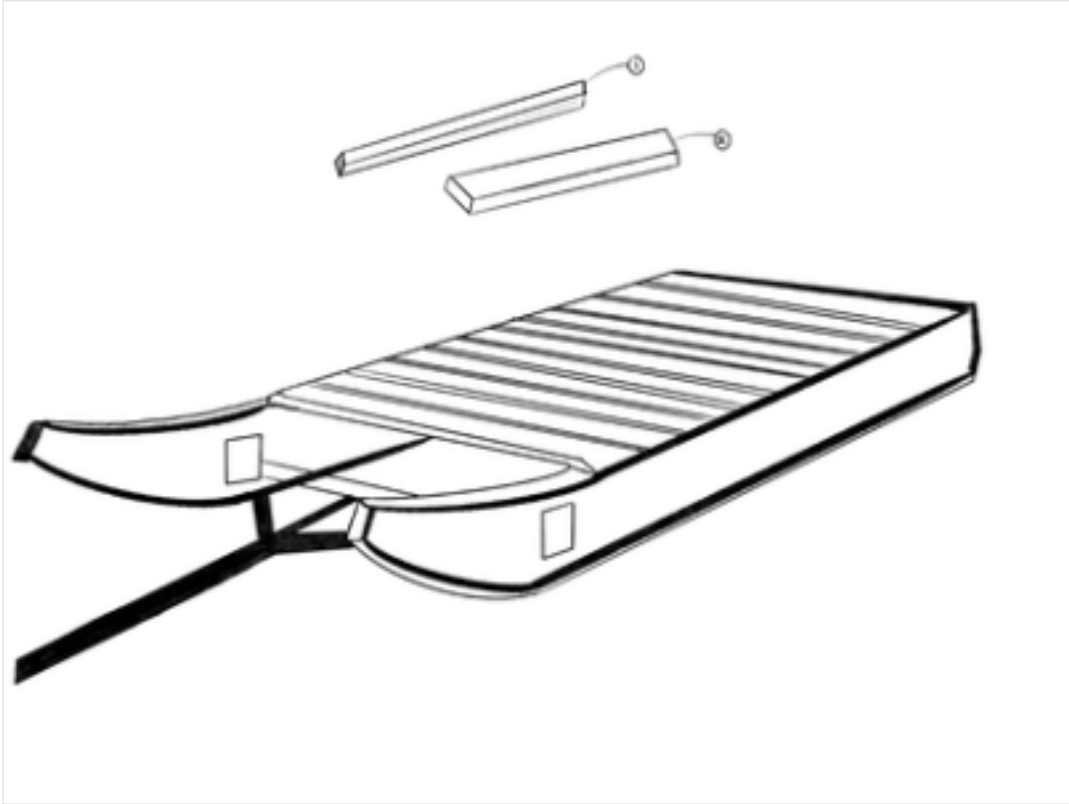
Material Culture Expressed

The illustrations below outline examples of the use of material culture expressed in the design considerations of the space with the aim of connecting the user to past and present traditions, memory and practice.



Figure 71: Material Culture Expressed, Qamutik Design, Image by Author

Qamutik (sled)



1. The vertical wood pattern in the qamutik (sled) will be used as a ceiling feature imbedding light between the panels.
2. The frame of the qamutik will serve as a structural beam in the main atrium space.

Figure 72: Material Culture Expressed, Qamutik Design, Image by Author

Traditional Tools: Custom Door Frame



1. The features of the etched wooden door frame included traditional tool used for sewing to demarcate the sewing and workshop areas. This will be used as wayfinding method within the Inuit Cultural Hub.

Figure 73: Material Culture Expressed, Qamutik Design, Image by Author

Preliminary Floor Plan: Grid System

In continuing with the exploration of modularity in the floorplan, the following grid system was created to allow for each wall to be placed on a grid supported the expansion, removal and contraction of wall systems. For instance, 4ft wall could be expanded into a 12 or 16ft wall programmed into the grid of the floorplan to encourage adaptive use of the space.

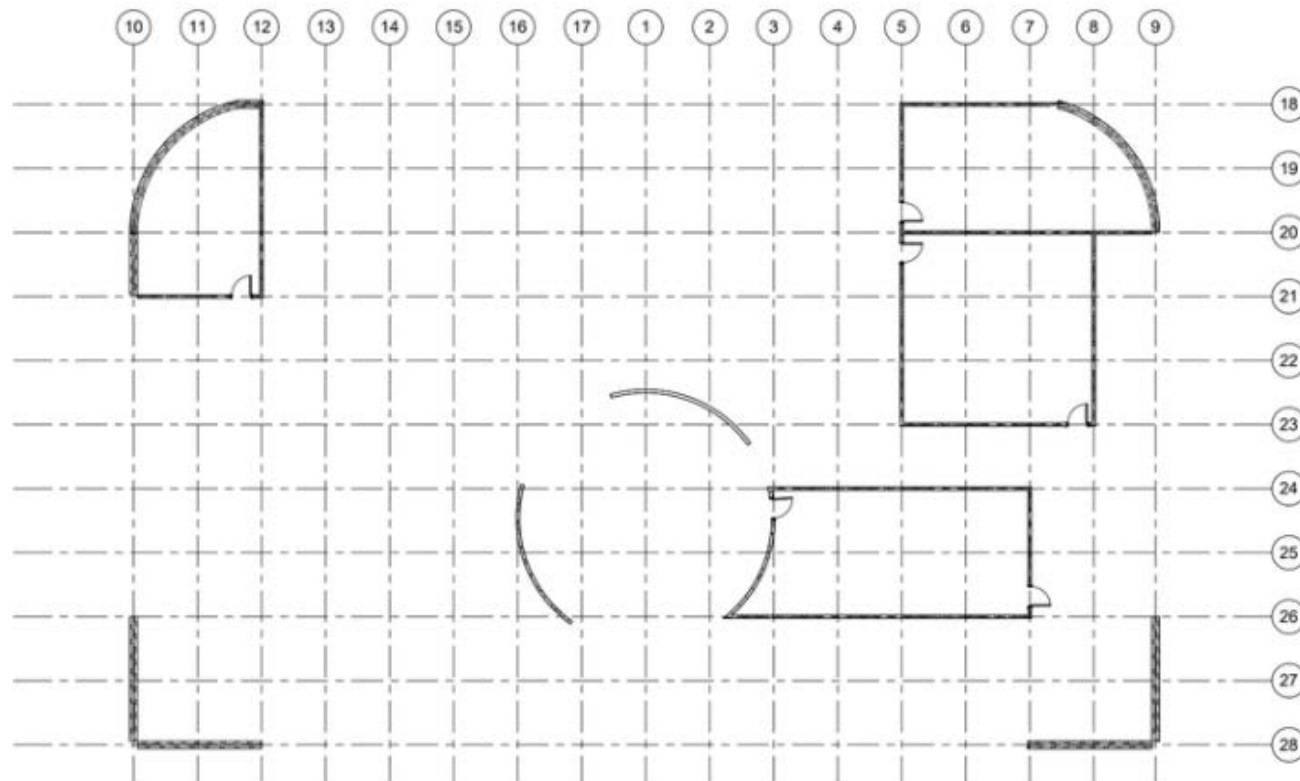


Figure 74: Grid System, Floor Plan Explored

Preliminary Floor Plans

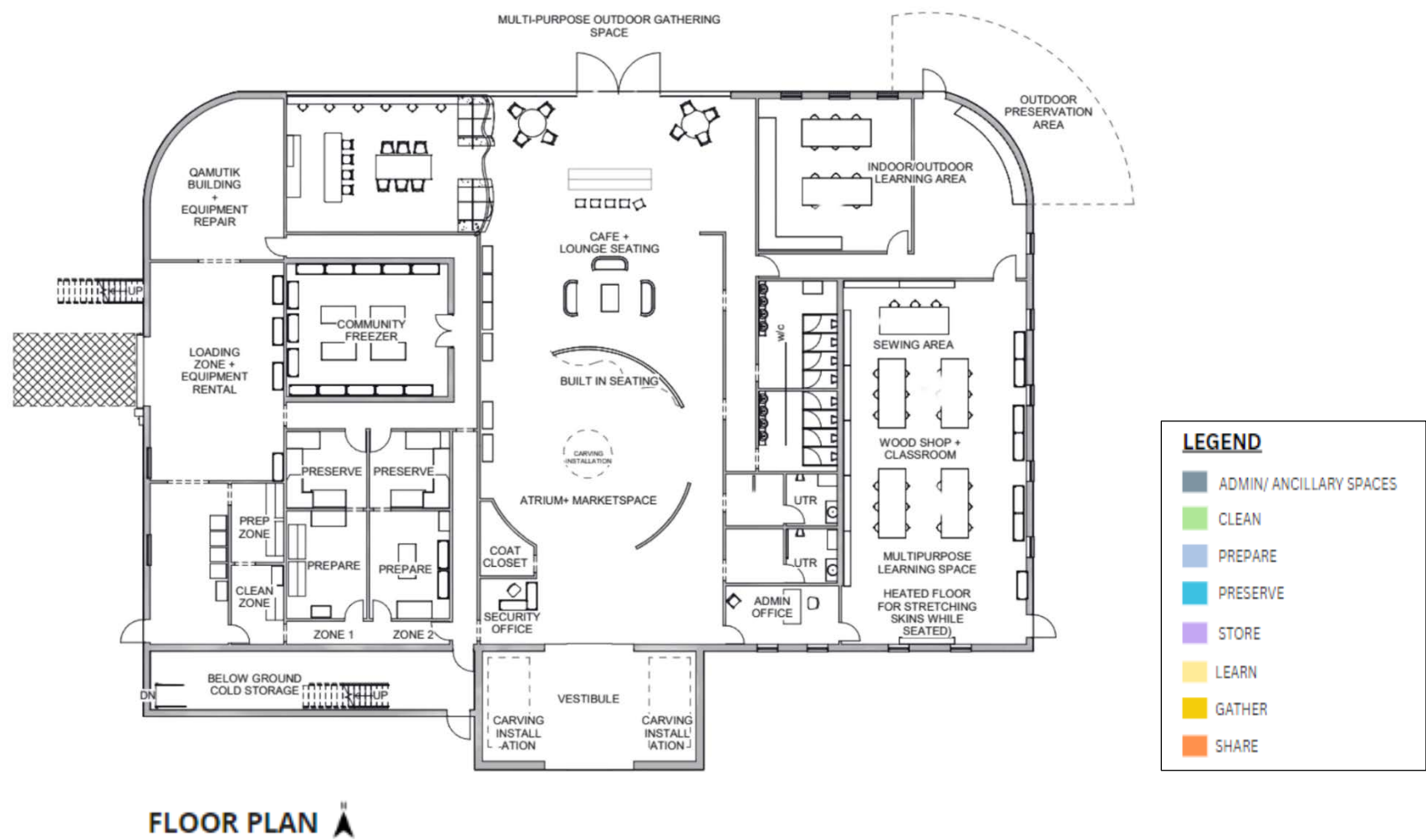


Figure 7: Preliminary Floor Plan

A Need for *Pause*

Exploring Modularity and Adaptability in Design

In the process of placing walls and testing the concept of modularity for the Inuit Cultural Hub, the focus on logistics and adaptability for future use overshadowed an important consideration: the sequence of interventions and the need for a slower process of design. A slower and deliberate pace allows observed behaviors to inform the delineation of walls, if at all required, and the subsequent formation of the space. As the design progressed, the process became focused on creating a fixed due to the design process utilizing architectural and design software. However, many harvesting activities occur outdoors, often in makeshift shelters or on the land. This realization provoked a re-evaluation of the building's fixed form and the creation of a model to examine the built or unbuilt form further: was it necessary to combine all activities into one built structure? Is it possible for the space to instead embrace flexibility or even ephemeral qualities? For instance, a preservation area might simply be in the form of a dugout, while a gathering space might consist of caribou-skin walls and a whale bone frame.

When developing the floor plan based on seasonal hunting and harvesting practices, the process highlighted a disconnection from the values of Inuit cultural practices, particularly the slow, deliberate and respectful approach to making, similar to that of kamik-making. Furthermore, the expediency of the digital design development process lacked the intentional and slow consideration required of a design aligned with Inuit culture and values. This required the consideration of an additional concept, which is that of slow architecture. Slow architecture, which found its roots in the slow food movement, a rebellion against the fast food industry is a philosophy and design concept which will be considered in the design development of the Inuit Cultural Hub. Slow architecture emphasizes sustainability and harmony with

nature, creating structures that age gracefully within their surroundings (Gattupalli, 2023). Moreover, it promotes slow living by creating spaces crafted with intention and time. This approach aligns with Inuit hunting and harvesting traditions, which prioritize sustainability, patience, and respect for nature. As such, the design will foster a respectful dialogue between the space and its users, allowing them to shape it organically. The goal is to create an open-ended space, where users contribute to its evolving story, enriching it over time.

Empathy in Practice

Negotiating Space (An Experimental Design Development)

The iterations below outline a potential timeline for applying slow architecture in the design process of the Inuit Cultural Hub. The incremental design intervention fosters dialogue and negotiation between the built environment and the user, allowing them to engage with the space and consider how it may be adapted and appropriated over time. The example below follows the process of building a traditional Inuit sod house, or qarmaq. The aim is to observe how users interact with the space, appropriate it, and adapt it in ways that could inform building practices in Nunavut to better reflect these needs. The construction process is gradual, beginning with the foundation, followed by the frame, and enclosing one wall at a time. This can also be seen in the sequence of the model making process below.

Slow Architecture Exploration (Inspired by the Qarmaq)

Similarly, the illustration to the right shows how space was created over time in Inuit architectural vernacular, with found or hunted materials reemphasizing a slow architecture philosophy imbedded the history, culture and practices of Inuit. By further examining the ways in which spaces and places might have taken shape, the design of Inuit Cultural Hub can consider new forms of the built or unbuild environment that foster placemaking and practice of traditional hunting and harvesting activities. The image first shows a



perceived barren land, followed by the use of some passerby's and animals, the gradual gathering and occupying of certain spaces, then the use of found material to create shelter as required. The diagram shows the use of hide as an enclosure and the frame becoming a functional aspect of the built form to dry hunted material and not solely as a wall.

Building Process Exploration (Informed by Qarmaq)

1. **Place Foundation:** Traditionally made of stone in the *qarmaq*, this will be replaced with concrete. The goal is to observe how users engage with the space and their willingness to interact with the foundation.

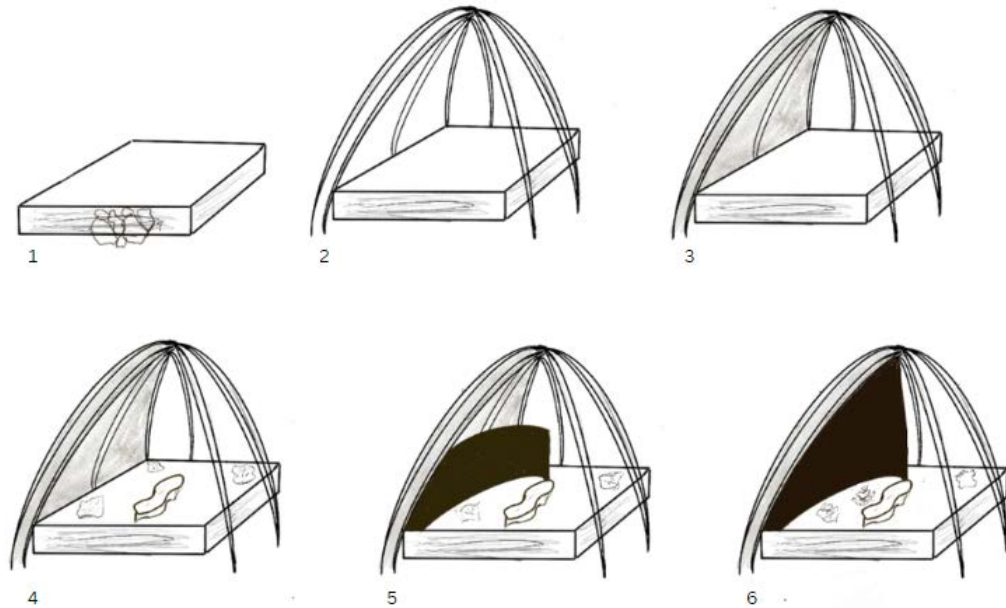


Figure 77: Qarmaq Design Exploration

2. **Construct Frame:** This is the first visible sign of structure. Observe whether the frame encourages interaction and if the shape of the *qarmaq* evokes a sense of familiarity and comfort for users.
3. **Enclose a Portion (e.g., Caribou Hide):** Traditionally enclosed with caribou hide, this can be substituted with a temporary material, such as canvas. This provides protection from wind and the elements. Observe whether this enclosure increases or changes the level of interaction within the space.
4. **Place Objects (e.g., Stones for Seating):** Informal seating areas, common in traditional Inuit spaces, will be created with stones. The aim is to test whether simple, nature-inspired furniture promotes comfort and use.

5. **Enclose a Partial Wall:** At this stage, semi-permanent features, such as a sink or fixed counter space, may be added. Observe how these features influence the function and flow of the space.
6. **Construct Full Wall:** Based on user behavior and interaction up to this point, the final wall construction should reflect the observed needs and the intended size and layout of the space.

Qarmaq (Sod House): Traditional Structure → Contemporary Adaptations

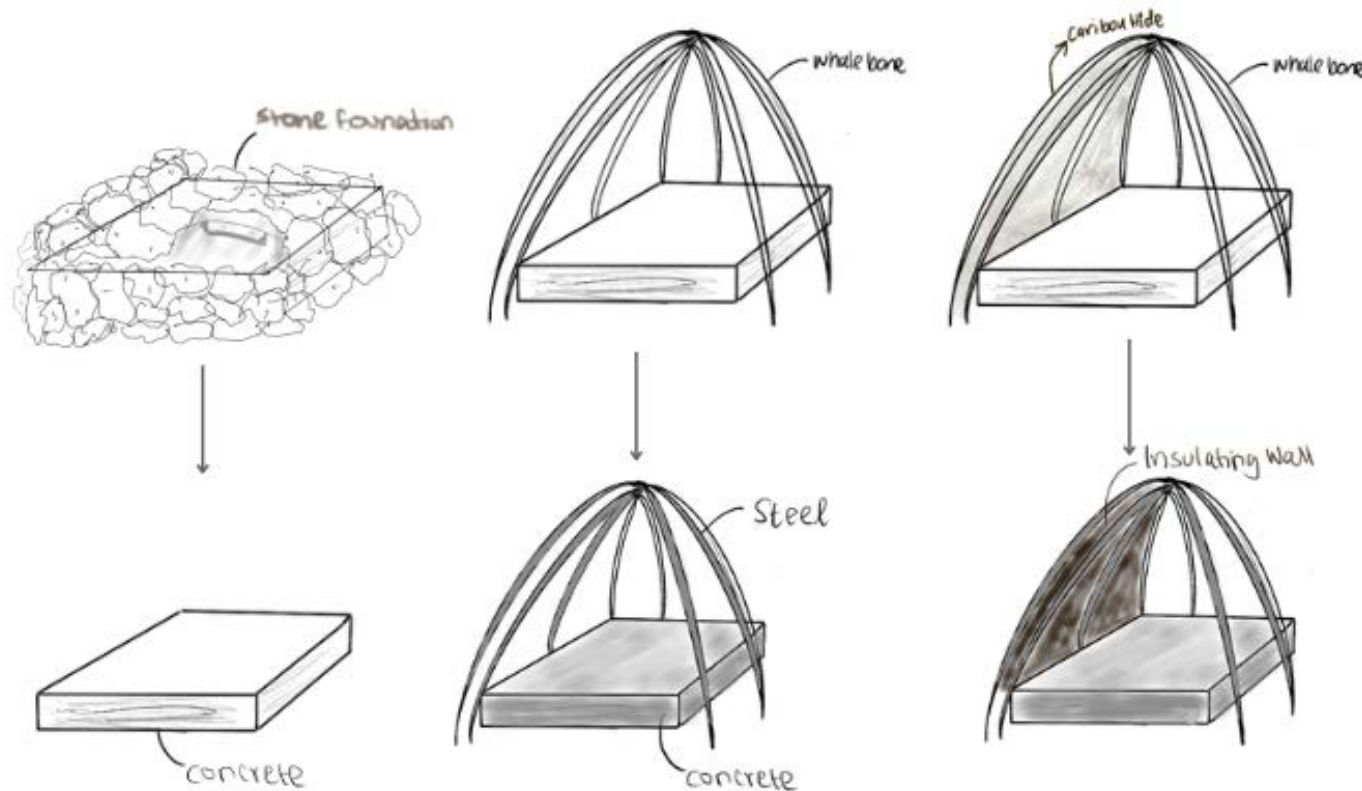


Figure 78: Qarmaq Design Exploration

Model Making

The parti was created to explore the proposed spaces and consider the sequence of interventions. This approach would in theory enable the community to pause the design development process. For example, the gathering space could be left as it is, with the surrounding area consisting only of a frame, allowing a canopy to be draped over it for spring or summer festivals and activities. In winter, partial enclosures could be considered to facilitate year-round use of specific activities in designated spaces within the floor plan.

This approach imagines a floor plan that evolves over time, unfolding between built and unbuilt spaces. The structure is intended to act as a flexible envelope, adapting to meet changing community needs and is influenced by the behaviours, climate, location. The designer's role here becomes less about programming and designing spaces but rather, to minimally intervene and then allow the community to shape their spaces accordingly.

The model explored two key aspects:

Incremental Intervention: Walls or interventions are added gradually, allowing pauses for reflection. For instance, a single makeshift wall might define a gathering area, with subsequent enclosures considered only as necessary.

Modularity: A 4x4x4 grid system enables walls to expand or retract. A wall could be extended to create larger rooms or removed to form temporary outdoor spaces, such as a mesh-enclosed preparatory zone.

Parti Model: Sequence of Interventions

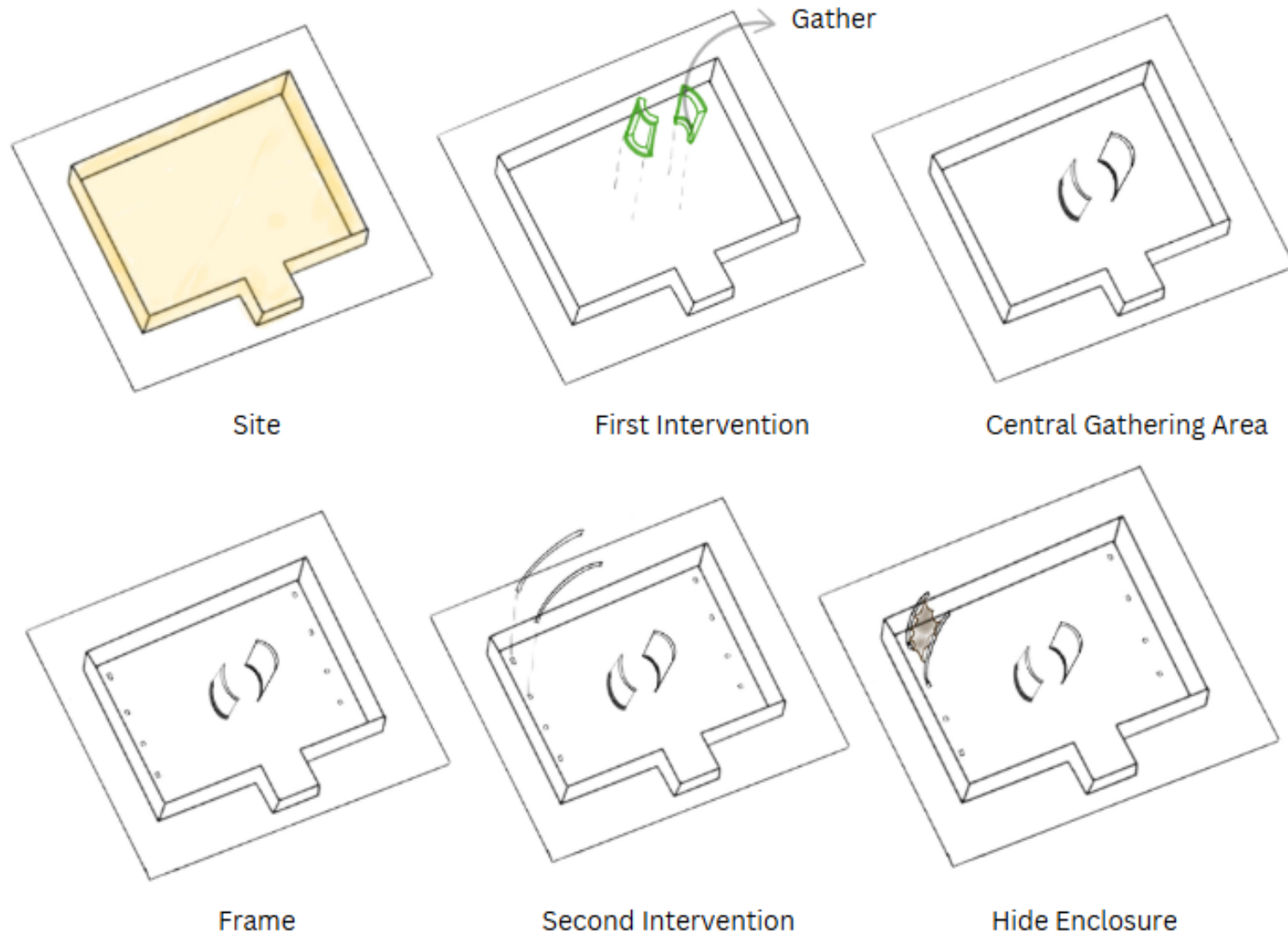


Figure 79: Parti Model, Sequence of Intervention

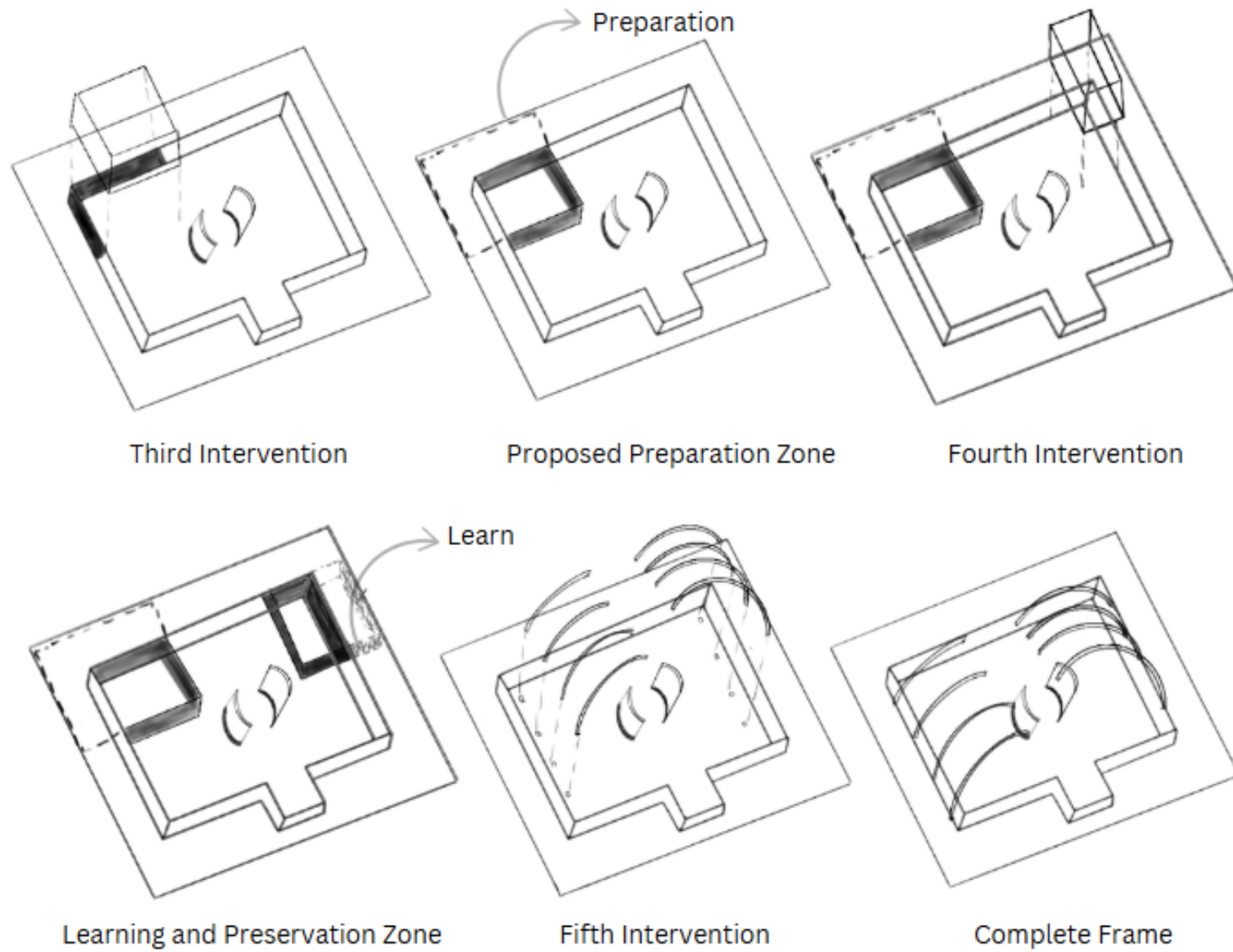


Figure 80: Parti Model, Sequence of Intervention

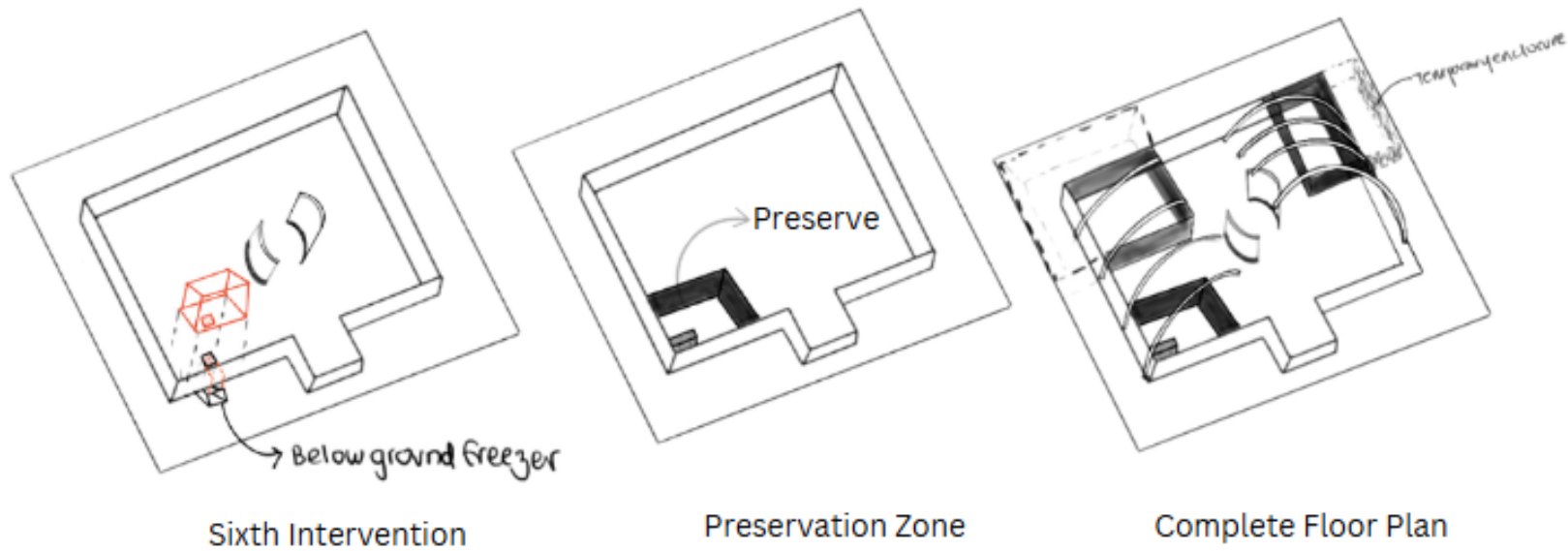


Figure 81: Parti Model, Sequence of Intervention

The model below was constructed in the same sequence as the parti diagram, guided by the slow process of building and observing uses in the space to explore the possible configurations and form of the Inuit Cultural Hub.

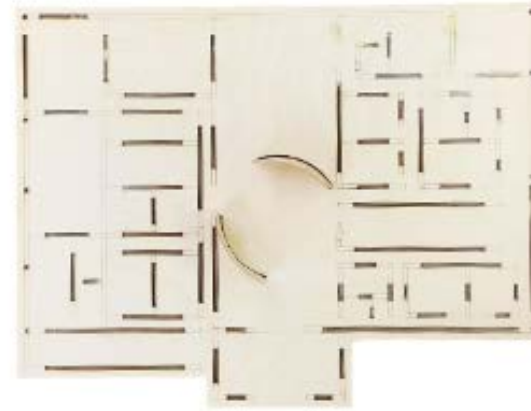
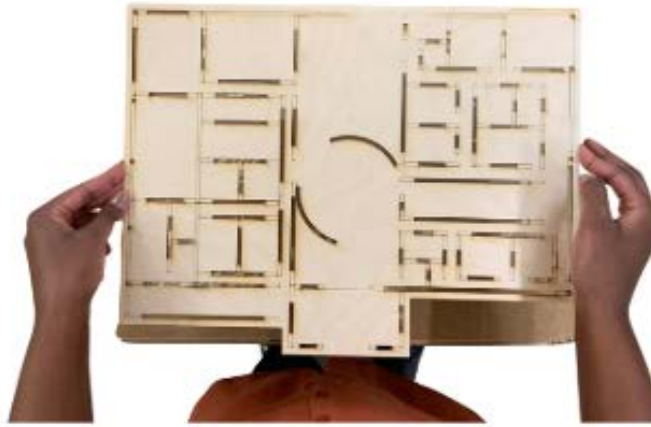
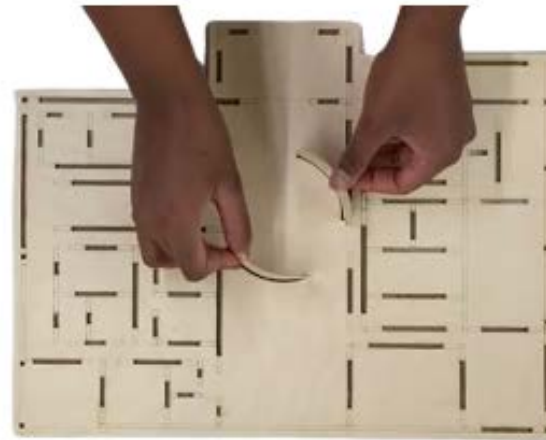


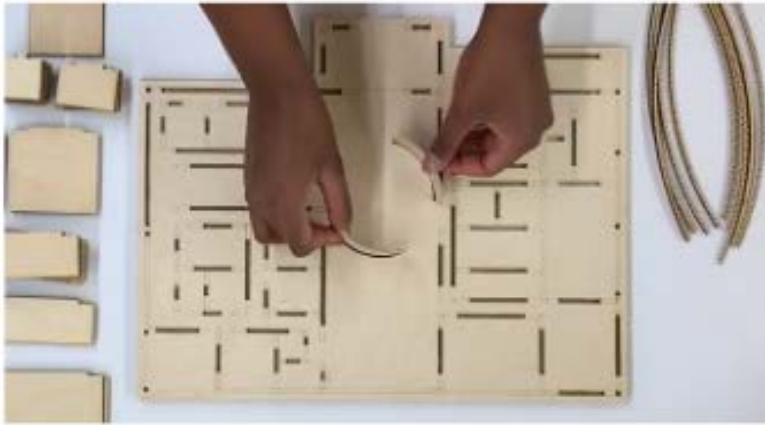
Figure 82: Parti Model Making,
Sequence of Interventions



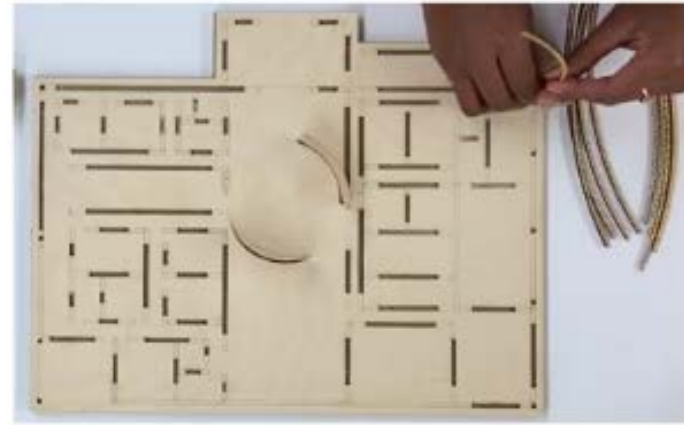
1. Prepare Grid Floor Plan



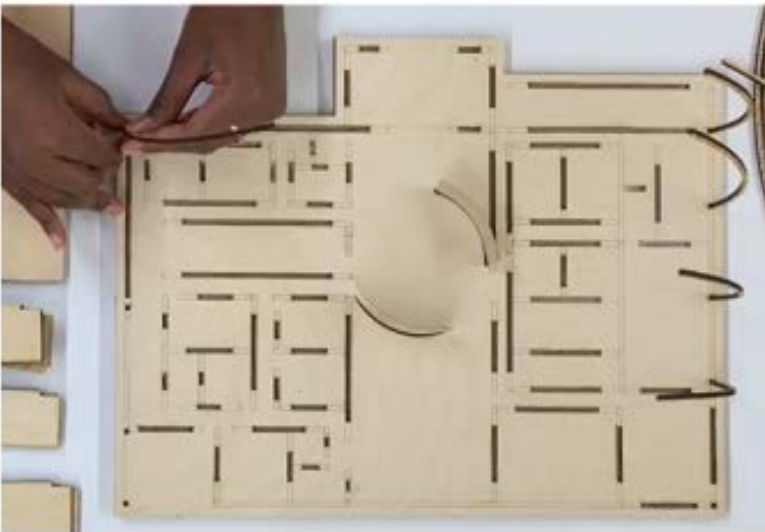
2. Place First Intervention



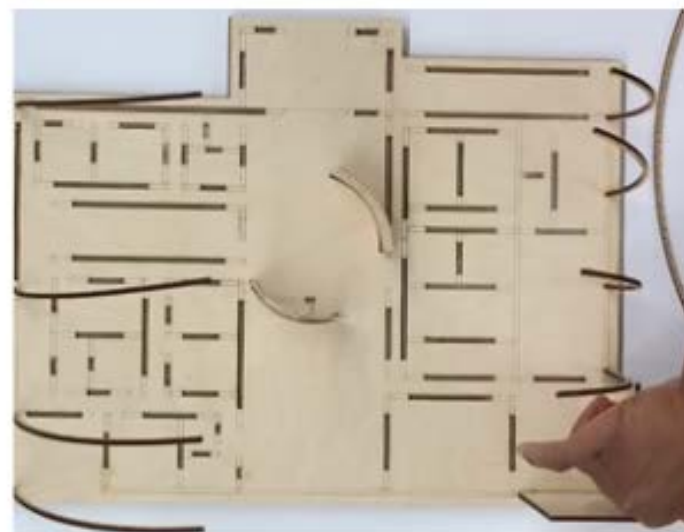
Gather Space



Framing Partial Structure

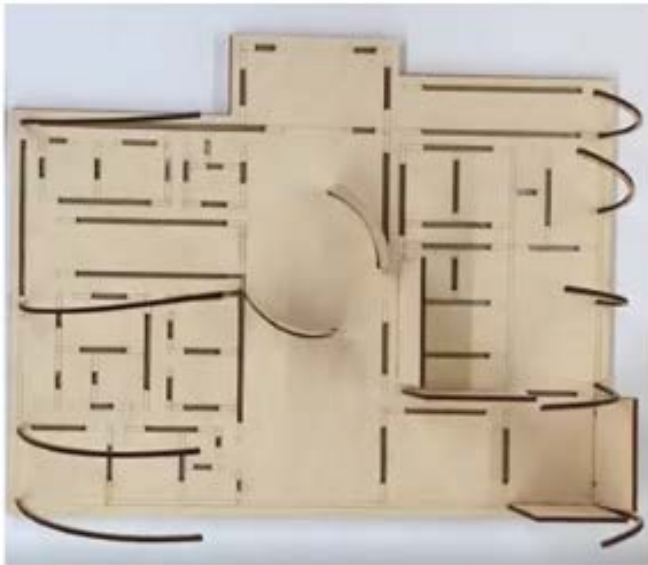


Framing Complete Structure

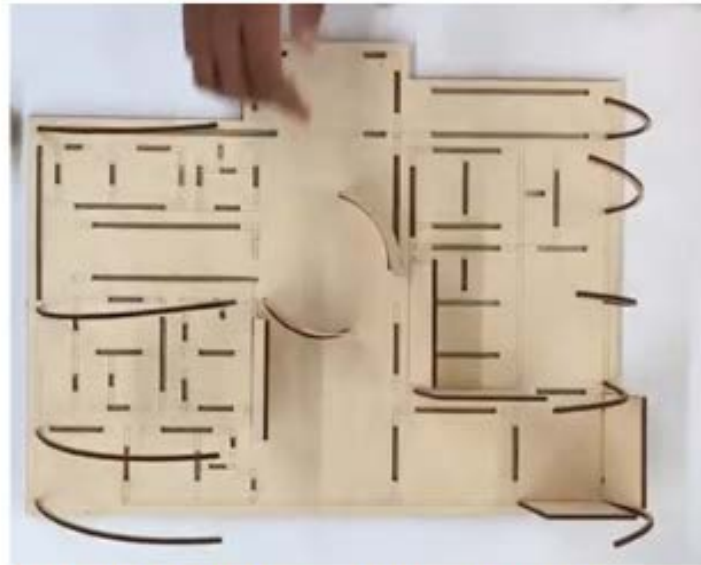


Place First Walls

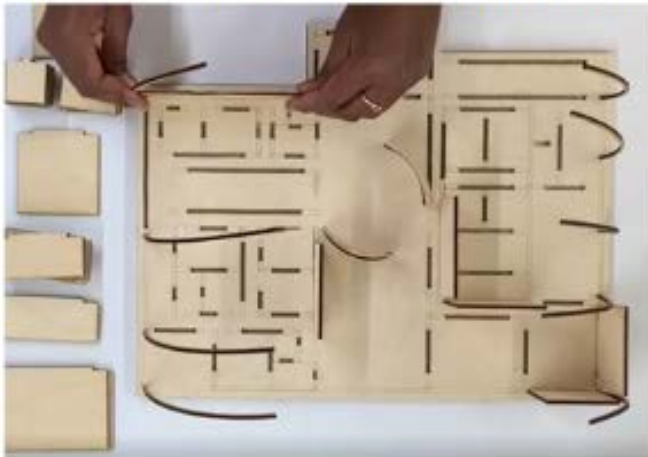
Figure 83: Parti Model Making, Sequence of Interventions



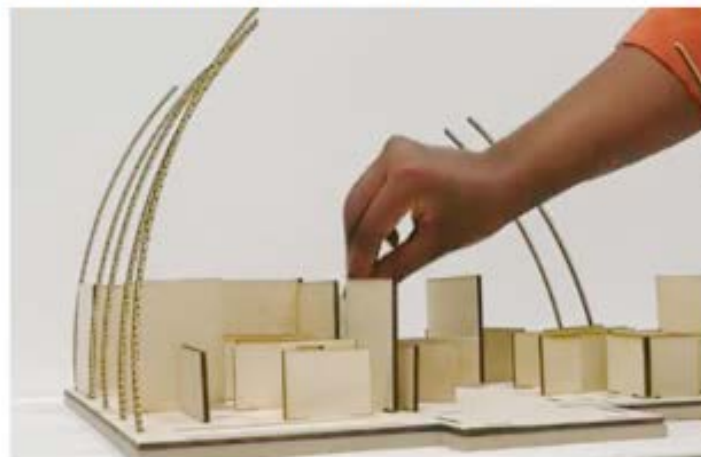
Place Interior Walls (Preservation Zone)



Place Interior Walls, Learning Space



Place First Exterior Walls



Complete Walls with Programmed Spaces

Figure 85: Parti Model Making, Sequence of Interventions

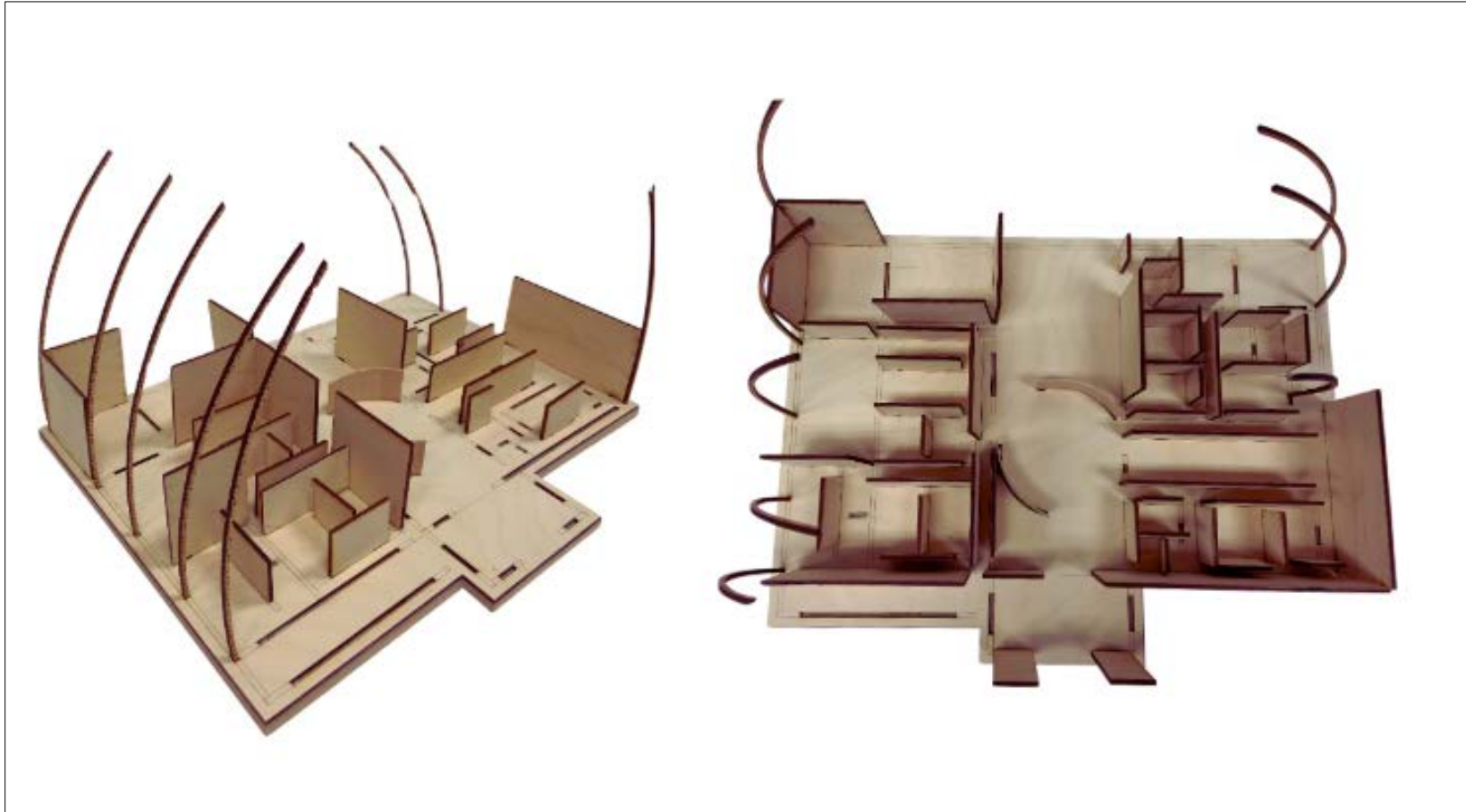


Figure 86: Parti Model Making, Sequence of Interventions

The parti model below further investigates whether the space must consolidate all activities in one location—or even take the form of a building at all. Separating these activities from the site and the proposed structure allows for the possibility that a conventional building may not be necessary. Instead, the space could represent a new typology for ephemeral spaces that foster a deep connection to place by avoiding the rigidity of a single form, location, or typology. The diagram builds on the concepts of adaptability and modularity, enabling walls to expand, contract, or be replaced with temporary enclosures, such as netting for preservation.

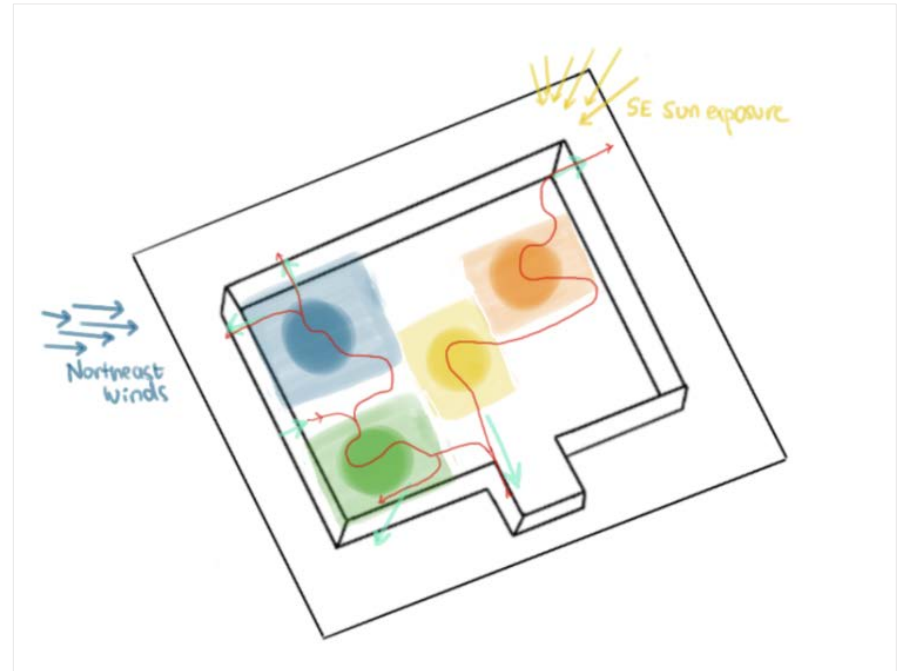


Figure 87: Parti Model Zoning Exploration

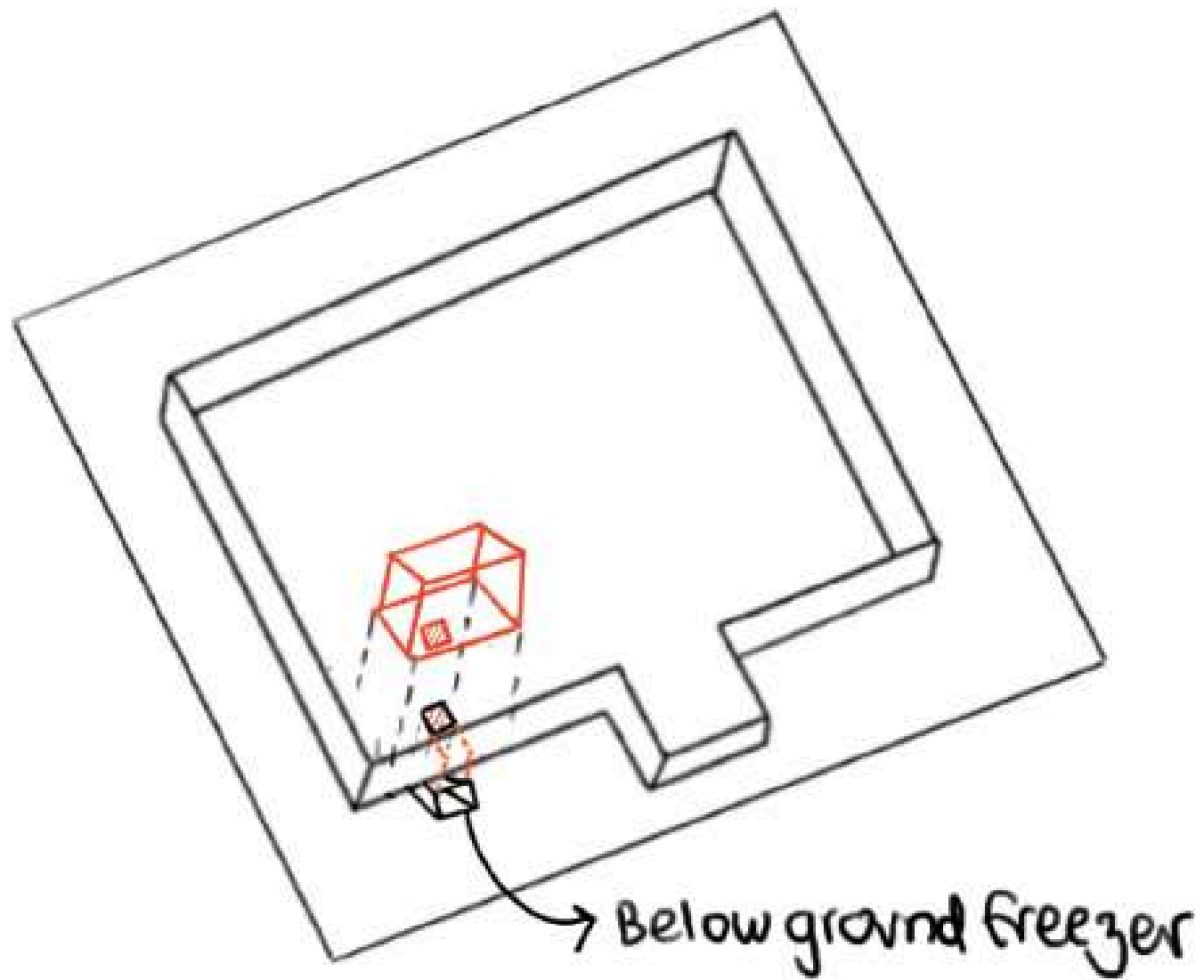
The main programs were considered for this exploration (see figure above) which includes the preservation area, learning, gathering and preparation zones.

1. **Isolate:** Placing the gathering area on the land using the technique of the qarmaq by building it into the ground; this space offers an informal gathering area year-round without the need for completely enclosed frame.

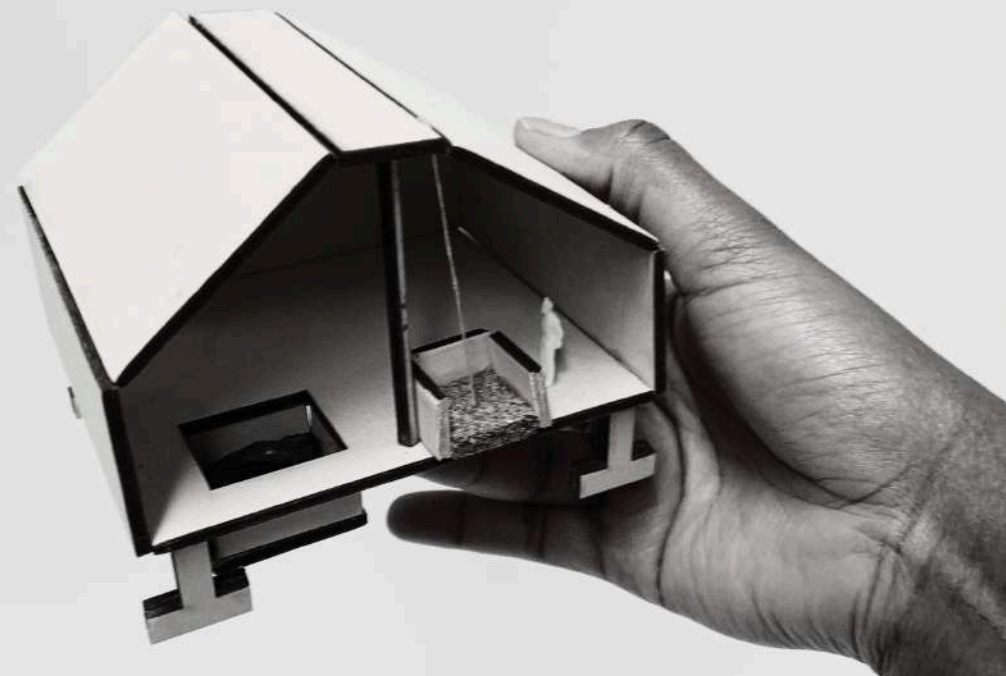
2. **Reconstruction:** This parti considers the use of a traditional freezer by removing the floor panel to dig into the ground. It also offers a pully system to transport meat on top of the home to allow for natural freezing during winter months with the benefit of the fresh air creating longer lasting and fresh tasting country food.
3. **Transport:** This model allows for the transportation of activities to occur between the interior and exterior spaces and even relocate during various times of the year (e.g. following migratory patterns).
4. **Perforate:** This model perforates the wall system to allow for ventilation of country food for preservation, the enables the drying of meat year round in these spaces. This space may consist of an additional layer or enclosure during colder months and adapt to mesh frame in warmer times of the year.

PARTI MODELS



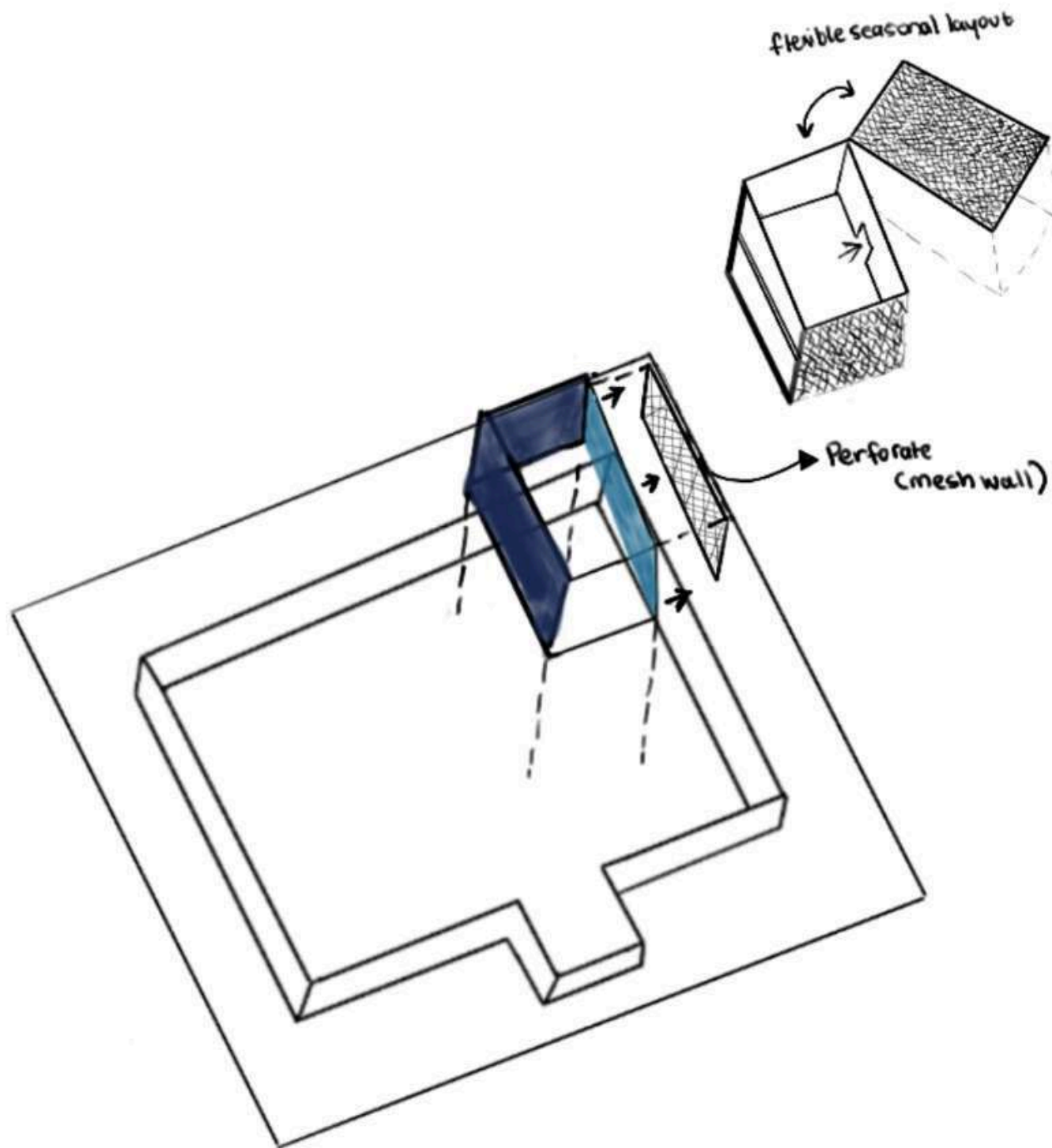


RECONSTRUCTION

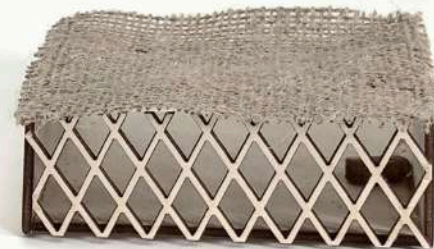
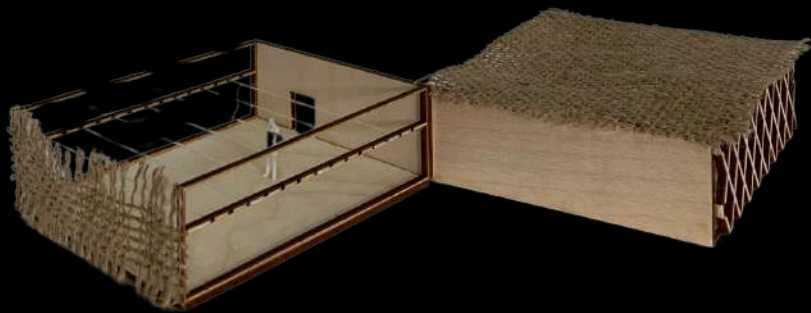
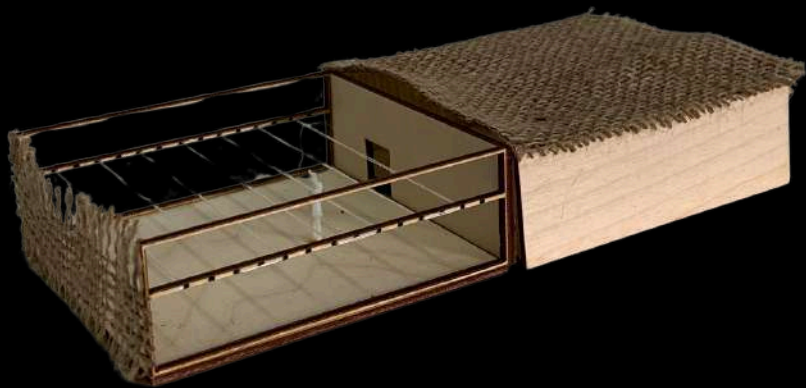
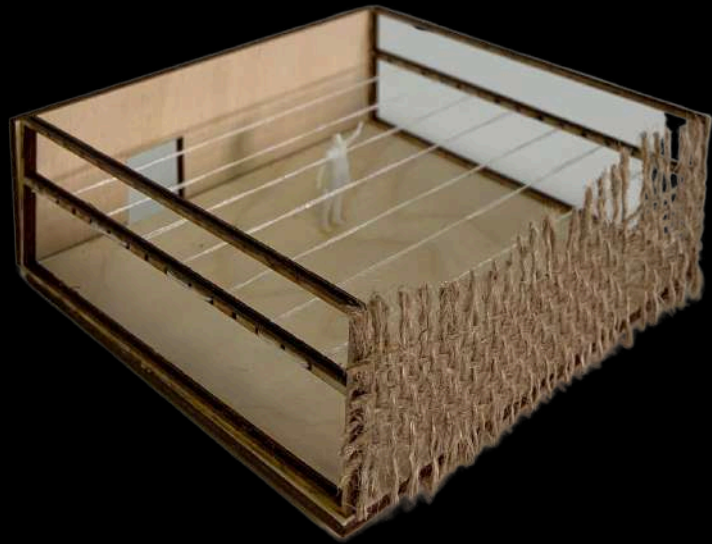


RECONSTRUCTION

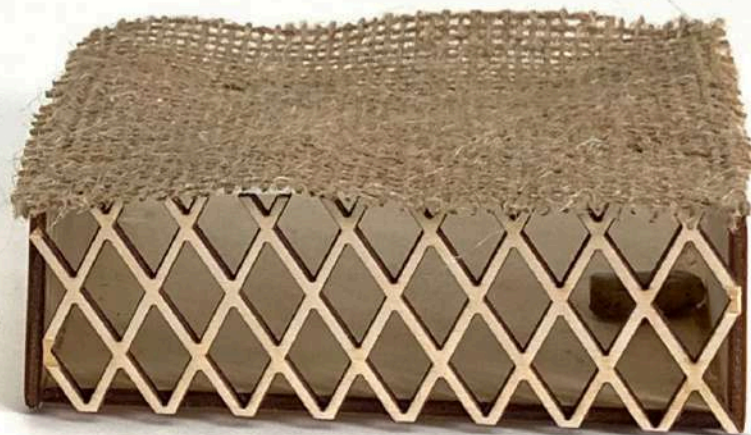
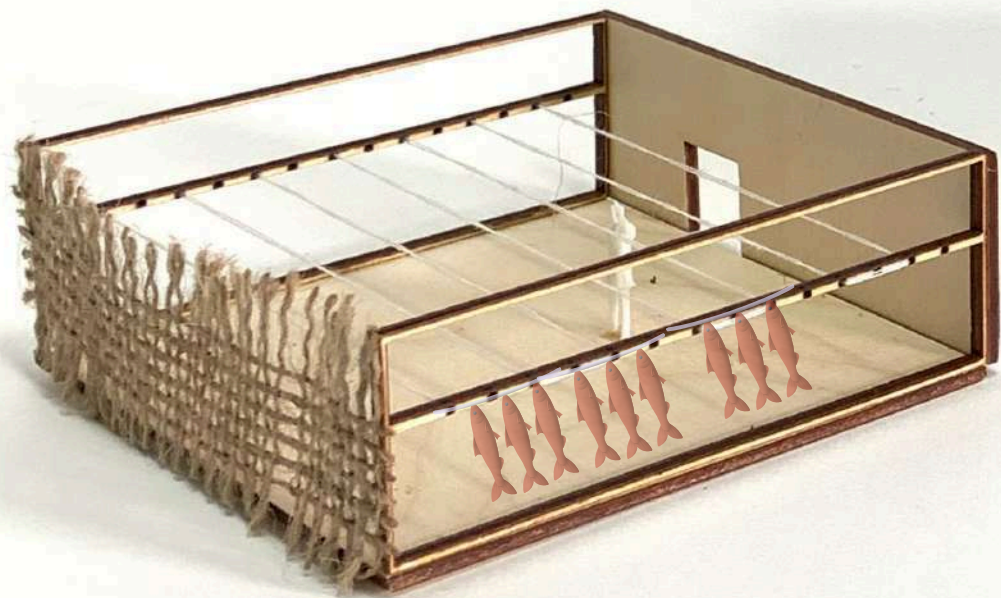


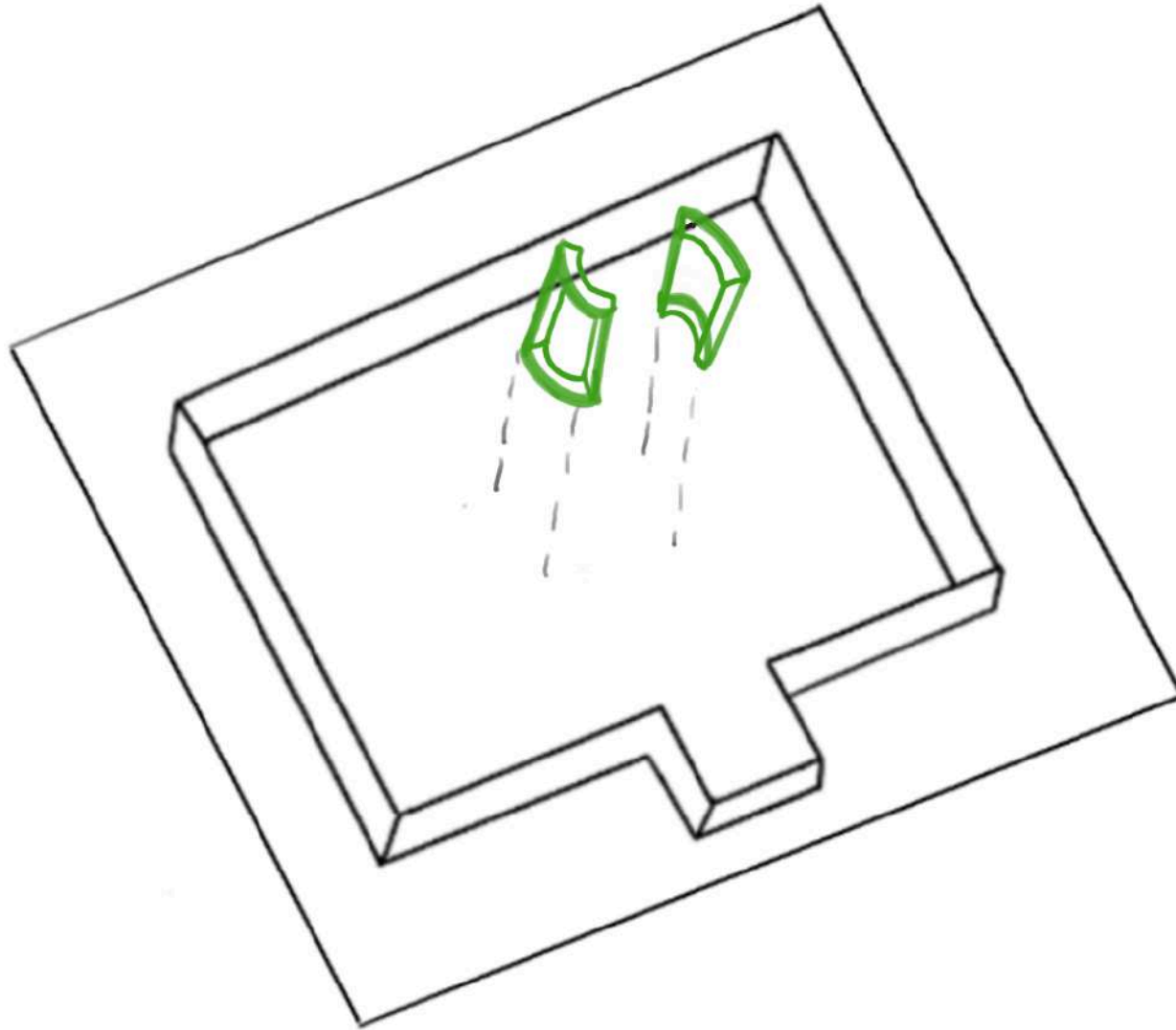


PERFORATE

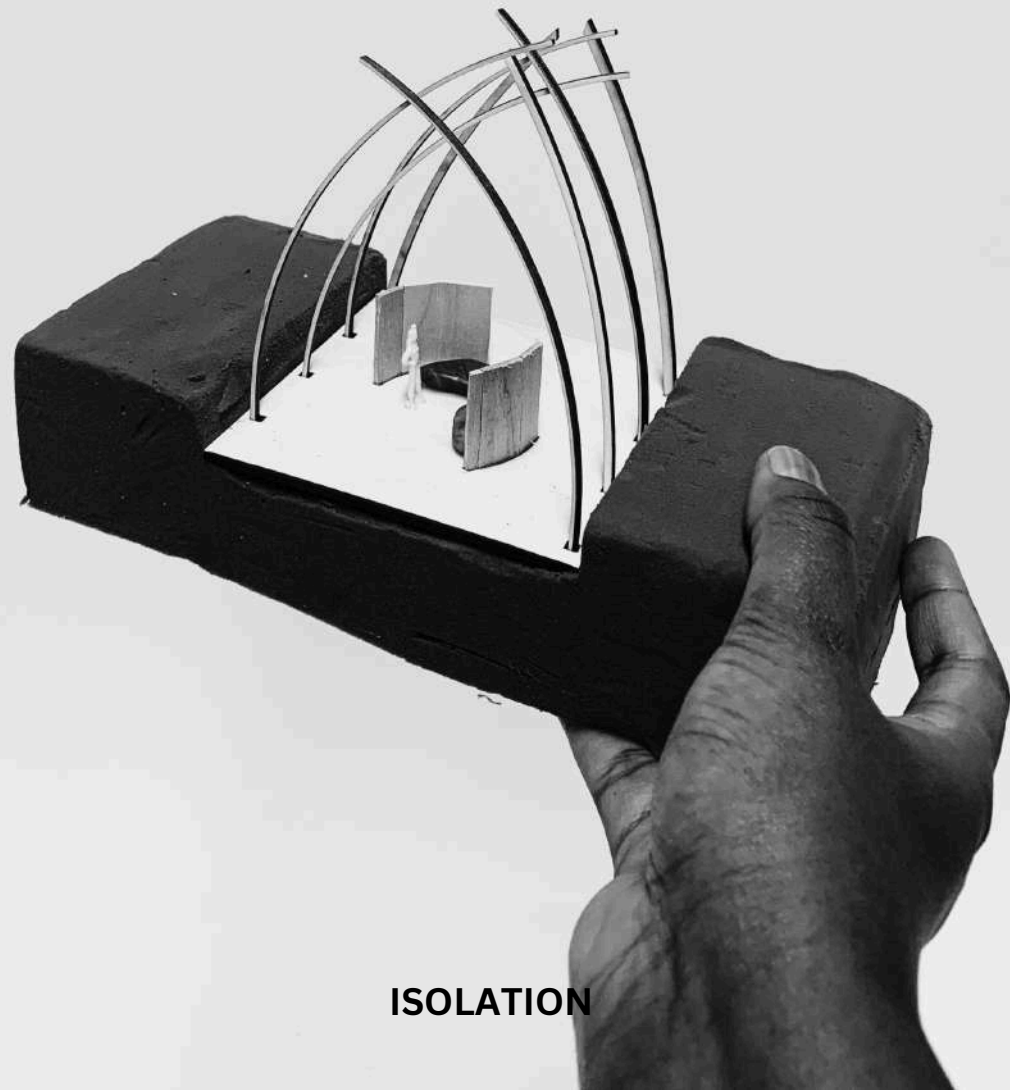
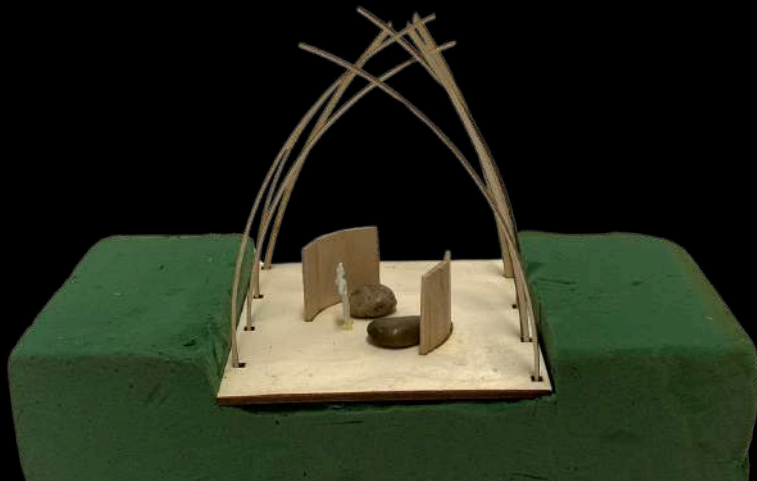


PERFORATION

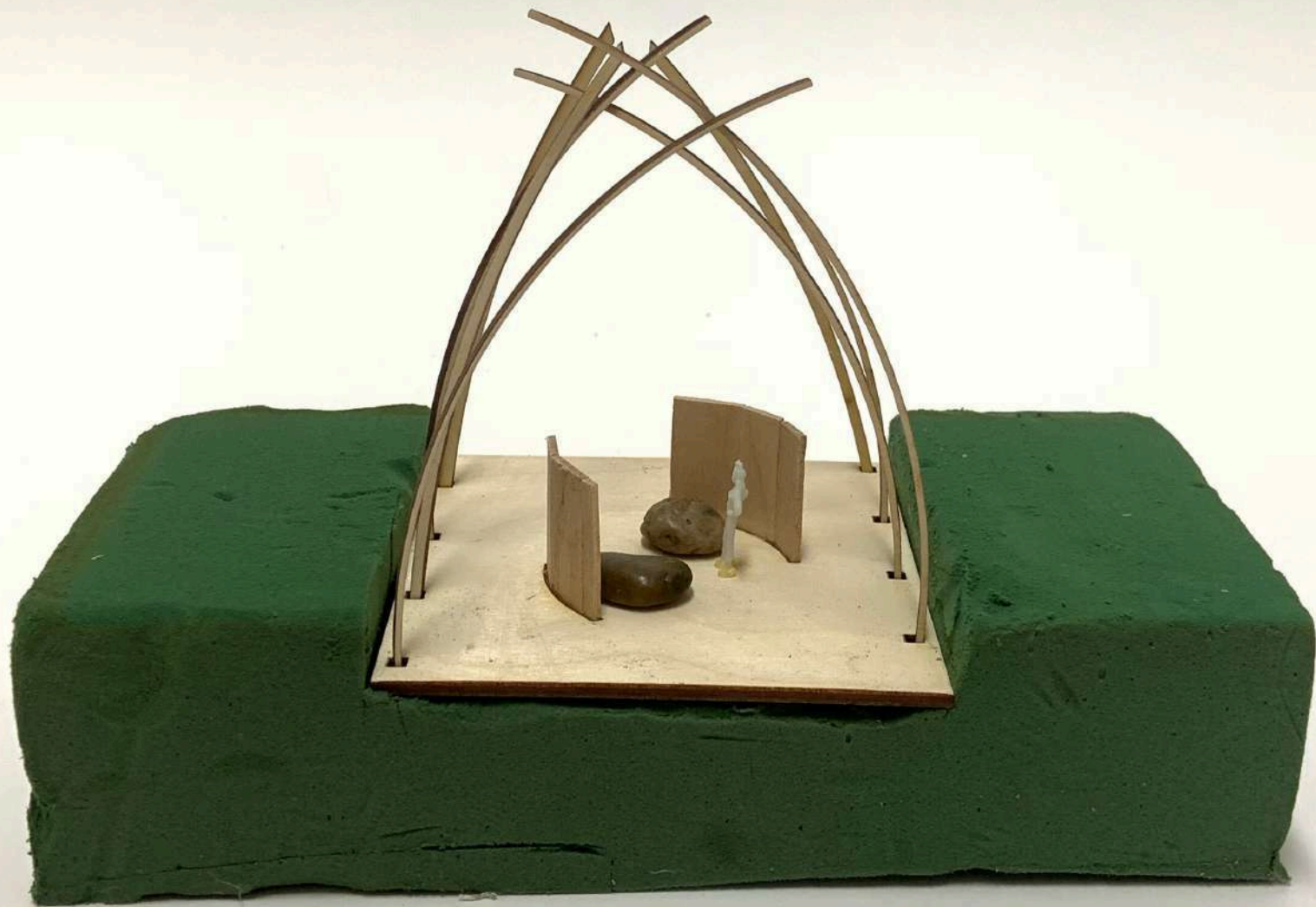


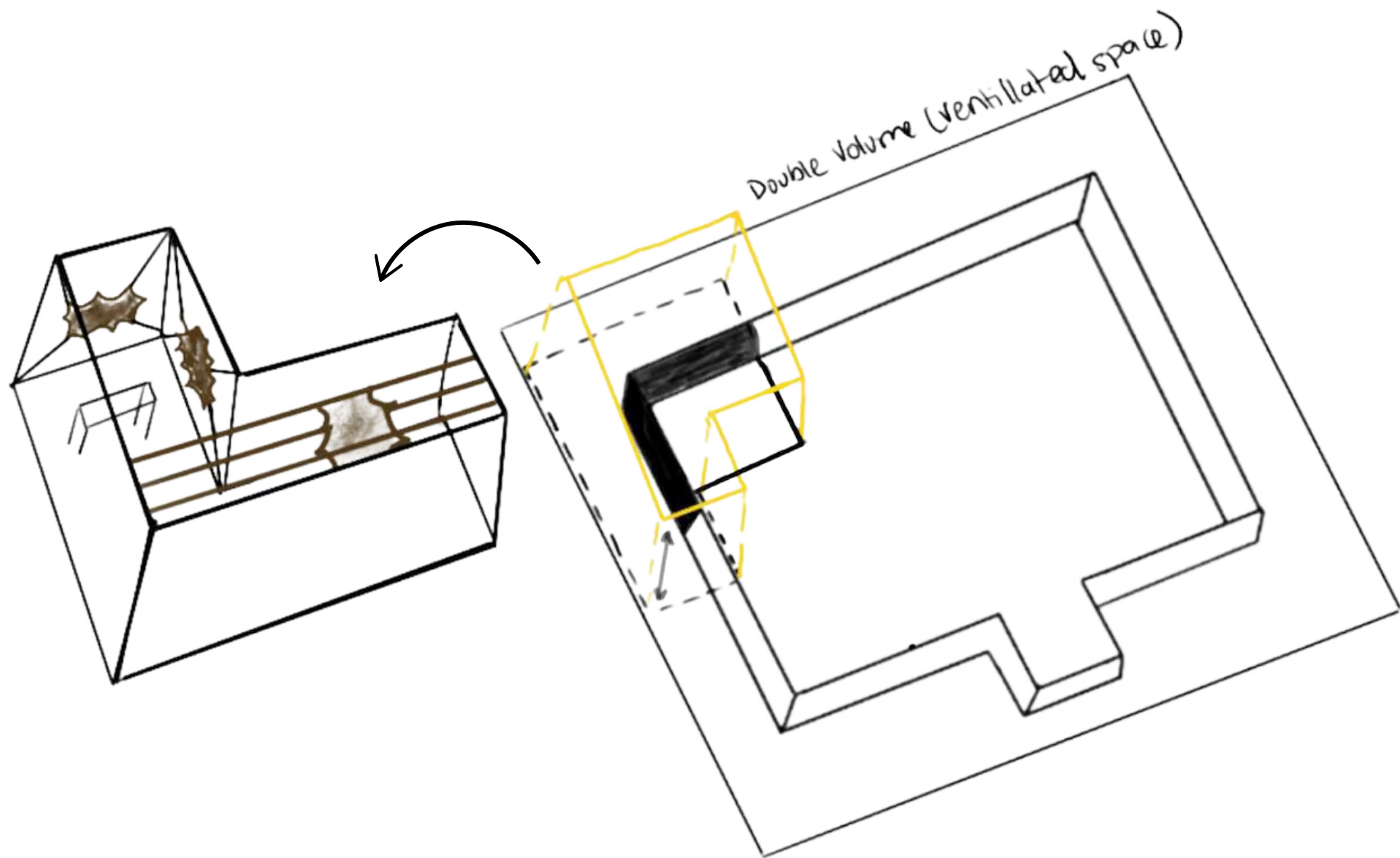


ISLOLATE

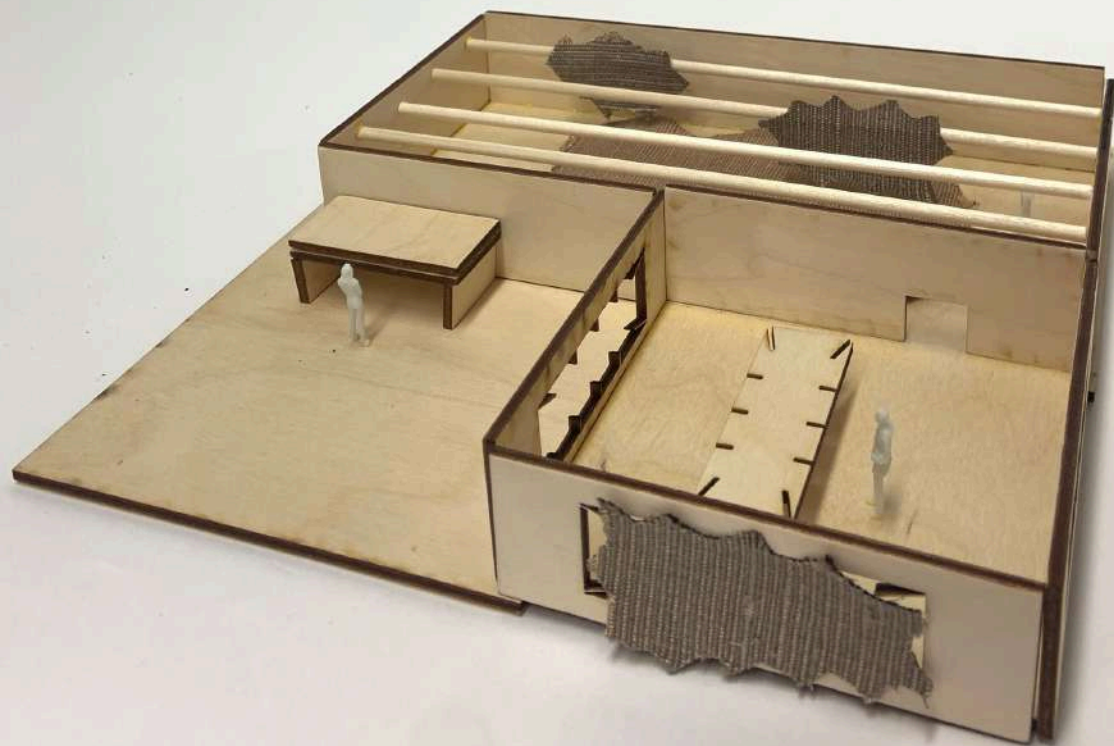
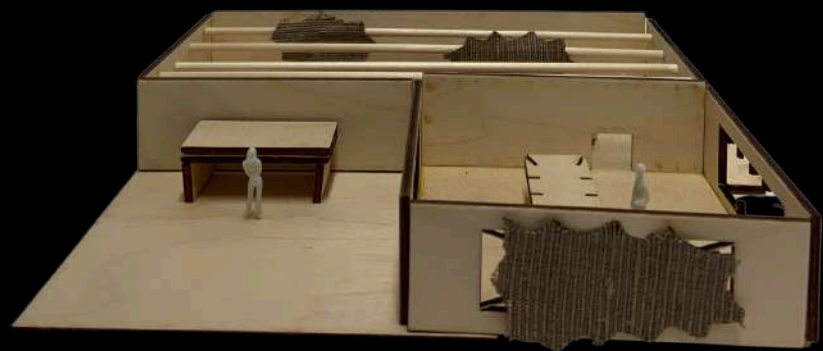
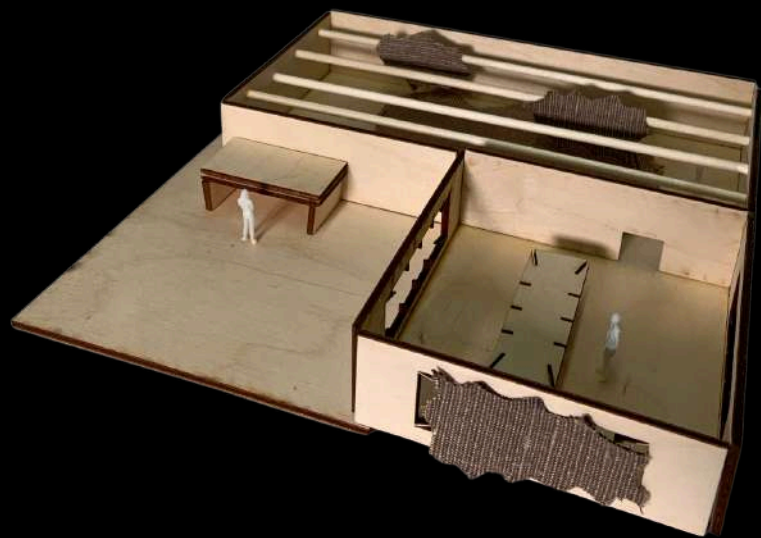


ISOLATION

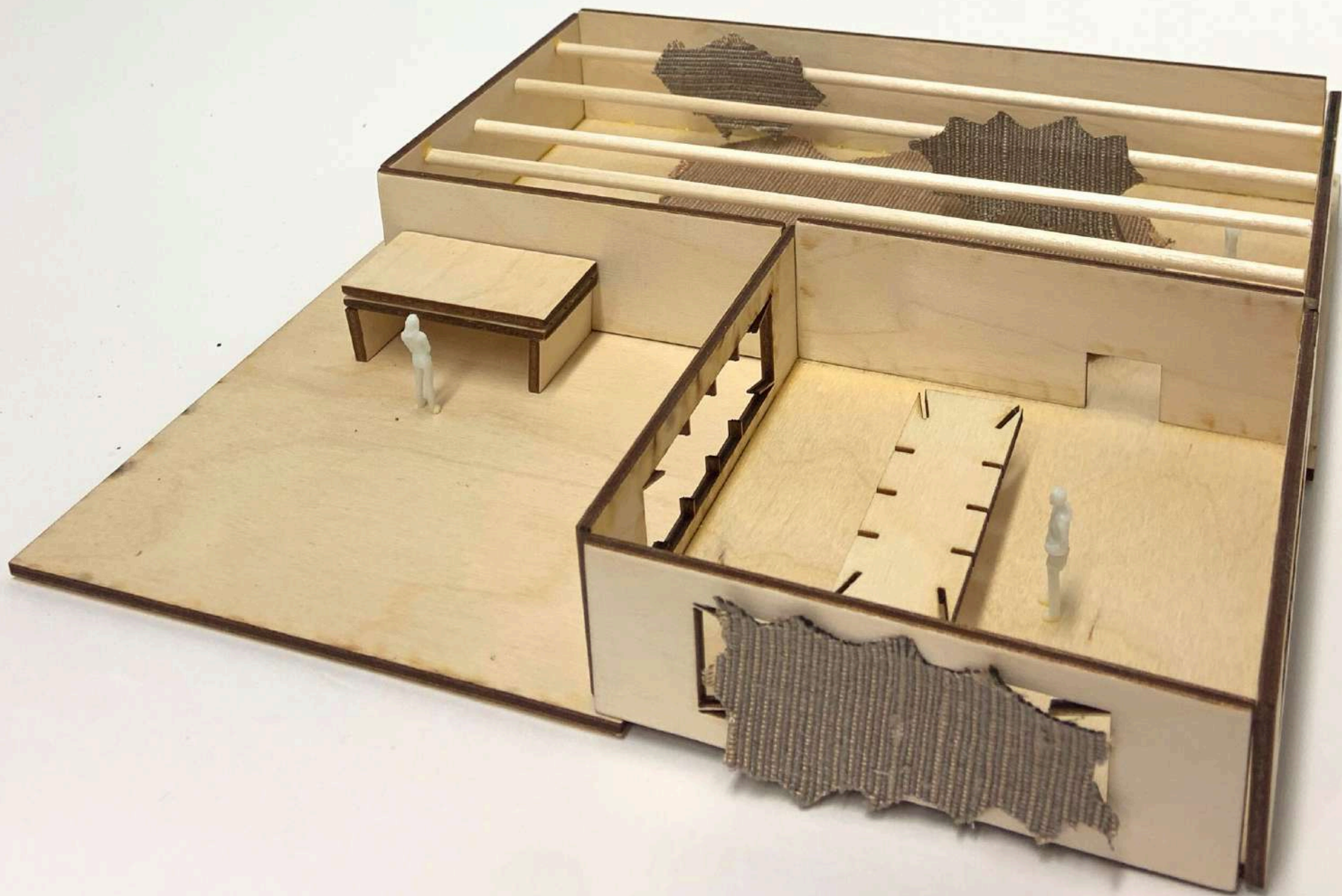




TRANSPORT



TRANSPORT



PARTI MODELS



Recommendations

Conclusion

The research in this practicum demonstrated a critical observation about empathy design, which is that in practice is not linear but nuanced, requiring a circular approach for designers to constantly reflect on whether empathy is being meaningfully practiced. It also highlighted the challenge of design practices being incongruent with the slower, empathy-driven processes that align with Inuit societal values. This resulted in the need to integrate additional systems into the proposed empathy framework that challenge the typical design process, transforming it into one that considers this sequence of **minimal intervention, pause and reflection**, repeated throughout the project. This iterative approach enables designers to gain a broader perspective on the impact of their interventions. The **pause** allows time to question whether an intervention is necessary and at what scale. Whereas, the **reflection** enables designers to position themselves within the project and evaluate their contributions through a critical lens.

Furthermore, the research highlighted an existing tension between the immediacy enabled by modern design tools such as Revit and AutoCAD and the intentional and deliberate slowness that is fundamental to Inuit culture. While the proposed cultural hub does address the spatial and programmatic needs of the community such as a community freezer, gathering space, and processing facility; the design development phase revealed a greater call to action. This research demanded more than simply meeting immediate needs; it necessitated a reimagining of the built environment in Nunavut. The process required a reflection and critique of current design practices, questioning whether they align with the cultural, social, and environmental values inherent to Inuit ways of life. This reflection became an integral part of the project, revealing the necessity of moving beyond conventional architectural solutions to explore approaches that honor Inuit traditions and foster a more meaningful connection between people, place, and process.

In examining Inuit material culture, we can observe the intentional and tangible slowness inherent in the creation of their material culture with the innovation of tools, slow process of making Kamiit or the building of dwellings over time with the understanding of their ephemeral nature. This observation provides a valuable insight for design practice, raising questions about the nature and pace of building processes and whether this misalignment with Inuit values might serve as a first step in addressing these issues in design practice going forward.

Reflections

During the design proposal and development phase, I encountered challenges in actioning the empathy framework due to conflicts with these conventional design **processes**. As I moved from conceptual development, programming, site analysis, and eventually toward a design 'solution', it became clear that building with expediency using architectural software conflicted with Inuit cultural practices. These practices are observed through slow, collaborative, and meaningful relationships with the land, space, and community, ultimately shaping their built environment. Therefore, this incongruity in the **process** of designing and the need for slowness, to respect and reflect Inuit practices, could not be overlooked. It is also crucial to consider insights from Inuit architectural practices illustrating the importance of ephemeral, adaptive spaces that respond to seasons and migrations such as the igloo and qarmaq. The intention is not to revert to past dwellings but to consider the value of slowness, mirroring cultural rhythms like hunting, harvesting, and the changing climate and land, this might allow the designer to see alternate possibilities and question the need for permanent built spaces.

This approach fosters the need to challenge industrialized, linear design processes that conflict with these practices, instead embracing a slower, more critical process in place of our linear and results-driven approach. Furthermore, the framework aims to challenge solely physical

design solutions by reimagining the processes underpinning architectural practice, highlighting it as the bottleneck to fostering empathy in practice. This ultimately meant that the design development of this practicum resulted in less of a design 'solution' and more of a design investigation and critical reflection.

These reflections led me to reconsider the empathy framework, recognizing that it lacked this crucial component: a dedicated phase serving as a checkpoint throughout the design process to ask critical questions, such as:

- Is designing required?
- How might empathy be further explored through a deeper understanding of community needs?
- How might I challenge my own contributions, intentions and perceptions of my role as a designer?
- How can deviating from conventional design phases contribute to a process that better aligns with the needs and culture of the community?
- What should the designer's role truly be in this context?

Adapting the Framework

The adaptation of the framework aimed to address the challenges I encountered as a design student striving to practice empathy through research and design, while navigating the conflicting expectations of conventional design processes. The addition of intervention, pause, and reflection enabled me to critically consider these conflicts and may serve as a guide for designers facing similar challenges when the design

process does not align with community or client needs. Outlined in the figure below are the three phases integrated into the framework; intervention, pause, and reflection which is repeated throughout the project.

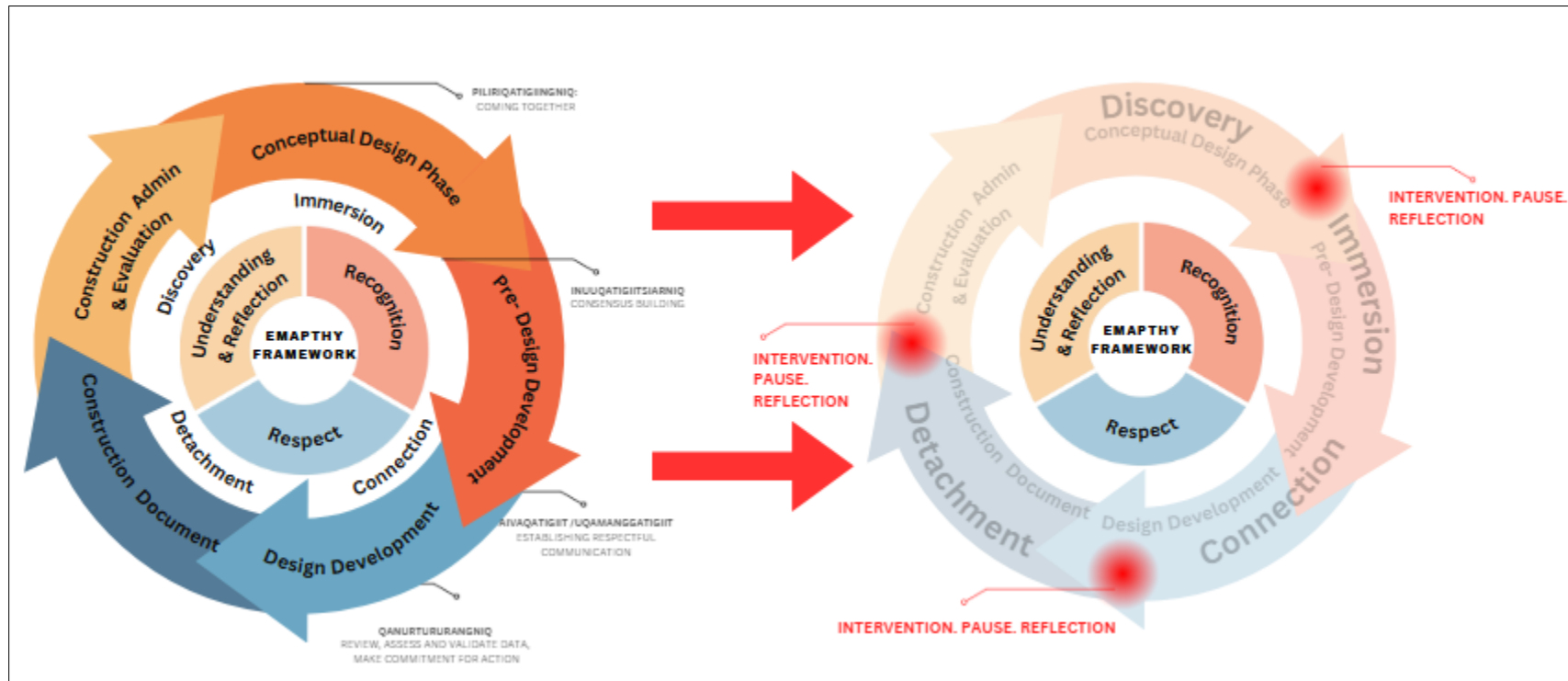


Figure 88: Empathy Framework, Exploration, Illustration by Author.

The proposed empathy framework aims to bridge the gap in understanding between designers and communities, fostering collaboration and respect. It is not merely a guide but an invitation to rethink how spaces are conceptualized, built, and shared. In my research, utilizing this adapted framework led to the creation of **parti models** to explore how the space might take shape. This allowed me to question whether a

physical structure was necessary, considering that many traditional Inuit activities occur outdoors, and whether a design ‘solution’ was appropriate for the context. Furthermore, the practice of model-making could serve as a communication tool between designer and community, ensuring needs are effectively conveyed in the development of spaces. The model-making helped contextualize and visualize spatial configurations informed by traditional practices and behaviors. This method resulted in zoning based on activities (e.g., indoor/outdoor, public/private, communal/isolated), demonstrated how modularity allows for adaptation in response to changing needs through slow and reflective process and most importantly, that design outcomes need not always be in the form of buildings or constructed dwelling but could instead foster **places** shaped collaboratively over time.

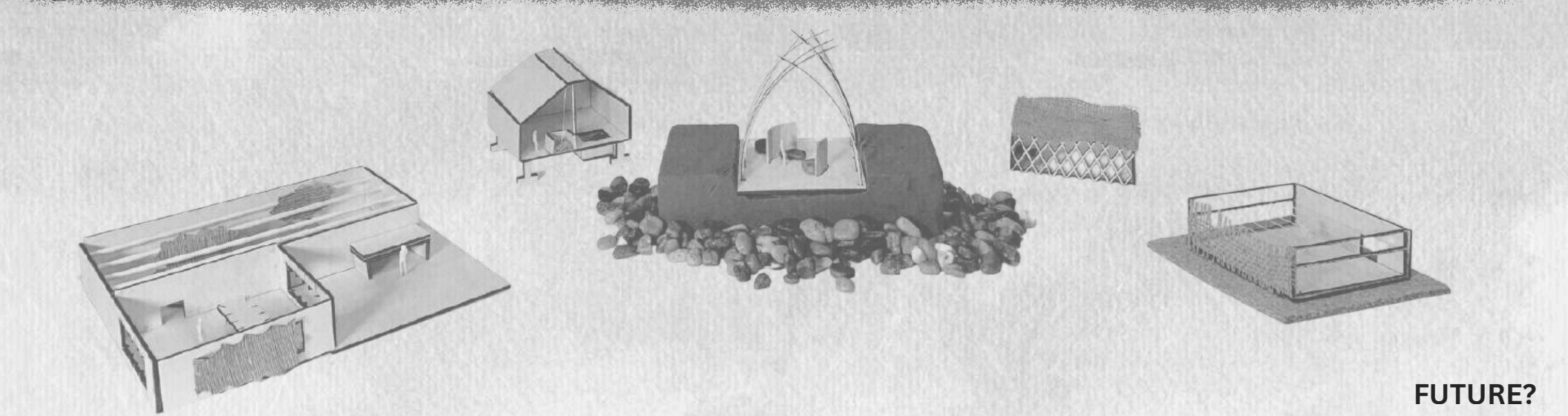
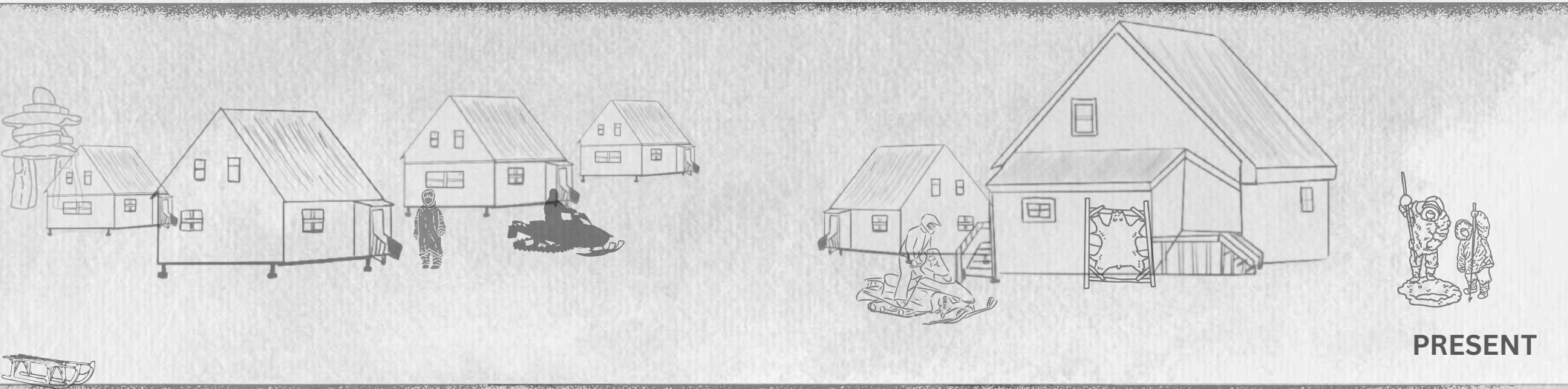
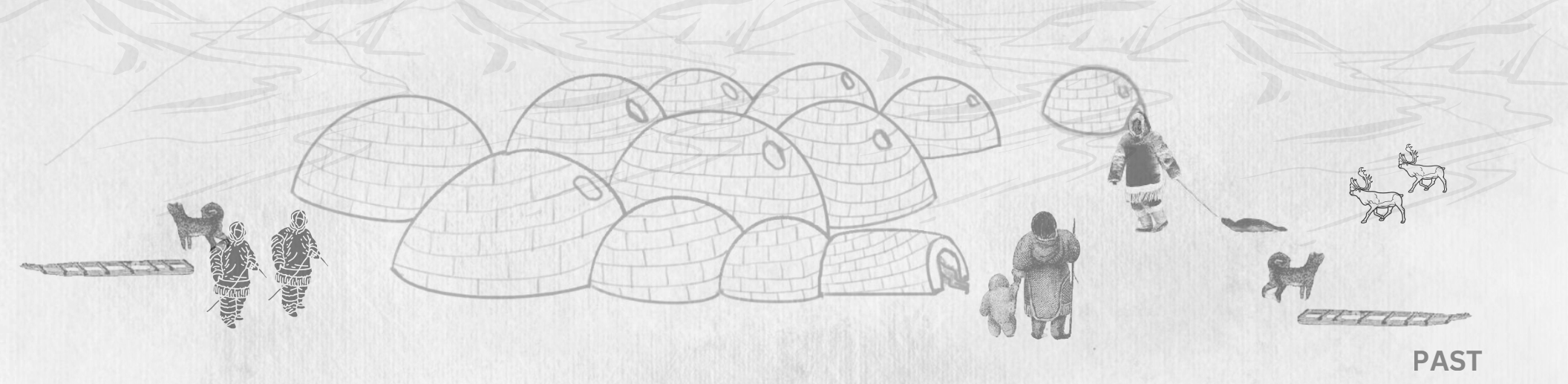
Recommendations

What's Next

The framework is intended to be a tool for designers and communities to collaboratively explore possibilities for future spaces in Nunavut shaped by empathy design. This framework can be adapted into a guide for practitioners, offering examples of empathetic approaches to design in Nunavut. Additionally, it can serve as a foundation for training programs that integrate Inuit Qaujimajatuqangit (IQ) into architectural practices and support a path forward where communities are empowered and able to actively participate in shaping their built and unbuilt environments. This practicum and framework is an offering—a step toward reimagining design practice in Nunavut by prioritizing shared values, cultural knowledge, and critical reflection as a means of shaping culturally and contextually meaningful spaces.

A Proposed Guidebook

The proposed guidebook attached to this practicum document is intended to help contextualize the design exploration process so that it may serve as a tool between designer and community. Collaboratively, they would explore the various iterations of what might be, negotiating space, removing and adding layers; this exchange facilitated with the use guidebook helps to build trust and vulnerability between the designer and client. Furthermore, the possible innovation through the sharing and exchanging of ideas through this collaborative exploration will render meaningful contributions to the practice, community, and design outcome. Through this process, the designer can expand their concept of self, space, place, built environment, and the design process, ultimately challenging more thoughtful and meaningful space. While the client sees the willingness to learn and shape space collaboratively illustrating an empathy approach. This type of engagement will ultimately foster more imaginative spaces and resilient buildings as well as communities for the future.



Thank You
Qujannamiik

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