

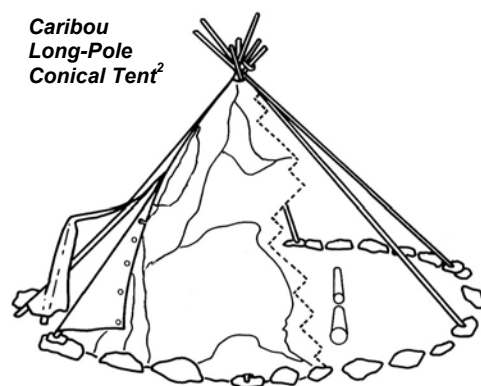
Life with the Land: A Living Box for the Canadian Arctic

Arch 684: Living Box Competition
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“The works of the past always influence us, whether or not we care to admit it, or to structure an understanding of how that influence occurs. The past is not just that which we know, it is that which we use, in a variety of ways, in the making of new work. The typology argument today asserts that despite the diversity of our culture there are still roots of this kind which allow us to speak of the idea of a library, a museum, a city hall or a house. The continuity of these ideas of type, such as they are, and esteemed examples which have established their identity and assured their continued cultural resonance constitute an established line of inquiry in which new work may be effectively grounded.”¹

The Mobile North: Past and Present

For thousands of years, those who inhabited the Canadian north were nomadic and they lived with the land, moving with the changing seasons in pursuit of physical sustenance. Their livelihoods were dependent upon the success of the hunt, and with their transient lifestyles, their homes were also of a cyclical and altering nature, continually shifting with the changing seasons. Though their architectural forms are no



**Caribou
Long-Pole
Conical Tent²**

longer present in the landscape, the works of the indigenous populations of northern Canada reveal that for these groups of people, architectural integrity came directly from the surrounding landscape and responded to the immediate physical conditions of the region.

The Caribou Long-Pole Conical tent, the summer home of those who inhabited the lands west of Hudson Bay, serves as an appropriate example in this situation: A simple organic shelter of sticks and skins, it was windproof, waterproof, portable and used for thousands of years. Forged out of necessity for

¹ From: The Harvard Architectural Review. Volume 5. Precedent and Invention. *Between History and Tradition: Notes Toward a Theory of Precedent.* John E. Hancock.

² Lee, Molly and Gregory A. Reinhardt. *Eskimo Architecture: Dwelling and Structure in the Early Historic Period.* Fairbanks: University of Alaska Press, 2003. p 50.

shelter from the elements, the 'genius loci' of such a dwelling emerged from the landscape and environmental conditions in which it was found. Furthermore, with the changing seasons, the shelter could be disassembled, and transported on back to its new location: Thus, traditionally, portable lifestyles and dwelling spaces were vital for survival in this harsh northern context.

Today, in communities across Canada's Arctic regions, a new mode of nomadic living exists: Mobile homes have become commonplace and provide an economical solution for the dwelling needs of contemporary transient northerners. The modern day mobile home is a fully equipped dwelling unit that contains all services and facilities found in any single-family home. Factory built and transportable, most of these portable dwelling units can be towed to the site on its own wheels and chassis frame. For the bulk of transient northern residents who head north for a few years of adventure and financial gains, mobile homes provide a small and easily movable home. Lacking in means of long term occupancy, the home is transportable when one's lifetime in the north has come to an end.

For other longer term residents, these units prefabricated in controlled building environments in the south and then transported to their northern destinations, present several economic benefits. As costs of building materials continuing to soar in northern Canada, skilled labor continues to decline and cold temperatures present fewer days for construction, the costs of permanent building in Canada's Arctic regions has increased greatly, thus furthering the economic case for mobile living.

However, while clearly economically appropriate, these mobile 'living boxes' fail to respond to the harsh northern climate and unique cultural context in which they eventually reside. Constructed off site, they are alien to the harsh Arctic climate, and then ultimately, they have little relation to the landscape and environment that they eventually inhabit. They become examples of 'placeless' architecture: They operate in complete isolation from their immediate contexts.

Within this situation, however, great possibilities exist for the redevelopment of a culturally and physically appropriate portable dwelling for Canada's Arctic regions. Through a thorough examination of traditional nomadic structures the keys to building in the northern landscape are revealed: For contemporary mobile living to truly take hold, it too, like its nomadic predecessors, must respond to and seek to celebrate the unique physical and cultural landscapes of the Canadian North.

Learning from the Past

In Canada and around the world, buildings and settlement patterns are a material expression of the cultures that construct them. Like any other culture, deeply embedded in the works of Northern Aboriginal populations are assumptions about appropriate patterns of production, consumption as well as suitable forms of social, economic and political behavior. For contemporary designers working specifically in northern Canada, there is much to be learned from the Aboriginal predecessors of the region.

In the study of traditional dwellings of northern people we learn about more than just the vernacular architecture of the region: Within this architecture a set of attitudes exist about stewardship and appropriate modes for inhabiting the earth, as well as relationships with a larger natural and cultural community. As these relationships provide appropriate and guiding models for the development of new architectural ideals and a cohesive cultural identity for northern Canada, it becomes clear that as designers, we have much to learn from the past.

However, as we study the vernacular works of northern Canada and seek to embody their ideals in the contemporary form, the diverging ideas of tradition and innovation come to the forefront. In developing architecture for the future, a question requires thorough consideration: How are designers to mediate between past ideals and contemporary innovations?

The philosopher Hans Georg Gadamer has devoted much energy to this conversation between the two fundamentally opposing ideas of tradition and innovation. As Gadamer notes, the opposition between these two parties implies a continuous discourse in which the prejudice of a given cultural legacy has to be continually reassessed against a critique that stems from another 'mode of beholding'. Reflecting on the issue, Georgia Warnke further develops this argument further. In a personal study of Gadamer's work, she notes:

"We understand history not simply because we make it but also because it has made us; we belong to it in the sense that we inherit its experience, project a future on the basis of the situation that the past has created for us and act in the light of our understanding of this past, whether such understanding is explicit or not." ²

² Frampton, Kenneth. *Labour, Work and Architecture: Collected Works on Architecture and Design*. London: Phaidon Press, 2002. P. 17.

Thus, in this situation, what Gadamer has in mind is a 'fusion of horizons' where one tradition comes to be gradually modified in light of an 'other'.³ We are not called to recreate history, but rather, we are to use historical precedents as the generators of contemporary developments and architectural innovations. Therefore, in developing a contemporary dwelling unit for northern Canada, the architect's role becomes not one of recreation, but rather one of transformation. Past theories are not merely answers upon which one can rest, but rather they become instruments for future design decisions. In developing new modes for inhabiting the northern land, we are called to focus upon the ideals behind the relationship to the landscape – not on the actual forms themselves – and learn how these ideals provided shape for the built form and northern livelihoods. In contemporary designs, these historic built forms are not to be mimicked, but rather, their roots - the driving ideals that are inherent to their beings – are to generate the development of contemporary works. The following exploration investigates historic nomadic dwelling spaces of Canada's Arctic regions and explores how some of their lessons can be transformed into an appropriate mobile form for inhabiting the Northern Canada of today.



Traditional Sod House⁴
Labrador



Contemporary Family Dwelling⁵
Iqaluit

Connection to the Land

One of the most fundamental characteristics of traditional northern buildings is the relationship between the dwelling and the ground. A building's relationship to the ground affects accessibility and articulates the psychological connection of a people to the landscape. For the original inhabitants of the north, there was no need to distinguish

³ Frampton. P. 18.

⁴ Lee, p.37.

⁵ OnSite Review. Issue 11, Spring 2004. "Northern Detail." Tracy McTavish. P.43.

between built form and their surrounding environment: The landscape was a natural extension of the constructed world, and they were an extension of their natural surroundings. An Elder in Rae-Edzo, Northwest Territories further explains this idea:

“Our life is part of the land. We live on the land and are satisfied with what we get from it. No one person owns the land. It belongs to all of us. We choose where we want to go and our choice is respected by the others whether in settlement or in the bush. We have no word in our language that means ‘wilderness’ as anywhere we go is our home.”⁶

Despite this original connection with the landscape, the modernist movement and the ‘post cultural’ information age invited a separation from the land and ultimately embodied an ignorance of architectural context. Instead of turning to the surrounding landscape in the making of architecture, modernism opted to rely upon technological solutions to keep out the weather and instead provide ‘state of the art’ environmental controls. The ‘placeless’ nature of the built form resulted: The integrity of architecture as a local and cultural expression was compromised.



Recent developments in the mobile home industry in the north embody these modernist ideas of placeless-ness, and thus, in many situations, buildings are physically divorced from the northern land. A clear example in this case is the large percentage of contemporary northern buildings that sit on wood or steel piles above the ground in order that air can circulate between the heated building and the permafrost below. While this solves the issues of thaw bulbs (land that thaws from building heat causing active and unstable soil below), this creates a fundamental separation between the act of dwelling and life on the land: A condition foreign to northern life.⁷

Responding to this need for a physical connection with the landscape, a contemporary northern architecture should strive to celebrate the relationship of the interior dwelling experience to the surrounding landscape, making the architectural

⁶ Furnleau, Rene. *Denendeh: A Dene Celebration*. Yellowknife, Northwest Territories: The Dene Nation, 1984. P. 59.

⁷ OnSite Review. Issue 11, Spring 2004. “Northern Detail.” Tracy McTavish. P.42-43. It should also be noted that an alternative to piles that allows building access to remain at grade is a Thermosyphon system which is passive ground loop charged with liquid carbon dioxide.

conception of exterior landscape less that of scenery, and more that of a dynamic and thriving dimension of the total living experience. Functional fluidity of both inside and outside activity is vital: These two dwelling experiences are interwoven. Thus, physical connections to the landscape, alongside the visual, are vital for contemporary design proposals for Northern Canada.

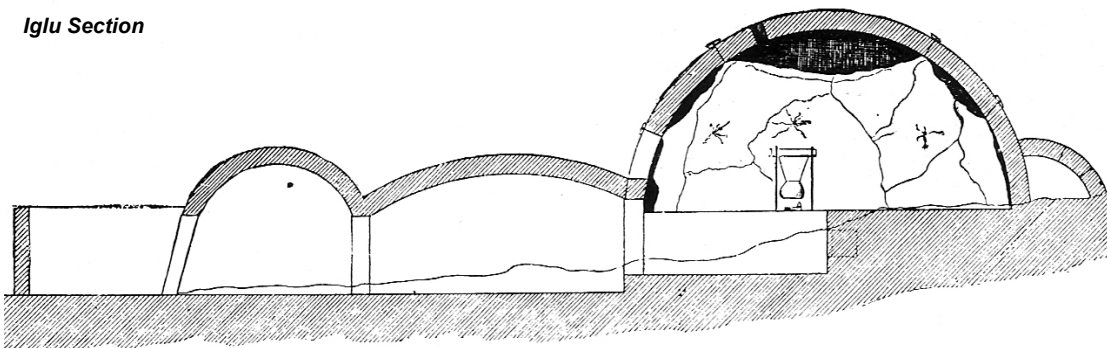
Building with Climate

The Iglu, probably the most notable Arctic dwelling icon, also speaks to various themes for northern inhabitation. The section of the Iglu⁸ responds to the natural characteristics of the northern elements and does not oppose the nature of the Arctic, but rather builds in response to the natural landscape and its forces.

Entry to the Iglu was through a recessed tunnel to the east, allowing any air that entered to drop. There were no openings to the cold north-west. Storage spaces were at surface level and sleeping areas were housed above, allowing natural upward airflow to warm the inhabitants during long winter nights.

The thermal composition of the Iglu was of a layered nature: Animal skins were hung on the inside of the ice structure, and served to trap warm air between the interior living space and the ice walls. Around the exterior of the building, snow was applied for added warmth. Natural ventilation strategies were also employed in the operation of the

Iglu Section



Iglu. A hole above the cooking area (blocked with a mitten while not in use to prevent heat loss) allowed heat from cooking areas and the soap stone lamp to naturally escape from the dwelling.

The Iglu also served various social and cultural functions, but ultimately was an icon of community, radiating the life within across the dark northern landscape. During the long, harsh months of winter, the Iglu provided the physical environment for communities of people to gather together, tell stories and share their days. Through its

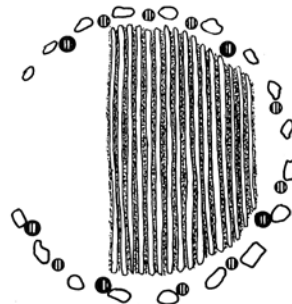
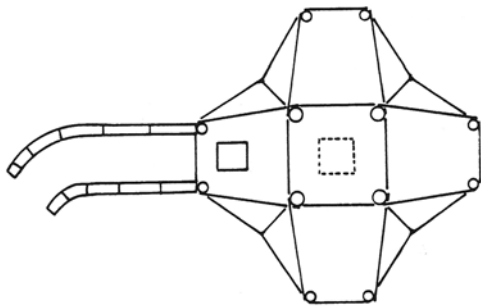
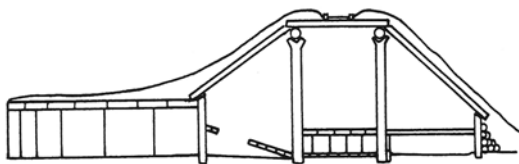
⁸ Nabokow, Peter, and Robert Eastman. *Native American Architecture*. New York: Oxford Press, 1989. P. 196.

icy structure, the life and light from within was radiated across the vast northern landscape, serving to beckon those out on the landscape back to the safety and community of home.

Seasonal Inhabitation

Seasonal inhabitation is another key component of the forms and lifestyles of the indigenous inhabitants of the Canadian north. Originally, northern people lived on the land following a seasonal round of activities which maintained them economically, spiritually, socially and politically. Across the continent, pockets of people lived throughout the changing seasons in seasonal dwellings adapted to each site.

In his Arctic contemplation entitled, "Playing Dead" author Rudy Wiebe reflects upon this regular movement throughout the land. According to Wiebe, movement for food was vital for the survival. For in this northern land, it was in stillness that life was destroyed.⁹ Thus, throughout the cycles of the seasons, various forms of dwelling and modes of transportation emerged to support this movement of cultural groups as they canvassed the land in search of food and sustenance.



Mackenzie Delta Wooden House¹⁰
Winter Dwelling Section and Plan

Mackenzie Delta Conical Tent¹¹
Summer Dwelling Section and Plan

Traditional dwellings found in the Mackenzie Delta region clearly outline how architecture responded to these seasonal changes. In the winter months, dwellings were large in order that communities would dwell together within a central Wooden

⁹ Wiebe, Rudy Henry. *Playing Dead: A Contemplation Concerning the Arctic*. Edmonton: NeWest Press, 1989. P.

¹⁰ Lee, p.74.

¹¹ Lee, p.94.

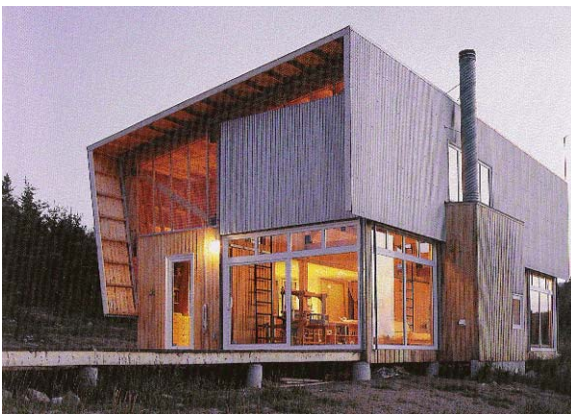
House. Excavated below ground level, these structures operated much like a 'wooden igloo': The structure was composed of wood, and turf and snow from the land provided the insulation and the building envelope. Inside the wooden home, all cooking, storage, living and sleeping areas. During the long winter months, all living was contracted within this communal dwelling were housed.

During the summer months, the people of this region dwelled in short pole conical tents, composed of wooden structures and animal skins covers. The shelter was primarily for sleeping and storage: all other activities were to occur in the landscape beyond.

In this brief examination of the traditional seasonal dwellings of the Mackenzie Delta people, several distinctly northern qualities for the contemporary built form become clear. Of architectural importance in this illustration are not the actual nomadic forms of these dwellings, but rather the notion that with the changing seasons, the dwelling patterns of the Mackenzie Delta people were altered. These dwellings responded to the changing seasons: In the winter, spaces contracted inwards and energy was focused within the interior environment, while in the summer, the building opened up and the surrounding landscape became the extended living environment.

Gino Pin, an architect in Yellowknife, Northwest Territories, honors this idea of seasonal inhabitation in several of his works. In a recent design for a tourist centre in Arviat, Nunavut, Pin pays homage to the extreme changes in the northern seasons in the design of the building envelope. In the summer, a portion of the exterior wall opens to provide an overhead shelter, creating a sheltered exterior room in the landscape. In the winter, this same element retreats back into the building envelope, and serves as another layer of thermal insulation during the cold winter months.

The Danielson Cottage by Brian MacKay-Lyons also operates in a similar



manner. Located in Smelt Brook, Nova Scotia, this summer cottage for a meteorologist and landscape architect enjoys views but is equally exposed to harsh North Atlantic weather: Likewise the building responds and transforms a from viewing platform to haven from extreme wind and rain. As described by the MacKay-Lyons in the book *Plain*

Modern: "the building's skin is chameleon like, with interior and exterior sliding doors acting as 'eyelids', protecting the house and its inhabitants from the harsh north Atlantic

climate.”¹² In good weather, the great room on the main floor can be opened, dissolving the boundary between inside and outside, while in cold winter conditions, the entire box is shut down and the building’s inhabitants retreat to heated service core.

Creative Use of Materials

Building materiality for vernacular northern structures is another important issue for consideration. Traditionally, materials were derived directly from the immediate contents of the dwelling, and great creativity was employed to construct a shelter to meet the needs of its inhabitants. Due to their remote building contexts, northern dwellers were forced to explore the opportunities that existed in the rarest of building materials: In locations where trees were present, wood was commonly used as a structural element for both summer tent structures and winter dwellings. However, north of the tree-line, where wooden structural materials were either scarce or completely non-existent, other materials from the land, and specifically, the by-product of the hunt were used as construction materials.

In his book *Light at the Edge of the World*, Anthropologist Wade Davis discusses human dependence upon animals, and the importance of the hunt for providing the basic needs for the people of the Arctic regions:

“In a world where animals dominate and the dialogue is between predator and prey, the central metaphor is the hunt. Unless one is able to follow caribou over the tundra, track moose through the forest, one can never fully embrace the rhythm of the culture. To record the myths of Athabaskan elders, one has to become a hunter, for the myths are an expression of the covenant that exists between men, women, and the wild, a way for the Indian people to rationalize the terrible fact that in order to live, they must kill the creatures they love most, the animals upon which they depend.”¹³

In the Arctic, animals were a means of food, clothing, transportation, and as well, they also served as a primary source for building materials: Skins and bones were important construction materials in regions of the eastern Arctic where wood was unavailable. The Baffinland Whalebone House¹⁴ is a notable example of such a structure as it was composed of whale bones, skins, found stones and various ground

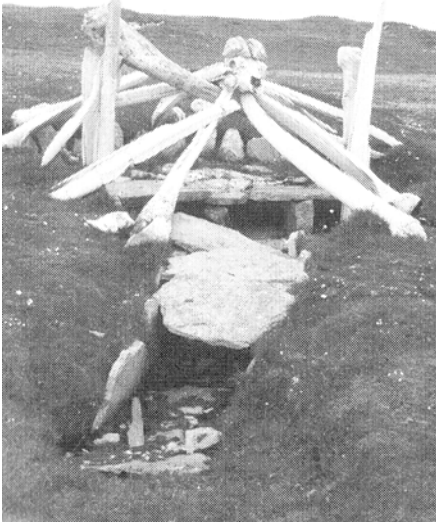
¹² Quantrill, Malcolm. *Plain Modern: The Architecture of Brian MacKay-Lyons*. New York: Princeton Architectural Press, 2005. P. 80.

¹³ Davis, Wade. *Light at the Edge of the World*. Toronto: Douglas and McIntyre, 2001, p. 27.

¹⁴ McTavish. P.43.

coverings of its immediate Baffin Island context. Various materials of the land, including moss, lichens, snow, and animal skins, served as insulating devices in many winter homes. The igloo, probably the most notable dwelling icon of the north, was composed completely of snow, a readily available northern resource.

Baffinland Whalebone House
Baffin Island



In the present day context of the Canadian north, this commitment to creativity in material usage invites interesting opportunities for future northern developments. It speaks of the ideal of innovative use of the earth's resources and also seeks to explore the opportunities that arise when one develops a fascination for everyday materials and commits themselves to an exploration about the possibilities that lay inert the simple and ordinary materials: To what enjoyable ends might materials be shaped? The exploration of functional and flexible materials such as corrugated iron serves as an interesting and appropriate example in this case.

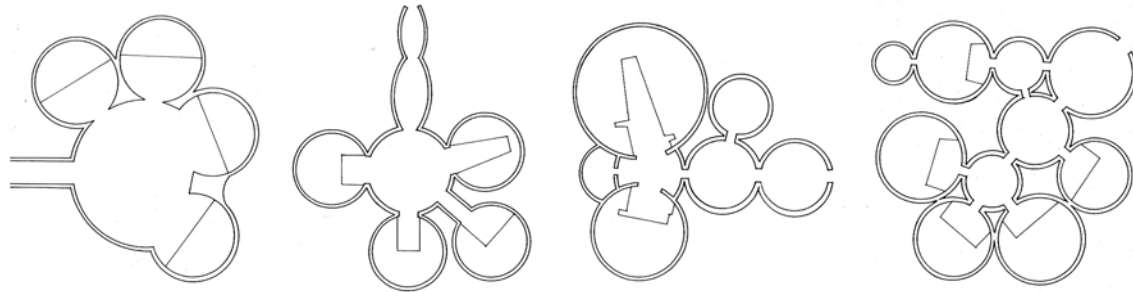
Ideal for its light, strong and versatile nature, corrugated iron is also noted for its properties such as its economy, fineness of line, and the natural looking profile which imparts stillness to the sheet. Furthermore, like water, it also has the property of reflecting the quality of daylight, and so it responds to the changes of the weather, thus making it an ideal material for northern developments.

Building reuse was also a common trend as northerners tread across the land in pursuit of the hunt. Structures such as a Skin Tent could be deconstructed and then the bone structure and skin covering transported in a backpack to the next building site. The notion of *Touching the Earth Lightly* rang true in these situations: The only embodied energy required for this building was the effort that it took to construct the shelter. Once the structure was removed from the site, there was little trace of its past existence.

Community Architecture

The northern landscape clearly provided the shape for traditional northern architecture. However, the northern landscape and climate was also pivotal in the development of many strong and thriving Aboriginal cultures in Northern Canada. The long and cold days of winter provided the appropriate time for the coming together of families and communities. Out of economy families would join together to share dwelling units and hunting surpluses: As kin and visitors congregated or joined other hunting

camps, snow houses could be expanded by adding as many additional domes as required. The resulting forms for community architecture served both economic and social functions during the long winter months.



Communal Iglu Configurations¹⁵

Based on study of Netsilik Eskimo Groups, Pelly Bay, NT.

Thus, dwelling within these community based environments were integral to survival on the land. Within these communal dwelling clusters, larger domes were often constructed to serve as a primary gathering space for storytelling, dancing and other cultural celebrations. This construction was the primary way that the harsh realities of the northern landscape shaped the culture of the people and encouraged strong community connections.

Composed out of necessity to protect communities of people from the northern elements, a clear communal architectural language and approach to living in the north evolved. While primarily serving the primarily practical function of survival in the northern context, northern forms, such as the igloo, were also poetic architectural masterpieces. Reflecting upon on the architectural quality of this winter snow house and its relationship to the northern landscape, Rudy Wiebe notes:

“The purity of the material of which the house was framed, and the elegance of its construction and the translucency of its walls, which transmitted a very pleasant light gave it an appearance far superior to a marble building and one might survey it with feelings somewhat akin to those produced by the contemplation of a Grecian temple reared by Phidias (the designer of the Parthenon). Both are triumphs of art inimitable in their kinds.”¹⁶

Thus, upon the northern landscape, the igloo was a beacon and radiated the warmth and light of the culture and life that it housed within to the world beyond.

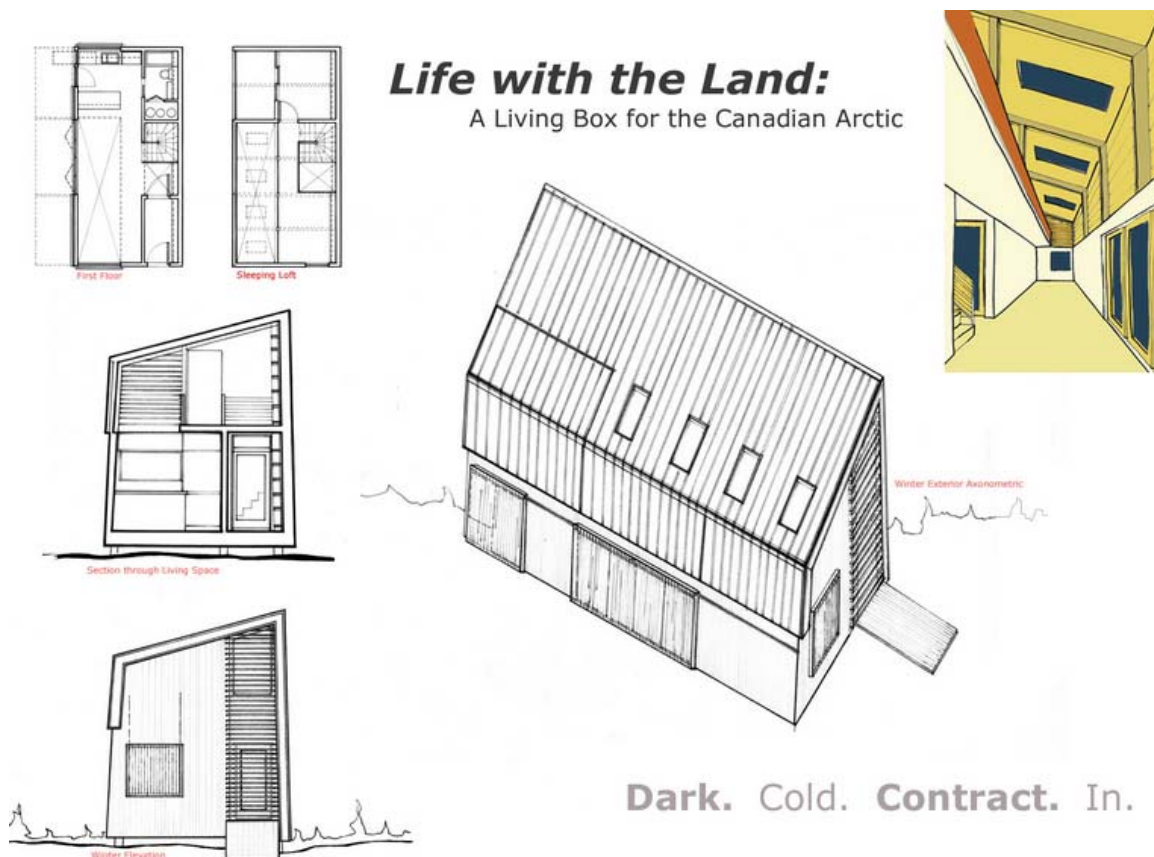
¹⁵ Nabokow. P. 197.

¹⁶ Wiebe, Rudy Henry. *Playing Dead: A Contemplation Concerning the Arctic*. Edmonton: NeWest Press, 1989. p.109.

Life with the Land: A Living Box for the Canadian Arctic

Based on these northern built traditions, the proposal for a contemporary Living Box for portable living in Northern Canada returns to the nomadic precedence of the region and seeks to redefine a mode for dwelling with the dualisms of the northern climate. The proposal does not seek to mimic these historic dwelling forms, but rather these former traditions in building with the northern land, practiced for thousands of years, become the generating devices for design decisions for the project.

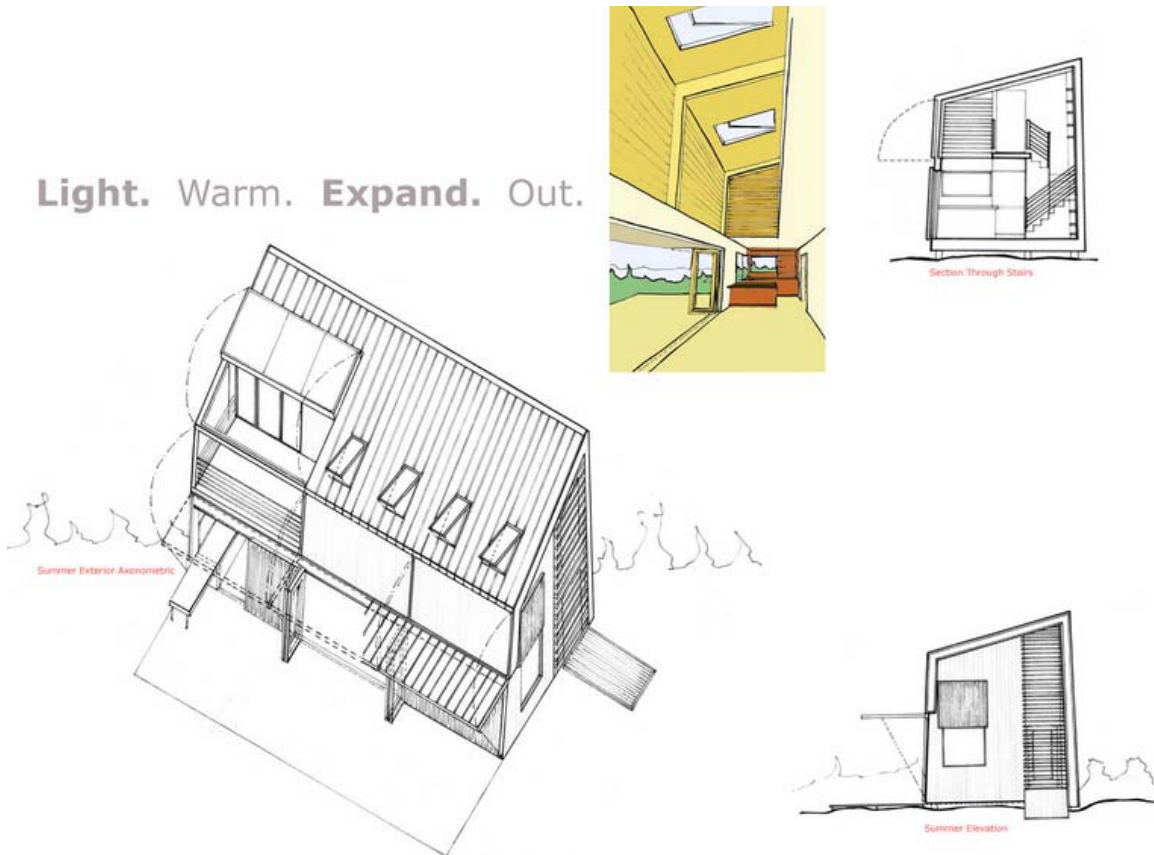
The proposed living unit measures sixteen (16) feet in width, thirty-two (32) feet in length and at its greatest dimension, sixteen (16) feet in height. In two pieces (ground level and sleeping loft), the structure can be transported on a flat bed trailer along any Canadian highway and pieced together on site. For remote Canadian communities, inaccessible by road, the unit can be transported by barge. The unit can not be transported by air.



The plan for the living box is open concept in design: Spaces bleed into one another and allow for altering and adapting occupancies as per users changing needs. Entry to the building is through an eastward airlock vestibule that doubles as an air trap and a storage space for outdoor materials. Like traditional dwellings that served multi-purposes throughout the day and year, the ground floor's double height living spaces

can be used for a variety of purposes throughout the day and year. A loft space overlooks the primary living spaces and can be used for sleeping or further living or storage space. An exterior balcony area is accessible from the sleeping area on the upper level. Interconnected spaces with multi-purpose usages are the driving ideals in the unit's space planning.

Light. Warm. Expand. Out.



In consideration of the harsh Arctic climate, the building responds to the natural conditions of the north in several ways: There are no openings on the north face of the building. Instead, adequate insulation, coupled with built-in shelving units (for storage), and service areas to the north of the structure serve as layered insulators and further protect the living spaces, housed on the south side of the building, from the harsh northern winds and temperatures. The building envelope is a layered system that is designed to open and close depending on the seasonal needs of the occupants. During the long and frozen winter months, sliding translucent Plastruct doors close over window openings, to provide an added thermal seal and prevent heat loss while still allowing the light from within the structure to radiate outwards upon the dark landscape. During the summer months, these doors roll away to provide views to the exterior, the south facing roof system folds down to become shading devices, windows and doors retract allowing for a physical connection with the landscape, and natural lighting and ventilation prevail:

During the summer months, the living experience expands outwards to the northern landscape beyond.

This expansion and contraction occurs both on a technical level for the building but also is designed with community values in mind. The Living Box is proposed from the standpoint that as humans, we do not only dwell within the confines of our homes but rather we dwell within the context of neighborhoods, communities and cities, which bring with them broader social as well as climatic conditions. Thus, "The home is not a self-contained world, but a foothold in a larger world."¹⁷ Direct connections to the outdoors from these spaces invite for expansion to outdoor living spaces in the warmer months. For the colder winter months, interior spaces are interconnected. The primary living space is allotted both the largest area as well as the largest volume, with other living spaces, such as the food preparation area and loft space interlocking with this main living space, inviting for large indoor community gatherings and interactions during the long and cold winter months.

Life in the north revolves around the seasons and, ultimately, the arrival and departure of the sun. Thus, where the dualities in seasonal light are extreme, a great opportunity exists in building envelope design in terms of providing natural daylight within northern structures. In the design for the Living Box, glazing on the south façade and roof allow natural light to penetrate the building during all seasons, and during the winter months, passive solar gains are maximized during these cold months. During summer months, sunlight and unnecessary thermal gains are blocked from the interior spaces through the use of exterior shading devices. Triple Paned, Low E Windows, designed to minimize heat loss, are utilized for all window openings.

The selected building materiality seeks to develop an engaging and reciprocal relationship with its immediate natural context. The exterior roof is clad with Tecu Classic Copper roofing. An oxidized layer forms on the surface when exposed to atmospheric conditions: With age, the surface develops a greenish brown surface that causes the sloping roof to physically blend with its natural surroundings. Exterior wall surfaces are clad in corrugated metal. Ideal for its light, strong and versatile nature, corrugated metal contains properties such as its economy, fineness of line, and also has a natural looking profile which imparts stillness to the sheet. Like water, corrugated metal also has the property of reflecting the quality of daylight, and thus, radiates light in the changing northern sunlight throughout the seasons.

¹⁷ Gauer, James. *The New American Dream: Living Well in Small Homes*. New York: Monacelli Press, 2004. P. 14.

Structurally, the building is supported by a wood frame system that is exposed in the loft space on the interior.

Interior heating is provided by the Cuprotherm Floor Heating System. All ventilation is achieved naturally through a series of manually operable portholes in the kitchen, bathroom and bedrooms during the winter months. Windows, doors and skylights are operable and provide further natural ventilation during the long summer days.

The structure sits slightly above the landscape upon pile foundations that are prescribed on a per location basis. Wood piles, steel pipe piles, gravel pads or buried footings, are developed depending upon the location, and are designed to ensure adequate grounding, and minimal impact on the landscape of the building's eventual location.

Inhabiting the Box:

Thus, the proposal for the Living Box in the Arctic is not merely a recreation of past forms, but rather seeks to develop a new architectural language based on lessons learnt from historic portable dwellings.

Within this contemporary approach to northern architecture is a clear recognition that both the natural and built worlds are intimately connected, and thus, both physical and visual connections with the landscape are integral to the design. Architecture in the north is designed for altering seasonal inhabitations: Like the landscape, the living patterns of northern inhabitants adjust with the changing seasons. This built form seeks to use materials creatively, and with an economic spirit, it relies on natural environmental controls such as the northern sun for heat and daylight where possible. A northern architecture is community architecture: In its harsh environmental context, the built form provides the dwelling place where kinship and culture can thrive.

Ultimately, the Living Box is based on the notion that architecture in the Canadian north is not isolated from the land, but rather it becomes an integral and mediating device within the total experience of its environment. Neither opposing nature, nor preventing its occupants from enjoying the landscape, a northern architectural language reveals the landscape to its dwellers and invites their presence to co-exist and radiate throughout it.

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