ARCTIC ADAPTATIONS

NUNAVUT AT 15 – CANADA AT THE 2014 VENICE ARCHITECTURE BIENNALE

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NU HEALTH
Introduction: Arctic Adaptations

2014 marks the 15th anniversary of the founding of Nunavut. However, Canada’s largest, most northerly territory is still unfamiliar to many Canadians. The myth of the Canadian north is tied to its unique geography - vast, sparsely populated, fragile, and sublime. Yet Nunavut, like the entire Arctic region, is undergoing dramatic transformation as powerful climatic, social, and economic pressures rapidly collide. In Nunavut, over 50% of the population is under the age of 25, making it a young, dynamic nation. Simultaneously, most Northern municipalities are under pressure to address ongoing social and economic challenges regarding health, housing, education, and employment.

The theme of 15 is echoed in the team structure. Working in collaboration with five Nunavut-based organizations, design teams – comprised of a Canadian architecture office and a Canadian school of architecture – will develop a 15-year vision plan for both a regional (territory) and architectural (building) scale on a particular theme. The themes are: Arts, Education, Health, Housing, and Recreation. Arctic Adaptations seeks to foster a collective discourse in schools, amongst architecture practices, and within Nunavut communities, on a proactive architecture motivated by progressive social and environmental responsibility.
Map of Nunavut and its Communities distributed over nearly 2 million square kilometres. Communities are connected to each other and to the South only by plane year-round, and by boat in the summer months.
Introduction to Nunavut

Before the arrival of other peoples in the North, Inuit had always lived a nomadic lifestyle in ilagita nunagivaktangat or camps. In the Baffin region alone, families lived in over 100 locations in kin-based camps. Although the process of relocation to communities began as a response by Inuit to the presence of traders, explorers, and missionaries, it took new form during the ‘settlement’ period between 1940 and 1960. During that time, Inuit were moved off the land and into communities for a number of reasons, including policing, education, and the provision of health care for remote populations during a widespread Tuberculosis epidemic and reports of starvation among some Inuit camps (Kirmayer, Brass & Tait, 2000; Indian and Northern Affairs Canada (INAC), 1996).

The changes imposed on Inuit in order to achieve this goal were rapid and dramatic—this was not a gradual progression from a traditional to a modern way of life, but a complete transformation. As a result, families were severed, people were sent away never to return, and the way of life changed completely.

Today, there are 25 communities in Nunavut ranging in size from populations of 110 to 7500. All of the communities are geographically isolated and are only accessible by air, water, or snowmobile in winter. Nunavut has a very young population. In 2011 52% of the Nunavut population (31,906) was comprised of those 24 years of age and younger. While the North is increasingly becoming a mixed cultural population, 85% of Nunavut’s population is Inuit. Further, 68% of Nunavummiut speak the Inuit languages of Inuktitut or Inuinnaqtun (Statistics Canada, 2011).

Today, all Northerners are facing a a new collective transformation together; a climate changing change climate where warming temperatures are challenging notions of permanence and transience alike (everything from melting permafrost foundations to shifting migration patterns of major food sources). However this rapidly warming climate is also yielding what many view to be unforeseen opportunities, including stretched transportation windows in the Arctic archipelago. The effects of climate change are especially challenging in Nunavut, with both a young history as a territorial government and a young population confronted with these challenges and opportunities.
Introduction to Health in Nunavut

The health and well-being of Nunavummiut can be explored and determined in a number of ways, including the states of physical, emotional, and mental health of both individuals and families within the greater context of the community and their connection to the rest of Canada’s North. Challenges in the North relating to health are vast and correspond to a variety of determinants such as poverty; lack of adequate housing and overcrowding; food insecurity; and trauma. These determinant are intermeshed with the quality of life for many Nunavummiut (Healey & Meadows, 2008; NDH&SS, 2005). The costs of administering health services are enormous considering the low population density (30,000 people living in a land the size of Western Europe). Doctors are in short supply, as a result, doctors are recruited in short-term contracts to fill in the gaps; as of 2008 fewer than half of the doctors in the territory were residents. Unlike the rest of Canada, most people in Nunavut see nurses rather than doctors, and are typically flown to Southern cities for advanced care, the equivalent of flying from Toronto to Mexico to see a specialist.

Furthermore, Inuit interpretations and perspectives on well-being are rarely considered in the current bio-medical model but need to be part of the foundation of innovative and creative contemporary health and wellness approaches to ensure the growth and sustainability of healthy, vibrant Arctic communities.

Currently, Nunavut has one hospital (Iqaluit, NU), and two regional health centres (Rankin Inlet and Cambridge Bay, NU). The rest of the communities are serviced by community health centres staffed by community health nurses. Patients are often sent to tertiary care facilities in Yellowknife NT, Edmonton AB, Winnipeg MB, or Ottawa ON if more advanced or complex care is required. Community wellness centres host community wellness programming, such as parenting groups, cooking programs, land programs, healing groups, and even research projects. These wellness centres exist in a handful of communities. Given the high number of people in Nunavut who have experienced trauma during the residential school era or intergenerational trauma, there is no healing centre in Nunavut. Such a place could have a significant impact on wellness in the territory.
Design Challenge for Health in Nunavut

It is well-known in Canada that northerners face a number of challenging circumstances when it comes to health: poor access to services; under-staffed health centres; a transient workforce of health professionals; serious challenges related to mental wellness, addictions, historical trauma and colonization; and geographically and politically isolated communities. That said, there are tremendous strengths in communities to address local health concerns, such as a willingness to work together; highly motivated community members and youth; traditions and customs that support healthy lifestyles and activity; a way of life that remains strongly connected to the land and all that it has to offer; a vibrant arts community; the revitalization of Inuktitut language; and tremendous cultural pride. By capitalizing building on the strengths that lie in Inuit communities and the concept of *Iqqaqqauqatigiinniq* (thinking deeply in ways that lead to innovation) it is possible to make positive contributions to the health of environments, places and people of Nunavut.

Rethinking Nunavut’s health services/programs requires consideration and imagination on many levels including relative to the local cultures of health, community and environment. One of the great challenges to fostering health and wellness is the reality of small, dispersed settlements, which often lack both human resources (in the form of full-time doctors and, additional nurses, public health and community health professionals) as well as facilities. Some key health challenges include maternal-child health, early childhood health, mental health, although access to most specialists requires travel to the south. The traditional hospital and regional health centres, as they might be conceived of in southern Canada, do not adequately address the challenges of health in Nunavut, in terms of access, frequency, quality and cultural responsiveness.

Additionally, while the rest of Canada is worried about health of an aging population, Nunavut's population is young. Fostering wellness among young people is critical.

A broader conception of healthcare needs to be embraced. Many local organizations working in Nunavut refer to ‘community and individual wellness’ rather than merely healthcare. As new thinking about what constitutes health strengthens across the territory, it appears that different types of venues, which might be distributed, networked, shared, with stronger relationships to the land, and which take on multiple roles, may be more suitable in this context. Communities are calling for greater local control of health, and less centralization.

Along with the obvious challenge of adequately addressing logistics related to geographic location, other unique considerations are also required. For example, Inuit arts, spirituality, and way of life, are all deeply connected to the land and water – and the land and water are connected to Inuit. This is part of existence, subsistence, and resilience. A space that promotes health and healing can achieve neither if the land is not considered to be part of wellness.

Above all else, from the Inuit worldview, the community is of critical importance. The community comes together to teach children; to support each other; to care for the ill. The community, and all that it entails, is central to the notions of individual and collective health and wellness.
Key questions and design goals are summarized below:

One can understand the range of health and wellness services in Nunavut operating within a range – from services dealing with acute illness, to maternal and child health, and care of elders, to a much broader understanding of health encompassed in the notion of community wellness. Wellness programs or centres already host community programming, such as parenting groups, cooking programs, land programs, healing groups, and even research projects. However even ‘conventional’ health services might be reconceived, beyond single function buildings in one community. Can health provision be mobile? Can it adapt to community needs? Can it accommodate families who come to support the person being cared for?

- How can strong community relationships in Nunavut be incorporated in a design or constructed space?
- How is the greater community acknowledged/incorporated in a building?
- How does a close relationship with the land change the way one thinks of buildings dedicated to health and wellness?
- What might be new, hybrid models of health and wellness facilities that may be inclusive of healthcare providers, health promoters, teachers, and/or elders?
- Given Nunavut’s young population, how is children’s youth and their wellness needs incorporated into the space?
- How might the architecture of health and wellness adapt if healthcare is to be more proactive rather than reactive?
- How might structures respond to the reality of health, technology, and mobility in the North?
- How might buildings respond to seasonality – and the changes in access in summer and winter?
- How might can buildings be responsive to a changing climate?

Scope of Project
With its 15th anniversary approaching, Nunavut now needs a 2030 vision for the promotion, delivery, and access to the health and wellness across the territory. Design proposals should represent this vision at two scales: (1) a territorial or regional scale considering networks or exchanges of knowledge and ideas; and (2) an architectural and typological scale. The regional scale should describe how the proposal positively impacts a larger territory: through networks of mobility, trade, exchange, etc... and how it impacts environment, species or multiple communities. The architectural scale should describe ideas about site, and temporal changes of the building through seasons with respect to users, program and building performance.

Program and Site
It is up to each team to determine the site(s) and program relative to the theme of Health in Nunavut. The expectation is that teams will select site and program based on in-depth research on the challenges and opportunities which Nunavut faces relative to the provision and expansion of Health and Wellness. Which communities are either in greatest need, or already thriving, or beginning new initiatives? And how might communities share these Health and wellness infrastructures?
Quick Facts

- Nunavut has one hospital (Iqaluit, NU), and two regional health centres (Rankin Inlet and Cambridge Bay, NU). The rest of the communities are serviced by community health centres staffed by community health nurses.
- Nunavummiut do not have family doctors as most primary care is provided by nurses in the communities. In 2006, there were 35 physicians per 100,000 population in Nunavut, compared to 172 per 100,000 in the rest of Canada. More than half were on short-term contracts or on a working on rotating basis. Like the rest of Canada, Nunavut is faced with challenges recruiting and retaining physicians, but it is clear that Nunavut’s challenges are quite exceptional.
- Much of the delivery of the Nunavut health system is located in Manitoba, Ontario, Quebec and the Northwest Territories. This has significant cost implications, but more importantly, social implications, as people are dislocated from their homes in times of vulnerability. Offord, Lipman, and Duku (1998) found that children aged 6 to 11 years who participated in the arts had a decreased likelihood of having one or more problems, including emotional or behavioural disorders, incidences of repeating a grade, or impairment in social relationships.
- 70% of households report food insecurity, with 35% reporting severe food insecurity; unemployment, low income and high food costs were the main reasons for food insecurity. By comparison, 9% of Canadian households are moderately or severely food insecure.
- According to ITK, mental wellness is the highest priority health issue for Inuit.
- For certain specialized care, doctors fly up once a year to the main communities such as Iqaluit. The rest of the year, patients must travel south for specialized care.
- There is a high rotation of doctors – doctors come for a few weeks to a few months and then leave, posing challenges to continuity of care.
Health


References


**Architecture**


**General**


Inuit Tapiriit Kanatami. *5000 Years of Inuit History and Heritage*. https://www.itk.ca/publication/5000-years-inuit-history-and-heritage


Competition Information

The Challenge
The focus at this stage of the competition is on strong ideas, rooted in thorough research and addressing clear, specific issues. Design intent needs to be clear, but not necessarily extensively resolved at a formal or tectonic level.

In developing proposals, teams are encouraged to carefully consider what issues the project is addressing? How does it respond to the region’s climate and geography in particularly appropriate ways? How does the project respond to the challenges of dispersed communities? To the challenges of infrastructure? To local cultural traditions in modern ways? To seasonal patterns which already exist?

Design responses should focus on building typologies rather than forms. The interest is not in how a building might recall the form or appearance of existing vernaculars, but how it learns from traditional programmatic or temporal performance. What programs are brought together in ways that leverage local traditions, and produce new collective realms, or new economies? Projects are encouraged to expand notions of sustainability beyond the technical or the building envelope, to consider social, cultural and economic sustainability specific to Canada’s North.

The projects should address two scales: the regional scale and the architectural scale. (See Design Challenge for further elaboration.)

Eligibility
Any student currently enrolled or graduating in 2013 from one of the five participating schools may enter the Arctic Adaptations competitions. Participating schools are Dalhousie University, University of British Columbia, University of Manitoba, Université de Montréal, and University of Toronto. Each school will run a competition on one of the five designated themes.

Registration
Each team is required to register by emailing <register@arcticadaptations.ca>. Each team must register by July 15, 2013 if participating in the theme of Health. In the registration email include which school you are registering from, your names, and your preferred contact email address. Arctic Adaptations organizers will send your team a registration number as confirmation of registration.
Submission
Each team should consist of two eligible students. The team should thoroughly document their proposal for Arctic Adaptations at the two scales, on two boards sized 24” x 36” laid out horizontally. Board 1 should document a design strategy at the regional scale. Board 2 should document an architectural scale. Boards are to be submitted as a PDF with the following filename designation:
registration#_schoolname_1.PDF
registration#_schoolname_2.PDF
More submission information will follow.

Schedule
May 1, 2013, - Competition opens
July 15, 2013 - Q & A period closes
July 15, 2013 – Registration closes
August 1, 2013 - Submission due
August 10, 2013 – Winner selected
August to November 1, 2013 – Project development with AA design team.
June 2014 –exhibition opens at 2014 Venice Biennale in Architecture
January 2015 - exhibition tours Canadian venues

Jury
The jury to select a winning student team will consist of Arctic Adaptations team members including academics, architects, and the Nunavut-based organization.

Prize
One winning team will be selected and have the opportunity to continue to develop the proposal in collaboration with one of the Arctic Adaptations architecture firms and the Nunavut-based organization. This project will be one of five presented in Canada’s pavilion in Venice in 2014. The Arctic Adaptations team will facilitate travel to the north for the selected student team, and will work with them in coordinating their role within the design team structure that is suitable to all parties. The selected students will be recognised individually and as a representative of their school.