

# CCA Charrette 2016 | Reassembling the North

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**Invites young creative designers to reconsider arctic villages/hack northern settlements and surroundings/and help create livable communities simply and frugally.**

## Background

Nunavik, (ᐃᓕᓂᓐ), meaning “Great Land” in Inuktitut, is the home of Inuit in Quebec. This vast region above the 55<sup>th</sup> parallel spans 507,000 km<sup>2</sup> – about one third of the province’s territory and approximately the size of Spain – and houses more than 12,000 inhabitants, 90% of whom are Inuit. They are settled in 14 villages along the eastern shore of Hudson’s Bay, the Southern banks of the Hudson Strait, and Ungava Bay. None of the villages are connected with each other or Southern Quebec via a road link; each has an airport with regular but prohibitively expensive service, and most supplies are delivered via annual sea-lift during summer and fall when the region becomes navigable.

These villages are a recent form of architecture in the North. Peter Katokra, an Inuit artist who grew up as a teenager in Ukkusiksalik in the 1940s, says that “Inuit, before the white man or the trading post, lived where there was game. They didn’t necessarily stay in one area. They just moved according to where they could survive.”<sup>1</sup> Inuit maintained this traditional nomadic lifestyle until the end of the Second World War. Government intervention throughout the 1950s and 1960s brought about a dramatic shift.

## The Problem Is...

The swift transition from a nomadic to a sedentary lifestyle has left its mark. Inuit today inhabit architecture conceived by an alien culture and designed for an exotic climate. They depend on traditional activities, but their settlements and housing give little support to their lifestyle. Most Inuit, although they live in permanent homes in towns, still hunt and fish across the territory as an integral part of everyday life. In Nunavik, 78% of Inuit hunt, 88% fish, 86% harvest wild plants, and 49% trap.<sup>2</sup> As a consequence, residents own and need cars, skidoos, boats, ATVs (all-terrain vehicles), trucks, doghouses, sleds (qammutiqs), building supplies, and hunting equipment. Current community plans, based

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<sup>1</sup> Pelly, David F. 2016. *Ukkusiksalik: the people's story*.

<sup>2</sup> Gerard Duhaime et al (2015). *Nunavik in Figures 2015*, Canada Research Chair in Comparative Aboriginal Condition, Université Laval, Quebec City. <http://www.chaireconditionautochtone.fss.ulaval.ca/documents/pdf/Profil-2015-anglais-24-08-2015.pdf>

on American suburban models, do not correspond with these needs. In particular, they do not match Inuit practices that adjust to the changing seasons.

This mismatch between architecture and culture is particularly visible in the in-between spaces of Northern communities. The zones surrounding homes are strewn with stuff: containers, sea-cans, trailers, palettes, old ATVs, abandoned snow mobiles, metal canoes, plywood crates, diesel fuel drums, plastic water receptacles, 6x6' lumber, corrugated metal sheets scavenged from culverts, leftover metal formwork for electrical posts, plastic sheeting, canvas, stones, gravel, sand, wood drums for rolling wire, insulation, and re-bar. Furthermore, due to the scarcity and high cost of materials, Inuit regularly recycle and repurpose this material. Village dump sites become for Inuit what Canadian Tire is for those in southern Quebec.<sup>3</sup> Residents organize and re-organize their homesteads to make good with what they have.

## The Design Challenge

For the 21<sup>st</sup> annual Charrette, the design challenge is to suggest ways to add to a house or make a self-contained outbuilding or cabin that engages the daily practices of Inuit in Nunavik using only the materials at hand.

Your design should emerge from a hacker mindset: it should be simple, frugal, and inclusive. A response to institutionalized inadequacy, hacks emerge in every culture. For an Inuk, *imminik arqisugialik* (ᐃᓐᓂᓐ ᐱᓕᓐᓂᓐᓂᓐ), or, the “self / has to be assembled,” would be equivalent to the word ‘hack,’ similar also to ‘*jugaad*’ a Hindi expression recently adopted by management gurus in English.<sup>4</sup> In any language, hacking advances the notion that the reuse and recycling of defunct parts and existing technologies can radically transform everyday life.

Your intervention can be at any scale, moving from territory to village to object. In other words, you can design at an urban, architectural, or micro-architectural level. You should consider these in-between spaces, including all of the ‘stuff’ they contain, not as a problem but as a source of materials, ideas, and inspiration. The goal is to envision what communities could be if they were designed and built with sustainable local practices and resources. How can we use Inuit cabins, camps, and the traditional fishing and hunting culture of northern communities to build for the future? How can we as designers and community members hack these items to rethink and reshape Northern villages?

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<sup>3</sup> Jacobs, Peter, Daniel Berrouard, and Mireille Paul. 2009. *Nunavik, un environnement en évolution: une évaluation environnementale et sociale du développement nordique : la Commission de la qualité environnementale Kativik, 1979-2009*. Kuujuaq, Que: Commission de la qualité de l'environnement Kativik.

<sup>4</sup> Radjou, Navi, Jaideep C. Prabhu, and Simone Ahuja. 2012. *Jugaad innovation: think frugal, be flexible, generate breakthrough growth*. San Francisco, CA: Jossey-Bass, A Wiley Imprint.

## Resources

Traditionally, Inuit were nomadic people. In the 1940s and 1950s, they began to settle around trading posts, established by the Hudson's Bay Company, as well as military installations established during the Second World War, including Crystal I airbase that was set up in 1942 near Fort Chimo (now Kuujjuaq). Following the War, the Government of Canada introduced a special housing program for Aboriginal people in north. Very modest homes were provided in settlements like Puvirnituaq; gradually, such settlements grew as more and more Inuit communities were settled.

**To give you a general context of individual buildings, housing and settlements, a library of Nunavik village plans and different housing stocks are provided.**

## Settlements

Today, there are 14 Inuit villages in Nunavik. The village populations noted are based on the 2011 census, and so the current numbers in all communities are considerably higher. In descending order of population, they are:

**Kuujjuaq**, (Inuktitut: ᑕᑦᑭᑭᑦᑭᑦ), meaning "the great river," is the largest village and the administrative center of Nunavik with a population of 2,375. It is located on the southern shore of Ungava Bay.

**Puvirnituaq**, (Inuktitut: ᑭᑦᑭᑦᑭᑦ), meaning "place where there is a smell of rotten meat", is located on the eastern side of Hudson Bay and at the mouth of Puvirnituaq River, and has a population of 1,692.

**Inukjuak**, (Inuktitut: ᐃᑦᑭᑦᑭᑦ), meaning "the Giant" in Inuktitut. Formerly known as Port Harrison, it is located on the eastern Hudson Bay with a population of 1,597.

**Salluit**, (Inuktitut: ᑭᑦᑭᑦᑭᑦ), meaning "the thin ones", lies to the north of the region along the Hudson Strait and has a population of 1,347.

**Kangiarsualuujuaq**, (Inuktitut: ᑭᑦᑭᑦᑭᑦᑭᑦᑭᑦ; also Kangirsualuujuaq ᑭᑦᑭᑦᑭᑦᑭᑦᑭᑦ) Located at the mouth of the George River, and meaning "the very large bay" in Inuktitut. Also known as Fort Severight, Fort George River, George River, and/or Port-Nouveau-Québec, Kangiarsualuujuaq has a population of 874.

**Kuujjuaraapik**, (Inuktitut: ᑕᑦᑭᑦᑭᑦᑭᑦ), meaning "small great river", is located at the mouth of the Great Whale River and has a population of 800.

**Kangiarsujuaq**, (Inuktitut: ᑭᑦᑭᑦᑭᑦᑭᑦ), meaning "the large bay" in Inuktitut and also known as Wakeham Bay, has a population of 696.

**Akulivik** (Inuktitut: ᐃᑕᑦᑭᑦ), meaning "central prong of a kakivak," a traditional trident-shaped spear used for fishing, to which the geographical location and setting of the village resembles. Population of 615.

**Kangirsuk** (Inuktitut: ᑲᓴᑦᑲᑦᑲᑦ/), is located almost opposite the village of Kangiqsualujjuaq on the Ungava Bay, and means "the Bay" in Inuktitut. Population of 549.

**Umiujaq**, (Inuktitut: ᐅᑦᐅᑲᑲᑲᑲ), meaning "which resembles a boat," has population of 444.

**Quaqtaq**, (Inuktitut: ᑦᑲᑲᑲᑲᑲᑲ), meaning "tapeworm", is located on a peninsula where the Ungava Bay and Hudson Strait meet and has a population of 376.

**Ivujivik**, (Inuktitut: ᐃᑲᑲᑲᑲᑲᑲ), meaning "place where ice accumulates because of strong currents," or "Sea-ice crash area," the northern most village of the region, with a population of 370.

**Tasiujaq**, (Inuktitut: ᑲᑲᑲᑲᑲᑲ), meaning "which resembles a lake" in Inuktitut. Located on the shore of the Leaf Lake, Tasiujaq has a population of 303.

**Aupaluk**, (Inuktitut: ᐃᑲᑲᑲᑲᑲᑲ), meaning "where the earth is red", is the smallest village with a population of 159.

It is important to note how the Inuktitut names of villages are associated with the land color, smell, site, effect of seasons on the geography, and so on; they truly reveal their geographical position and/or local natural settings. For further explanations on village names and their meanings and additional information about all settlements please consult the Nunavik Tourism website.<sup>5</sup>

Out of these 14 villages, only Kuujjuaraapik is located well within the tree line. Four others – from east to west, Kangiqsualujjuaq, Kuujjuaq, Tasiujaq and Umiujaq – are situated just along the tree line. The rest of the villages are situated in tundra zones, i.e. where the year-round temperature is so cold as to freeze sap, therefore not allowing for any tree growth.

Regardless of the positioning and location of these villages, an overall suburban layout is common and often at odds with the natural setting which includes views of rivers, waters, natural orientation to sun and wind, etc. This is due to standardization and servicing patterns, however, they are not insurmountable.

## Housing

Over the years, different government agencies built several different types of housing ranging from tent- or hut-like co-ops and one-room structures to matchbox-style units, bungalows, semi-detached homes, and apartments. Due to an acute housing shortage, overcrowding is common in all. There are also issues of design which do not always correspond to users' lifestyle. After the signing of the historic James Bay and Northern

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<sup>5</sup> <http://www.nunavik-tourism.com/default.aspx>

Quebec Agreement in 1975, the housing responsibility was transferred to the *Société d'habitation du Québec* (SHQ). Since 2000, a broad framework of agreement between the Governments of Canada and Quebec, Makivik Corporation, Kativik Regional Government (KRG), and Kativik Municipal Housing Board has been guiding the housing development of the region. To familiarize you with different housing stock we have provided almost the full library of housing types that are found in Nunavik.