



From matter to space,

Composition of a local and resilient architecture based on the IQ (Inuit Qaujimagatuqangit).

Project of a collective center for healing and cultural transmission.

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Professional master's degree in architecture

Final project / Université Laval

Start date : 01.09.2018

End date : 14.12.2018

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Transmission site of Inuit culture in the Salluit Fjord (1st plan: dryer and cutting station, 2nd plan: centre, 3rd plan living quarters).



// ABSTRACT

According to Searles (2010) and Dowsley (2013), the use of the territory for traditional hunting and fishing activities has always contributed to the development and support of a distinctly Inuit "sense" through what Berque (2010) would define as northern "chôra". Today and in a complementary way, this meaning also extends to recreational activities, crafts, socialization, or activities conducted with the intention of "healing". From this perspective, the tundra camp then presented itself as an exemplary place for identity development and the consolidation of Inuit well-being.

Unfortunately, the territory remains accessible only to a handful of privileged people, despite its proximity. If easier access is increasingly claimed, the same applies to resilient architecture whose layout and materials are adapted to northern contexts.

By focusing on the village of Salluit, Nunavik, and its fjord, the architecture project aims to provide a means of democratizing access to the land and the made goods it generates.

Its mission is to create spaces that facilitate the transmission of local knowledge (traditional and contemporary) and to offer a restorative space, inviting the spirit to adapt to the echoes that a moment in the tundra offers.

The question at the origin of this final year project (pfe) is therefore defined as follows: **how can architecture maintain a beneficial and sustainable relationship between territory and community?**

// OBJECTIVES AND CHALLENGES

The hypothesis developed upstream of this research-creation project suggests that the enhancement and harmonisation of local constructive principles (within a contemporary architectural context that is predominantly exogenous) could act as an elementary and essential link in this beneficial and sustainable relationship between territory and community.

Thus, an architecture rooted in local human and material resources would promote a (re)cosmisation of the sensitive and lasting links between matter, territory and collective identity.

In order to validate this hypothesis and respond to the project's mission, it was considered that the design of a **cultural transmission site** built in the immediate periphery of the village of Salluit (4 km), i.e. on the tundra, would best suit the successful exploration of different scenarios. Whether through the flexible and adaptive program that this place of cultural transmission implies or through its location, which necessarily leads to autonomous construction, it was also considered that the design solutions and principles developed within the project could then be more easily transposed to other components of the northern built environment.

At the same time, it is important to know that the programme of this place of cultural transmission was defined, on the one hand, following a study of the activities practiced on the territory (reported in the literature) and, on the other hand, during informal interviews held with members of the Salluit community in August 2018. These interviews made it possible to establish occupant profiles and an annual calendar of activities that could be held in this cultural transmission site (see pages 7-8 of the presentation). Through this program, the project therefore targets groups of various ages and interests and its activities seek to keep pace as much as possible with the cyclical rhythm of the Arctic seasons and the contemporary Inuit way of life.



Design objectives then made it possible to combine the mission of the architecture project with the chosen approach and programme. These were imagined from the Inuit value system of the IQ and from the vernacular determinants of sustainable architectural design as defined by Coreia et al. (2014).

To clarify this, the Inuit values of the IQ and the determinants of sustainable design have been grouped into three issues: ecological, technical and symbolic (see page 15 of the presentation). As presented in the diagram, each issue relates a targeted value of the IQ to a determinant of sustainable design that has been identified as complementary and encompassing other values and concepts. The exhaustive portrait of each issue therefore made it possible to define the project's design objectives by combining theoretical principles and the sensitive context of the place of intervention.

The ecological issue attaches the Inuit value of respect for the environment to the concepts of adaptability and resilience. Together, they articulate the objective of limiting the project's ecological footprint by promoting passive strategies, enhancing the use of local materials and allowing flexibility of use for the project.

The local materials targeted in Salluit are of mineral origin such as earth, clay and rubble, of vegetable origin such as peat and seaweed, of animal origin such as goose feathers or are recycled materials as shown in the vernacular construction of the cabins.

The technical challenge oscillates between frugality and innovation and aims to develop a constructive approach that is appropriate, simple and effective, where innovation allows the development of harmonized (hybrid) solutions between tradition and contemporaneity.

By drawing inspiration from the different types of traditional habitats such as the perched dwellings of King Island, the peat of semi-buried houses or the snow masonry of igloos, it is then possible to imagine alternatives to the use of local materials presented above. Moreover, by taking inspiration from the organization of contemporary cabins and camps, the architectural project can aspire to offer a similar appropriation.

The symbolic issue, balanced between northern territoriality and the notion of sharing, was intended to support healing by strengthening community ties and encouraging the sharing of Inuit subjectivity and by allowing cultural activities to be carried out in close proximity to nature and the territory.

// CONTEXT AND COLLABORATORS

As mentioned above, interviews with members of the Salluit community were conducted during a study field held in August 2018 and as a complement to the research conducted as part of a brief entitled: Home-made-home, local human and material resources in Nunavik. These informal interviews gather information gathered through planned or fortuitous meetings with cabin builders and people who have been involved on loan and by far in their construction. Accompanied by an Inuit guide (Juupi Tuniq), the visit of some 20 cabins built on the outskirts of Salluit Fjord also enriched the understanding of the constructive processes of Inuit vernacular architecture.

The municipality's support and interest in the research-creation project were discussed with some elected officials and made it possible to broadcast invitations on community radio to Salluitmiut to share knowledge about cabin construction.

The visit to the Habitats and Cultures workshop in November 2018 also provided an opportunity to revisit the people met at the end of the summer and discuss with them the progress of the research-creation process in order to confirm and



invalidate the right choice of decisions taken and to explore alternatives more appropriate to the needs of community members. The visit to Salluit's primary and secondary schools on this occasion also provided an opportunity to briefly present the architectural projects and explore their interest in the proposed avenues.

Finally, a group visit to the potential settlement sites allowed us to gather more information about them and thus facilitate the choice of the final site. Discussions about them also took place with the community members met, including Juupi Tuniq, the guide for this small expedition.

// RESULTS AND SOLUTIONS

A PLACE FOR CULTURAL TRANSMISSION

Located on the south shore of Sugluk Fiord, the place of knowledge transmission can be seen in the distance through these three distinct volumes that seem to float in the hollow of a hillside at the mouth of the Kikkaluk River. Accessible by an excursion of about 4 km from the village of Salluit, the arrival is first punctuated by a first pavilion which happens to be a cutting station for the fruits of the seal hunt. To avoid any waste, this pavilion is also equipped with a meat and seaweed dryer that is ventilated through its openings by a chimney effect. It must be said that this first stop is also an opportunity to learn about the latest fishing stories.

A little higher up, after greeting the few campers who have set up their tents on wooden platforms, we reach the place. Soon enough, we realize that there is a lot of activity on the gallery. The time has come for sculpture, while in the adjoining workshop, a kayak is being made for the great pleasure of a few teenagers eager to explore. The link with the fjord is essential. It is necessary to give time to the matter to understand that soon it will float.

A person in charge of the centre is more down-to-earth in his work. It must change the interior frame of the larger windows in preparation for winter. This system allows wooden caissons caulked with sealskin to provide additional insulation. Snow could also offer the same advantage by relying on the generous overhang of the fixed frames.

After taking off your shoes in a warm portico with its four earthen walls and resting under a covered terrace facing the entrance to the fjord, you can access the quiet heart of this cultural centre. At first glance, we see a fireplace inserted into a massive earth wall that furnishes a small reading room. On the other side, the kitchen is lined with embroidery that was made during the long night on the canvas of the walls that retain their goose feather insulation. These embroideries use traditional Inuit motifs and are sometimes reminiscent of a loon or a caribou. Here, we eat what the sea and the land offer us. Sitting on the ground around a granite, you can enjoy Muktuk cubes.

In the background, in the adjoining room that calls us by its light, we hear Paulusie telling a group of children the story of his family. To help him in his explanations, impressions of life in the past have been affixed to the canvases. Later, they can all sleep together in the same room by recovering the mattresses hidden under the platform.

As far as we are concerned, we will have the chance to occupy a cabin. Unusual, perched on the rocky outcrop, we had seen them as soon as we arrived. As you enter it, you will notice that the space is divided into three sections. A first gantry allows us to get comfortable. A lower box provides storage, while the upper part is accessible from a small ladder. The space is soothing and the flame of the oil lamp as well as the dome made of dwarf birch twigs and an under-stressed canvas recall the typology of the snow house. Here time stops here.



A PROJECT ESTABLISHED OVER A LONG PERIOD OF TIME

If the last story tells the daily life of the place of transmission of culture as it was imagined at one stage of its most complete construction, it should be noted that this project proposes several phases of construction beforehand; each one more essential than the last. Inspired by the tradition of gradual expansion of Inuit settlements, the various stages of building the architectural project were designed in a logical and adaptable sequence.

IMPLEMENTATION PHASES

The choice of site was based on the criteria for the establishment of Inuit camps. While the former are more technical, such as support on stable ground, access at low tide or protection from the wind, the most important of them is the relationship with a traditional site. This is the Kikkaluk River and Niaqunnguut Point, well known for Arctic char fishing and mussel harvesting. Other factors such as the presence of rock outcrops, sunlight and access to local materials were also considered.

PHASE I

The first phase is simply a community hall placed on a gabion seat facing the fjord to maximize views of the "pantry". A gallery facing south facilitates transitions with the outside and frames the arrival of newcomers from the village.

PHASE II

The second phase proposes a floor located perpendicular to the first volume and projecting towards the entrance to the fjord while easily connecting to the column-beam structure made of compound sawn timber (the constructive details of the structure and the overall project can be studied in the large axonometry of the 3rd plank of the project). It should be noted that the materials used throughout the project, if not local or recycled, are materials usually provided by Salluit's Hunter support during the construction of the cabins.

In this constructive sequence, the addition of this second phase offers the advantage of freeing up the lower space in order to set up a workshop and start the implementation of the sections built in the ground. Once used in semi-buried dwellings, soil (mixed with clay) is used here because of its relative abundance compared to other local materials. Its plasticity, particularly when making blocks of earth or mud, can also remind us of that of snow and offer the opportunity for local populations to transfer their constructive knowledge.

When applied as the lower volume envelope, stabilized earth blocks provide increased protection to the lower volume that is more likely to be hit by projectiles thrown by the wind. Raw earthenware, used in interior spaces, is recommended for its comfort benefits. In addition to offering good thermal inertia, it offers very good relative humidity control.

PHASE III

Finally, the third volume supports its side on the slope in order to adapt the expansion of the project to it. Like the gallery below, it aims at the arrival of the people of the village. At this stage, the living spaces thus form a concentric and polar heart, while the spaces of intimacy, located at the ends, interact with the territory and invite calm and contemplation.

CONCLUSION

In closing, I would like to come back to the definition of Inuit Qaujimagatuqangit (khow-yee-ma-yat-yat-too-khan-geet) which, as mentioned above, refers, in Inuktit, to a set of maxims and values. According to Jaypetee Arnakak, a direct translation could be the expression "living technology" or "what Inuit have always known".

By carrying out this research-creation project, I hope to have been able to demonstrate that, based on a knowledge of Inuit culture, even limited like mine, it is still possible to harmonize and adapt certain vernacular constructive knowledge to collective aspirations in



order to address concrete and innovative solutions to the establishment of beneficial and sustainable links between territory and community.

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