



// IDENTIFICATION.....

**PROJECT TITLE: Processus participatifs et aménagement culturellement significatif :
Évaluation d'un guide d'aide à la décision avec et pour les communautés innues**

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// ABSTRACT

(around 250 words)

This urban design essay focuses on the evaluation of an Internet-based planning decision guide. This guide is developed in collaboration with members of the Innu community of Uashat mak Mani-Utenam and the Mamuitun Tribal Council: www.innuassiam.org. It offers visual tools as a support for reflection and participation and is intended for band council professionals and elected officials, citizens interested in planning issues and external consultants working with Indigenous communities. Its evaluation aims to understand the potential and limitations of a decision-making tool in achieving Indigenous planning. As very few studies report on best practices for such planning tools, the essay proposes to add knowledge from an evaluative and forward-looking perspective. An Internet consultation with potential users of the guide, mainly housing managers and First Nations citizens, allows to understand the qualities of content and interface related to, among other things, cultural values. The results of this evaluation relate to community engagement around planning issues, the risk of over-crowding of participants, and the demonstration of the actual utility of a planning guide. Ultimately, they point to a need to truly understand the multiplicity of contexts, territories, histories and Innus realities, such as Indigenous ones, to develop truly useful planning decision support tools.

// INTRODUCTION.....

(including the research problem)

In the context of the significant demographic growth of communities, the massive construction of housing and the expansion of several Indigenous territories points to a lack of tools to support these transformations. However, before implementing new tools, it seems important to be able to evaluate them objectively.

The establishment of the first indigenous reserves precedes the Second World War. Subsequently, the reserves were planned and enlarged based on the model of the post-war suburbs. The detached single-family homes are located on large plots, with a large setback along straight streets or loops forming a rational framework (Figure 1 and 2) (André-Lescop 2016). The standardization of the planning elements thus allows a fast, high-volume design in which the local populations are not asked to express themselves. These developments, designed mostly by non-native professionals, leave little room for local culture and do not correspond to the practices, aspirations or values of communities (André-Lescop 2016, Piché 2016, Vachon and al.). However, due to the lack of time, external consultants perpetuate these practices (André-Lescop 2016). The limited variety of types of housing, the lack of permeability within residential areas, and the generic nature of these are associated with financial, social and environmental costs. Meanwhile, the Indigenous population of Quebec and Canada is growing twice as fast as the Canadian population since the last ten years (Statistics Canada 2016). At this rate, communities will double by 2035. In addition to being in short supply, existing homes are already overcrowded. This population increase is therefore putting significant pressure on expanding reserves, as well as on the development and renovation of the housing stock (Statistics Canada 2016). In this emergency context, thinking about long-term planning, tailored to local needs and culture, is a challenge.



That said, mobilizing communities around planning issues is not easy. Development plans and specifications made by external consultants and commonly used during these processes may not easily motivate the participation of community members. The highly technical graphical representation of development proposals (Figure 3) leaves little room for an understanding of the values and aspirations of the community by consultants (Vachon et al., 2017). Underestimated, overly technical images used to illustrate solutions to complex issues may prevent community members from projecting into prospective visions. As a result, Indigenous managers and concerned citizens find it difficult to formulate critical opinions on development proposals and confirm the need to develop planning decision support tools that are adapted to their cultural and decision-making context (Vachon, André-Lescop and St-Jean 2016, Vachon et al., 2017). Considering these considerations, it seems important to establish structures for dialogue and consultation that are inclusive as well as the tools and planning proposals that flow from it.

In line with this hypothesis, a researcher's team from Living in Northern Quebec partnership has developed a visual tool for planning assistance in collaboration with ITUM and the Mamuitun Tribal Council (Habitats + Cultures Group, 2015). This tool was developed to support Innu professionals and citizens in their reflection on the urgent needs of their community in terms of planning and development. In the form of a website, the Innu Community Planning Guide is based on a critical analysis of recognized urban design principles with respect to Innu values and aspirations. After more than fifteen months online, the guide is evaluated as part of this essay to capture the potential and the limits in a community planning and development process, directly consulting the populations to whom it is addressed. The results of this evaluation, while relatively modest, include a better understanding of culturally meaningful representation strategies and the usability criteria of an online decision-support tool. They also reflect on a possible adaptation of content, form and process to develop similar tools with other Indigenous communities (including Inuit) to positively influence the relationship between Indigenous communities and health professionals.

// THEORETICAL FRAME

The research is based on theories that the indigenization and decolonization of the usual Western planning processes are necessary to achieve a truly Indigenous planning. Participatory processes for knowledge exchange and co-production are essential to support this transition. However, without adequate tools to support the learning process and consensus building, these processes become difficult. The theoretical frame first aims to demonstrate the need for decision support tools in the planning of Indigenous communities and, ultimately, to determine the qualities that must be associated with them. These qualities, as much focused on the content as on the interface with the user, will establish criteria for evaluating the guide.

Indigenous planning

Indigenous planning has always existed (Walker and Matunga 2013, Matunga 2013). Long before the creation of the reserves and the imposition of "white" urban planning, the populations took their places in the territory according to strategies corresponding to their way of life and their culture. Yet, in the early 19th century, European descendents initiated the reunion of Indigenous people on reserves (Erfan and Hemphill 2013, Deborbe and Vachon 2017). The Indian Act subsequently imposed European notions of land ownership that were totally different, if not foreign, from traditional practices (Millette 2011). To date, practices associated with western planning have lagged the establishment of a new relationship with First Nations (Piché 2016). Walker and Matunga (Walker and Matunga 2013, Natcher, Walker, and Jojola 2013) argue that a return to resolutely Indigenous planning is needed to protect the cultural, social, political and economic interests of these populations, in addition to developing and to support the relations with the communities. Western planning, as it is commonly defined in the field of planning, is "the scientific, aesthetic and orderly disposition of land, resources, facilities and services to ensure physical, economic, and economic efficiency. and social, health and well-being of urban and rural communities "(Canadian Institute of Planners 2012, in Natcher, Walker, and Jojola 2013). Indigenous planning, on the other hand, would imply values closer to the territory, manifesting itself physically on inherited land. It incorporates cultural knowledge and a vision of the world based on balanced relationships between humans and their natural environment, guided by traditional activity and decision-making processes (Millette 2011, Layra, Palermo, and Smith 2013; Matunga 2013, Fawcett, Walker, and Greene 2016). Considering the current state of Western practices, it is important to identify strategies to support the return to Indigenous planning. Fawcett, Walker and Greene (2016) identify three concepts to support a change in First Nations relations: indigenization, coexistence of actors, and co-production of knowledge.



Planning decision support tools

Many challenges surround decision-making. To address this, several researchers from different disciplines have designed and developed a variety of tools to help decision-making processes (Jain and Lim 2010). These tools contribute to the learning process and consensus building in participatory contexts (Al-Kodmany 2001, Pettit, Nelson and Cartwright 2004, Waaub and Graillot 2006). Helping communities to use tools and develop management skills is perhaps the most significant result of involving professionals in an inclusive process (Erfan and Hemphill 2013). Given the increasing use of participatory planning tools and processes, it is important to understand their impact and to be able to assess their quality according to well-defined criteria and indicators (Fletcher 2003, Vachon et al., 2017).

Among the variety of tools available, landscape visualizations are particularly powerful to facilitate exchanges (Schroth et al., 2011). Landscape visualization, also known as visual simulation or landscape modelling, attempts to represent actual places to illustrate their appearance within a design or development proposal (Sheppard 1989, Sheppard, Lewis and Akai 2004; Lewis, Casello and Groulx 2012). Based on social representations, the construction of spatial representations facilitates dialogue between actors. Generated mostly at the computer, the perspectives can be static or dynamic, immersive or not. The views can be represented on a human scale, in panoramic or in aerial views (Schroth et al., 2011). Perspective views allow to see the environment in a real way by connecting the observer, the objects and their context. Lewis and Sheppard's (Sheppard, Lewis, and Akai 2004, Lewis and Sheppard 2006) and Al-Kodmany (2001) researches identify the need for realistic and accurate representations to increase understanding of propositions and to promote greater degree of involvement. They argue that realistic visualizations are easier to understand for the less initiated. Schroth and colleagues (2011), for their part, argue that a variety of levels of realism allow for variability in cognitive and affective response.

Information and Communication Technologies (ICTs) open the possibilities for the use and forms of planning decision support tools, while contributing to the democratization of planning (Senbel and Church 2011: 424). Providing a communication platform that mitigates distances, they offer new potential for citizen participation (Hanzl 2007) and facilitate mutual knowledge between the different actors of the territory (Waaub and Graillot 2006). Among all media, the website remains a particularly simple, effective and powerful tool for transmitting information (Ong, Chang, and Lee 2013).

Research question and objectives

The theoretical framework shows that a return to Indigenous planning, guided by the indigenization and decolonization of processes, appears to be essential and that the tools to support this transition should be enriched. Considering these considerations and the problematic, a research question emerges:

What are the potential and limitations of a planning decision support tool in achieving Indigenous planning? How can these tools be culturally meaningful while being useful in guiding planning intentions?

The purpose of this essay is to objectively evaluate an Internet-based decision support tool designed within and for Innu communities.

To answer the research question, the following objectives guide the work:

1. Establish the relevance of a collaborative process to design a decision support tool in an Indigenous context;
2. Assess the appropriateness and effectiveness of graphic representation strategies that are culturally meaningful;
3. Understand the potential and limitations of a planning decision support tool for Innu communities in Quebec;
4. Make recommendations for the design of similar tools with other Indigenous communities.

// METHODOLOGY

The evaluation methodology is based on an Internet consultation with potential users of the Innu Community Planning Guide: Band Council Managers and Elected Officials, Citizens Interested in Development Issues and Consultants external. The evaluation took place in three stages: the design of the survey, the pretest and the posting. It aims to measure, in a qualitative way, the accuracy, the efficiency and the usability of the Innuassia guide according to 10 criteria: the legitimacy, the comprehension, the engaging potential, the precision, the credibility, the representability, the accessibility, the utility, usability and satisfaction. To do this, 39 questions grouped under 5 sections refer to one or other of the criteria (see Appendix A: Questionnaire, and Appendix B: Criteria related to the questions). All respondents, regardless of their profile, are invited to answer the same questions.



// RESULTS AND DISCUSSION.....

During the survey period, sixty new visitors were listed on the Innuassia website. Of these, twenty-two participated in the evaluation of the guide by answering all questions (see Table 1). Fourteen of these twenty-two participants identify as members of a First Nation community, the remaining eight identify themselves as non-native. The main occupation of the majority is related to the area of housing or development. This proportion is even higher among non-Indigenous people, whereas only three of them do not work in this area. More than half of those surveyed come from the public and community domains. The survey participants are about as many men (ten) as women (twelve), and are mostly between thirty-five and sixty-four years old.

The evaluation by criteria allows, as a first step, to draw a portrait of the guide according to relatively precise angles. Linking these criteria makes it possible to identify trends associated with respondents' profiles and with planning proposals. All criteria combined, the simulations that illustrate meeting place, namely the Sports Pole, the Community Center and the Schoolyard, are the most appreciated. These images attract the most attention of respondents and are those to which they identify the most. The representation of the transformed Schoolyard is the most appreciated among these shared spaces. The Boulevard also attracts attention, but for opposite reasons. Some other proposals, on the other hand, receive very little attention, although they are quite feasible according to the participants. This is the case of Residential Street, which offers a soft densification by raising existing houses, but does not raise the passions of respondents! For respondents, religious buildings do not seem particularly significant in relation to Innu identity. This last aspect was raised during the discussions accompanying the elaboration of the guide on the values and qualities associated with the spaces of the community.

In general, non-Indigenous respondents tend to be more enthusiastic and positive in their responses. First Nations respondents, on the other hand, are more circumspect, being rooted in the realities and daily constraints of their community. In other words, they are probably looking more lucid and enlightened on the different aspects of the guide and particularly on its limits. Some Indigenous respondents were strongly opposed to the proposals or some elements of the guide such as the Boulevard densification proposal. Their disagreement was particularly expressed in the choice of answer questions. By leaving only very short comments or not at all, this does not allow to grasp their position and arguments in all their subtleties.

At the end of the evaluation, the guide seems to have been positively appreciated by most participants. The criteria of legitimacy, understanding, potential, accessibility, user-friendliness and satisfaction are those that have been best achieved. The form and organization, as well as the images, were considered attractive and led respondents to question the underlying issues. The collaborative process of designing / validating the tool seems to have greatly contributed to making the guide comprehensible in terms of both form and content. It also confirmed the relevance of the Web interface for sharing ideas and making them known to remote communities, while not minimizing the importance of promoting them directly in communities.

The evaluation also highlights some criteria that remain challenges: the accuracy, credibility, representativeness and usefulness of the guide. The most supported criticism concerns the representativeness of the tool through planning proposals that are more representative of the everyday life of "urban" Indigenous communities. The views and images presented here are not and cannot aspire to be meaningful to all Innu communities, as the title to the guide suggests. Some participants noted that while the proposals seem culturally appropriate, there is a lack of technical information to believe in the real potential for implementation in communities in the current context. Moreover, without a more systematic dissemination of the tool, or even an "accompaniment" in its initial use, the real usefulness of the guide in the community remains uncertain. In short, the evaluation makes it possible to draw up an informed balance sheet of the Innuassia guide for a better use of decision-making tools in planning.

// CONCLUSIONS.....

In conclusion, the essay demonstrated the value of decision support tools in translating local knowledge and experiences for more appropriate living environments. It also makes recommendations for the design of future support tools involving other indigenous communities. The reflections shared by the respondents make it possible to grasp a diversity of Innu and even Indigenous realities, particularly in view of the marked differences between the communities of the Upper and Lower North Shore. Their comments make it clear that, despite several positive aspects of the collaborative process of developing the Innuassia Guide, there is still work to do in understanding and integrating multiple realities to contribute to the decolonization of planning practices. From this perspective, the guide should not be an end-point, but rather a tool that assists decision-making and is part of an iterative participatory process.