Études Inuit Studies

ÉTUDES
Inuit
STUDIES

Nunavut Urban Futures: Vernaculars, Informality and Tactics (Research Note)
Futurs urbains du Nunavut : Vernaculaires, informalité et tactiques (Note de recherche)

Lola Sheppard

See table of contents

Explore this journal

Cite this note

Article abstract

The Canadian Arctic, and Nunavut in particular, is one of the fastest-growing regions per capita in the country, raising the question as to what might constitute an emerging Arctic Indigenous urbanism. One of the cultural challenges of urbanizing Canadian North is that for most Indigenous peoples, permanent settlement, and its imposed spatial, temporal, economic, and institutional structures, has been antithetical to traditional ways of life and culture, which are deeply tied to the land and to seasons. For the past seventy-five years, architecture, infrastructure, and settlement form have been imported models serving as spatial tools of cultural colonization that have intentionally erased local culture and ignored geographic specificities. As communities in Nunavut continue to grow at a rapid rate, new planning frameworks are urgently needed. This paper outlines three approaches that could constitute the beginning of more culturally reflexive planning practices for Nunavut: (1) redefining the northern urban vernacular and its role in design; (2) challenging the current top-down masterplan by embracing strategies of informal urbanism; and (3) encouraging planning approaches that embrace territorial strategies and are more responsive to geography, landscape, and seasonality.

érudit

Nunavut Urban Futures: Vernaculars, Informality and Tactics (Research Note)

Lola Sheppard[i]

ABSTRACT

The Canadian Arctic, and Nunavut in particular, is one of the fastest-growing regions per capita in the country, raising the question as to what might constitute an emerging Arctic Indigenous urbanism. One of the cultural challenges of urbanizing Canadian North is that for most Indigenous peoples, permanent settlement, and its imposed spatial, temporal, economic, and institutional structures, has been antithetical to traditional ways of life and culture, which are deeply tied to the land and to seasons. For the past seventy-five years, architecture, infrastructure, and settlement form have been imported models serving as spatial tools of cultural colonization that have intentionally erased local culture and ignored geographic specificities. As communities in Nunavut continue to grow at a rapid rate, new planning frameworks are urgently needed. This paper outlines three approaches that could constitute the beginning of more culturally reflexive planning practices for Nunavut: (1) redefining the northern urban vernacular and its role in design; (2) challenging the current top-down masterplan by embracing strategies of informal urbanism; and (3) encouraging planning approaches that embrace territorial strategies and are more responsive to geography, landscape, and seasonality.

KEYWORDS

Nunavut, urbanism, planning, northern vernaculars, informal urbanism

RÉSUMÉ

Futurs urbains du Nunavut : Vernaculaires, informalité et tactiques (Note de recherche)

L'Arctique canadien, et le Nunavut en particulier, est une région du pays qui jouit d'une des plus fortes croissances démographiques au Canada. De cette réalité résulte la question suivante : qu'est-ce qui pourrait constituer un urbanisme autochtone significatif dans l'Arctique ? Un des grands défis culturels auquel reste confrontée la population locale et l'urbanisation du Grand-Nord et consiste en un peuplement permanent qui exige l'imposition de structures spatiale, temporelle, économique et institutionnelle. Ces structures s'opposent aux modes de vie et à la culture traditionnelle Inuit qui sont intimement liés à la terre et aux réalités saisonnières. Depuis plus de trois quarts de siècle, les modèles d'urbanisation, d'architecture et d'infrastructures ne sont que des importations venant du Sud ; ils servent d'instruments de colonisation ayant comme résultat d'effacer la culture locale, en ignorant leurs spécificités. La croissance et le développement des

---

i. School of Architecture, University of Waterloo. lola.sheppard@gmail.com

communautés du Nunavut continuent à un rythme accéléré. C'est donc dire que l'urgence d'établir de justes critères de planification pour la région est indispensable. Ce texte illustre trois notions qui pourraient constituer un premier pas vers un Nord urbain vernaculaire. (1) La redéfinition de ce qui constituerait un Nord urbain vernaculaire. (2) Le questionnement du plan directeur actuel qui tend vers une approche «top down» et inclut des stratégies d'urbanisation informelle. (3) Encourager des approches de design qui tiennent compte des stratégies territoriales en matière de géographie, de sites et de réalités saisonnières.

MOTS-CLÉS
Nunavut, urbanisme, planification, vernaculaires du Nord, urbanisme informel

＊＊＊＊＊＊

The Canadian Arctic is one of the fastest-growing regions per capita in the country, with more than 120,000 people now living in the cities, towns, and hamlets in the territories north of 60 degrees (Statistics Canada 2016). This region is predominantly populated by small, dispersed communities. With the exception of the three territorial capitals—Whitehorse (pop. 25,000), Yellowknife (pop. 19,500), and Iqaluit (pop. 7,700)—most of the 85 communities north of 60 have fewer than 1,000 residents, and only a handful cross the 3,000-person threshold.[1] Vast differences exist within the Canadian Arctic, from east to west, from coast to inland, from territorial capitals to remote hamlets. The diverse histories and cultures of Indigenous peoples and their inhabitation on the land and coast have indeed shaped these differences. Today, the eastern and western Arctic are at different stages of resource and infrastructure development and urbanization. Access via air, road, and water have come to accentuate disparities in terms of the cost of goods and building supplies, which has yielded distinct responses regarding planning, architecture, and infrastructure. Nonetheless, far northern communities are growing and will need to confront the challenge of conceptualizing an authentically northern practice of planning and design that best reflects place and people.

While more familiar southern models of development exist in larger communities such as Yellowknife and Whitehorse, remoteness, geography, and climate continue to resist the flattening forces of globalization and modernity in much of the Canadian North, creating distinctly arctic communities. This essay focuses on questions pertaining to urbanization in

---

1. See Yukon Government website, Communities; Northwest Territories government website, Community Data; Nunavut Bureau of Statistics, Population Data. http://www.gov.yk.ca/aboutyukon/communities.html, http://www.statsnwt.ca/community-data/index.html; http://www.stats.gov.nu.ca/en/Population.aspx.

Nunavut, Canada's largest and youngest territory. With a population of over 39,000 that is 85% Inuit, distributed in 25 communities, this territory is the fastest growing per capita in the nation, rising by 8.5% between 2011 and 2016.[2] We outline three ideas or approaches that propose more culturally reflective planning practices for Nunavut: (1) redefining what constitutes a northern vernacular; (2) challenging the top-down models of master planning; and (3) designing with greater responsiveness to geography and climate.
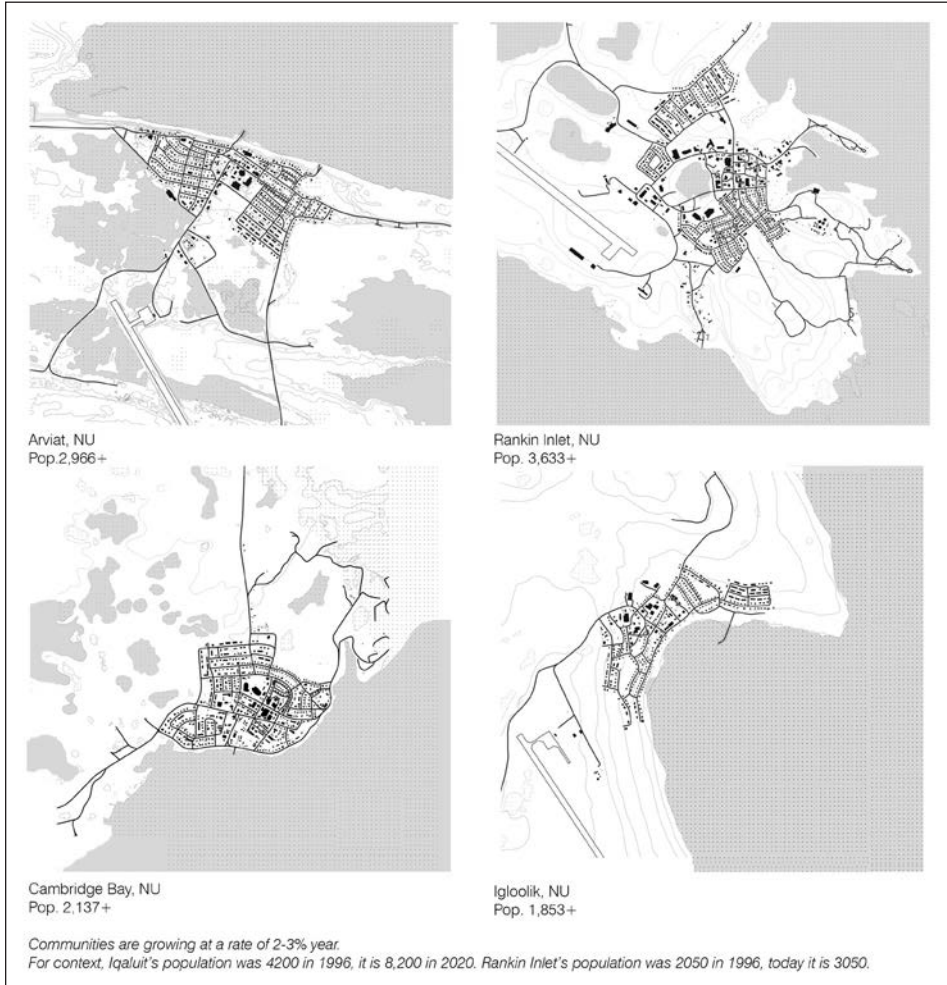

Arviat, NU
Pop. 2,966+

Rankin Inlet, NU
Pop. 3,633+

Cambridge Bay, NU
Pop. 2,137+

Igloolik, NU
Pop. 1,853+

Communities are growing at a rate of 2-3% year.
For context, Iqaluit's population was 4200 in 1996, it is 8,200 in 2020. Rankin Inlet's population was 2050 in 1996, today it is 3050.

Figure 1. While relatively speaking still small, communities in the Canadian Arctic are growing rapidly.

---

2. See Government of Nunavut Census Data. https://www.gov.nu.ca/eia/information/census-data.

Imagining Arctic Indigenous Urbanism

Despite the recent growth of Arctic communities, Danish anthropologist Susanne Dybbroe, in her analysis of Greenland, questions whether urbanization is the right term in the context of the Arctic (2008). Dybbroe, Vachon (2017), Hemmersam (2016), and others acknowledge that life in Arctic communities is transforming: increased access to internet, hunting using snowmobiles and GPS navigation systems, and the use of telehealth and distance education in certain instances have brought the conditions of the global to the remote North. Many aspects make Inuit societies modern, such as living in towns, access to technology, and connections to the South, among others. Dybbroe argues that "while these situations are often not obviously urban in all, or even many, details, a certain urban colouring is created by their integration into regional, State and global systems" (ibid., 26). As Nunavut continues to grow in population, so will its communities, such as Rankin Inlet and Arviat, and other medium-sized communities (by Nunavut standards) will graduate from hamlet to town.

The North is increasingly connected, but perhaps not urban, at least in a conventional sense. As environmental historian Finn Arne Jørgensen notes, "The North is a networked region: Northern places can't be understood as disconnected sites, isolated from the world: they are instead nodes, tightly networked and connected in a variety of ways" (2013, 277). This notion of networked space has a strong link to Indigenous ways of knowing and being on the land. Geographer Beatrice Collignon observes, "Inuinnait geosophy appears to be founded on a high sense of context and relations in which space and networks are indeed more important than places. The Inuinnait sense of places is in their relations to others, in the fluidity of the connected territory" (Collignon 2006a, 204). Perhaps, then, Arctic urbanism must be understood in a multivalent way: a distributed territorialisation of small communities linked by non-physical networks of trails, internet, and a shared culture. Although Nunavut's towns and hamlets can be understood as geographically separated islands of inhabitation, the region is connected in other ways: technologically, culturally, and through specific social infrastructures.

The notion of decentralization is inherent in the foundations of Nunavut. When the territory was officially established in 1999, government institutions were intentionally decentralized throughout the territory into three regions. This represented a desire to distribute the wealth of administrative jobs and was an attempt to create a less hierarchical political structure and bring government closer to the people (White 2015). Certain social infrastructures in Nunavut, such as the regional college programs and health and government services, already operate as distributed networks

present in all or many communities, depending on the service.[3] However, these attributes are not necessarily reflected in architectural design nor in spatial planning strategies. Given the remote, dispersed nature of communities, one can argue that institutions should imagine new building and campus types which could better support and reflect—in the programming, siting, and calendar cycles—decentralized health services, higher education, and culture. It is compelling to imagine a social infrastructure that could be tactical, scalable, and adaptable to leverage and respond to the scale of the territory. Connectivity through spatial distribution, digital technology, or physical infrastructures thus represents significant opportunities for design thinking.

That said, does technological, infrastructural, or digital connectedness make a place more "urban," and indirectly, less northern? Such questions were raised four decades ago in Québec geographer Louis Edmond Hamelin's *Canadian Nordicity* (1978). Hamelin charted both a geographic and a mental nordicity, which was calculated according to a series of "polar values", including infrastructural connectivity, economic development, population size, and climate, among others. He acknowledged that modernity and urbanity could be at odds with certain northern or polar values and that the condition of nordicity could change and diminish over time: as economic development, connectivity, or population increased, polar values diminished (ibid.). How might design help identify and argument an urban "nordicity", rather than diminish it, and what does this imply for planning?

One of the cultural challenges of an urbanizing the Canadian North is that for most Indigenous peoples, permanent settlement (with its imposed spatial, temporal, economic, and institutional structures), has been antithetical to traditional ways of life, which are deeply tied to the land and attuned seasonality (Mauss, Beuchat, and Fox 1979; Damas 2009). Anthropologist Edmund Searle notes, "Inuit identity requires particular places that nourish Inuit identity (e.g., outpost camps) while other places drain it away (e.g., Iqaluit)" (2008, 240). Inuit elders have observed that "being in town feels like being in jail" and that many Inuit feel free once they are out of town and either at their land-based cabins or camping on the land for the weekend; that being on the land was "being at home" (Tester 2018, 14). Indeed, for the last seventy-five years, imported models of architecture, infrastructure, and settlement form have served as deliberate spatial tools of cultural colonization, imposing an image of State while neutralizing local

---

3. The Nunavut Arctic College network is an interesting example of such a decentralized social infrastructure. Their website declares: "Community Learning Centres located in all 25 communities of Nunavut bring our programs home to people throughout the territory. These Centres are a doorway to a wider world of learning opportunities." http://www.arcticcollege.ca/arctic-college-overview.
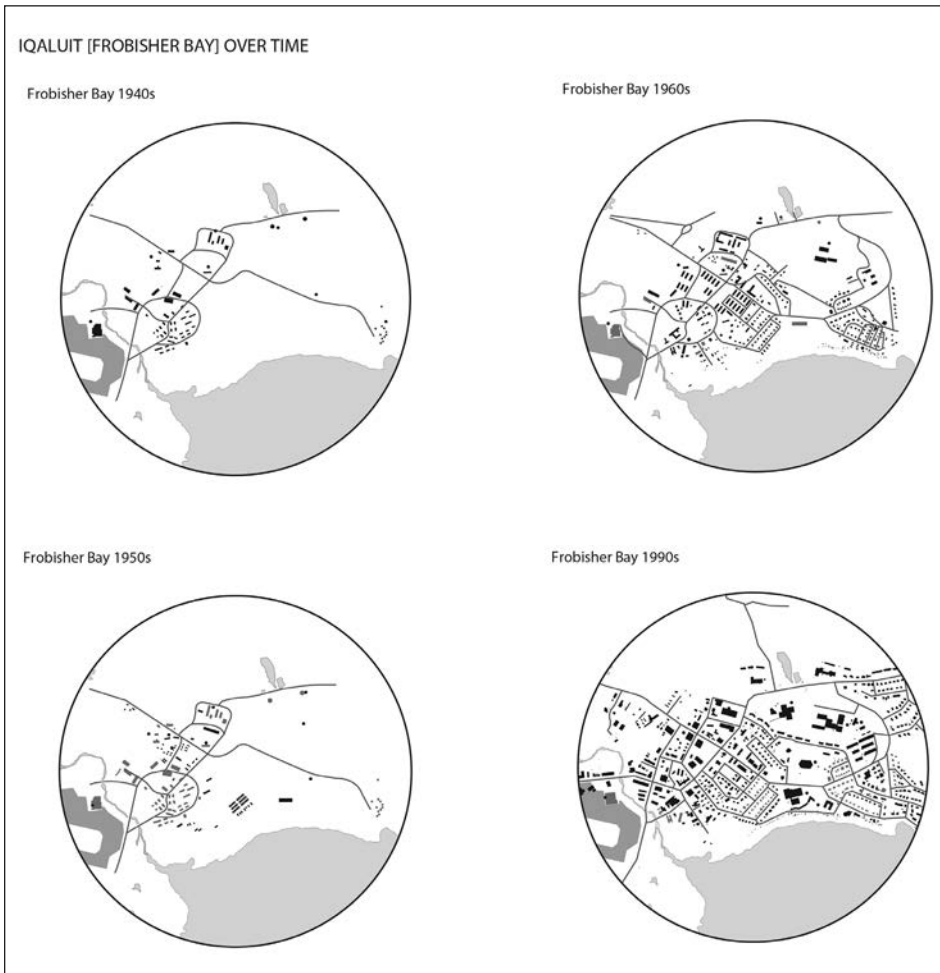
IQALUIT [FROBISHER BAY] OVER TIME

Frobisher Bay 1940s

Frobisher Bay 1960s

Frobisher Bay 1950s

Frobisher Bay 1990s

Figure 2. Evolution of Iqaluit (previously known as Frobisher Bay) from 1940 to 1990s. Iqaluit evolved from a military base to capital city through the progressive addition of various civic and residential structures. The functionalist legacy of the military base can still be felt in the current planning of the City. Image courtesy of Lateral Office, Toronto.

culture and geographic specificities (Farish and Lackenbauer 2009). Therefore, how can planning for northern Indigenous communities address the fundamental challenge that emerges from a legacy of colonial rule? (Thomas and Thompson 1972; Tester 2009; McCartney 2018). In light of the *Truth and Reconciliation Commission*'s 2015 report, there is a heightened awareness that planning northern communities must develop a more inclusive approach; one that involves knowledge exchange rather than the imposition of ideas (McCartney 2018). How can planning, community design,
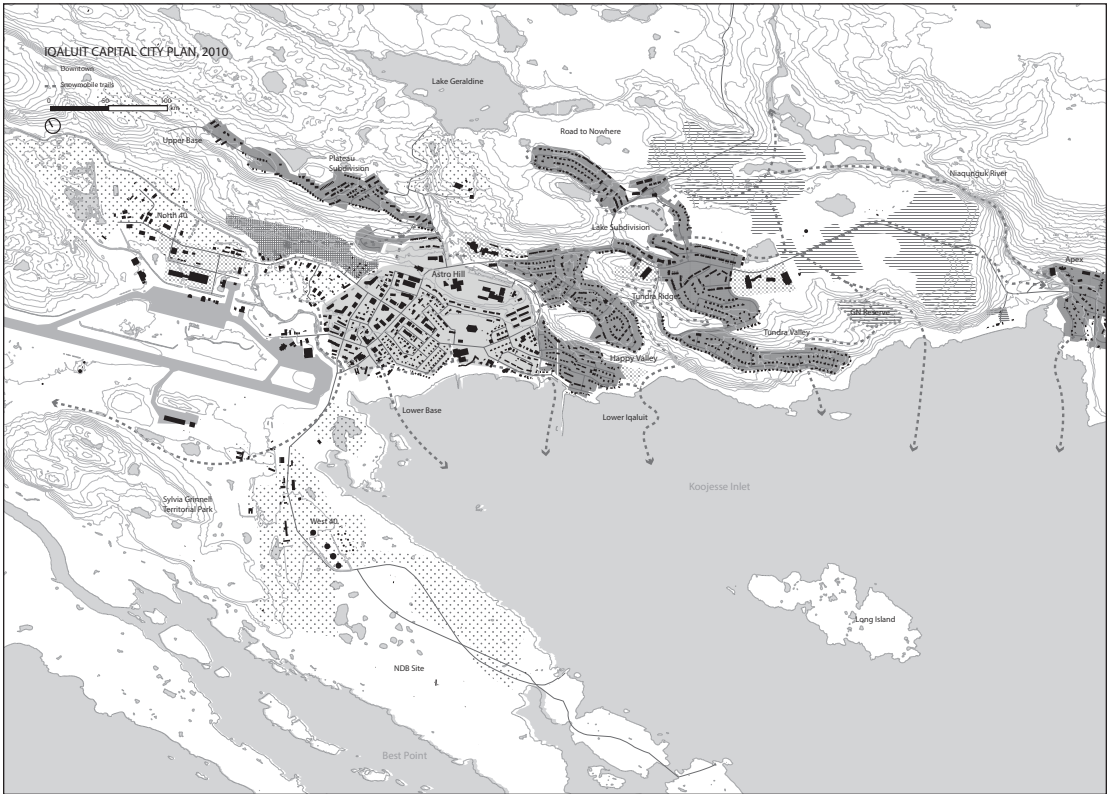
Figure 3. Iqaluit is growing by approximately 2 percent per year. Urban planning is driven my infrastructure needs and access to easily buildable land (given the complexities of constructing on permafrost) rather than considerations of public space or relationship to landscape, making urban develop often appear unplanned. Image courtesy of Lateral Office, Toronto.

and architecture engage the fundamental challenge of creating communities that reflect and support Inuit culture, social structures, and patterns of daily life? And how might a truly authentic Indigenous arctic urbanism be defined or imagined?

Current planning in Nunavut is driven primarily by such functional concerns as fire services, deployment of available land, efficient road and lot layout, climate change impacts, and infrastructure servicing.[4] Community planning typically replicates southern, suburban models in their lot and road layout and parking allowances and often ignores key spatial and visual

4. The tremendous cost and shortages of urban infrastructure and serviceable lots significantly impedes development in communities such as Iqaluit and are largely responsible for the dramatic housing shortages. Based on a phone call with Iqaluit City planner Jennifer Jarvis, May 28, 2019.

relationships to water's edge, trail access points, local knowledge of where to build, and which land provides stable ground.[5] As Nunavut communities continue to grow, new planning models are needed. This paper outlines three ideas or approaches which could constitute the beginning of more culturally reflective planning practices for Nunavut: (1) redefining the northern urban vernacular and its potential role in design; (2) challenging the current top-down masterplan by embracing strategies of informal urbanism; and (3) encouraging master planning approaches that embrace territorial strategies and are more responsive to geography, landscape, and seasonality.

Defining Northern Vernaculars

Within the discipline of architecture, vernaculars are often characterised by building design using local materials and construction practices, without the involvement of architects. Such architecture typically adapts to regional geography and is responsive to climatic and environmental conditions through unique building form or material responses. The role of the vernacular in architecture was brought to the forefront by architectural historian Bernard Rudofsky (1964) in his celebrated book, *Architecture Without Architects, an Introduction to Nonpedigreed Architecture*. The images indirectly reinforced the perception of the vernacular as an aesthetic, picturesque, and pattern-based logic, given the book's limited analysis of building form's relation to climate, cultural patterns, or social structures. However, other architectural historians, such as Amos Rapoport (1969), Paul Oliver (2006), and Marcel Vellinga (2008), extended their understanding of vernacular to include cultural practices and social rituals, as well as the study of "cultural impact." Oliver argued that vernacular architecture was critical to ensure sustainability in both cultural and economic terms. Other social science disciplines (sociology, anthropology, ethnography, etc.) similarly define architectural vernaculars as a mirror of a given society's material culture, deeply intertwined with the patterns of daily life and ritual.

In the context of the Canadian North, landscape theorist J. B. Jackson's understanding of vernacular landscapes as reflections and materializations of cultural landscapes and values is perhaps a more fruitful model. For Jackson, the rural, the vernacular, and the seemingly banal-built environment of America were worthy of investigation and reflected a multiplicity of narratives about the people that inhabited it. In his view, landscape should begin with commonplace: "American vernacular represents the hybridization

---

5. In visits to Inuit communities in Kuujjuaq and Arviat, residents noted planners' deliberate ignoring of local knowledge of land qualities, and good and poor places to build.

of Old World and New World factors. It is not simply rural and agricultural, it is identified with mining and shipping communities, with cities and the architect- or engineer-planned villages having military or political function. Finally, it used materials and techniques imported from elsewhere" (Jackson 1984, 11). The analogies with Nunavut communities are striking in recognizing that vernaculars are hybrids of imposed and local systems. Like Jackson's rural landscapes, Canadian Arctic communities are rarely beautiful or picturesque in the conventional sense, except for the sublime landscapes in which they sit and their spatial manifestation of local culture. Furthermore, they are the embodiment of a particular set of local constraints with regard to siting, layout, construction logistics, and mobility. This notion of "commonplace" is also framed by Harold Kalman in his *History of Canadian Architecture*: "many Northern designers have adopted an approach to design that is more pragmatic, and consequently less appealing… [producing] tight and well-constructed buildings [that] strive to work in harmony with the local climate and circumstance" (1994, 704). This northern pragmatism suggests a logical response to context; a less optimistic interpretation is the prioritizing of efficiency and expediency over culturally contextual response as the primary criteria for architecture and planning in Nunavut.

The key question, however, is what constitutes Nunavut vernacular today? There is a well-known legacy of Inuit vernacular architecture: the *iglu*, the *qarmaq*, the *tupiq*, and others. However, with the imposition of permanent settlements, these types have lessened in everyday relevance. In central and eastern Arctic, building and planning practices imposed by Canadian agencies have been the antithesis of vernacular traditions: the product of imported materials and external logics such as building or fire code, southern shipping logistics, and construction cost efficiency. Yet the utilidor, the trucking of fuel and water, the town fuel tanks, and the port and beach landing that receive the annual sealifts, are all uniquely northern infrastructures (Sheppard and White 2017). Similarly, building types such as Northmart, community freezers, and multi-plex housing are pervasive and have arguably become a contemporary vernacular. Simultaneously, bottom-up practices, such as the repurposing of shipping containers for sheds and storage, the construction of cabins out on the land, and the activation of school parking lots for festivals, are contemporary, locally generated practices.[6] Traditional spatial activities include going out on the land, hunting, and harvesting berries and other food sources. Together, these top-down and bottom-up systems constitute northern spatial practices or vernaculars—actions, constructions, movements, and markings—on the land

---

6. Architect Joshua Armstrong notes that the presence of cabins on the land is a relatively new practice, dating back 15-20 years (2018, 77); however, the making of structures for housing dates back to the first relations to settlements (Damas 2002).
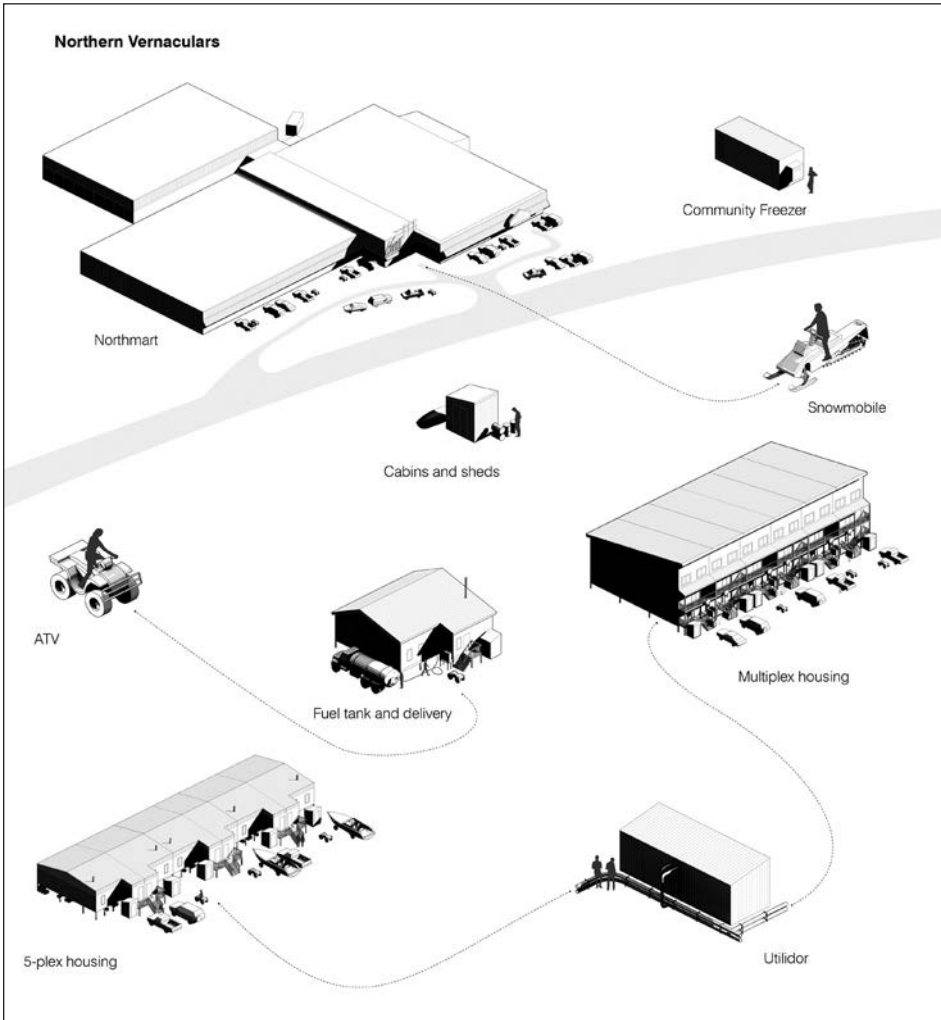
Figure 4. The North's vernaculars include sheds, cabins, multiplexes, utilidors, fuel and water tanks, and northern co-op stores, among others. Image courtesy of Lateral Office, Toronto.

that have come to shape a modern northern vernacular (ibid). How might the design of these vernaculars be given better consideration?

For example, one critical infrastructure in several northern communities is the utilidor, found in Iqaluit, Inuvik, and in the future, Arviat, among others. It is a distinctly northern innovation in which municipal water and waste infrastructure is carried above ground because of the difficulty of ground conditions (permafrost or rock). Running within the interior of a planning block, utilidors are sometimes paired with walkways to enable pedestrians to navigate over and along it. That said, the utilidor and its

attendant walkways could play a larger role in planning and defining zones of movement and be more catalytic in shaping urban space, rather than becoming a spatial afterthought. An interesting precedent for this potential is the extensive network of walkways in Nuuk, Greenland, which navigate between the backs of residential buildings and across complex rocky topography, thus offering a more intimate pedestrian navigation system than walking on the main streets. Nuuk's walkways are a distinct response to context, much as the utilidor in Nunavut communities could be as an alternate mode of navigating and experiencing the towns in which they are found. Similarly, every community in Nunavut depends on sealift deliveries, yet most communities lack the proper deep-water port infrastructure to receive sealift ships. Instead, cargo ships moor in the bay and a second barge moves back and forth between cargo ship and shore over several days, unloading the sea cans while navigating dramatic changing tides (Sheppard and White 2017). Iqaluit is finally set to complete construction of its deep-water port in 2021, yet the design of this infrastructure is entirely perfunctory, unfortunately missing the opportunity to imagine the port as an extended public realm[7].

Figures 5. Iqaluit's utilidors appear throughout the city in a haphazard way. In Nuuk, the utilidor is typically paired with the exterior walkways that lead residents to various housing complexes. Images courtesy of author.

7. https://www.arctictoday.com/iqaluits-deep-water-port-project-remains-on-track-for-2021-completion/. See *Strategic Plan for the Iqaluit Deepwater Port Project*. Report prepared for The City of Iqaluit by Aarluk Consulting Inc., Gartner Lee Limited, and Chris Anderson. August, 2005.

Figure 6. The proposed Deep Sea port for Iqaluit, scheduled for completion in 2022. The design misses the opportunity for even a modest sense of public realm, for this critical piece of urban port infrastructure. Image produced by Aarluk Consulting for the City of Iqaluit. Public report, August 2005

Refuting the Masterplan: Adaptable Urbanism

Another significant challenge of planning in Nunavut is the resistance to appropriation or change by its residents or even the ability to adapt to community priorities. Hamlet and town plans are often done with limited community engagement, leaving absent the degree to which residents see themselves reflected in the layout of their community (Havelka 2018, 137; McMillan and Sheppard 2020). Driven by legitimate efficiency and safety concerns, community plans tend to replicate southern, suburban models as unquestioned solutions. These functionalist plans actually date back to the military bases and trading posts of the nineteenth century, from which many of the communities emerged (Damas 2002; Sheppard and White 2017). Amplifying the intransigence of the collective realm is the singular nature of housing in Nunavut: the cornerstone of the built fabric of all communities. In an effort to control costs, housing (most often the 5-plex or 5-unit block built by the Nunavut Housing Corporation) is reduced to the most minimal of structures; the interface is limited between interior and exterior in the form of decks and wind-shelter areas; and even the cold porches and rear doors have been eliminated or reduced in more recent

versions of the multiplex.[8] Furthermore, little consideration is given to the spaces created between buildings, how these might be appropriated by citizens, or how this space could shape the quality of life in the urban realm. The question of the space created between buildings, the semi-public collective realm of the domestic, must therefore be prioritized as communities grow, to move from a functionalist planning paradigm to one that actually supports communities.

A more community-driven approach could produce a more culturally reflexive northern urbanism. Urban theorist Margaret Crawford's concept of "everyday urbanism" may offer clues on how to conceptualize an urbanizing North that eschews traditional approaches of public realm design or even function. Strongly influenced by the work of Henri Lefebvre, Michel de Certeau, and Guy Debord, Everyday Urbanism resists top-down planning structures, finding its meaning instead in everyday life through an understanding of the social use of space (Crawford, Chase, and Kaliski 2008).[9] Using careful observation of the patterns and temporalities of daily life and community engagement, this practice serves to eliminate the distance between planning "experts" and ordinary users. Resisting the logic of large-scale planning, everyday urbanism leverages incremental, small-scale interventions through the intensification of existing experiences and practices rather than the imposition of new spatial structures. Contrasting Jackson and Crawford who wrote about a dramatically different climatic and cultural context—that of Los Angeles—the notion of customizability of interior and exterior space of dwelling and the conception of bottom-up planning strategies show potential in the context of Nunavut.

The ability of the Inuit to respond and adapt to their physical environment, both historically and today, has been extensively documented (Mauss et al. 1979; Tester 2006). Architect Suzanne Havelka has observed this strong culture of adapting dwellings in communities such as Clyde River, through the construction of *uqsuu* (porches), *sanavii* (workshops) and *ilugarlaa* (outbuildings or storage sheds) to produce an unintentional everyday architecture. Havelka writes, "the leveraging of the 'gap space' or *akuningaa* is an important concept in the eastern Arctic. The gaps comprise

---

8. For a recent evolution of the 5-plex housing type, which dominates Nunavut Housing Corporation's housing stock, see Gary Wong. *NHC 5Plex MURB as a best practice in Nunavut.* FN MURB Workshop, May 15-17, 2018, Whitehorse, YK. www.housing.yk.ca/pdf/5-FN-MURB-Workshop-NHC-Gary-Wong-18-05-15.pdf.

9. Michel de Certeau, in *The Practice of Everyday Life* (1984), distinguished between strategy and tactic, proposing that everyday users operate tactically and subversively in a bottom-up manner within the strategic framework developed by the institutions and structures of power (de Certeau 1984). In the context of the North, however, tactics are not directly about subverting power but are rather motivated by local adaptations to the environment.

all micro spaces that are part of the town proper but not the houses themselves" (2018, 176). Considering this at an urban scale, it is precisely the "gap spaces" that have been ignored by town plans in Nunavut and elsewhere in the North. These gap spaces offer the promise of a more flexible collective realm which residents can appropriate. Shacklands, a term coined by architect Josh Armstrong in his analysis of Iqaluit's waterfront structures, describes this informal landscape as speaking to an indigenous informality of place (2012). Such gaps in the city fabric have the potential to be nurtured over the long term, as they provide sites for the imagination of a culturally considered built future (2012, 3). A first step could be an "asset mapping" or spatial inventory of existing built and landscape elements in the "in-between" spaces of communities: the landscapes (lichen, rocks, local berries), objects (boats, snowmobiles, ATVs stored by the residents' houses), structures (cabins, storage structures), and infrastructures (utilidors, fuel and water tanks, rock bollards) that make up the urban realm. Once documented and considered, these could translate to constitute elements of design of a truly Nunavut public realm.

Figure 7. Iqaluit's waterfront is populated by numerous cabins, shacks and boats used for storage, work, and recreation, which shape the character of the City's land/water interface. As the City grows, a more comprehensive approach to integrating these structures, (without displacing them) seems critical. Image courtesy of author.

Figure 8. Fuel tanks, storage, stairs and balconies in Iqaluit's multiplexes contribute to the northern housing vernacular and inadvertently shape the public realm.
Image courtesy of author.

A simple example is the potential role of shipping containers and cabins in Nunavut communities. Often left behind following the annual sealift deliveries, the containers are repurposed by individuals for storage or workshop spaces, while cabins are built in a do-it-yourself manner using locally available and often repurposed building materials (Armstrong 2012; Havelka 2018). In most Nunavut communities, residents place the cabins and shipping containers in an ad hoc way. Armstrong notes that the cabins by Iqaluit's beach waterfront tend to fall in a grey zone in which authorities do not want to impose strict control, while the cabin owners have subverted formal authority through a series of tactics that include construction, squatting, and resistance to imposed rules (2012, 65). In contrast, in the city of Nuuk, Greenland, storage structures are often built by the municipality as an integral part of housing projects and are adjacent to the walkway networks described earlier. These structures define a planned but informal, collective space—a northern equivalent to the rear laneway. One could imagine Nunavut accommodating for containers and cabins in the design and zoning of community plans, not in an effort to suppress or control them

but rather to coordinate them in order to create deliberate spaces for work, repairs, or crafts.[10] Furthermore, micro-grants could enable owners to improve, paint, maintain, or adapt their out-buildings, thus offering community residents agency over a small element of their domestic space as it relates to public realm. Greater community engagement and participatory design practice could therefore foster more inclusive community plans in which the Nunavummiut see themselves reflected.

Engaging Geography and Seasonality

Geographers and anthropologists have written extensively about the relationship of the Inuit to the land and their long-standing knowledge of its topography, seasonality, and morphology (Aporta 2009; Collignon 2006b). Movement in Nunavut communities extends between and beyond the roads to include informal snowmobile and all-terrain vehicle paths, thereby creating a second layer of seasonal movement. This effectively expands the territory of the community beyond official boundaries, as these trails connect the community to a vast hinterland of hunting spots and gathering points marked by mobile as well as permanent cabins that form an extension of life in the community. Here is a space that can be appropriated, constructed, and built up as residents wish (Havelka 2018). Returning to Collignon's observation of networks of spaces in Inuinnait geosophy, she states, "What is important to them is not so much to have a place of their own but to have at their disposal a whole set of various places, with very different qualities, all connected together through the shared experiences of the various members of the community" (2006a, 204). While the spaces in question refer to ones out in the land, could an Arctic urbanism operate in a similar manner, with diverse, connected places offering a range of experiences? For rapidly growing northern towns, there is no tradition of main street familiar in rural morphology. Instead, community life occurs in a constellation of spaces in town: in schools and their parking lots, at skating rinks, in community centres, and *out on the land*. In this model, city and hinterland, material and virtual networks, cease to be dichotomies. Could we envisage planning that acknowledges and integrates this extended territory and geography?

---

10. During a 2016 design charrette hosted by the Canadian Centre for Architecture, "Recomposer Le Nord", several student projects proposed leveraging the location and arrangement of shipping containers in communities for various uses, from material depot and storage to snowmobile garages to help shape the public realm. https://www.cca.qc.ca/charrette/2016/index.html.
On July 2020, Iqaluit City Council voted to temporarily stop people from building cabins on municipal lands until it came up with a plan to regulate them. Hopefully, this is seen as a opportunity for holistic thinking about the potentials of these structures In the urban landscape.

It is surprising how little the town and hamlet plans of Nunavut communities engage or respond to the landscapes and ecologies in which they sit. For instance, few significant municipal buildings in Iqaluit address Frobisher Bay in their siting, except for the Nunatta Sunakkutaangit Museum and the Visitor Information Centre, which are situated near the bay. Even the Nunavut Legislature, perhaps the most symbolic building in the territory, sits perfunctorily at the intersection of two downtown streets, with no consideration of view or siting to the adjacent majestic landscape. This is largely the legacy of functional planning whose roots lie in the military encampment that Iqaluit once was (Qikiqtani 2014). Informal cabins line the Bay's edge in Iqaluit in an ad hoc manner, neither amplifying the community's relationship to the land nor acknowledging the paths that serve as a gateway to the extended landscape when the bay freezes. At a more intrusive scale, Arviat, in its new town plan, proposes to pave over the local ground, landscape, and its attendant ponds to create a new artificial ground for construction (McMillan and Sheppard 2020). This lack of planning and landscape consideration stands in sharp contrast to that of a city like Nuuk, where several buildings, such as the University of Greenland or the Greenland National Archives (each of which addresses particular geographies), are situated at a geographic highpoint of the community and at water's edge, respectively.

Figures 9a et 9b. Walkways and storage shape the public realm of Nuuk. Retrofitted housing in Nuuk integrates storage in a more playful way. Image courtesy of author.

Similarly, the 2011 planning redevelopment of the very large Block P in Nuuk focused as much on public realm design as it did on building layouts.[11] Public realm design studies that examine more than merely land

---

11. Block P was the largest housing project in Nuuk, dating from 1965, which at one point was the largest apartment complex in Greenland. It was deemed unsuitable as housing and was demolished in 2013, prompting design studies for the redevelopment. See planning proposals by MDL architects. https://mdh.no/project/nuuk-masterplan/.

use are largely absent in Nunavut. One exception is the work of the group *Habiter le Nord* who is exploring arctic urbanism in the presence of housing and public realm concerns, in consultation with various communities in Nunavik, Québec. Their research leverages modern vernaculars such as the utilidor, cabins, and housing cluster strategies to shape collective space and respond to geographic and topographic conditions, social patterns, and wind and snow orientation in a more calibrated manner (Vachon *et al.* 2017).

Figure 10. Proposal for Inukjuak, Quebec, in which housing is considered in concert with infrastructure and public realm. Image courtesy of Genevieve Vachon, Avarello Garneau Larouch Renaud-Roy. (2015)

Beyond the spatial, typological, and morphological fixity of Nunavut planning and housing, there has been an imposition of temporal structures. Over the course of the twentieth century, Canada imported and imposed southern institutions, calendars, political structures, and language, among other frameworks (Stern 2003; Searle 2008). Living off the land had very different notions of time; the emergence of permanent communities, wage-based economies (and the associated calendar of lunch breaks, paychecks, weekends, etc.) and patterns of social structures attendant to education and recreational activities, among others, produced increasing temporal regulation (Stern 2003). Contrary to Western control of time, "[the] Inuit learn how to relinquish a desire to control time in order to become more aware of, and therefore better able to yield to, the rhythm and movements of weather, ties, animals, seasons, etc." (Searles 2008, 248). This contrast of southern time and northern time relates to design in how it questions programming, responsiveness to seasonality, and considerations about the life-span of structures. Could social infrastructures in the city acknowledge daily, seasonal, and annual events? How might collective spaces and buildings be calibrated to seasonal changes?

Figure 11. Iqaluit square.
Image courtesy of author.

One example of planning that acknowledges temporal and local practices is the Iqaluit 2005 Masterplan developed to address the growing presence of snowmobiles in the community, and whose spatial patterns are distinct from pedestrians and cars, and hence overlay a non-orthographic system of movement that resists the formal order of the town. Although the proposed strategies and plan predominantly focused on pragmatic issues of intersection design and the negotiation of pedestrians and snowmobiles, it effectively incorporated the distinctly northern reality of snowmobiles into the urban design and acknowledged that mobility patterns change according to the seasons. This study coincided with the Iqaluit Core Area and Capital District Redevelopment Plan, which attempted to acknowledge seasonal trails and the City's connection to the bay. However, some of the built outcomes of the plan, such as the creation or demarcation of Iqaluit Square, failed to be used by residents, begging the question as to what could best define successful public realm typologies in the Arctic. Rather than formally delineated spaces, public realm could be better shaped by the thoughtful use of programs and a deeper consideration of the relationship between buildings, and between buildings, the landscape, and the larger territory. Furthermore, given the long winter days with little light, focus on lighting of the urban environment is another unanswered concern. One speculative project from 2012 explored mobile lighting for the North which responded to environmental conditions through changing light colours.
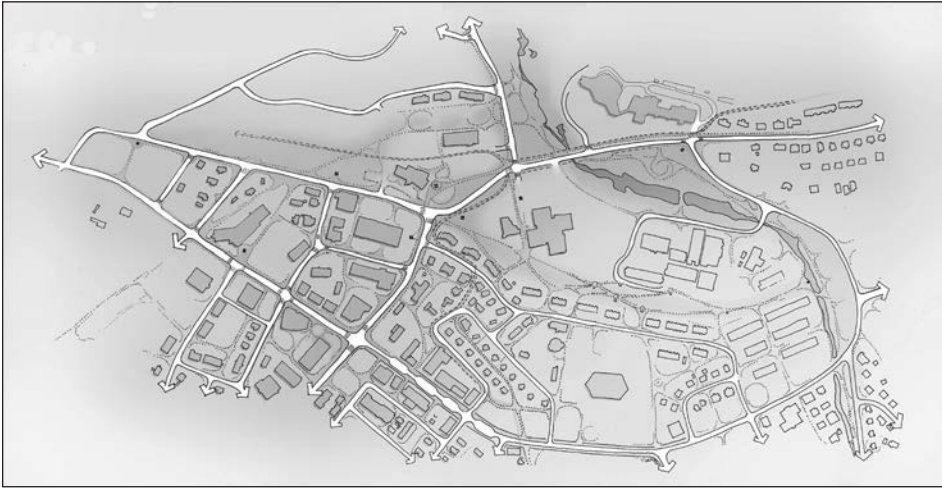
Figure 12. Study of movement of people, vehicles and snowmobiles for the City of Iqaluit. Image prepared by Office for Urbanism for City of Iqaluit. Public report 2005.
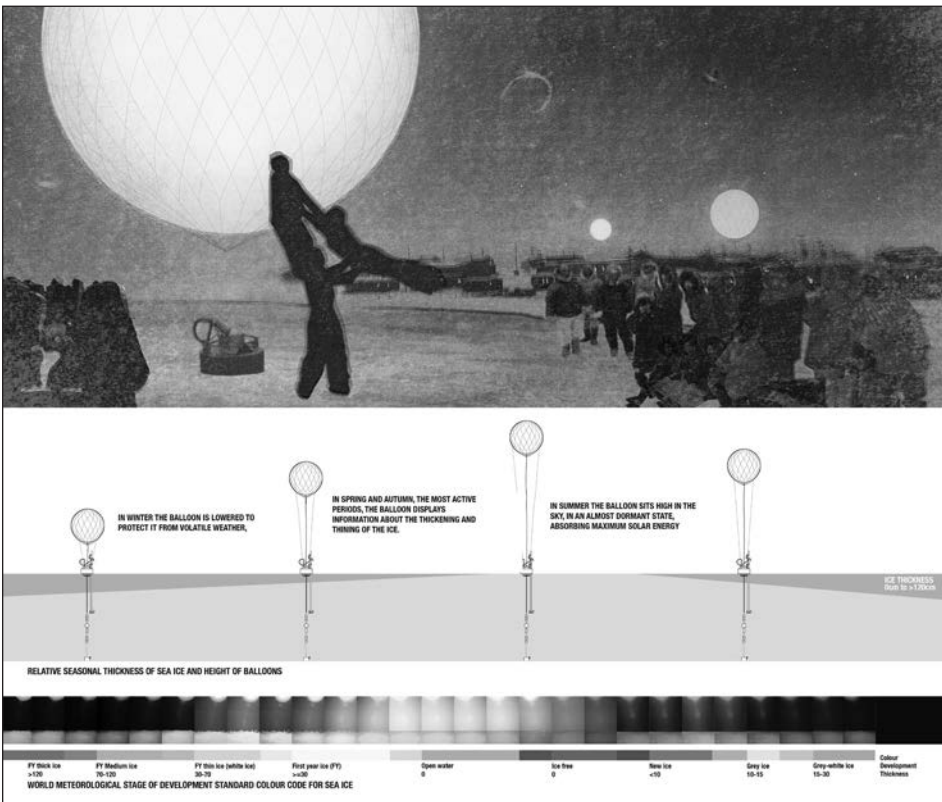

Figure 13. Proposal for distributed lighting and environmental monitoring in Nunavut communities. Image courtesy of Claire Lubbell and Virginia Fernandez.

Building a Northern Design Vocabulary

A key challenge of planning and design in Nunavut is not only the absence of precedents, given its unique history, climate, and culture, but also the absence of relevant terminology or words to speak accurately about the particular phenomena of urbanization in this region of the country. Terms such as 'urban design', 'landscape architecture', or 'public space' are southern importations and are thus inappropriate, given the ambiguousness of the very term 'urban' or 'landscape' in the context of the Canadian far North. However, terms such as *katilvik*, meaning 'a gathering or meeting place' could offer some clues to developing a lexicon and morphology to characterize northern urbanism.[12] This would require working with Inuktitut speakers and groups, such as Nunavut Culture and Heritage, to imagine new terms to evoke ideas of collective space that uniquely reflect the Nunavummiut. In the late twentieth century, urban theorists such as Jackson and Crawford developed terms and practices that eluded traditional urban design and indeed challenged its tropes. In the context of Nunavut, and indeed much of the Canadian Arctic, where architecture and planning have long served as tools of colonization and cultural erasure, a similar recalibration of practice and vocabulary is needed.

Both Inuit leaders and scholars have affirmed the degree to which Inuit people have adapted to changing climate, culture, technology, and architecture (Mauss et al. 1979; Aporta 2009; Pearce et al. 2005; Simon 2011; Watt-Cloutier 2015). Indeed, in each instance, resilience and adaptability have emerged from locally developed tools or strategies for adaptation. The challenge to architecture and planning is mirrored: rather than community adaptation happening *in spite* of design, effective planning must not only embrace vernacular spatial practices (which hybridize tradition and modernity) but also develop frameworks that enable the actual users to adapt local plans. Lastly, it must evolve beyond the coarse scale of land use toward a finer-grain understanding of buildings' relationship to each other, to the land, and to seasonality, which are so central to daily life in Nunavut communities. Only then will planning and design become sustainable tools of cultural empowerment for the Nunavummiut.

---

12. See Spalding, Alex and Thomas Kusugaq 1998. *Inuktitut—A Multi-Dialectal Outline Dictionary (with an Aivilingmiutaq base)*. Iqaluit: Nunavut Arctic College. http://www.inuktitutcomputing.ca/Spalding/index.php?lang=fr.

References

APORTA, Claudio
2009   "The Trail as Home: Inuit and Their Pan-Arctic Network of Routes." *Human Ecology* 37 (2): 131–146.

ARMSTRONG, Joshua
2012   "*The Second Promise: An Architect's Journey through the Shacklands of the North*." Master's thesis, Carleton University, Ottawa.

COLLIGNON, Béatrice
2006a   "Inuit Places Names and Sense of Places." In *Critical Inuit Studies: An Anthology of Contemporary Arctic Ethnography*, edited by Pamela Stern and Lisa Stevenson, 187–205. Lincoln: University of Nebraska Press.
2006b   *Knowing Places: The Inuinnait, Landscapes, and the Environment*. Edmonton: Canadian Circumpolar Institute, University of Alberta.

CORE AREA AND CAPITAL DISTRICT REDEVELOPMENT PLAN, IQALUIT
2004   Prepared by the Office for Urbanism, FoTenn, Laird & Associates, July.

CRAWFORD, Margaret, John CHASE, and John KALISKI, eds
2008   *Everyday Urbanism*. Expanded ed., New York: The Monacelli Press.

DAMAS, David
2002   *Arctic Migrants/Arctic Villagers: The Transformation of Inuit Settlement in the Central Arctic*. Montréal: McGill-Queen's University Press.

DAWSON, Peter C.
2006   "Seeing like an Inuit family: The relationship between house form and culture in northern Canada." *Études Inuit Studies* 30 (2): 113–35.

DE CERTEAU, Michel
1984   *The Practice of Everyday Life*. Translated by Steven Rendall. Berkeley: University of California Press.

DYBBROE, Susanne
2008   "Is the Arctic really urbanising?" *Études Inuit Studies* 32 (1): 13–32.

FARISH, Matthew, and P. Whitney LACKENBAUER
2009   "High modernism in the Arctic: Planning Frobisher Bay and Inuvik." *Journal of Historical Geography* 35: 517–544.

HAMELIN, Louis Edmond
1978   *Canadian Nordicity: It's your North Too*. Montréal: Harvest House.

HAVELKA, Suzane
2018   *Building with IQ (Inuit Qaujimajatuqangit): The Rise of a Hybrid Design Tradition in Canada's Eastern Arctic*. PhD diss., McGill University, Montréal.

HEMMERSAM, Peter
2016   "Arctic Architectures." *Polar Record* 52 (4): 412–22.

JACKSON, John Brinckerhoff
1984   *Discovering the Vernacular Landscape*. New Haven, CT: Yale University Press.

JØRGENSEN, Finn Arne
2013   "The Networked North." In *Northscapes: History, Technology and the Making of Northern Environments*, edited by Dolly Jørgensen and Sverker Sörlin, 277. Vancouver: University of British Columbia Press.

KALMAN, Harold
1994   *A History of Canadian Architecture, Vol. 2*. Toronto: Oxford University Press.

MAUSS, Marcel, Henri BEUCHAT, and James J. FOX
1979   *Seasonal Variations of the Eskimo: A Study in Social Morphology, 1872-1950*. Translated from the original: *Essai sur les variations saisonnières des sociétés Eskimo*. London: Routledge and Kegan Paul.

McCARTNEY, Shelagh
2016   "Re-Thinking Housing: From Physical Manifestation of Colonial Planning Policy to Community-Focused Networks." *Urban Planning* 1 (4): 20–31.

McMILLAN, Jason, and Lola SHEPPARD
2020   Unsettling Ground: Arctic Urbanism in Fluid Geography. *Études Inuit Studies* 44 (1-2): this issue.

OLIVER, Paul
2006)   *Built to Meet Needs: Cultural Issues in Vernacular Architecture*. London: Routledge.

QIKIQTANI INUIT ASSOCIATION
2014   *Qikiqtani Truth Commission: Community Histories 1950–1975, Iqaluit.*, April.

RAPOPORT, Amos
1969   *House Form and Culture*. London: Pearson.

RUDOFSKY, Bernard
1964   *Architecture Without Architects, an Introduction to Nonpedigreed Architecture*. New York: Museum of Modern Art.

PEARCE, Tristan, James FORD, Ashlee Cunsolo WILLOX, and Barry SMITH
2005   "Inuit Traditional Ecological Knowledge (TEK), Subsistence Hunting and Adaptation to Climate Change in the Canadian Arctic." *Arctic* 68 (2): 233–245.

SCOTT, Felicity D.
2000.   "Bernard Rudofsky: Allegories of Nomadism and Dwelling." In *Anxious Modernisms. Experimentation in Postwar Architectural Culture*, edited by S. Williams Goldhagen and R. Legault, 215–237. Montréal: Canadian Centre for Architecture and Cambridge: MIT Press.

SEARLES, Edmund
2008   "Inuit Identity in the Canadian Arctic." *Ethnology* 47 (4): 239–55.

SHEPPARD, Lola, and Mason WHITE
2017   *Many Norths: Spatial Practice in a Polar Territory*. Barcelona: Actar.

SIMON, Mary

2011   "Canadian Inuit: Where We Have Been and Where We are Going." *International Journal* 66 (4): 879–91.

SPALDING, Alex, and Thomas KUSUGAQ

1998   *Inuktitut—A Multi-dialectal Outline Dictionary (with an Aivilingmiutaq base)*. Iqaluit: Nunavut Arctic College. http://www.inuktitutcomputing.ca/Spalding/index.php?lang=fr.

STATISTICS CANADA

2016   *Population by Year, by Province and Territory*. Ottawa, Ontario. http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/demo02a-eng.htm.

STERN, Pamela

2003   "Upside-Down and Backwards: Time Discipline in a Canadian Inuit Town." *Anthropologica* 45 (1): 159.

TESTER, Frank

2006   Iglu to Iglurjuaq. In *Critical Inuit Studies: An Anthology of Contemporary Arctic Ethnography*, edited by Pamela Stern and Lisa Stevenson, 230–52. Lincoln: University of Nebraska Press.

2009   "Iglutaasaavut (Our New Homes): Neither 'New' nor 'Ours' Housing Challenges of the Nunavut Territorial Government." *Journal of Canadian Studies/Revue d'études canadiennes* 43 (2): 137–158.

2018   "Inuit Homelessness: Knowing, Growing and Going to Make a Difference." *National Conference on Ending Homelessness*, Hamilton, November.

TESTER, Frank, and Peter KULCHYSKI

2011   *Tammarniit (Mistakes): Inuit Relocation in the Eastern Arctic*, *1939-63*. Vancouver: UBC Press.

THOMAS, David K., and Charles Thomas THOMPSON

1972   *Eskimo Housing as Planned Culture Change*. Ottawa: Department of Indian Affairs and Northern Development, Northern Science Research Group.

TRUTH AND RECONCILIATION COMMISSION OF CANADA

2015   *2015 Truth and Reconciliation Commission of Canada: Calls to Action*. Manitoba.

TRANSPORTATION AND URBAN DESIGN STUDY, IQALUIT

2005   Prepared for The City of Iqaluit Planning and Lands Department. Prepared by the Office for Urbanism, Marshall Macklin Monaghan John Laird Associates, December

VACHON, Geneviève, Érick RIVARD, Mathieu AVARELLO, and Laurence ST-JEAN

2017   "Imaginer l'aménagement soutenable des villages inuits du Nunavik. Le design pour réfléchir aux possibles." *Recherches amérindiennes au Québec. Habitation: imaginaires et réalités autochtones* 47 (1): 137–50.

VELLINGA, Marcel

2007   "The Inventiveness of Tradition: Vernacular architecture and the future." *Perspectives in Vernacular Architecture* 13 (2): 115–28.

VELLINGA M., OLIVER P., and BRIDGE A.
2008   *Atlas of Vernacular Architecture of the World*. New York: Routledge.

WATT-CLOUTIER, Sheila
2015   *The Right to be Cold: One Woman's Story of Protecting Her Culture, the Arctic and the Whole Planet*. Toronto: Penguin, Random House Canada.

WHITE, Graham
2015   *Made in Nunavut: An Experiment in Decentralized Government*. Vancouver: UBC Press.

WONG, Gary
2018. *NHC 5Plex MURB as a best practice in Nunavut*. FN MURB Workshop, Whitehorse, Yukon, May 15-17.