RECOVERING PLACE IN THE ARCTIC

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Most literature on Arctic development starts with the rapid changes occurring in the region due to climate change. Nowhere are the effects of global warming felt more acutely. This affects fragile ecosystems, but also the communities that are described as "victims" of climate change. Generally, Arctic settlements are inscribed in a "development" or "frontier" discourse in which they are observed and designed from elsewhere. In this discourse, their appearance reflects responses to exterior forces, and their inhabitants have little or no agency of their own. Arctic settlements are seen as extraordinary – either as socially and economically underdeveloped communities of indigenous populations that rely on regulation and support from (southern) national states or simply as unregulated industrial settlements or "company towns" that are exempted from regular rules and legislation.[1] This last perspective is on the rise due to the projected wave of industrialisation in the region as the rising worldwide resource demand leads to the opening up of more economically marginal extraction areas. This is made possible by changing sea ice patterns which open up the Arctic for shipping, mineral prospecting and resource extraction (see, e.g. Arbo et al., 2013; Smith, 2011).

The colonial history of the region is evident in many ways. While empowerment and self-government have increased in parts of the Arctic, paternalistic voices still proliferate and post-colonial resentment and resignation are also evident in many places. This has consequences for community development, which is seen as necessary by outsiders, but is often considered to be outsiders' business by locals. Adding to this problem is the increasing transient population of the region, including imported miners or seasonal employees in other industries. They are not regarded as having a say in the development of place, despite their obvious "citizenship" in the landscape, especially in the wholly transient industrial or tourist settlements of the region.[2]

The architectural and urban planning legacy of colonialism has been well documented in many regions, but no systematic record of this dimension exists for the Arctic. In the period after the Second World War, particularly from the 1960s, Arctic communities were, as architectural historian Rhodri Windsor Liscombe argues about the Canadian Arctic, 'site[s] of utopic imagining and dystopic intervention' (2006, p. 64). At the peak of architectural modernism, colonial contexts, including the Arctic, were subjected to grand experiments in 'modernisation through architecture'. Even under the ensuing criticism of modernism, in the form of an anthropologically inspired structuralism with an increasing focus on everyday life-worlds, a lingering notion

of architectural determinism still pervaded. In the Arctic, this is evident in the writings of British/Swedish architect Ralph Erskine. While his proposals for settlement designs in the Scandinavian and Canadian North paid lip service to the desires and aspirations of locals, and despite their "softened" architectural language, they were still ultimately modernist in their proposals for uto-

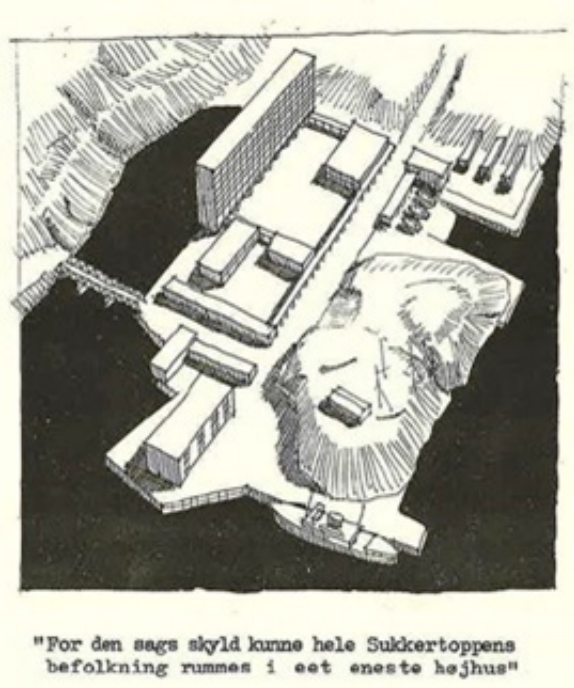

FIGURE 1. An unrealised example of modernist planning in Greenland: 'For that matter, the whole population of Sukkertoppen [now Maniitsoq] could be accommodated in a single high-rise' (Department of Greenland (Denmark), 1951).
Architectural proposal: Hugo Lund Andersen Poul Lyager, Mogens Boertmann and Flemming Teisen, Byplanforslag i Vestgrønland. Narssaq, Sukkertoppen, Egedesminde, Godthaab, (Copenhagen: Grønlandsdepartementet, 1951): 32.

pian "place-less" designs of settlements (Hemmersam, 2016; Liscombe, 2006; Marcus, 2011; McGowan, 2008). (Figure 1)

The climate-adapted architecture of Ralph Erskine is still widely seen as archetypal (e.g. Birk, 2012), and even today, no competitive alternative models for Arctic settlements have emerged. A contemporary derivative of his ideas is found in the *Winter Cities* movement (Pressman, 2004), which is 'a design and behavioural approach' (Davies, 2015, p. 307) that 'attempts to reduce winter's negative consequences and to emphasise its positive features' (ibid., p. 278). While seemingly sympathetic in pursuing liveable urban environments for inhabitants, this approach nevertheless echoes Erskine's outsider's view on settlements in the region and his fundamentally colonialist call for an Arctic architecture that 'attract[s] engineers and technicians and their wives' (1968, pp. 166–67).

Erskine's idea of a new utopian architecture reflected modernism's disregard for local preferences and desires, and he 'found it difficult to reconcile the northerners' love of their forests, rocks and islands with their longing for southern ways' (Erskine, 1968, p. 166). Illustrating that this modernist perspective still dominates the discourse on Arctic cities, Kjeld Vindum, editor of the Danish journal Arkitektur, recently complained that the 'poor international mainstream architecture' (2012, p. 3) emerging after Greenland's home rule was inferior in its concern for local context compared to the colonial architecture from the 1950s and 60s that displayed 'a sincere effort to address the unique climatic and topographical conditions and the Greenlandic lifestyle and culture' (2012, p. 3). (Figure 2)

In recent years, the emerging dynamics of the region has again attracted the attention of architects, such as the Danish contribution to the 2012 Venice Biennale of Architecture on Greenland (Lima et.al, 2012) and the 2014 Canadian exhibition in the same place celebrating the 15-year

anniversary of Nunavut. In addition, numerous schools of architecture and landscape architecture have focussed on the Arctic, including the University of Virginia, Columbia University and the Royal Academy in Copenhagen.[3] At these institutions, design studios have engaged in variations on speculative design driven by the "extreme" parameters of the environment and often bear little evidence of input from locals.

PLACE IN LANDSCAPE URBANISM

The abstraction of modernism was criticised by postmodern architects and theorists as a 'tyranny of space' (Venturi et al., 1972, p. 148; see also Augé, 1995; Relph, 1976). They insisted that the more intangible notion of "place" should be addressed as the key dimension of people's identification with a given location. This was specifically the program of critical regionalism (Frampton, 1983; Tzonis & Lefaivre, 1990), which emphasised the role of local climate and topography as key moderators of modern architecture, often with a focus on the tectonics and materiality of the architecture.

Today, critical regionalism has largely been outflanked by diverse forms of neomodernism that celebrate the transformative role of globalisation in cities. Architectural historian Mari Hvattum calls the static regionalist conception of place in architecture the "tyranny of place", and claims that it has inherent nationalistic and essentialist currents and relies on geographic determinism (2010). Hvattum echoes geographer Doreen Massey's notion of place as being neither fixed nor spatially bounded. For Massey, places are 'articulated moments in networks of social relations and understandings' (1994, p. 154), which results in a 'sense of place which is extroverted, which includes a consciousness of its links with and dependencies of the wider world, which integrates in a positive way the global and the local' (1994, p. 155).

Landscape urbanism as a discourse emerged in the mid-1990s and can be traced to postmodern architectural thinking and the critique of the abstraction of modernism (Waldheim, 2016). The development of the field also represented a move away from the ecological modernism that had dominated landscape architecture, while simultaneously echoing the foregrounding of environmental thinking and, more recently, climate change adaptation and mitigation strategies in the

FIGURE 2. Ormen Långe windbreak building (Svappavaara, Sweden, 1965). Design: Ralph Erskine (photo in public domain).

design and planning of cities. This intersection of landscape architecture and architectural urban planning is both a post-modern and a materialist alternative to the strict modernist division of landscape and city. It differs distinctly from critical regionalism by seeking entirely new strategies and designs for place creation, rather than relying on traditional forms and tactile design strategies.

As an experimental and culturally informed planning proposition, landscape urbanism is rooted in the recognition of the indeterminate or uncertain future of any location undergoing change and the need to develop design strategies to accommodate such uncertainty. An associated development in the 1980s and 90s was the emergence of 'strategic urban planning' (Albrechts et al., 2003; Healey, 1997), which sought to develop governance-based planning policies that were processual and no longer relied on predefined "ideal" end goals for urban development. This approach emphasised the unfolding interplay of actors, institutions and the public, and sought the release of trans-sectorial energies and potentials through selected strategic projects. These projects often take the form of public space upgrades that then "trigger" private investment and initiatives from other sectors, which are all seen as parts of a wider effort towards urban cultural and economic development. This mirrors concerns in landscape urbanism for what Charles Waldheim calls 'urban effects' (2016: 13) and for indeterminacy of use and 'processes over time'. His perspective mirrors James Corner's insistence that the urban landscape should be seen as a 'living arena of processes and exchanges over time' in which 'shifting processes cours[es] through and across the urban field: *terra fluxus*' (2006: 30).

Strategic urban planning echoed in a wider trend of turning away from the social sciences as the sole underlying ontology of planning. In landscape urbanism, we find a turn towards a new materialism in which landscapes and their constituent processes and elements are seen as having agency. Bringing landscape structures and processes to the foreground of city planning may result in the release of energies beyond ecology, exemplified by the numerous river opening or brownfield regeneration projects in recent years that have had profound effects on urban life and vitality.

In strategic urban planning, the aim of achieving synergy between actors across various fields has a distinct cultural dimension, and a similar claim can be made for landscape urbanism, where place creation through material and social dynamics becomes important as a cultural perspective. In landscape urbanism, this processual dimension is accompanied by an interest in regional systems of ecology, water, infrastructure etc. The intention of opening up and including any site in regional systems mirrors Massey's insistence on an extroverted sense of place, rather than the essentialist or phenomenological notions of place espoused in critical regionalism. In landscape urbanism, such open design and creation of place is linked to the value of recognising global or at least regional dimensions of any given location, including the material and cultural agency of these scales and the multitude of place definitions held by a multiplicity of actors, both within and outside a location.

TUNDRA URBANISM

Arctic cities and settlements come in many different configurations, from highly urban post-Soviet industrial cities to coastal fishing and hunting settlements. Generally, they do not conform to standard Eurocentric models of cities. For instance, the agricultural element in an urban–rural transect is absent, and densities do not conform to standards outside the region. Also, in many cases European (and North American) models for urban regionalisation are simply not feasible due to the lack of connecting infrastructure and distances between settlements.

Central to landscape urbanism is the development of strategies for restructuring sites of modernisation and/or de-industrialisation. In the current era of climate change effects materialising in changing patterns of sea ice, fish stock habitats and territorial industrialisation, nowhere changes faster than the communities in the Arctic. The contingency of this situation mirrors the concern in both landscape urbanism and strategic urban planning of developing new forms of urbanism that

respond to uncertainty and change. Based on this parallel, it is appropriate to ask what relevance landscape urbanism approaches hold for landscapes and cities in the Arctic.
To answer this question, we can start with the constituent roles that landscape and natural resources play in Arctic communities, whether they rely on fishing, sustenance hunting or resource extraction. In addition, core concerns of Arctic urban planning include various landscape-related forces, such as the extremes of wind, water or snow, the hazards of avalanches and erosion and the challenges of permafrost construction.

A further parallel between the two discourses is the prevalence of post-industrial landscapes as a field of operation, which was the initial breeding ground for landscape urbanism in North America. In the Arctic, developing responses to industrialisation is rapidly becoming a pressing issue, and many communities are also facing either de-industrialisation or new industrialisation, depending on fluctuations in the world's mineral markets.

Another subject matter of landscape urbanism is the development of strategies for shrinking cities that lack the kind of growth that still constitutes an underlying premise in traditional forms of urban planning today. This condition is also present in many arctic communities, as a policy-based, but also culturally inspired, impetus for urbanisation and centralisation has led many smaller communities to contract. De-industrialisation also plays a role in this phenomenon, for instance, in the way the regionally important fishing industry is centralising.

The primacy of infrastructure as a territorial organiser in landscape urbanism theory and practice (e.g. Allen, 2007; Bélanger, 2016) also seems to be relevant in Arctic settlements. Here, infrastructure is visually very evident in settlements due to permafrost and the limited supply situation in many parts of the Arctic, which means that communities have to be self-contained for extended periods, as no regional system plug-in is feasible.

While these overlaps between the landscape urbanism agenda and Arctic urbanism make it assertable that theories and practices are transferable, landscape urbanism is obviously developed and practiced elsewhere, with a distinct set of priorities and agendas not necessarily found in Arctic settlements—which also differ significantly among themselves.

MAPPING NON-STANDARD SPACE

The premise of this paper is that certain aspects of landscape urbanism practice and theory have parallels in the Arctic context that call for further inquiry. This includes the specifics of design strategies that are based on a close reading of local conditions and an overall search for innovative and different models for place creation in places that do not conform to classic models of urban space. Such close site reading includes the materiality of the landscape and its processes of change, as well as reassessing infrastructure as the very opportunity for place creation in entropic (or in the Arctic, isomorphic), non-standard urban landscapes.

Building site knowledge involves forms of mapping. Mapping in postmodern architectural culture was inspired by the "representative turn" in the social sciences (Harley, 1988; Wood, 1992) in which maps are seen as social constructions. More recently, mapping has been inspired by non-representational theory, including "the material turn" in geography (e.g. Bennett, 2010; Nyseth & Pløger, 2015). What these postmodern perspectives on mapping share is the view that 'urban and cartographic spaces are entwined' (Brook & Dunn, 2012, p. 11; see also Cosgrove, 2006), and that 'mapping [is] a collective enabling enterprise, a project that both reveals and realizes hidden potential', thus 'creating and building the world as much as measuring and describing it' (Corner, 1999, p. 213). In fact, according to James Corner, mapping has agency 'in uncovering realities previously unseen or unimagined, even across seemingly exhausted grounds. Thus, mapping unfolds potential; it re-makes territory over and over again, each time with new and diverse consequences' (1999, p. 213).

Maps and mapping have begun to fill a number of roles beyond geographic modelling and territorial control, including mappings that are 'participatory, generative, revealing, enabling, performative' (Hall, 2012, p. 157). Tracing its lineage to the psycogeography of the Situationsists (Debord, 1958) and recognising its inherent agency, various contemporary forms of architectural mapping deliberately include a variety of dimensions in the activity, including the serendipitous, the material, the mediated and, not least, the cultural (see Hemmersam et al., 2012; Hemmersam et al., 2015). In landscape urbanism, various mapping practices have been employed, including ones that link social processes with ecological concerns in the study and design of city and landscape (Corner, 1999), moving beyond the modernist separation of the cultural, social and material spheres. In recognising the agency of mapping and the reiterative character of any mapping of dynamic processes, such practices also move beyond fixed, essentialist and phenomenological place relationships. They include critical approaches to finding and establishing new identities in situations where standard urban models and planning modes do not apply and where de-industrialisation and de-population call for entirely new approaches and innovative suggestions for establishing a sense of place.

FINDING PLACE IN THE URBAN LANDSCAPE

According to critical regionalism protagonist Kenneth Frampton (1995), while globalisation sometimes has devastating consequences for cities, landscape, he argues, has a remediating role to play in maintaining a sense of place. The following question thus arises: How does landscape address the question of a "sense of place" in ways planning and architecture are incapable of?

Ian Thomsen argues that one of the core tenets of landscape urbanism is to make the 'invisible visible' (2012; see also Amoroso, 2010). This represents the continuation of the tradition of landscape mapping stemming from Ian McHarg (1969) . While still occasionally invoking functionalist ecology, landscape urbanism has essentially abandoned it as its core ontology in much the same way that planning has deviated from the social sciences. Various mapping practices within the landscape urbanism field have emerged as alternatives to the "scientific" modernist ecological planning that aspired to ever-increasing accuracy and complete models of any terrain to inform (top-down) decision making. This implies that the "visible invisible" may be natural phenomena, objects and processes as well as the social and emotional relations between people and a given location.

Corner argues that architectural mapping contributes to 'diversify worlds' (1999, p. 149). This is akin to Massey's insistence that sense of place cannot be reduced to single identities, but rather that even within the same community people have different positions and a diverse "sense of place". Therefore, places have many distinct identities. Massey also argues that notions of place are not spatially bounded but extroverted and includes an awareness of the various networks that the places are part of. This echoes the premise in landscape urbanism of mapping and designing any site in its regional context, which follows Corner's observation that 'ideas about spatiality are moving away from physical objects and forms – towards the variety of territorial, political and psychological social processes that flow through space' (1999, p. 227).

Finally, any mapping of place nessecarily also involves the emergence of place. According to geographer Tim Cresswell (2004), the questions of what place is and how it can be mapped are closely connected. For Cresswell, place is not a thing, but a way of understanding the world. This tangledness of mapping and place making is the proposition of this paper.

TRANSECTING ARCTIC CITIES

The changing approach to urban landscapes represented by landscape urbanism required new modes of representation, of which aerial photography, dynamic diagrams and maps are among the most prominent forms. Drawing from such methodologies and proceeding experimentally, we

have examined how settlements and landscapes of the Arctic can be documented and conceptualised in ways that avoid standard (colonialist) approaches. This has happened as part of a wider research project called Future North in which we have sought to find approaches that ascribe agency to local populations and landscapes in thinking about the future.[4]

According to Corner, 'the agency of mapping lies in its cunning exposure and engendering of new sets of possibility' (1999, p. 251). Our mapping approach was inspired by Raoul Bunschoten's Urban Gallery methodology (Bunschoten et al., 2001). Corner describes Bunschoten's approach as 'informed by a kind of street-level ethnography that is often highly personalized and peculiar to places and individuals. In this way, the field-worker/mapper gains a remarkably detailed and socially colourful sense of local dynamics and desires' (1999, p. 243).

Our version of 'street-level ethnography' employed a redevelopment of the Urban Transect Walk, resulting in a kind of physical, sensory walk (Pink, 2007). The Urban Transect Walk is a participatory method that deliberately cuts across the urban landscape in order to capture diversity rather than averages (Henk & Wilbers, 2004). It is used for appraising local economies in cities in the South by organisations such as UN Habitat and the World Bank, where it functions as an alternative to survey-based forms of mapping (e.g. Pretty, 1995).

Our mapping of five Arctic cities took place between September 2013 and May 2015, and included Murmansk (Russia), Vardø (Norway), Tasiilaq (Greenland), Fermont (Québec/Canada) and Longyearbyen (Svalbard/Norway). Each mapping iteration was a variation of the previous ones. In total, eight mapping sessions were conducted, and responding to local conditions and earlier experiences, we tried different routes, reversing directions and mapping individually, in teams and with locals. For documentation, we employed our GPS-based and social-media-enabled urban mapping tool, which allows for shared text, image- and hashtag-based annotation (like Instagram) in discreet mapping sessions. This tool also allows us to create digital maps (KML format) that can be downloaded for post-processing.[5] (Figure 3)

FIGURE 3. Transect of Vardø (Norway) exported to Google Earth as KML and post-processed. (Map data: Google, Astrium)

Along the transect walk, we observed and annotated phenomena with images and text. Our diverse range of academic backgrounds (an architect, literary scholar, design researcher and social scientist as well as students of landscape architecture) brought out varying perspectives on what we observed, and revealed what aspects of the urban space were important to each of us. Thus, the transect walks provided observational data; more importantly, however, they provided a platform for exchange between researchers and local informants.

CREATING PLACES

The mapping sessions provided us with a rich introduction to the given locations and enabled the cross-disciplinary team to jointly observe and co-narrate aspects of the place. Our walks transected the cities from periphery to centre, but in practice we were drawn to observe and document phenomena beyond the line. Thus, the line is a tool that draws in a wide set of phenomena (objects, views, events), while still being highly selective. The obvious randomness of the transect line underlines the arbitrariness of any map-producing activity. In our approach, there was no pretention of comprehensive mapping; rather, serendipity and encounter were emphasised as key dimensions of the activity. (Figure 4)

Our approach involved embodied knowledge generation, in which seeing and conceptualising were entangled. It revealed the agency of the mapper, and faced her directly in confrontation

FIGURE 4. Excerpt from transect journal. Longyearbyen (Svalbard), May 26, 2015.

with the physicality of the urban landscape (as when jumping from snow bank to snow bank over the Longyearelva River in Svalbard or encountering the smell from a highly polluted river on the outskirts of Murmansk). It also worked to expose our individual and collective "luggage" of preconfigured ideas (see Traganou, 2009) – ideas we often found pertained to urban settings elsewhere, but still coloured our perception of place.

The mapping activity was part of wider efforts to build site knowledge based on a variety of sources and local knowledge. The mapping activity also extended beyond the actual walk, including both previous knowledge and research as well as post-mapping mediation and uptake in design development. On several occasions, the mapping also involved informants – either as mapping companions or as casual encounters along the walk. This provided insight into local imaginaries and aspirations. The knowledge collected during the mapping formed the basis for further dialogues with locals, and also functioned as input for educational design studios. The resulting work and our reflections on site were communicated back to the community in online posts, booklets and exhibitions.[6] Thus, our mapping enabled both our own sense(s) of place and those of locals. In this approach, we find a multiple sense of place that means that we we have 'diversified worlds' (Corner, 1999).

The speed and scale of change in Arctic communities seem to mirror the radical consequences of deindustrialisation in North American and European cities that started landscape urbanism. Through our encounters with Arctic communities using mapping, we have learned that urban life here is remarkably similar to what one finds anywhere, indicating that perhaps settlements in this otherwise extreme region are "just" places and settings for everyday life like everywhere else. This calls into question the current planning practice of modernisation, and also calls for the development of a true place-specific urbanism – one that includes both the agency of populations and landscape; that recognises the variety of ways in which places are co-produced; and which ensures an open and relational concept of place can include locals, outsiders and the landscape itself in formulating multiple futures in a rapidly changing, industrialising and urbanising Arctic.

In conclusion, we think that it is important to further develop non-representational and architectural forms of mapping that focus on how place is enacted. The action of mapping itself is a vital part of this activity.

ENDNOTES

1. For example, as reflected in the Grenlandic policy of allowing mining coorporations to set up workers' camps that are partially exempted from national social and work legislation (Inatsisartutlov nr. 25 af 18. december 2012 om bygge- og anlægsarbejder ved storskalaprojekter, 2012).
2. On landscape citizenship, see, e.g. The European Landscape Convention (Council of Europe, 2000).
3. See, e.g. http://www.arcticdesigngroup.org/; https://kadk.dk/blog-architecture-and-extreme-environments
4. www.futurenorth.no
5. The tool is called MAPPA: https://itunes.apple.com/us/app/mappa-collaborative-tool-for/id578620293?
6. E.g. http://www.oculs.no/projects/future-north/news/?post_id=4297

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