

RELATE NORTH

PRACTISING PLACE, HERITAGE, ART &
DESIGN FOR CREATIVE COMMUNITIES

Edited by

Timo Jokela & Glen Coutts

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Edited by Timo Jokela & Glen Coutts

LUP

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Preface

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Pre

In a publication with the broad subtitle of *Practising Place, Heritage, Art & Design for Creative Communities*, one would expect to find chapters and visual essays covering a wide range of topics. We do not think readers will be disappointed as the contents of this book address issues ranging from the special conditions facing designers in the North and Arctic to the potential of art and science working together to raise awareness of plastic pollution in the sea and shorelines. As in the previous *Relate North* anthologies (Jokela & Coutts, 2014, 2015, 2016; *Relate North* 2017), authors are based in northern and Arctic countries including Canada, Finland, Iceland, Norway, Russia and Scotland. The book explores contemporary practices in arts-based research and knowledge exchange in the fields of arts and design. Authors provide thought-provoking accounts of current practice in these countries. By focusing on Northern and Arctic perspectives in contemporary art, design and education, the studies investigate issues of heritage, sustainability, socially engaged arts practice and socio-culturally sensitive research.

The call for this volume was issued at the fifth *Relate North* symposium and exhibition of the University of the Arctic, *Arctic Sustainable Arts and Design Thematic Network* (ASAD), which was held in November 2016 at Shetland College, University of the Highlands and Islands (UHI) in Lerwick, Scotland. The content of this volume was selected from the proposals submitted, including many from authors who were not able to attend the events in Shetland. Each chapter or visual essay was subjected to 'double blind' academic

peer-review and the book now in your hands is the result of that process.

Established in 2011, ASAD investigates the relationship between art and design practices and northern and Arctic places. Readers should note that the term 'place' has been used in many different ways. In the field of art, there has been a lot of discussion about the 'sense of place' (Kwon, 2002; Lippard, 1997). To some, it is associated with physical, geographic locations and is often used in relation to those characteristics that make a place special, a unique place to visit and experience. Whilst to others, place is more about communities, people, home and belonging. Places are not fixed and stable, they are constantly changing. Human activities such as construction, transportation, and economic exchange shape the places where we live. Scholars in several reports have pointed out how the northern environment is changing rapidly, how 'megatrends' impact on places, economy and livelihoods (Nordic Council of Ministers, 2011; UNESCO, 2009). These megatrends affect, in a very visible way, social life, well-being, and culture of people living in the region. However, it is also a question how we learn to perceive, experience, interpret and understand our places.

Some art and design educators use forms of 'place-based education' (Greenwood, 2008; Gruenewald & Smith, 2008) in order to increase understanding and use dimensions of place as educational tools for sustainability. The term 'place' is also used in urban and rural studies in relation to place-making and the attachment of communities to their environment. Place-based education is

more an educational philosophy or strategy than a teaching method, it seeks to help communities by employing students, schools and university staff to solve community problems. Place-based education differs from classroom-based education in that it positions the students' local community as a primary resource for learning. Place-based education often highlights project-based learning, and is always related to something in the real world. Thus, place-based education promotes learning that is rooted in what is local, the unique history, environment, culture, economy and art of a particular place, that is, in students' own 'place'; the immediate schoolyard, neighbourhood, town or community. In the North and the Arctic, place-based education is often connected with the aim of the decolonization processes (Smith, 1999), not only with indigenous people, but among other northerners as well (Jokela, 2017).

A place-based strategy in art and design is not only an educational approach. Place-making could also be understood as economic development strategy, it is the practice of using places and a community's public amenities to make economic progress (Milone & Ventura, 2010). This approach focuses on the unique features of particular places, building on existing strengths, and using them to attract new investment and boost existing businesses. Place-making as an economic development strategy is particularly relevant in the North and the Arctic in today's age of globalism and neoliberalism. According to the *Nordic Council of Ministers* (2011), the Arctic needs to generate more human capital by investing more in its people. The advent

of what is often referred to as the 'knowledge economy' needs the enhancement of human skills and creativity, which will be key to the next stage of the development process.

When communities commit to place-making as a method of economic development, the benefits extend far beyond enticing visitors, entrepreneurs and small businesses. To local economies recovering from a loss of conventional industry, place-making is a way to exploit existing strengths, rather than inventing new ones in order to develop a stronger economy. Place-making is an environmentally friendly form of economic development, particularly in remote communities in the North and the Arctic. Merging place-based research, art and design practices, education and economic development may offer new possibilities to tackle the challenges of the rapid changes in the North and the Arctic.

Since its inception, ASAD has sought to 'identify and share contemporary and innovative practices in teaching, learning, research and knowledge exchange in the fields of arts, design and visual culture education' (ASAD, 2016). The organisation is one of the thematic networks of the University of the Arctic, the networks aim to 'foster issues-based cooperation within networks that are focused but flexible enough to respond quickly to topical Arctic issues' (UArctic, 2016). The network is a diverse and collaborative organisation that respects and values difference the socio-culturally bound nature of research in art and design. We encourage the reader to interpret the terms 'arts' and 'design' widely to include, for example, crafts,

indigenous making, media, product or service design. In addition to hosting the annual symposia and exhibitions, there have been numerous collaborations between organisations and members of the network, demonstrating that the boundaries between what constitutes 'art' and 'design' activity, especially in a socio-cultural context, are becoming increasingly blurred. What constitutes creative practice in the 21st century is a complex and fluid question that many of the authors in this volume invite you to explore.

The contents of this book reflect the different perspectives, cultural context and research approaches of the authors. As editors, we respect the traditions and conventions that are the norm in different countries and regions across the circumpolar north. In bringing together this varied collection, we hope we have remained true to the authentic voice and register of each author and that the reader will appreciate the diverse ways that research is conducted, not only in art and design, but also in different cultures.

In the opening chapter, Beaulé and De Coninck, from Montreal, report on the concept of *Nordicity*. They discuss the particular issues that designers face in cold, sparsely populated areas of the world and lament the influence of the south on northern ways of life, design services and products. The authors argue that what seems blindingly obvious to those who live and work in the North i.e. Arctic or what they term 'winter-centred design' is either unknown or somehow innovative.

In the second chapter, from the other side of Canada, Vancouver, Beer and Chaisson's research

focuses on the potential of art in raising awareness of the environmental consequences of large scale industrial activity. In particular, the authors report on how contemporary art can bring to the fore debate about the impact of northern damming practices on First Nations communities.

From Canada, we travel almost to the other end of the Arctic region for the next chapter, to the Ural Mountains in the Russian federation, Usenyuk-Kravchuk, Garin, Gostyaeva, Konkova and Mingaleva's research is design focused. There are some parallels with the work of Beer and Chaisson as the authors address challenges of the industrialisation of Arctic areas and its potential for 'devastation to the way of life of indigenous communities and their traditional economies' (pp. 56–85).

The fourth chapter takes us to Finland and the themes of art, education and sustainability. Härkönen and Vuontisjärvi report on an ongoing research and development programme that has resulted in an innovative Masters level degree programme. The authors report on the ways that new partnerships have been forged between academics, local businesses and students. Known as the *Arctic Art and Design* degree (Ulapland, 2017), it requires students to foreground factors unique to the arctic in their studies. The ultimate aim being to train creative professionals able to work across the increasingly fuzzy dividing line between the disciplines of art and design.

Iceland is our next destination (even though the author is based in Canada). The multi-layered concept of *Place* (Cresswell, 2004; Dean & Millar, 2005; Renshaw, 2013) underpins Vaughan's research.

The author reports, through a personal narrative, on the limitations of the 'tourist gaze' and how one artist responds to a particular place. In Vaughan's case the medium is textiles using wool, but her experience and as she describes it 'journey' will resonate with many artists, educators and researchers.

The final chapter, in some respects, continues in a personal narrative vein. Erkkilä-Hill, an artist and academic at the University of Lapland, reflects on the potential of walking to nurture 'artistic thinking'. Her essay explores the links between walking and artistic productivity. Musing on the 'artist's way through the world' (pp. 133–149).

The final three contributions in this book are visual essays.

The first of the visual essays, from Scotland's far north, the Shetland Islands, investigates the problem of marine plastic litter around islands off the coast of North West Scotland. This study shows how art and science can work together to bring to public consciousness a growing problem. Barton artfully presents a problem that is affecting not just the locale of the research, but the entire planet. Her study is ongoing at the time of writing (Barton, 2017) and is an excellent example of the way that an art-infused scientific investigation can produce compelling artwork with an underlying, potent, message.

The participatory project that is the subject of the second visual essay also took place in the Shetland Islands, but the writers are based in Iceland, a country with long history of links with the islands. Waage, Macdonald, Jónsdóttir, Jóhannesdóttir and Finnbogadóttir report on ways that visual art might

convey a 'sense of place'. Philosophy, art, education and natural sciences form the professional background of the researchers and this range is apparent in the visual essay.

The final visual essay and closing contribution to the book, takes us to Norway. Gårdvik, Stoll and Sørmo's study concerns an art-science project about the shoreline. Although taking the shoreline as its subject, it is quite different in nature to Barton's study. In the Norwegian study, anatomy, physiology and how organisms adapt in the ecosystem was the focus.

Contemporary art, in addition to its intrinsic values, can be a powerful means to investigate, report and assimilate critical issues into public consciousness. Given the all-pervasive nature of the mass and social media, place-based research and education may, we think, also have an important role to play.

Timo Jokela and Glen Coutts,
Rovaniemi, Finland and Elderslie, Scotland,
December 2017

References

- ASAD. (2016). *The Arctic Sustainable Arts and Design network is a Thematic Network of the University of the Arctic*. Retrieved from <http://www.asadnetwork.org/>
- Barton, J. (2017). *Littoral: Sci-Art Project*. Retrieved from <https://littoralartproject.com/tag/julia-barton/>
- Cresswell, T. (2004). *Place: A short introduction*. Oxford: Blackwell Publishing.
- Dean, T., & Millar, J. (2005). *Place*. London: Thames & Hudson.
- Greenwood, D. A. (2008). A Critical pedagogy of place: From gridlock to parallax. *Environmental Education Research*, 14(3), 336–348. <https://doi.org/10.1080/13504620802190743>
- Gruenewald, D. A., & Smith, G. A. (Eds.). (2008). *Place-based education in the global age: Local diversity*. New York: Lawrence Erlbaum.
- Jokela, T. (2017). Art of art education through art-based action research for the North. In M. Fritzche & A. Schnurr (Eds.). *Fokussierte Komplexität – Eden von Kunst und Bildung* (pp. 55–67). Oberhausen: Athena.
- Jokela, T., & Coutts, G. (Eds.). (2014). *Relate North 2014: Engagement, art and representation*. Rovaniemi: Lapland University Press.
- Jokela, T., & Coutts, G. (Eds.). (2015). *Relate North: Art, heritage & identity*. Rovaniemi: Lapland University Press.
- Jokela, T., & Coutts, G. (Eds.). (2016). *Relate North: Culture, community and communication*. Rovaniemi: Lapland University Press.
- Kwon, M. (2002). *One place after another: Site-specific art and locational identity*. Cambridge MA: MIT Press.
- Lippard, L. R. (1997). *The lure of the local: Senses of place in a multicentered society*. New York: New Press.
- Milone, P., & Ventura, F. (Eds.). (2010). *Networking the rural: The future of green regions of Europe*. Assen: Van Gorcum.
- Nordic Council of Ministers. (2011). *Megatrends*. Retrieved from <http://www.nordregio.se/Publications/Publications-2011/Megatrends/>
- Relate North. (2017). For more information visit: <http://www.asadnetwork.org/publications.html>
- Renshaw, A. (Ed.). (2013). *Art & place*. London: Phaidon.
- Smith, L. T. (1999). *Decolonizing methodologies: Research and indigenous peoples*. London: Zed Books.
- UArctic. (2016). *Thematic Networks and Institutes*. Retrieved from <https://www.uarctic.org/thematic-networks/>
- Ulapland. (2017). For more information visit: <https://www.ulapland.fi/EN/Admissions/Masters-Studies/Masters-Degree-Programmes/Arctic-Art-and-Design>
- UNESCO. (2009). *Climate change and Arctic sustainable development: Social, cultural and educational challenges*. Paris: UNESCO.

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THE CONCEPT OF “NORDICITY” Opportunities for the Design Fields

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Figure 1. “A northern perspective” looking through ice by the St. Lawrence River (low tide in April), Godbout, Québec. Photo: Caoimhe Isha Beaulé, 2017.



Introduction

In today's context of globalisation, many northern cities and territories force us to realise that we are surrounded by products, services and environments that are poorly designed for their specific context (Pressman, 1999). Because only 2% of the world's population lives in *cold* areas of the globe (Chartier, 2016), the *northern paradigm* seems to be condemned to a constant fight against the overpowering *southern* paradigm. Indeed, immediate access to products, ideas and trends from across the globe can have significant impacts on the way our objects, homes and environments are conceived, which ones we desire and how they interact with their environments. Referring to the history of the American continent, and more specifically the conquest of the 'New world' by the Europeans, the question of 'life and survival' during the harsh winters was an

important preoccupation for the first Nations and settlers, whether it be for food, garments, mobility or housing (Mann, 2005). This chapter will not be addressing the discovery of a new phenomenon (at least from a climatic perspective), but rather, it will point out how, curiously, these northern realities aren't systematically part of the design criteria in a project. Correspondingly, to some, the topic of 'northern design' or 'winter-centred design' can seem obvious; to others, it is appealing and even innovative.

This chapter will mainly concern the Canadian province of Quebec¹, where harsh winter climates are an undeniable reality, even in its most southern areas. This phenomenon is easily observable in cities like Montreal² (Quebec, Canada), which has winters comparable to those in Siberia, and where products, services, infrastructures and even strategies seem to be developed for summer, as if winter didn't exist; for instance, the city's paddling pools are only open 57 days a year, which leave these spaces unused 85% of the year (Chartier, 2016). Similarly, the 'southerner's' vision is often the one leading northern development projects in the province, causing a lot of concerns and tensions with local inhabitants, which are mostly indigenous, or with environmentalists. Whether it be for the development of new winter sport products, pedestrian safety on icy sidewalks, managing 'slush', to rethinking large northern development projects, health-care or education in remote areas, etc., various issues suggest that the northern context should be better acknowledged and further developed in various fields, and particularly in design.

Let us take the simple example of Post Canada's community mail boxes (these are distributed all over the country), and their recently publicised "freezing locks" issues. Indeed, once the cold weather sets in, the locks are most likely to freeze and make it impossible to access the individual boxes (see Figure 2) (CBC News, 2016). Undoubtedly, one would think that in a country like Canada, where 'northernness' and 'winteriness' are often portrayed as an intrinsic cultural trait, Canadian design (in all forms) should naturally be functional during the cold seasons. In addition to causing inconveniences for Canadian citizens, the problem will require changing hundreds of thousands of locks across the nation (CBC news, 2016) and thus a large financial expense.



Figure 2. Canada Post community mailboxes in winter. Image by Caoimhe Isha Beaulé, 2017. “The lock design on new boxes is susceptible to freezing when the cold weather sets” (CBC news, 2016).

This is a simple and obvious example of bad ‘northern design’, but it goes to show that these criteria are often omitted in the most basic products. Such examples are all around us and well distributed amongst designers, planners and decision makers. It is essential for projects to take the local context into account, in this case, meaning there is the necessity of a global understanding of northern specificities such as its climate, environment, cultures and the political, economic and social frameworks.

Furthermore, today’s context demands a bigger step forward: a northern perspective in design must not restrain itself to the material, design is much more than just problem solving, style and aesthetics (De Coninck, 2009); it should also reach ‘higher levels’ (like values, well-being, ethics, social responsibility, decision making), where complex or ‘wicked’ problems (Rittel & Webber,

1973) are deeply rooted. Thus, contemporary designers must acknowledge not only their relationship with the subject but their relationship with the world (De Coninck, 2009; Levy, 1988). This chapter is based on the general idea that “design is to devise courses of action aimed at changing existing situations into preferred ones” (Herbert, 1978). This being said, in a context of sustainability, designers (in this case industrial designers), being professionals that develop products and systems of products, are initiators of change within and of society. They therefore need to be sensitive to the particular needs and emerging aspirations of the society, but also to solutions and approaches that are systemic and global (De Coninck, 2009). Thus, design can be a tool for the sustainable development of our northern regions, winter-cities and communities. In fact, design is what structures most of the things that surround us, the way we use and experience them. Most of today’s environment is the outcome of some kind of human design; the outcome of decisions and choices of human beings (Heskett, 2005). There by, most problems faced today are design problems.

Design can play an active role in improving the well-being of northern inhabitants and tackling complex issues (such as health care, education, poverty or climate change), which demand much more than new products and infrastructures. Today’s complex problems show the evident need for a change in the way we develop and approach projects as designers, but also as citizens, professors or decision-makers. The main contributions of this chapter will be:

- To show that the northern context has many specific issues that demand thought and action.
- To demonstrate how the Canadian concept of *Nordicity* can help us shape and define the role of design in northern regions and reciprocally, how the field of design can be used as a tool to operationalize the ideas behind it, and take action. Surprisingly enough, the topic of ‘northern design’ is, in literature, still at its embryonic stage.
- To argue that, in the era of sustainability, there is a great need for design to play an active role in tackling various

problems for the well-being of northern inhabitants, requiring the integration of the northern perspective into design processes.

- To give a brief overview of the main authors that have approached the topic of 'northern design', in fields such as architecture, urbanism, service and strategic design. Subsequently, it will demonstrate the urge to pursue the conversation about 'northern design' and demonstrate how northern states could develop Finnish-inspired strategies in their own cities and territories, based on their *Arctic Design* concept.

The problems

Northern vs southern paradigm

This section is an overview of the underlying problems exposed in this essay. Firstly, in Canada, the 'northern vs southern paradigm' imagery manifests itself in different ways. Canada's southern neighbours (US, and more specifically states such as Florida et California), like for many other countries around the world, have a large influence on the local mainstream culture; this can be observed in the lifestyles, movies, fashion, trends etc. that take most of the room on our television screen and shops. But this overwhelming idealistic and 'Californian' lifestyle can also impact the way designers conceive their own projects; it becomes a frame of reference that is presumed to be the 'norm'. Inevitably, what occurs is that 'winter' then becomes an abnormality or is even seen as a calamity. Projects are conceived at best for the spring and summer, and fingers are crossed so that it will be 'somewhat' efficient during the winter. Why would a northern city like Calgary, Canada, have a skyline that is almost identical to Houston, Texas (US), even though they have completely different climates? (Roger & Hansen, 1980; Bartczak, et al., 2008).

Furthermore, it is also possible to have conflicting paradigms within the same country. Indeed, the southern part of Quebec is where most of its popu-

lation lives, and where the culture is very much mainstream. As a result, the south has overpowering position towards its own 'North' and, therefore, on its local inhabitants, most of which are indigenous³. Having intrinsically different values, the misunderstandings between indigenous and mainstream cultures can have devastating consequences. Indeed, Northern Quebec is, still today, mostly designed and exploited by and for the "south" (Hamelin, Chartier, Désy, & Fréchette, 2014). This results in infrastructures, services that aren't suited for local needs and most often don't meet the needs and aspirations of local inhabitants. For example, housing units in Nunavik, which is the homeland of the Inuit of Quebec, do not generally consider the local way of living, gathering and hunting during their conception. This problematic was approached by environmental design teacher Patrick Evans, in the project *Cuisine Nordique* (English – Northern kitchen) where students were asked to work on rethinking kitchens that were in line with Inuit way of life (more than half of the population still hunts for their food). The proposed projects were adapted to seasonal change, extreme climates, were a central part of the home, had specific access to the outdoors, room for regular family gatherings and food preparation, etc. (Evans, 2013).

For most designers and planners in Quebec, the 'real North' is mostly imaginary, as they have, for most, not visited these regions (they are not easily accessible); this sets the table for many presumptions and prejudices. In this way "the north is not heard from itself" (loose translation, Hamelin, et al., 2014). Indeed, this division between the north and the south, partly due to the lack of infrastructures, also contributes to a lack of dialogue between the northern and southern populations of the province, and may explain the lack of effective intercultural exchanges between the indigenous and non-indigenous population. As of today, the northern part of Quebec, is too often seen (from a southerners perspective) as a pool of resources to exploit for the benefit of the south (Hamelin, et al., 2014).

Traditional vs contemporary design processes

Furthermore, we could also say that the issue lies in the way the subject is approached in the first place. Indeed, designers are traditionally trained to

approach a problem in a Cartesian manner, which encourages them to isolate a given subject from its environment to better analyse it; a presumed subject (or problem) that is given and ordered. Considering it is the dominant epistemological posture, it is not a surprise that it made its way into the creative and design fields (De Coninck, 2009). Today, it is said that “a systemic and holistic vision helps the designer think about the complexity of the reality” (Alvarez & De Coninck, 2016, p. 2) and thus better understand the context of its subject, similarly to the ideas advanced by Rittel and Webber in their essay *Wicked problems are planning problems* (1973). As follows, in addition to the usability and technological dimensions of a ‘product’, the designer must consider present and future contextual aspects, such as the social, environmental, political and economic background (De Coninck, 2009) to have a global understanding of the subjects’ environment, its elements and their interactions.

The northern context is often misunderstood or omitted from the design criteria in design processes, which isn’t explicitly stated, but obvious through simple observations. It may, in fact, be due to designers being influenced by the mainstream (southern) culture, but it is also very likely because subjects are rarely approached in a global and systemic way. This results in projects (products, services, infrastructures, etc.) that are contextually inappropriate, sometimes neglecting the cultural values or climate particularities of the area or tackling the wrong problem; this can have serious consequences. These issues will be revisited in section “Opportunities for new Design approaches and initiatives”.

“Nordicity”: a conceptual framework for design?

In the 1970’s, Louis-Edmond Hamelin⁴, a Canadian linguist and geographer, developed a concept known as ‘Nordicity’ (in French *Nordicité*), which changed our understandings of the north and winter on many levels. Today, he is mainly recognized for his life-time work revolving around the French word *nordique*; a word that (previously) strictly used to refer to northern Europe or Scandinavia (Hamelin, et al., 2014). His work succeeded to develop broader, more complex

and inclusive views on the north and all its elements. It is this vision, through its many facets, that is here argued to be a tool to further develop a contemporary understanding of 'northern design'. From imaginary to measurable, the 'many norths' of Hamelin, are still very relevant today. Nordicity, "the state, degree, awareness and representation of cold territoriality in the northern hemisphere" (Chartier, 2010), is a complex phenomenon that touches most inhabitants of the northern hemisphere, from designers, decision-makers to the "ordinary" people. However, once we delve into the subject, we quickly realize that speaking about it is not that easy. How should the subject be approached from a design point of view today? Other fields⁵ have been developing their respective interpretations of what these 'northern qualities' represent from their point of view, for example in anthropology and geography, economy and political science, literature and various art fields, gastronomy, architecture and urbanism. These developments complement each other, like pieces to a dynamic puzzle, they add more layers to the complex and perpetually changing system embodied by the term 'nordicity'. Nonetheless, in design, this perspective still seems to be at an embryonic stage in literature and not fully explored in practice. However, these pieces should not be mistaken for the underlying totality; thus, a holistic and inclusive perspective is necessary to see the big picture.

With growing international attention on northern and arctic areas, whether they be driven by economic interests or social and environmental concerns, there are many reasons why the design fields should be taking part in these conversations. The following section will expose the structuring elements of Hamelin's concept of 'nordicity'. To facilitate understandings, we have organised ideas into the following categories: A) *normative* nordicity; B) *subjective* nordicity; C) nordicity as an *ideology* and D) *total* nordicity.

A) Normative Nordicity

'Normative' Nordicity refers to the 'measurable' and 'tangible' qualities of cold areas in the northern hemisphere. This area is Hamelin's most famous conceptual contribution, as it brought a new way of delimitating cold regions in the northern hemisphere, it is often referred to as the "Nordicity index" (in

French *Indice de Nordicité*). To determine an area's level of nordicity, the “polar value”³ can be assessed with the combination of ten factors (both natural and human) such as: latitude, annual temperatures (summer and winter), types of ice, precipitation (snow and rain), the amount of vegetation, terrestrial

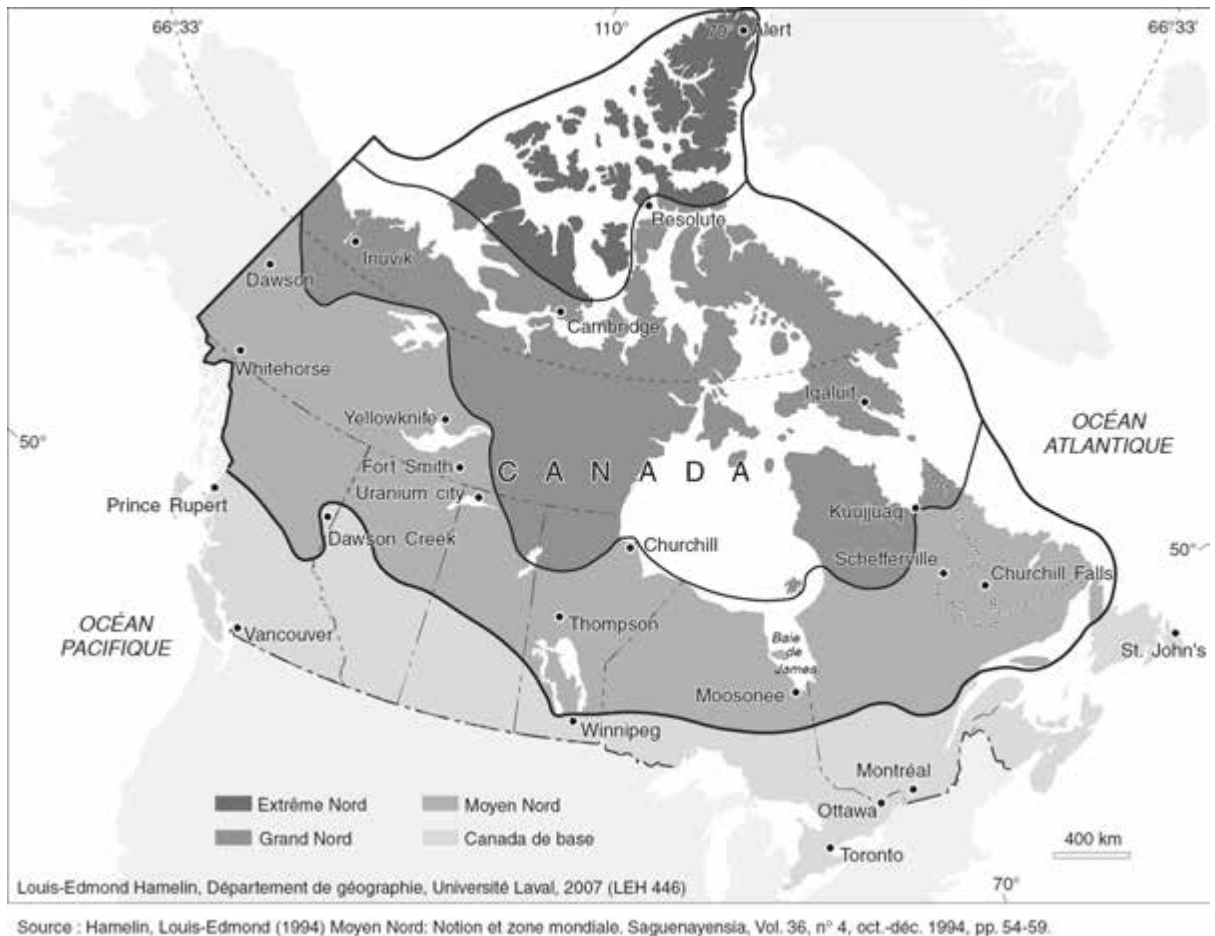


Figure 3. Zones nordiques du Canada (in English Northern zones of Canada), L-E. Hamelin, 1994, Courtesy of Université Laval Archives, Fonds Louis-Edmond Hamelin.

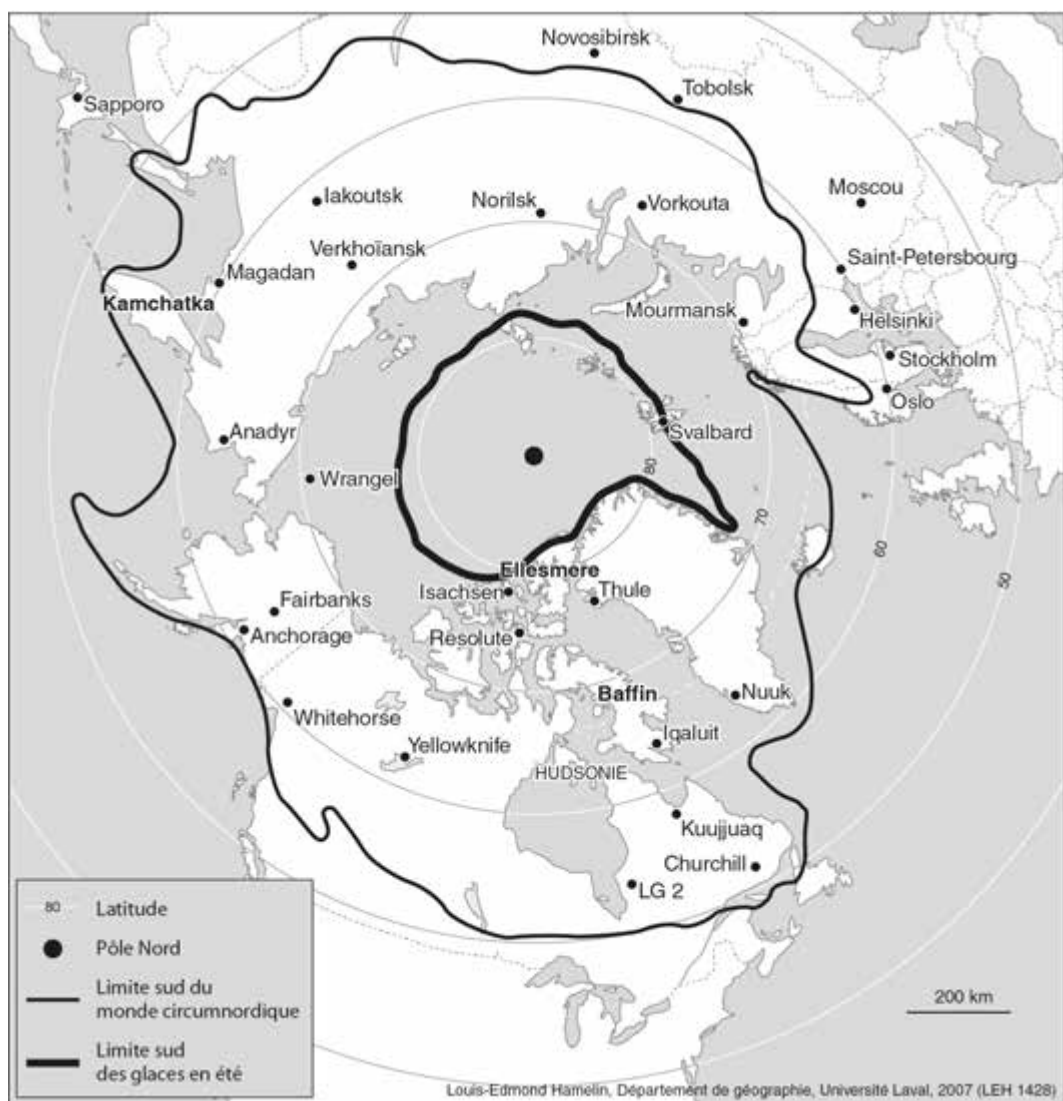


Figure 4. Major regions of the Northern World in L-E. Hamelin, 2002, Courtesy of Université Laval Archives, Fonds Louis-Edmond Hamelin.

accessibility (land or air), economical activities and population (Hamelin, 1975). The results divide the Canadian North into 4 different categories: the Near North (also called Base Canada), Middle North, Far North and Extreme North (see Figure 1) (see Hamelin, 1975). On an international scale, the nordicity index, once mapped out, gives us an oval shape that is “less perfect” compared to the Arctic circle, which is drawn at the 66th parallel north, but closer to the reality (see Figure 2). In fact, latitudes don’t tell us much about what happens in reality; “the variable nature of [this] index accommodates the complexity of the territory” (Chartier, 2010, p. 34).

More recently, a Toronto-based architecture group, Lateral Office, published a book *Many Norths: Spacial practice in a Polar Territory* (Sheppard & White, 2017) that collects and illustrates years of data, compiled during projects in northern settings. Their contribution adds to the idea brought forward in this paper, that understanding the northern context is a complex task and that reduction and generalisation can have impact on the adequacy of design or planning projects. Contexts can be extremely variable from one circumpolar nation to another; indeed, “considerable differences exist with respect to geography, climate, national histories, aboriginal cultures, infrastructures and connectivity, among many other traits” (Sheppard & White, 2017, p. 4). Below is a cartographic that organises some of the elements that can have large impacts on special practice (like urbanism and architecture) of the multiplicity of Norths. The authors intentionally depicted these lines in a dynamic way, representing the superimposing and intertwining nature of these factors, such as the North extent of road lines, tree line, permafrost line, inhabitation line, etc. (Sheppard & White, 2017) (See Figure 5).

Furthermore, some areas have “arctic-like” climates, but only temporarily; this is the case for many winter-cities. Hamelin called this phenomenon “winterity” (in French *hivernité*), also described as “seasonal nordicity”:

The first gesture is to no longer consider this season as a single physical phenomenon: through its social, cultural, athletic and psychological practices, the adaptations which it causes, the behaviours, discourses,

CANADA'S MANY NORTHS



Figure 5. Canada's many North's Sheppard, L. & White, M., 2017, Courtesy of Lateral Office.

representations and policies that result from it, 'winter' touches several disciplines and must be observed from a pluridisciplinary perspective.
(loose translation⁶, Hamelin, et al., 2014, p. 13.)

Even though it lasts a few months a year, winterity is what most people living in these cold areas of the globe experience, in cities like Montreal, for example, where temperatures can swing from -40 degrees Celsius in the coldest months, to +40 degrees Celsius in the summer. Such bipolar climates can indeed make it a big challenge for designers to create solutions in such variable contexts. In sum, the 'normative' dimension refers to all the environmental characteristics that are somewhat measurable.

B) Subjective Nordicity

Intrinsically tied to the previous section, what is characterise as 'Subjective Nordicity' is what relates to the human capacity to imagine, perceive northern and winter phenomena, which manifests itself through various forms, like: cultural practices, arts and crafts, literature, etc. Some draw back to human real experience, others entirely from the imagination (see Chartier, 2010; Chartier, 2007).

The imaginary of North, in the Western world of the imagination, refers to a series of figures, colours, elements and characteristics conveyed by narratives, novels, poems, films, paintings and advertising which—from the myth of Thule to contemporary representations in popular culture—have forged a rich, complex network of symbolic meanings. (Chartier, 2010, p. 27.)

As stated by Hamelin, "the North is not only in latitudes, but mostly in attitudes" (Fortier, 2012), meaning discussions about the north should not be reduced to a strictly geographical or magnetic sense, but include a cultural or human perspective as well. In fact, the term "nordicity" symbolizes today one of the main components of *Québécois* identity (Chartier, 2011). On the other hand, the "imaginary north" can cause many problems in planning and designing, as

design problems are always contextual. Differences in the culture, for example, need to be carefully understood, not imagined, to avoid creating culturally inappropriate solutions.

C) Nordicity as an ideology

This area is not usually explicit when referring to Hamelin's concept of nordicity, as it, for the most part, invokes his personal vision and values, which underlays most of his ideas and what he has published in his career. In the era of sustainability, these values are what make Hamelin's vision relevant for the fields of design today. For example, as northern development is an important part of the political discussions in Quebec, Hamelin wonders if the "southerners" will be able to pursue their 'ways of doing' to the vastness of the north; seeing the north as a pool of resources for the south. In fact, he advances that one of the North's problems *is* the south itself (Hamelin, et al., 2014). Even though Hamelin's contributions are mainly of geographical matter, his ideas are based on many fundamental values such as inclusiveness, sustainability, awareness and calls for innovation and action (Hamelin, 2002; Hamelin, 2012). Could design be a tool to operationalize his vision?

D) "Total" Nordicity

Hamelin's vision of the North has transcended the boundaries of geography, and is today a recurrent subject in many fields and in the public place. The word *Nordicité* is one of the rare 'elastic' words that manages to make its way into scientific language as well as in everyday discussions (Hamelin et al., 2014); this demonstrates the spectrum of subjects that fit under its conceptual umbrella. "Total" nordicity, or referred to in English by Hamelin as 'comprehensive' nordicity which embodies the "thinking systems, knowledges, vocabularies, intercultural know-how, arts and humanities sensibilities, expressions of opinions, applications in territorial, political and economic fields; in short, [...] the state of a northern country" (loose translation, Hamelin, 2002, p. 6).

The following conceptual map⁷ seeks not only to visually communicate the web of concepts that are part of this northern dimension, but also how they are

inherently connected (see Figure 6). It is this holistic and global perspective of nordicity that is here argued to have the most opportunities of success in the design fields.

The adoption of the systemic approach moves the focus from the entity and the whole, as advocated by the classical mainstream sciences, towards the interrelationships existing among the elements and sub-systems, as well as their intra-and exo-systemic organization.

(Alvarez & De Coninck, 2016, p. 1.)

Although this article has only skimmed over the vast subject of what is nordicity, its richness and complexity are the reason why, decades later, researchers are still developing it in their respective disciplines. What is the right way to approach this concept for design field? And what could be the potential outcomes? Under these circumstances, the mono-disciplinary approach doesn't allow us to produce enough relevant and necessary knowledge to fully understand the subject in its environment; thus, a pluridisciplinary approach (rightfully integrating sciences, traditions of knowledge, cultures, imaginary, and languages) is appropriate to allow the maximum comprehension of an object or subject in itself or in its relations (Hamelin et al., 2014).

The North, a living world interlinking natural and human characteristics, organized series of intellectual acts, bearing, within a circumscribed territory, reference to systems of thought, knowledge, vocabularies, intercultural grammars, representations in art and literature, the expression of opinions, economic, political and territorial applications as well as ways of being. (Chartier, 2010, p. 36.)

The concept of Nordicity opens a door to a broad, complex, inclusive, multidisciplinary and multi-level view of northern regions and its ecosystems. For the field of design, this concept can help develop projects that reflect the true context and thus develop innovative projects that are culturally and environmentally

appropriate and strive towards the sustainable development of northern territories, winter-cities and communities. Nordicity must be seen as a dynamic system, which evolves from the fact that it exists and that exists because it evolves. A holistic and complex vision of nordicity, in a perspective of sustainability, is therefore essential, even crucial.

Opportunities for new design approaches and initiatives

Using design as a way to improve the everyday life of northern inhabitants has been a topic of interest for a few decades already. Indeed, the *wintercities* network

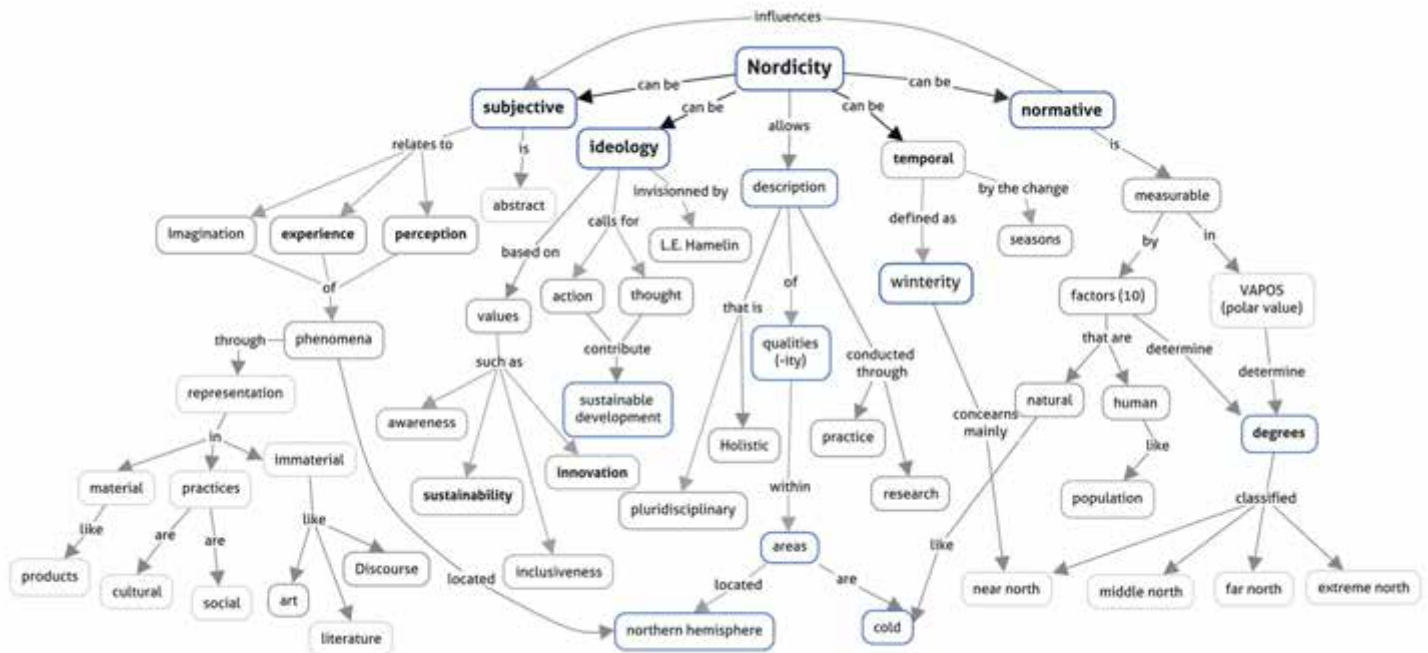


Figure 6. What is Nordicity? Conceptual map (simplified version), Caoimhe Isha Beaulé, November 2017.

has been an active player in promoting the use of winter-centred design (mainly architecture and urban design) to create safe and liveable cities all year round, as well as new economical spin-offs (Winter Cities Institute, 2016). Norman Pressman contributed to ideas on how to develop functional winter-cities through urban planning in his books in the 90's: *Northern cityscape: linking design to climate and Cities designed for winter* (Mänty & Pressman, 1988; Pressman, 1995) and most recently, as mentioned previously, *Lateral Office* with their book *Many Norths: Spatial practice in a Polar Territory* (2017).

In the last few years, Finland has been leading and initiating international reflections about the role of design in the Arctic regions with their concept of *Arctic Design* which “should be understood as actions aimed at increasing well-being and competitiveness in the northern and Arctic areas. *Arctic design* combines art, science, and design for solving the particular problems of remote places and sparsely-populated areas” (Jokela & Tahkokallio, 2015, p. 121). The concept also focuses on the use of emerging design methods (like service and strategic design) for the benefits of the circumpolar north (Tahkokallio, 2012). Strategic design can be understood as the use of traditional design methods and applying them to the ‘big picture’, as an attempt to address complex and wicked problems, such as healthcare, education, poverty and climate change (Hill, 2012; Helsinki Design Lab, 2013); these new methods are being developed in response to a growing global interconnectivity, demonstrated through the complexity and ‘wickedness’ of contemporary problems. Indeed, design is progressively moving further from the world of ‘products’ (Brown & Martin, 2015). The concept of *Arctic Design* demonstrates a similar shift (and rightfully so) within the topic of northern design; Finland is leading the way on this matter. Notably, *Arctic Design* advocates managed to integrate the idea into the *National Arctic Development Plan* of Finland (Finland, 2013), giving a backbone to strategic thinkers and designers to further develop this idea and its methods.

The Arctic region (based on the arctic circle) has strong political significance, but remains a dated and simplistic way of characterizing the far north (Hamelin, 1975), and this is particularly true in the field of design. Indeed, many regions outside of the Arctic circle should feel concerned by the ideas advanced by the

Finns. The *Arctic Design* concept shouldn't be seen as a 'label' or as a 'material' characteristic; even though it is seductive by the Arctic's exotic nature, it is a reductant manner of describing innovative and ambitious ideas that are at its core: seeing the Arctic region as a design project itself. The concept of nordicity, considering its four categories of meaning, shows itself as a great conceptual framework to understand the complexity of the northern context, its different elements and how they interact with each other. In fact, in the era of sustainable development, it is proving to be a potentially very powerful perspective, since it not only allows a new type of diagnosis of major phenomena in northern regions (health care, isolation, education, food security, mobility, etc.), but also to develop new solutions, know-how and practices, and ultimately to implant new avenues of innovation. At the academic level, the new and ever-growing interest in this concept (see Figure 6) also opens new avenues for research and teaching through inter- and transdisciplinary approaches, as well as exchanges and collaborations between faculties, universities and all other organizations (i.e. companies, research centres, institutes) located in northern territories. Perhaps it can help bring conversations and collaborations initiated by *Arctic Design* beyond the 66th parallel borders, like in the province of Quebec, in the same way Hamelin's legacy expanded discussions about the North, winter and the Arctic.

To conclude, we need to understand that the problem and solutions are closely tied: "one cannot understand the problem without knowing about its context, one cannot meaningfully search for information without the orientation of solution concept; one cannot first understand, then solve" (Rittel & Webber, 1973, p. 138), which requires innovative methodologies. A design project is before and foremost about creating new possibilities rather than adjusting to a status quo. Moreover, we must identify and address prejudices and assumptions related to winterity and nordicity. So here is the question: could integrating the concept of nordicity into the way we consider our environments and uses allow us to discover new possibilities and generate innovative solutions? New products, services, infrastructures and even strategies? The most pertinent question here is not the "what" but rather the "why". How is it relevant to consider nordicity and all its epiphenomena (such as winterity, ice, snow, tundra, low population density,

indigenous peoples and cultures, etc.)? Nordicity should be part of the criteria in the design process, in the way of thinking (design thinking and strategic design) and therefore in the epistemology of design, but also in the philosophical and ethical concepts of sustainable design. Many questions but, still today, not so many answers. But as Edgar Morin (2005) mentioned “complexity is above all a ‘problem’ concept, not one of solution”.

Endnotes

¹ The province of Quebec holds about 23% of Canada’s population (2016) (Statistique Quebec, 2016) and is 1,667 Million km² (being about 5x the size of Finland).

² Montreal, the largest city in the province of Quebec, Canada, is said to be the ‘coldest big city in the world’ (Chartier, 2016). Montreal is also a UNESCO city of design since 2012 (Design Montreal, 2016).

³ In the Nunavik region, northern Quebec, about 90% of the population is indigenous (Canada Statistics, 2016).

⁴ Hamelin has been a pioneer in developing and expanding conversations about the north in the French province of Quebec. His legacy today is of institutional, linguistic and conceptual matter (Hamelin et al., 2014). He did not simply create the first French northern studies institute in Canada (Centre des Études Nordiques) at Université Laval but has also had major conceptual contributions to northern studies, that have now gone well beyond geography.

⁵ See: Centre des Études Nordiques (Université Laval); Chaire de recherche sur l’Imaginaire du Nord de l’hiver et de l’Arctique (Université de Québec à Montréal) www.imaginairedunord.uqam.ca/; Caribou culinary Magazine ‘nordicité’ (2016); Sommet mondial de la nordicité (1999), etc.

⁶ “Le premier geste consiste à ne plus considérer cette saison comme un seul phénomène physique: par ses pratiques – sociales, culturelles, sportives, psychologiques-, les adaptations qu’il occasionne, les comportements, discours, représentations et politiques qui en sont issus, l’hiver touche à plusieurs disciplines et il doit être observé par un regard pluridisciplinaire”

⁷ The conceptual map is used as a tool to visually represent complex systems, the inter-relationships existing among the elements and subsystems.

References

- Alvarez, J., & De Coninck, P. (2016). The design process: The beauty and relevance of the fluidity concept within an interdisciplinary team. *The International Journal of Design in Society*, 10(1), 33–48.
- Bartczak, T., Harvey, S., Kefgen, P., Centre canadien d'architecture., Centre canadien d'architecture., & Power Corporation of Canada. (2008). *Coldsnap*. Montréal: CCA Study Centre.
- Brown, T., & Martin, R. L. (2015). Design for action. *Harvard Business review*, 93(3), 55–56. Retrieved from <https://hbr.org/2015/09/design-for-action>
- CBC news. (2016, November 1). Canada Post replacing defective community mailbox locks that freeze in winter. Retrieved April 17, 2017, from <http://www.cbc.ca/news/canada/montreal/canada-post-mailboxes-freeze-1.3830584>
- Chartier, D. (2016, March). *Penser l'hiver par lui même: principes de la nordicité et de l'hivernité culturelles* [To think winter from itself: principles of cultural nordicity and winterity]. Lecture presented at the Nordicité 2016 Design charrette, Concordia University, Montréal, QC.
- Chartier, D. (2011). J'attends du froid qu'il me complique l'existence [Waiting for the cold to complicate my existence]. *Aspects des fonctions de la nordicité et de l'hivernité dans la poésie québécoise. Zeitschrift für Kanada-studien* (Allemagne), 31(1), 110–121.
- Chartier, D. (2010). Representations of North and Winter. The Methodological point of view of “nordicity” and “winterity.” In E. del Acebo Ibanez & H. Gunnlaugsson (Eds.), *La circumpolaridad como fenómeno sociocultural. Pasado, presente, futuro* (pp. 27–39). Buenos Aires: Universidad de Buenos Aires. Retrieved from <http://www.archipel.uqam.ca/6479/>
- Chartier, D. (2007). Towards a grammar of the idea of North: Nordicity, winterity. *Nordlit*, 11(2), 35–47. doi: 10.7557/13.1498
- De Coninck, P. (2009). Enseigner la technologie par le design. Vers une écologie de la conception.. ou comment la vision systémique aide à concevoir des produits durables” [Teach technology through design. Towards an ecology of design .. or how systemic vision helps to design sustainable products]. In Charland, P., Fournier, F., Riopel, M. & Potvin, P., (Eds.), *Apprendre et enseigner la technologie. Regards multiples*. Éditions MultiMondes: Québec.
- Evans, P. (2013). *Dans la cuisine* [In the kitchen]. Forum Art, Culture et Mieux-Etre. Retrieved from http://www.scientifique-en-chef.gouv.qc.ca/wp-content/uploads/PEvans_ForumACME.pdf
- Finland. (2013). Finland's strategy for the Arctic Region 2013. Government resolution on 23 August 2013. *Prime Minister's Office. Publications* 16/2013.

- Fortier, V. (2012, February 22). Assumons-nous vraiment notre nordicité? [Do we really take on our nordicity?]. *Métro*. Retrieved from <http://journalmetro.com/actualites/national/40675/assumons-nous-vraiment-notre-nordicite/>
- Hamelin, L.-E. (2012). *L'application au Québec du concept de nordicité* [Applying the concept of nordicity in Quebec]. Paper presented at the Colloque Mobilisés pour le Nord durable, Québec, Université Laval, Grand Salon, 18–19 juin 2012. Retrieved at https://www.chairededveloppementnord.ulaval.ca/sites/chairededveloppementnord.ulaval.ca/files/le_hamelin.pdf
- Hamelin, L.-E.. (2002). *Discours du Nord* [Northern discourse]. *Collection Recherche*, 35. Québec: GÉTIC, Université Laval.
- Hamelin, L.-E. (1994). Moyen Nord: Notion et zone mondiale [Middle North: concept and area]. *Saguenayensia*, 36(4), 54–59.
- Hamelin, L.-E. (1975). *Nordicité canadienne* [Canadian Nordicity]. Montréal: Hurtubise HMH.
- Hamelin, L.-E., Chartier, D., Déry, J., & Fréchette, R. (2014). *La Nordicité du Québec: entretiens avec Louis-Edmond Hamelin* [Quebec's Nordicity: Interviews with Louis-Edmond Hamelin]. Québec: Presses de l'Université du Québec.
- Helsinki Design Lab. (2013). What is strategic design? Retrieved April 30, 2017, from <http://www.helsinkidesignlab.org/pages/what-is-strategic-design>
- Herbert, A. S. (1978). *The sciences of the artificial* (6. print). Cambridge/Mass. London: M.I.T. Press.
- Heskett, J. (2005). *Design: a very short introduction*. Oxford: Oxford University Press.
- Hill, D. (2012). *Dark matter and trojan horses: a strategic design vocabulary*. Moscow: Strelka Press.
- Jokela, T., & Tahkokallio, P. (2015). Arctic Design Week: A forum and a catalyst. In T. Jokela & G. Coutts (Eds.), *Relate North: art, heritage & identity* (pp. 118–139). Rovaniemi: Lapland University Press.
- Levy, R. (1988). “Le projet: une projection de soi” [The project: a projection of oneself]. *Informel*, 1(2), 7–11.
- Mann, C. C. (2005). *1491: New revelations of the Americas before Columbus*. New York: Knopf.
- Mänty, J., & Pressman, N. (Eds.). (1988). *Cities designed for winter*. Helsinki: Building Book.
- Morin, E. (2005). *Introduction à la pensée complexe* [Introduction to complex thinking]. Paris: Seuil.
- Pressman, N. (1995). *Northern cityscape: linking design to climate*. Yellowknife, NT: Winter Cities Association.

- Pressman, N. (1999). Apprivoiser l'hiver pour rendre nos villes plus habitables [Taming winter to make our cities more livable]. In *Actes de la journée habitat du sommet mondial de la nordicité* (pp. 8–9). Société d'habitation du Québec.
- Rittel, H. W. J., & Webber, M. M. (1973). 2.3 Planning problems are Wicked Problems. *Polity*, 4, 155–169.
- Rogers, W. C., & Hanson, J. K. (1980). *The winter city book. A survival guide for the frost belt*. Edina, Minn: Dorn Books.
- Sheppard, L., & White, M. (2017). *Many Norths: Spatial practice in a Polar territory*. New York: Actar Publishers.
- Statistique Québec. (2016, December). *Le bilan démographique du Québec* [Quebec's demographic balance sheet]. Québec: Gouvernement du Québec, Institut de la statistique du Québec. Retrieved from <http://www.stat.gouv.qc.ca/statistiques/population-demographie/bilan2016.pdf>
- Tahkokallio, P. (2012). What has Arctic Design got to do with it? In P. Tahkokallio (Eds.), *Arctic Design: Opening the discussion* (pp. 21–25). Rovaniemi: University of Lapland.
- Winter Cities Institute. (2016). Winter cities: Ideas to make northern communities more livable and sustainable. Retrieved from <http://wintercities.com/>



DAM NATION:
Disrupting the Currents
of Energy and Extraction
in Northern Canada

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Introduction

As northern and circumpolar regions continue to be pried open by global climate change, large-scale infrastructures for energy and extraction projects relentlessly migrate north (Anderson, 2010; Banerjee, 2012). From hydrocarbon to hydroelectric, processes of mining, drilling, hauling and damming are sparking debate amongst communities, as profit-driven agendas compromise the stability and longevity of northern ecosystems.

In this chapter, we will narrow our examination of industrial mega-projects to focus on northern damming practices. This is currently a major and contentious subject in Canadian politics. Recent developments that continue to be vetted by government, despite major controversy, include BC Hydro's proposed Site C Dam near Fort St. John in British Columbia (Amnesty, 2016; Levin, 2016), and the Muskrat Falls Dam in Labrador which will predominantly affect the autonomous Inuit region of Nunatsiavut (Burrows, 2015; Goodyear, 2016). Coupled with extensive social implications, these projects will alter the neighbouring communities in considerable ways. Disproportionately impacted are Inuit, Métis and First Nations, whose territorial rights are often abnegated through these projects, and the imminent loss of land and resources strikes with the most severity (Loo, 2007; Murdocca, 2010; Niezen, 2000). This chapter will address the looming advance of these specific hydroelectric developments indirectly, by considering a number of precedents for these kinds of blockages in the landscape.

Approaching this research from the perspective that environmental concerns are also always tied to a social imperative, how can cultural and visual art practices work to transform our understanding of the complexity of energy and extraction? How are contemporary artists using sculpture as a medium to present the multi-faceted and material concerns that shape northern landscapes? This chapter offers an analysis of this field of research, including a review of contemporary artworks produced by Indigenous and non-Indigenous artists in the global north. Ruth Beer, Marianne Nicolson and Kevin Schmidt pay close attention to the specificities of language (whether oral, written, or visual), in order to nuance the many issues at stake in our understanding of dams. Contrary

to the stoic, silent, fixedness of most sculptural encounters, these three artists think through the noisy, challenging, and confrontational talkativeness that sculptural materiality is capable of.

From these artists' perspectives we will examine dams in differing capacities of obstruction: the tailing dam, the hydroelectric dam, the glacial dam. Addressing three types of dams in the scope of this paper is not to avoid specificity, but rather, as Lucy Lippard notes, "art, which demands leeway, even within culturally restrictive contexts, twists and turns in ways that sometimes seem less like reversal and more like avoidance and denial. But it can also be the sly twist of a knife in the gut of the dominant culture" (2000, p. 224). Like the healthy river that bends back over itself, or one that meanders through the landscape, this article will support a form of research that splits off into distinct but connected tributaries. As the antithesis of fixed, rigid and inflexible dogmas, creative practices can advocate for intersectional knowledges that are responsive, balanced and transformative.

Lasting watermarks: the rapids of energy and extraction in the north

The circumpolar north is a region where environmental changes, political changes and commercial changes are intensified. Often referred to as the "tipping point" of the planet, the Arctic is the final terminus for pollutants travelling through water and air currents from southern regions, concentrating here at peak levels (Banerjee, 2012). In a somewhat perverse form of reciprocity, the Arctic is conversely the site where the most dramatic effects of climate change are already rippling outwards, affecting the rest of the planet. In addition to the intensification of environmental change in the north, it is possible to see climacteric trends in the socio-political realm as well. At these higher latitudes, visionary national policies and ruthless capital enterprise display a similar tendency to condense and concentrate. As though attracted by some magnetic pull, the unique socio-political conditions of this region are revealing about the ecological transformations that are occurring on a global scale.

Clearly, there are several unique contributing factors worth noting that should re-frame the way we approach energy and extraction, the environment and Indigenous rights in the north. In the anthology *Contested Arctic*, Eric Alden Smith notes in his introduction:

This may sound absurd to those accustomed to viewing the present as a postcolonial era. Yet, it is no exaggeration to say that Western colonization of the circumpolar north is only now fully underway. Rather than sailing ships, conquistadors, and colonists seeking furs, gold, and farmland, this colonization is carried out by oil-company geologists conducting seismic tests, resource biologists intent on regulating animal populations (as well as the people who depend on these populations for subsistence), and an imported proletariat brought in to work the mines, cut the forests, dam the rivers. (1997, p. xiii.)

In addition to a temporal delay between northern colonization and southern colonization, Smith notes a crucial distinction that “the colonial impetus in the Arctic is resource extraction rather than settlement or labor control” (Smith, 1997, p. xiii). Perpetuating the settler-state’s myth of the barren, desolate and empty north is important for two reasons. Firstly, it is used to support the colonial designation *terra nullius*, or “nobody’s land”, which effectively displaces resident communities and repeals Indigenous rights and titles. And, secondly, this distinction generates a particularly vulnerable position for the landscape. Resource extraction without considerations towards human habitation is much less encumbered and much more egregious. The less proximate human life is to toxic tailing dams, chemical effluents and contaminated water systems, the easier it is to justify the suitability and profitability of mega-industry in these regions. This mode of occupation by the extractive-state, a contemporary variant of the settler state, is nevertheless still “tied to a political will in the [...] government to occupy ‘its’ North, and culturally, to integrate more of it into the [colonial] national imagination” (Desbiens, 2007, p. 261). With increasing accessibility to these regions, a northern vision is speedily intensifying.

While this chapter addresses damming issues and policies in northern Canada specifically, this is a matter that has wide-reaching effects across global Arctic and Subarctic regions. In northern Norway, for instance, the construction of the Alta Dam in the 1970s sparked an enormous controversy that piqued the attention of the world (Korsmo, 1988). Posing an unprecedented transformation in the landscape, the massive energy project fuelled a major resistance movement by the Indigenous Saami people to protect their sovereignty. The fight against exploitative energy and extraction projects that are happening in Canada today are emboldened by a long legacy of resistance movements that have occurred on both national and international stages. Supporting solidarity between these northern regions is crucial in the ongoing work towards environmental and social justice.

Tailing dams: heavy metals and variable water pressures

Offering more depth to the visual and discursive language associated with extraction and energy projects in Canada is due to a need to suggest a richer and more compelling critique of mega-industry in the public sphere. Despite the expansive research seminal Canadian economist and media theorist Harold Innis advanced during the early-to-mid twentieth century, the public imaginary is still very limited when it comes to the relationship between natural resources, social organization and communication. For Innis, natural resources, or “staples” as he defined them, “were communicative media in their own right” (Kroker 1984, p. 115). These physical, earthly resources (and the way they were exploited and exported) were telling, perhaps even revealing about the empires they served. Resources articulate their own relationship to nations, “with its own rhythm of economic development, with its own “timing” in relationship to the spread of the centre empires, its own class structure, and a specific relationship to its socio-natural environment” (Kroker, 1984, p. 108). Far from inert, resources should be considered with a certain animism. The way in which Innis understands the communicative capacity of materiality is akin to the ways that materials are considered in an artistic capacity. In short, this methodology is one that

Figure 1. Ruth Beer: Falls, 2016. Weaving, polyurethane sculpture. Installation view. Solo exhibition, States of Matter, curated by Laura Schneider at The Reach Gallery Museum, Abbotsford, British Columbia. Photo: courtesy of the artist.



perceives a form of material intelligence that urges materiality to do the work that language fails to do.

In the artwork of Ruth Beer, copper is the staple resource taken up at the centre of investigation. A long, shimmering weaving spills down a wall, impacting a rounded, black, ore-like sculpture on the floor. *Falls* (Figure 1) suggests all the visual vocabulary of a waterfall: the verticality, the shimmering surface, a rippling quality of the fibre or filaments, even the splash upon impact implied by the swirling fringe of curls that bounce upwards at the end of the copper weaving as it hits the ground.

Falls is a part of an expansive body of artwork developed through a multi-year Social Sciences and Humanities Research Council of Canada research-creation project, *Trading Routes: Grease Trails, Oil Futures*, led by artist-researcher, Ruth Beer. This project examines the overlapping geographies of Indigenous oolichan fish grease trails and the ever-expanding network of oil and gas pipe-

lines throughout Canada. Using metaphors of grease and oil, at the heart of this project is an attentiveness to the entanglement between water and extraction industries, social and environmental geographies, and intersections between Indigenous and non-Indigenous ways of knowing. Rather than demarcating clear divisions and categories, *Trading Routes* considers the expansiveness of the intersections, the overlaps and the various trades that energy and extraction imply.

While the seductive iridescent quality of the copper magnetic filaments suggest some kind of aesthetic relationship with water, the materiality of the artwork is used as a conduit to address the impact copper mining has had on aquatic ecosystems in northern British Columbia. Like all other extraction processes, copper mining produces huge volumes of chemical effluents. These toxic slurries are stored as tailing ponds, which are in fact earthfill embankment *dams*. The incommensurability between the bucolic quaintness of a pond and the sizeable nature of a dam is important to note here. Tailing *pond*, the preferred nomenclature within industry, seems inadequate to account for the tremendous amount of wastewater these facilities are designed to retain *forever*, a storehouse for contaminants that have no other possible means of disposal. Whereas hydroelectric dams require periodic releases and captures of water (that are out of line with the natural cycles of the rivers that feed them, and more in-tune to the seasons of capital demand), tailing dams are meant to withstand every statistically foreseeable event to prevent discharge from the reservoir. It is a misnomer to think that a breach in the Imperial Metals Mount Polley tailing *pond* in northern British Columbia could have released “five million cubic metres of wastewater” (CBC News, 2014) into Hazeltine Creek. The pond and the dam both evoke the ways in which water is contained and treated, but the connotations are fundamentally different. *Falls* mimics some of the representational aspects of water through copper, in order to raise questions about how, exactly, water is represented.

In addition to an attentiveness to materiality, *Falls* is also carefully considered in its formal composition. Depth and gravity are palpable in *Falls*, which tumbles forwards in a frozen spill of movement. Anchored by the black polyurethane sculpture at the base, the copper pools in striated patterns in the weft

Figure 2. Ruth Beer: Falls, 2016. Weaving, polyurethane sculpture. Detail of weaving. Photo: courtesy of the artist.



as the work ripples down the wall. Dense in some sections, while porous in others, moments of tightly bound pressure produce a highly reflective surface that eventually fades out. Deliberately woven in an open matrix, the weaving elicits some of the qualities of a fishing net (Figure 2). Calling upon the relationship between extraction and fish in *Trading Routes*' oeuvre, the antagonistic relationship between copper particulates and fish is presented to the viewer. Copper has been known to have an adverse impact on many species of fish, but its effects can be seen most resolutely on salmon populations. Compromising their olfactory senses, this interference leads to a form of disorientation that prevents salmon from finding their spawning grounds, jeopardizing the continuation of their populations (Raloff, 2007). To the viewer, the netted component of *Falls* filters through the surrounding exhibition space like a sieve. The work reveals parts of the supporting wall behind it, but it also hides or obscures it. The copper also creeps upon the sculptural base, as though about to slowly wrap

around and engulf it in a meshy grasp (Figure 3). The installation which creates a tension between opacity and transparency, reveals and conceals the surrounding space in variable ways.



Figure 3. Ruth Beer: Falls, 2016. Weaving, polyurethane sculpture. Detail of base. Photo: courtesy of the artist.

In many respects, *Falls* is demonstrative of the “communicative power” of copper. The material and formal concerns of the work speak to the relationship between extraction and dams, water and wastewater, fish and copper. As a work that explores dams in the context of extraction and mining, *Falls* objects to the portrayal of the tailing dam as something that is necessarily inert, arrested or contained. Depicted in a swell of suspended motion, *Falls* creates a breach, or a spillway in our interpretation of the quality of such infrastructures.

Hydroelectric dams: transmissions over time and space

Like many other extraction or energy industries, the success of hydroelectric power is in large part because of a very particular alchemy of distance. The

metropolitan resident rarely thinks of hydroelectric dams, but when the subject does come to mind, it is like a faint apparition that appears thousands of miles away. Primarily situated in the northern regions of Canada, dams are imagined to occupy the “end of the earth” or “wastelands” (as defined by the settler state). Any compromising or negative repercussions of these infrastructures are normalized to the majority of the population because they appear to be happening very far away.

The construction of hydroelectric dams in northern Canada has had a long and contentious history: W.A.C. Bennett (British Columbia); Churchill Falls (Newfoundland and Labrador); James Bay Project (La Grande River, the unsuccessful Great Whale River project, Rupert River Diversion) (Quebec). Today, BC Hydro’s Site C Dam (British Columbia) and Nalcor Energy’s Muskrat Falls Dam (Newfoundland and Labrador) are underway, but facing significant legal challenges from local communities. The resistance, in many cases, is coming predominantly from Inuit, Métis and First Nations. Far from coincidence, these battles directly emerge out of Canada’s continuing colonial legacy. During a surge in public outcry against the second phase of the James Bay Project in the early nineties, environmentalist, economist and writer Winona LaDuke exclaimed:

... It is... unacceptable to flood Indian lands in Northern Canada. I find it totally ironic: If you lived in Paris, you would not wake up one day and find all of Paris underwater, unless there was a tidal wave or something. But Quebec Hydro, Manitoba Hydro and Ontario Hydro are flooding all of Northern Quebec, Ontario and Manitoba- essentially every single river that goes into James Bay, where the Cree and Inuit people live- in order to keep the lights on in New York City. [...] There’s a lot to be said for the indigenous value system of the Cree people- they say that the only people who should be allowed to build dams in our territory are beavers. (1990, p. 13.)

As LaDuke states, infrastructures of hydroelectric dams are designed to feed domestic and international markets at the expense of the health of local commu-

nities. Hydroelectric power, which translates currents of water into currents of electricity, channels or re-routes political and economic power in the process. Political strategies to suggest the isolation or remoteness of communities in the north is often in the service of consumers further south.

A recent work by Marianne Nicolson, *The Rivers Monument* (Figure 4) short-circuits this imposed distance by positioning a political commentary on the “issue of dams and the health of Canadian rivers” (Nicolson, 2014, artist’s website) right in the centre of the international corridor of the Vancouver International Airport. Two formidable cylindrical posts tower over the throughway. Etched into the blue-tinted glass are formline pictographs that tell the story of the Columbia River on one post, and the story of the Fraser River on the other. Nicolson describes the work as a one that:

... contrasts the history of the Columbia which has been dammed 14 times on its main line and the Fraser/Thompson which has never been dammed on its main line. It memorializes the flooding of Celilo Falls, the oldest continuously inhabited community on the North American continent until 1957, when it was submerged by the construction of the Dalles Dam on the Columbia River. (Nicolson, 2014, artist’s website.)

Similar to geological core samples, the posts are vertical cross-sections of the rivers. Representations of the surface of the water are found at the top of the posts, whereas representations of the deepest parts of the rivers are found at the base. At first glance, the paired rivers look like an identical set. Perched atop each post is a carved cedar eagle, and *sisi’utl*, a supernatural shape-shifting fish, sits on the river bed at the base. But it is the midsection of the posts, where representations of the intervening depths diverge to tell the respective histories of the rivers. The Fraser post depicts imagery found along the geography of the river, including emblems of stars, flowers, fish and fishers. On the Columbia post, images of uniformed men and dams fill the majority of the representational space. Beneath them is a copy of the ancient petroglyph of the Spedis Owl, the

*Figure 4. Marianne Nicolson:
The Rivers Monument, 2015.
Etched glass, water, cedar.
In the collection of the
Vancouver Airport Author-
ity, YVR Airport, Vancou-
ver. Photo: courtesy of the
Vancouver Airport Authority
and the artist.*



location of which was submerged when “the Dalles Dam flooded and buried forever thousands and thousands of art pieces on the basalt cliffs lining the Columbia River” (Gold, 2007, p. 603). The year that marked the construction of the Dalles Dam resulted in an archeological scramble in the form of a Smithsonian Institute River Basin Survey to save and preserve artifacts from the site that contained records of 10,000 years of human habitation in that place. Beginning in 1952, “archaeologists from Universities of Oregon and Washington gathered as much as they could of the evidence left by the Indians” (Butler, 1957, p. 159) before the impending flood. And while a fraction of the artifacts were salvaged from the creation of the slack water pools, the colonial gaze remained blind to the living, contemporaneous Wishram and Wasco people displaced from their land and cultural histories.

In *The Rivers Monument*, Nicolson’s mixing of ancient petroglyphs and contemporary, secular imagery can be seen in the context of her practice which views “contemporary pictographs as a source of resistance and assertion”, and demands “crossovers between signs and symbols in traditional and contem-

porary methods of reading” (Mendel Art Gallery, 2014). This assertion is one that challenges mainstream understanding of this iconography, and refuses to permit the division between historical or “ancient” Indigenous cultural production from contemporary concerns. The inclusion of uniformed men or dams in the vernacular of the pictographs is a poignant declarative on the part of Nicolson, one that demands recognition of the continuity of Indigenous time, representations and relationships to the land.

Centred in a major crossroads at the international airport, the work operates to entangle past and present, while also compressing stories of space. In *The Rivers Monument*, the traditional sculptural forms of the house post calls upon the language of contemporary architecture. Taking up the modern architectural vernacular of glass, Nicolson appropriates the use of glass “conceptually in regards to a border” (Borderzones, 2010). The transparency of the material allows visual access from one space through to the other, while at the same time physically creating a barrier, or a blockage that divides space (Borderzones, 2010). Re-inscribing the notion of an “obstacle” into the contemporary discourse of hydroelectric dams challenges the claim for an easy transmission of energy or power. The posts are dominating, formidable and operate counter to the fluidity of queue logic that define international hegemonic spaces. In airports, pedestrian space is primarily designed to facilitate speed, surveillance and directness, but Nicolson alters this type of movement by effectively damming the passageway of the airport. Forcing a major diversion in the “clear paths” through the space, *The Rivers Monument* presents the viewer with what it means to be confronted and challenged by hydroelectric dams.

Using a deeply complex visual vocabulary, Nicolson demonstrates that “maintaining ways of interacting with, and valuing, objects, images, and modes of expression that have long been powerful for one set of reasons and the need for them to be powerful for new reasons as well” (Townsend-Gault, 2014, p. 968). Situating local histories in a global context, Nicolson’s work is as much about the Dalles Dam as it is about the Alta Dam, the James Bay Project, the Muskrat Falls Dam, or the Site C Dam. This critical monument was unveiled in 2015 at the Vancouver International Airport, and later that year, BC Hydro cele-

brated the one-hundred day mark of construction on the Site C Dam location in northern British Columbia (Site C, web). Taking up the lexicon of a monument, the work is as much a marker of a historical event as it is an intervening presence that shapes present-day manoeuvres. Nicolson compounds scales of time and distance, the secular and the traditional, all in order to articulate a staunch resistance to the rigid obstructions that have, and continue to, compromise the health of waterways.

Glacial dams: signs of outbursts and flood tides

Far from autonomous, dams are products of their environments (economic, political, social and natural) that compromise and complicate borders. Dams exist in many contexts, in many forms and for many purposes. Yet, the anthropocentric way in which the world is framed makes it appear as though dams are mostly human constructions. Under the custodial care of companies and governments, whether for energy (hydroelectric dams) or extraction (tailing dams), these projects are coded as contained and controlled infrastructures. Stories suggesting the precariousness or failings of contemporary dams are dismissed as anomalies. Dams that breach, rupture and spill are typically explained away as cases of extenuating circumstances caused by either human error, or unruly weather. But, to think of a dam as a benign or neutral bedrock in any environment is a qualitative misunderstanding. Dams existed in nature long before humans sought to design them for profit. Glacial dams, for instance, have been an important facet of the Canadian landscape. Looking at examples of dams in the natural environment can be used as a foil to better understand the role of dams in the built environment. For instance, what kinds of insight can glacial dams reveal about the role of other types of dams in contemporary life? What can glacial dams reveal to us about damming practices and policies in the north?

While engineered dams project a false presumption of containment and control, glacial dams are understood to be fickle, unpredictable and subject to outbursts. Naturally formed over time, and a confluence of various environmental conditions, these dams are sites of tremendous pressure and instability. In



Figure 5. Kevin Schmidt: A Sign in the Northwest Passage, 2010. Cedar sign installed on the seasonal ice of the Beaufort Sea, 20 kilometres north of Tuktoyaktuk, the Northwest Territories. Photo: Tytus Hardy, courtesy of the artist.

her seminal text, *Do Glaciers Listen?*, anthropologist Julie Cruikshank notes that “surging glaciers... may advance without warning after years of stability... they frequently create ice-dammed lakes that build up and burst out with catastrophic consequences when the ice eventually thins and the dam breaks” (2005, p. 6). These ice dams are characteristically defined by a volatility that has decimated villages, propelled frozen shrapnel flying and destroyed routes for travel. As adjuncts to the glaciers that form them, Cruikshank suggests these dams display many of the same temperaments of glacial activity. In Athapaskan and Tlingit oral traditions, which make up much of Cruikshank’s research, glaciers are “characterized by sentience: they listen, pay attention, and respond to human behaviour- especially to indiscretion” (2001, p. 378), which positions “glacier behaviour as occurring within a deeply moral universe where natural-cultural histories are always entangled” (Cruikshank, 2005, p. 243). To mock, offend or otherwise disrespect a glacier (or by extension, a glacial dam), results in vengeance. In stark contradistinction to human-engineered dams (which are contingent on a psychic repression of the dam’s capriciousness), glacial dams are avowedly powerful and knowing.

A Sign in the Northwest Passage is a fifteen-foot sculpture constructed out of cedar and counterbalanced barrel flotations (Figure 5). The wooden sign morally proclaims apocalyptic visions from the *Book of Revelations* in the *New Testament*. Burn, blood, torture, kill, agony and scorch are just a few of the foreboding words seared into the skyline atop of the seasonal ice on the Beaufort Sea. The sculptural work is mindfully dependent on the environmental conditions that surround it. *A Sign in the Northwest Passage* outlines tragedies that are remarkably terrestrial (offences of earthquakes, seas and fires), but the message itself is further subjected by positioning the divine proclamations at the mercy of the winds, tides and currents. With the annual melt of the ice sheet underneath it, *A Sign in the Northwest Passage* was abandoned and left to drift along the treacherous corridor through the arctic archipelagos, the passage which first brought Europeans to the region. It has not been seen since.

To align Schmidt’s overtly proselytizing artwork within the moral landscape described by Cruikshank, is to understand an intensely charged geography. This

is a landscape of morality, judgements and miracles. In an evaluation of the work of Kevin Schmidt, Juan Gaitán notes, “the most accepted definition of the miracle- also the most general- is that it is an *act contrary to nature*” (Gaitán, 2005, p. 21). Given the vagaries of the naturally formed ice dam, to imagine a stable or inert dam is to imagine a structure that acts in contradiction to itself. To imagine a dam that is incapable of calamity, or a dam that can be subsumed under human authority, should be seen, in short, as nothing less than miraculous.

Whereas the hydroelectric or the tailing dam operates methodologically through containment and control, the glacial dam reminds us of the irregularities, sensitivities and violence that such structures are capable of. Acknowledging the capacity of dams to perform as agents in the judgement of human behaviour, with a propensity for direct action, has not yet been a serious consideration in the development of dam projects. Typically, dam outbursts are viewed as unlikely events that can be managed through contingency plans, but how would the industrial landscape change if we approached these constructions knowing they have the power to reprehend human folly, and that they can act willfully independently?

Conclusion

This chapter has attempted to flood the currently accepted lexicon in extraction and energy industries by articulating a complex consideration of the role and communicative power of dams in northern Canada. Through a rich sculptural vocabulary, Ruth Beer, Marianne Nicolson and Kevin Schmidt challenge our conventional understanding of dams. In the works of Ruth Beer, copper is used as a means in which to nuance the role of the tailing dam in extraction industries, and to challenge the relationship between water, copper and fish. An overt critique of hydroelectric dams, Nicolson’s *The Rivers Monument*, refuses to make room for the kind of distancing (from high density populations, from historical events, from Indigenous land claims) that energy projects require in order to operate profitably. Schmidt’s *A Sign in the Northwest Passage* portends the opening of glacial dams through the melting of arctic ice, recognizing the moral assaults

dams are capable of. In each work, there is an entanglement between natural and cultural histories that recognises the way in which the environment, built or natural, can “upset clear notions of social boundary” (Cruikshank, 2005, p. 221). These artworks simultaneously work to reveal that the massive infrastructures that situate dams as fixed, contained, armoured or unyielding is only a veneer. The walls of dams are porous and their effects ripple out across many facets of contemporary life.

References

- Amnesty. (2016). *The point of no return: The human rights of indigenous peoples in Canada threatened by the Site C dam*. Amnesty International. Retrieved from <https://www.amnesty.ca/sites/amnesty/files/Canada%20Site%20C%20Report.pdf>
- Anderson, A. (2010). The great melt: The coming transformation of the Arctic. *World Policy Journal*, 26(4), 53–64. Retrieved from <http://www.jstor.org/stable/40468738>
- Banerjee, S. (2012). From Kolkata to Kaktovik en route to Arctic voices: Something like an introduction. In S. Banerjee (Ed.), *Arctic Voices: Resistance at the Tipping Point* (pp. 1–22). New York: Seven Stories Press.
- Borderzones. (2010, June 21). Conversation with Marianne Nicolson [video file]. Retrieved from <https://www.youtube.com/watch?v=MAfO-H7pRxQ>
- Burrows, L. (2015, September 7). Poison in Arctic and human cost of ‘clean’ energy: Hydroelectric energy may be more damaging to northern ecosystems than climate change. *Harvard Gazette*. Retrieved from <https://news.harvard.edu/gazette/story/2015/09/poison-in-arctic-and-human-cost-of-clean-energy/>
- Butler, R. (1957). Art of the lower Columbia Valley. *Archaeology*, 10(3), 158–165. Retrieved from www.jstor.org/stable/41663484
- CBC News. (2014, August 4). Mount Polley Mine tailings pond breach called environmental disaster: complete water consumption, swimming, cooking ban in effect for Quesnel and Cariboo rivers. CBC News. Retrieved from <http://www.cbc.ca/news/canada/british-columbia/mount-polley-mine-tailings-pond-breach-called-environmental-disaster-1.2727171>
- Cruikshank, J. (2001). Glaciers and climate change: Perspectives from oral tradition. *Arctic*, 54(4), 377–393. Retrieved from <http://www.jstor.org/stable/40512394>
- Cruikshank, J. (2005). *Do glaciers listen? Local knowledge, colonial encounters, and social imagination*. Vancouver: UBC Press.

- Desbiens, C. (2007). 'Water all around, you cannot even drink': The scaling of water in James Bay/Eeyou Istchee. *Area*, 39(3), 259–267. Retrieved from <http://www.jstor.org/stable/40346041>
- Gaitán, J. (2005). Doubt as an optical illusion. In M. O'Brian (Ed.), *Burning bush: Kevin Schmidt* (pp. 18–25). Vancouver: Artspeak.
- Gold, P. C. (2007). The long narrows: The forgotten geographic and cultural wonder. *Oregon Historical Quarterly*, 108(4), 596–605. Retrieved from <http://www.jstor.org/stable/20615799>
- Goodyear, S. (2016, October 26). Scientists back Inuit in efforts to limit mercury poisoning risk from Muskrat Falls hydro project. *CBC News*. Retrieved from <http://www.cbc.ca/news/technology/muskrat-falls-labrador-mehylmercury-1.3821827>
- Korsmo, F. (1988). Nordic security and the Saami minority: Territorial rights in northern Fennoscandia. *Human Rights Quarterly*, 10(4), 509–524. Retrieved from <http://www.jstor.org/stable/761918>
- Kroker, A. (1984). *Technology and the Canadian Mind: Innis / McLuhan / Grant*. New York: New World Perspectives.
- LaDuke, W. (1990). The struggle for cultural diversity. *Race, Poverty & the Environment* 1(2), 12–13. Retrieved from <http://www.jstor.org/stable/41553938>
- Levin, D. (2016, December 10). Canada's \$7 billion dam tests the limits of state power. *The New York Times*. Retrieved from <https://www.nytimes.com/2016/12/10/world/canada/canadas-7-billion-dam-tests-the-limits-of-state-power.html>
- Lippard, L. R. (2000). *Mixed blessings: New art in a multicultural America*. New York: The New Press.
- Loo, T. (2007). Disturbing the peace: Environmental change and the scales of justice on a northern river. *Environmental History*, 12(4), 895–919. Retrieved from <http://www.jstor.org/stable/25473166>
- Mendel Art Gallery. (2014, September 29). Marianne Nicolson artist talk [video file]. Retrieved from https://www.youtube.com/watch?v=k7_Mt4cB7tM
- Murdocca, C. (2010). 'There is something in that water': Race, nationalism, and legal violence. *Law & Social Inquiry*, 35(2), 369–402. Retrieved from <http://www.jstor.org/stable/40783022>
- Nicolson, M. (2014). *My work*. Retrieved from <http://www.mariannenicolson.com/my-work.html>
- Niezen, R. (2000). Recognizing indigenism: Canadian unity and the international movement of indigenous peoples. *Comparative Studies in Society and History*, 42(1), 119–148. Retrieved from <http://www.jstor.org/stable/2696636>
- Raloff, J. (2007). Aquatic non-scents. *Science News*, 171(4), 59–60. Retrieved from <http://www.jstor.org/stable/3982616>

- Site C Clean Energy Project. (2015, November 3). Site C construction reaches 100-day mark. *BC Hydro*. Retrieved from <https://www.sitecproject.com/site-c-construction-reaches-100-day-mark>
- Smith, E. A. (1997). Introduction. In E. A. Smith & J. McCarter (Eds.), *Contested Arctic: Indigenous peoples, industrial states, and the circumpolar environment* (pp. xi–xix). Seattle: University of Washington Press.
- Townsend-Gault, C. (2014). The material and immaterial across borders. In C. Townsend-Gault, J. Kramer & Ki-ke-in (Eds.), *Native Art of the Northwest Coast: A History of Changing Ideas* (pp. 963–994). Vancouver: UBC Press.



ARCTIC DIMENSION IN DESIGN EDUCATION: How the Place Matters

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Introduction

One of the main challenges of today, i.e. sustainable development of the world's regions becomes an issue of truly global importance in the case of the circumpolar Arctic¹. Along with obvious economic benefits, the intensive industrial development of the Arctic has entailed large-scale transformation of the environment, with devastation to the way of life of indigenous communities and their traditional economies. In addition, it has led to the appearance of a new, and to large extent conflicting, subculture of mobile workers and newcomers from southern regions. For Russia, the problem of sustainable development of this region has never been so crucial as it is now. Today the Arctic, together with the entire country as the world's largest northern state, enters a new era of industrial development, rapid economic and infrastructural growth and faces totally new climatic conditions.

Today's relations with the Arctic can be characterized by the triad “*extreme – conquest – technology*,” where *extreme* is a given reality and the key characteristic of the environment, *conquest* is a proactive action to prevail over the aggressive nature of the region, and *technology* is the means to implement this action. While the development and appropriation of the changing Arctic continues as resources to support the existing technology-augmented mode of action are decreasing, the relationship between human, environment and technology has to be radically reconsidered and models for sustainable modes of living have to be borrowed and/or invented. In this regard, there is a clear need for a new “Arctic development paradigm” including a new image of the North and, in a wider sense, a “new culture” of the region, that should be aimed at strategic transition from “conquering Northern frontiers” (Bolotova, 2012) towards development of *the ways of living* within these frontiers.

This chapter presents the history of the Arctic-oriented design education in Russia as told through the case studies of field encounters, personal stories of immersions and discoveries, and student projects, which provide an insight into how firsthand exposure to communities, environments and cultures enables students to consider design as a situated practice of mutually beneficial dialog and co-creation with local people and environment.

As a starting point, the chapter considers a new stage of interaction between human, environment and technology in the Arctic context. The goal is to reveal the potential of design with its artistic core as characterized by the emphasis on environmental thinking, appreciation of the practical value of indigenous and traditional knowledge. The intention is to improve the quality of living and working conditions in severe environmental settings, to be included in a system of Arctic development. Our exploration is centered on the emergence of a specific area of Arctic-oriented design education in Russia. We report the lessons from student fieldwork conducted in different localities of the Russian Arctic, illuminate an alternative perspective on the system of professional design studies and suggest the significance of cultural encounters and community-centered collaborations. We refer to the example of the School of Arctic Design, an autonomous research unit inside the Department of Industrial Design, Ural State University of Architecture and Art which hosts projects that focus on human adaptation and wellbeing in the extreme natural conditions of the Arctic regions. The program “Design for the Arctic/Far North” dating back in 1980s stemmed from enthusiastic projects inspired by a series of self-initiated student field trips to the Arctic and Siberian wilderness.

In conclusion, we outline the main principles and priorities developed and implemented at the Arctic Design School during its 30 year evolution and discuss its perspectives in the changing context of design education on the tide of current interest in the Arctic.

Design in the Arctic versus the Arctic in design

Traces of design can be readily found within the system of Russian Arctic development. However, design methods and principles are now applied superficially, without local adjustment and proper consideration of the context: the application area is limited to visual representation and promotion of specific, mainly extractive, companies and their projects, without profound investigation of contextual issues and development of scenarios of interaction between people, industrial products or services and the environment of the Far North. Design

gets involved only at the stage of implementing solutions that have been created without participation of design experts. The trials and errors become the only appropriate method and this, according to the history of Soviet/Russian development of the North, can lead only to “cosmetic localization,” i.e. incorporating superficial local traits into existing product platforms, without transforming their “non-Arctic” core (see Usenyuk, Hyysalo, & Whalen, 2016 for specific examples).

“Designing” the process of sustainable development of the Arctic territories implies prior development of a research culture that would provide new, practice-oriented, knowledge about the region. The vast expanse of the Arctic is still sparsely populated, despite the long history of its development: extreme natural conditions constitute an insurmountable barrier for the adaptation of people from low and mid-latitudes. In order to determine the *raison d'être* of living and working in such environment, the practice-oriented knowledge should encompass, for example, traditional ways of knowing of indigenous peoples, principles and practices of creating and using new technology, local and situated understandings of climate change. For designers, this means that the Arctic cannot be considered as just a “special case” for design practice; this is a completely different and independent phenomenon. Therefore, there are no reasons for employing existing design principles, methods or techniques, which have been developed and verified in moderate climatic conditions.

If existing methods are inadequate and current practices are misleading, then what can be utilized as a resource for Arctic design research and practice? We argue that engaging with designers at the early stage of data collection, perception and analysis, including fieldwork, would lead to obtaining structured information about working environments from the design perspective, and would consequently supply designers with methods and tools enabling them to develop a specialized Arctic-appropriate “world of things.” Moreover, as Fulton Suri (2011) argues, inspiration and grounding for truly innovative design solutions can arise from ethnographic observation of very personal kind, i.e. conducted by designers themselves.

To properly include the “design component” into the system of development of the Russian North, it is important to consider the artistic and design

expertise that to date has been built up within this specific, Arctic-oriented, domain. While the industry failed to see beyond form-giving and aesthetic competencies of design, the strategic, prognostic and transdisciplinary potential of this field was nurtured and accumulated inside professional schools and universities². Art and design institutions, with their substantial experience of combining theoretical and practical knowledge, have historically been at the forefront of design thinking. Although the traditional applied nature of professional design education, on the one hand, restricts resources for fundamental scientific inquiry, on the other hand, with clearly formulated research questions and defined locales, it enables researchers to quickly validate and implement the obtained results. In this context, the Russian North provides an ideal testing ground for experimenting with the most daring as well as ethically and environmentally friendly solutions with respect to the spatial development of territories, for developing optimal life-sustenance systems, and for protecting and activating the cultural capital of indigenous inhabitants.

In the following sections, we illustrate this statement with two cases drawn from the history of the School of Arctic Design. Established about 40 years ago by design enthusiasts and Northern wanderers, the school initially did not have any physical space. It was more an informal discussion club for teachers and students who took an intense and passionate interest in the process of transforming the Far North into a desirable place to live.

Arctic dimension in design education: case studies

In the context of incorporating the Arctic dimension, i.e. the priorities and needs of the region's development process, into design education, a pioneering role and leading position among relevant institutions in Russia belongs to the Ural State University of Architecture and Art (USUAA), has an excellent location in one of the largest industrial regions on the crossroads of Europe and Asia as well as of the North and South. The location per se has ensured two prerequisites for an Arctic-oriented branch of design and research to appear: while the proximity of the Arctic provided the opportunity to "get used to" the context of designing, the

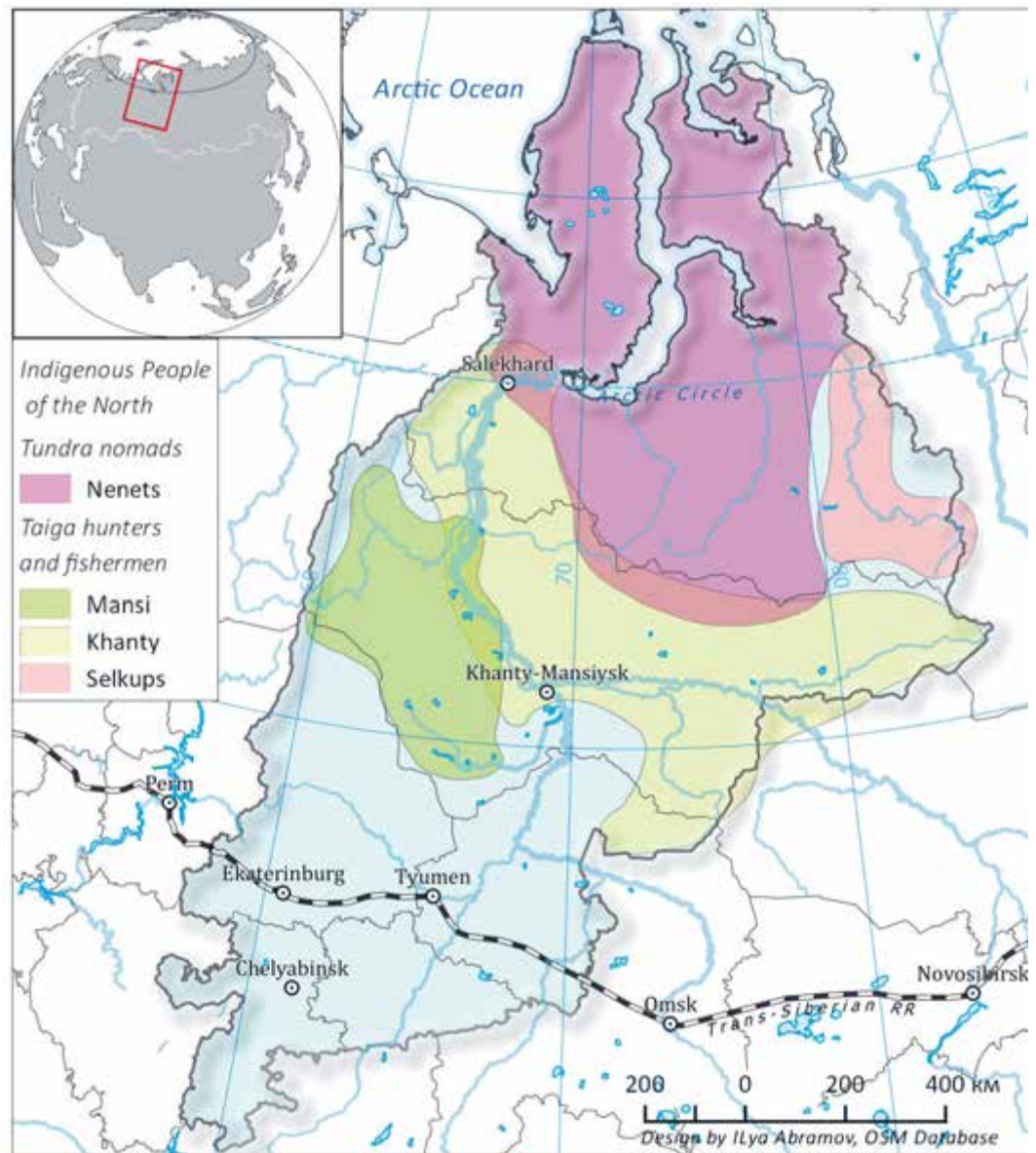


Figure 1. Indigenous areas of the Ural Federal District. Source: Ilya Abramov, 2017.

developed network of industrial enterprises (in Soviet times) would potentially implement proposed design solutions.

In the early 1980s, this fruitful combination – coupled with the general inspirational rhetoric of the Soviet state – resulted in several enthusiastic student projects at the design department of the Sverdlovsk Architectural Institute (former name of the USUAA) inspired by a series of self-initiated field trips to the Polar and Siberian wilderness. Direct encounters with indigenous communities during these trips constituted a key learning moment that later gave rise to the very idea of the Arctic Design School. Before discussing the details of those trips and further reflections, in the section below we briefly introduce the peoples and outline our understanding of the process of community engagement in design.

Arctic indigenous peoples at a glance

Our work is geographically grounded in the northern part of the Ural Federal District (Figure 1), where, to date, indigenous peoples – Nenets/Nentsy (Samoyedic group), Khanty, Mansi (Finno-Ugric group) – still practice traditional way of living based on hunting, fishing, and reindeer herding (Figure 2).

In fact, such a way of living is a visible result of centuries-long evolution of human body and mind, as well as of adaptive transformation of skills, technologies and the entire material world. The physiological, social and spiritual aspects of the Arctic indigenous existence are powerfully illustrated by Alekseeva, 1977; Sokolova, 1990; Krupnik, 1993; Golovnev, 1995; Golovnev & Osherenko, 1999; Hasnulin, Voytik, Hasnulina, Ryabichenko, & Skosyreva, 2014, etc. in their research.

At a practical level, during the long history of Arctic discoveries, polar explorers and re-settlers have appreciated the survival experience of native peoples by copying or directly borrowing their tangible artifacts and practices of dressing, moving and dwelling. However, in the modern era, at the level of large-scale regional development Soviet and Russian engineers and planners, due to the young age of their fields of interest, acted with “too much enthusiasm in the absence of complete information” (Josephson, 1995, p. 521) and mostly neglected the available experience of local inhabitants.



Figure 2. Field photos (from left to right): Khanty women (Photo: S. Usenyuk, 2013); a Mansi fisherman (Photo: Ilya Abramov, 2014), a caravan of Nenets (Photo: A. Rogova, 2016).

During the 1960–70s the exploitation of oil and gas deposits in the North-Western Siberia began and brought about extensive industrial development and a massive influx of new people and new technology. Since that period and to date, the profound lack of communication and direct (peer-to-peer) exchange of knowledge and practices between indigenous people of the North and Soviet/Russian newcomers has become especially visible. As Kvashnin points out with reference to Yamal Peninsula, “there are two distinct communities that coexist in parallel: one is indigenous population, small in number, and the other is the numerous Russian-speaking population. Each of them considers their own community self-sufficient and keeps a certain distance in relation to the other” (Kvashnin, 2010, p. 104). As a result of such mutual estrangement, by the end of the 20th century, the conquest of the Arctic has led to a variety of detrimental social, economic and other interventions that can soon make the unique and vitally significant Arctic expanse of little use in terms of human existence.

Today, the economic and social conditions of living of the described communities differ greatly: from the threat of extinction as a nation, with the decrease of native speakers and people involved in traditional employment. There is also increasing alcohol consumption and suicide rate among Mansis. At the same time, there are flourishing communities of tundra Nenets success-

fully adapted to new economy, with growing number of young people speaking native language and involved in traditional activities, namely herding (authors' field observations 2006–2015, Pushkarev & Goryachenko, 1996; Stammeler, 2005; Ruttkay-Miklan, 2001; Golovnev, Lezova, Abramov, Belorussova, & Babenkova, 2014). These issues, however, are not the matter of this chapter.

Returning to the main theme of the section, what is the professional challenge for designers and researchers then? In the outlined context, being under the real threat of losing the unique knowledge and practices, i.e. the ways of comfortable living in the severe yet fragile environment, the challenge is to actively protect and appreciate what has been achieved by indigenous communities to date. More specifically, in formulating the general task for Arctic designers we echo Hardt saying: “to analyze and adopt existing design principles from the Arctic and to make these available to the rest of the world while respecting the intellectual property of indigenous peoples” (Hardt, 2012, p. 57).

As a theoretical framework for this discussion we take the widely acknowledged postcolonial approach that provides valuable insights into currently important topics of participation, empowerment, and intelligibility in the contexts of cultural encounter, particularly in the context of contemporary globalisation (Muller & Druin, 2010; Irani, Vertesi, Dourish, Philip, & Grinter, 2010; Naum, 2012).

As Irani et al. noted the power of postcolonial theory is in demonstrating “the ways projects we engage in for “others” often tell us more about ourselves” (Irani et al., 2010, p. 1312). Indeed, Arctic design at its best is not aimed at indigenous population; its main target audience is non-indigenous visitors, coming to the Arctic areas for work, leisure, etc. – temporarily located in environments and situations quite different from their usual lives. As researchers, we see our goal as providing decision-makers with data applicable for the support of non-indigenous individuals on “Arctic missions” of any kind and duration.

Applying the concept of the “third space” by one of the most influential postcolonial scholars H. Bhabha (1988) we can come up with a conceptual solution of bridging between the overlapping domains in the described region. As mentioned above, each domain has its well-defined boundaries based on established knowl-

edge and practices. While the culture of the natives is under the threat of absorption by newcomers, who, in turn, struggle for existence against the aggression of the nature, the reciprocal engagement seems possible within a mutually beneficial space of “inventions and conventions, initiated and maintained by day-to-day situations and encounters” (Naum, 2012, p. 106). This vague and generalized description constitutes the extra-challenge for designers: to facilitate the development of such a space based on co-design principles, namely: acknowledging mutual values; re-defining problems and opportunities; mutually defining risk, success, and failure; creating and renewing structures for communication; and getting serious about feedback, evaluation, and reflection (Corser, 2008).

Getting back to the history of the School of Arctic Design, in its early stage these thoughts and principles were far from clear articulation. However, there was a “gut feeling” that digging into the culture of Arctic natives would be the way to follow, and this feeling resulted from very intimate knowledge acquired in face-to-face encounters, one of which is presented below.

Case Study 1: Discovering the North

The first case study draws on reminiscences of the first field trip to the Northern Urals.

The trip took place in 1979, when our group of design and architecture students passionate about sport tourism went for a hiking trip into the Northern Urals. While our equipment was very simple, i.e. backpacks, tents and sleeping bags, the plans were ambitious and adventurous: to beat a new track into the wilderness of the least accessible part of the Ural Mountains. After several days of roaming and getting almost lost, we came across a tiny village of the Mansi indigenous people. It happened all of a sudden, and therefore the effect of that encounter was equal to the discovery of another civilization. Moreover, nobody of those indigenous dwellers could speak Russian. However, the Mansi, although they were highly surprised by the intrusion of aliens, showed



Figure 3. Extracts from students' field journals kept in the series of early expeditions. Later these journals evolved into the stable method of learning diaries for reflecting upon personal encounters with local communities, their ways of living and, particularly, for visualizing their artifacts and everyday practices.

their hospitality at its best: they treated us to raw reindeer meat, fermented fish and tea with polar cloudberry for dessert. We, in turn, drew a lot of Mansis' graphic portraits and gave them as presents. All that tastes, colors, sounds made a strong impression on us as young designers. But the most significant change happened when we actually encountered the tangible world of the locals: their houses, vehicles, tools, and other objects. We literally rushed from one thing to another. And everything was, indeed, truly organic, functional, and... beautiful, with perfectly refined proportions! Everything asked to be touched, tried and explored and then – to be measured, sketched, tested for durability, analyzed for assembly, etc. And we just immersed into all this, forgetting about time and destination. On our return, we decided to make such trips on a regular basis, expanding their interest up North, towards the Arctic Ocean, and to the Northeast, towards Siberia and Chukotka. (Garin, field notes and personal communication, 2005.)

In this case, students discovered an illustrative example of successful adaptation to the extreme environment of the Far North embodied in man-made things. The initial design observation of indigenous artifacts (Figure 3) later moved to the stage of extracting and understanding the material adaptations (Figure 4); and then, logically, to the stage of implementing this knowledge in design projects (Figure 5).

During the period from early the 1980s to the late 1990s, the School of Arctic Design has passed several stages of its organizational evolution within the Department of Industrial Design. In spite of strict centralization of the system of design education of the Soviet era, it has been possible for universities to develop flexible curricula under the framework of regionally significant topics. Thus, the results of the first and subsequent expeditions paved the way for a serious reconsideration of the program of design studies: instead of annual artistic practice at the BA-level that included open-air drawings and paintings of “complex design and architectural objects”, a young teacher and passionate tourist Nikolai Garin suggested such trips to the North as a voluntary alternative for industrial design


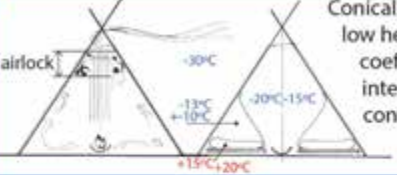


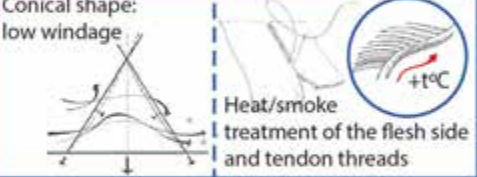




COLD	ADAPTIVE RESPONSE	WORKING PRINCIPLE(S)	EXAMPLE
 low temperature	To insulate the 'core' in order to keep existing warmth	 Conical shape: low heat loss coefficient, internal air convection	
 wind	To improve aerodynamic stability, to prevent wind penetration	 Conical shape: low windage Heat/smoke treatment of the flesh side and tendon threads	
 wind-chill	To minimize heat loss, to increase production of 'proximal' / body heat	 Full coverage of the body Scratching a naked body with reindeer hair improves surface blood circulation Minimum joints/seams, hidden: draught-protection	

Figure 4. The example of detailed analysis of indigenous “material adaptations”: here the adaptive response to the climatic factor of cold is presented. Drawings by N. Garin.

students and managed to secure the university funding. All the data collected during those expeditions served as a unique source of knowledge and inspiration for students’ degree projects of equipment, shelters and transport vehicles for the Far North.

After few years of irregular working on Northern issues, Nikolai Garin founded the studio “Design for the Extreme Environment,” based on the specific northern application of the concept of a “living lab,” i.e. “an environment in which people and technology are gathered and in which the everyday context and user needs stimulate and challenge both research and development...” (Bergvall-Kareborn, Hoist, & Stahlbrost, 2009). The studio provided postgraduate education for students with an industrial design background. In this context, the geographical reference to the Far North also helped them to reflect upon indigenous knowledge with an eye to further practical implementation.

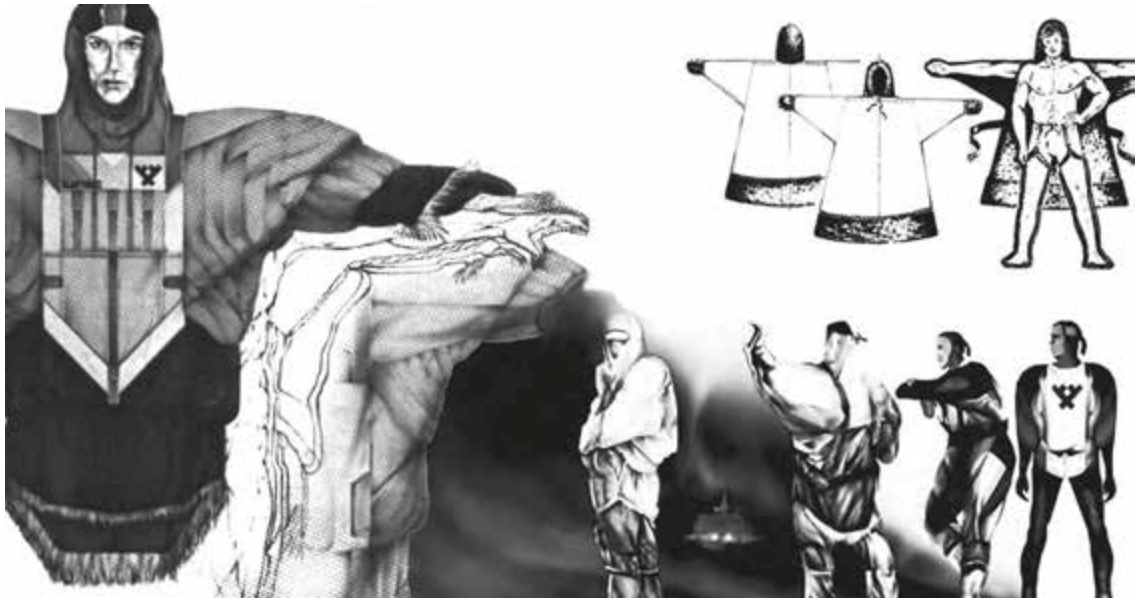


Figure 5. Lyudmila Ulianycheva. A set of clothing for arctic researchers from the Ural Branch of the Academy of Sciences USSR, 1984. The project is based on the idea of adopting the indigenous artefacts (clothing) or their key elements to new users and new requirements of use. Not only did the author study thoroughly all the variety of Arctic indigenous clothes, but also she undertook a series of field studies during summer and winter periods. She literally experienced living in traditional clothes of the Nenets people and tested the garments in various contexts: sleeping on the snow, riding a reindeer sledge, trekking in deep snow, etc. The key features of the designed set of clothing are multi-layered structure and combinability, enabled by the use of up-to-date materials and technologies.

In addition to internal educational tasks, the newly founded studio was open to external collaborations. The first partner was the exploratory/scientific organization *PolarEx* (Polar Expedition). Combining multidisciplinary field experiences, the students and researchers from the *PolarEx* came up with a set of life-supporting facilities, multifunctional transport, mobile shelter and equipment, for a scientific and sport expedition to the North Pole (Figures 6–8).



Figure 6. "Towards the North Pole": the fragment of the project exhibition. A. Chekmenev and A. Mitin, aerography, 1985.

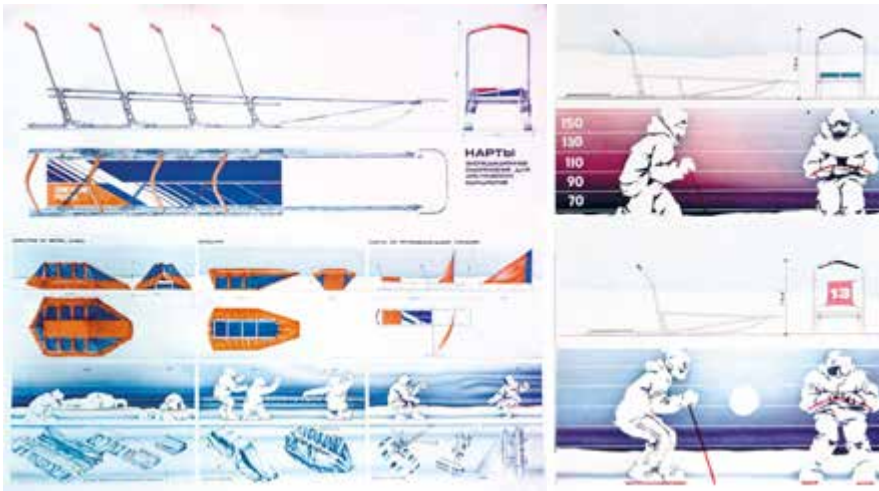


Figure 7. Alexander Chekmenev. A transformable sled for arctic expeditions, 1985. The author developed a sled, which easily turns from a heavy cargo carrier into a light-weight vehicle for high-speed riding. The sled is made of thick-walled titanium tubes with a 4mm-thick synthetic protective coating. Relying on the living example of a traditional riding sled of nomadic reindeer herders, the author said no to rigid welded joints: all attachment points must be movable and "alive" to sustain constant exposure to extreme temperatures and other severe condi-

tions. This led to development of inventive joints made of sheet metal. Another transformation option is a boat resembling a Chukchi canoe: the rearranged frame of the sled plus durable waterproof cloth. Also the overturned boat can serve as a small shelter. In addition, there is a sail in the set, which helps to utilize wind power for mobility. The patent for the industrial design No 29741.



Figure 8. Andrei Mitin. A backpack for a research expedition to the North Pole, 1985. This project presents a synthesis of principles and technologies borrowed from the indigenous material culture (traditional system of carrying things on the back, developed by Siberian hunters) and contemporary domestic industry. The proportions and texture of the backpack contribute to the overall image of a durable, multifunctional and interesting gadget for carrying something vulnerable and fragile, e.g. scientific measuring instruments. The construction of the locks allows a number of such 'capsules' to be joined together just by using straps. This modularity makes it possible, for instance, to easily assemble a raft on a river. In case of tundra, it could be a caravan for carrying people and things (resembling a traditional caravan of reindeer nomads). The capsules may also be used as windproof screens to protect oneself against wind. The patent for the industrial design No. 25204.



Figure 9. Elvira Gumarova. A set of rental equipment for winter tourist activities, 2005. The project presents the author's design response to the present-day contradiction between the human desire "to get back to nature" (in the form of short trips, weekend tours, etc.) and the actual need to support this desire with a comprehensive range of facilities ensuring comfort and safety. So, the main design issue was to create a set of touristic equipment (outfit) that should be a 'mediator' between Man and Nature. All elements of the equipment are uniformly distributed over the human body; therefore every device can be reached easily and quickly. The central idea came from the detailed analysis of equipment of nomadic reindeer herders, with its necessary and sufficient distribution of important things in close proximity to the user. Natural lines and shapes of human body became a general basis for the design of the outfit. The outfit is intended for use in touristic equipment rental networks.

In the early 2000s, Nikolai Garin, as the studio leader, took an active role in establishing collaboration with the Faculty of Design at Khanty-Mansiisk Institute of Design and Applied Arts in the field of emerging Arctic design, in the form of visiting lectures, tutorials and supervision of BA degree projects (Figure 9). Under the umbrella of this collaboration, the focus of the works has shifted from facilitating scientific expeditions towards developing the sector of Arctic tourism, enabling experience- and value creation.

While the shift towards a more conceptual and discursive design discipline has been widely recognised by professional community (Krippendorff, 2005), it became increasingly clear that there was an essential gap between research and practice in design education at the Faculty of Design. This, in fact, entailed significant changes in the organisational structure of the Department of Industrial Design, and especially of the School of Arctic Design. Traditionally, the mission to connect theory and practice in design education is entrusted to post-graduate courses (Master's level) (Garin, Usenyuk, Panova, & Kukanov, 2009). Thus, in 2005 the first Master of Design Course in Russia was opened in Ekaterinburg, under umbrella of the USUAA, where the School of Arctic Design provided the conceptual foundation for the entire programme. The aim was to develop design-based research tools, design concepts, and experimental research methods with an eye to establish a platform for multidisciplinary collaboration with the areas of human/social and engineering sciences and also business.

In the light of the changed goals and priorities, from “aesthetic arrangement” of forms to “aesthetics arrangement” of systems and processes, the School identified three problematic sectors of Arctic development for research and design explorations in future projects: (1) industrial development and professional performance in the North (with regard to extractive industries and arctic military forces); (2) the emerging industry of arctic tourism; and (3) the socio-cultural issues of the “multicultural North.” There were potentially conflicting interactions between the growing community of newcomers and existing small communities of natives. Among those, the projects on arctic tourism, museums, exotic and adventurous routes and supporting facilities (Usenyuk, 2008; Usenyuk & Gostyaeva, 2017), gained the greatest interest from

external stakeholders, including regional authorities and decision-makers as well as local communities.

According to Johnston (2000), indigenous tourism is defined as “based on indigenous knowledge systems and values, promoting customary practices and livelihood” (Johnston, 2000, p. 91). While the idea of using tourism as a platform to enhance indigenous communities’ participation in regional and global tourism frameworks is not new, at a practical level there are ethical and aesthetic aspects of tourism; representation of the indigenous culture is often overlooked³. With regard to the Russian North, Pashkevich & Keskitalo (2017) put forward the discrepancy between existing, mostly exaggerated and full of stereotypes, tourist representations and actual situation on site. As they conclude, there is now a real threat of converting local indigenous cultures into exotic objects for tourist consumption.

In contrast, all tourism-related projects conducted at the School are intended to contribute to developing a dialogic space between cultures. Instead of becoming a form of cultural conquest, Arctic tourism is suggested to be a “test bed” for mutually beneficial interaction, whereby contacts between tourists and indigenous people reveal very clearly the range of multicultural problems arising. Design exploration starts with the aim to provide for embodying new standards of tourism ethics and sustainability in the Arctic region, and to enable new kinds of tourist products and services. The general idea behind each project is immersion of tourists into the culture of natives designed as a gradual and painless process for both sides. Every project with a link to indigenous culture begins with the research on what is *not* allowed to show at the particular community for example, many natural sites are sacred, many rituals and ceremonies are not to be seen by strangers. Overall, the rituals and various forms of communication with nature among the Arctic natives are examined as a viable prototype for developing new rites and habits of a new “hybrid” culture of Arctic visitors, i.e. a “connective tissue between cultures” (Bhabha, 1996, p. 54).

One of the recent examples is a collaborative project of the tourist complex on the River of Trom-Agan commissioned by the administration of the Surgut District, KhMAO and co-developed with the local Khanty community. In this

example, field immersion practices have encouraged collaboration and co-creation of knowledge with the local community and among students themselves and resulted in the design scenario of a weeklong trip into the sacred site of the Khanty people (Figures 10–11).

Back to the case study analyzed through the lens of design education, particularly the concept of “situated learning” (Lave & Wenger, 1991), this case shows *what* and *how* design students could learn from real-life encounters with another culture and tradition, completely different from widely promoted “modernity” or “global” design. The theory of situated learning pays attention to knowledge production *in situ* and in the course of work practices rather than upon learning transmission in the classroom (Fox, 1997). In the case study above, fieldwork experience, i.e. personal immersion into established living systems of Arctic inhabitants became a primary source of inspiration and hands-on training for design students. Given the chance to observe and practice *in situ* the way of living of a particular community, design students gradually started to comprehend the ethics and aesthetics of the previously unknown culture, though these categories are often obscure and highly complex.



Figure 10. Discussing the project: in the field with locals (left; photo: G. Vedmid) and in the studio (right; photo: A. Nikiforova).



Figure 11. Maria Gostyaeva, Alena Nikiforova, Anna Suslova, Eugenia Chernykh and Elena Kipriyanova. The tourist complex on the River of Trom-Agan, 2013. The journey of immersion into the local culture: the fragment of the final exhibition.

The educational framework of “designerly immersion” into the culture of Northern natives comprised of: preparatory archival studies, physical training, open-air drawing, methods and principles of field ethnography, exploratory analysis of traditional artifacts. In addition, practices included principles of facilitated interaction between human and the environment, and, finally, organizing the collected data into the internal database of indigenous design solutions.

As Casakin and Goldschmidt (1999) claim, novice designers do not need to be taught how to use analogy: they already have this cognitive capacity. They do need, however, to be shown *how* and *why* it can be helpful to harness this ability for successful design problem solving. A unique opportunity to study

indigenous objects in their original context, rather than in the museum, gave rise to the key method of the emergent School of Arctic Design, i.e. a method of learning from the indigenous culture – to uncover the principles of Arctic adaptation and survival coded in the natives’ artifacts, with an eye to develop an entirely new material environment for the growing and diverse community of Arctic temporary visitors (shift-workers, tourists, etc.).

While the organisational form of the School have been actively changing, the method of design fieldwork and, generally, the method “of learning from the indigenous culture” have also been polished: the initial purpose to reveal and clarify a complex interplay between the shapes of things, their functions and climatic conditions of use, has been transformed into the integral *vision* to enable designers to use indigenous knowledge in a creative and perceptive way. The goal behind this vision of an Arctic future is to develop the sustainable system of human presence in the region based on an ultimate respect for nature.

This vision shaped a new wave of constructive research interest within the School. The case that follows is centered on the field encounters with non-native northern inhabitants that put forward a more pronounced manifestation of a universal phenomenon of people’s creativity as technology users.

Case study 2: Geographically constructed creativity

Largely overlooked by designers and planners, the principles of non-indigenous self-sufficiency and people’s creative response to overcome the challenges of northern nature became the subject of master’s and then doctoral research by one of the authors.

I got interested in the human-machine interactions in severe environmental conditions: how people make their technology function on the everyday basis, what kind of adaptations and changes it requires from both sides, i.e. the user and the object? One of the turning points was a memorable encounter in one of my early trips to Siberia... I was supposed to get to one village, which has a road passable only for several

weeks in a year, and there was a friendly truck driver who agreed to help me and drive me there. During that journey we talked a lot and I at some point asked a pretty naïve question: “What kind of music do you usually listen while driving?” He got silent, looked at me very seriously and then said very slowly: “I do not listen to music. I’m constantly listening to the engine. This is the road music my work and my entire life depends on.” That was shocking. I’ve been returning to this phrase over and over again, and this what – to some extent – provoked my further thoughts on Arctic technology and Arctic mobility in general.

Another revelation came from an ATV driver in Polar Urals: “Modern vehicles get obsolete very quickly. Why on Earth would I buy a snowmobile specially designed for hunting, if there are no other hunters around I could sell it to in a couple of years? No, I would prefer a generally reliable machine to customize it myself and – when the guarantee is over – to redesign it back and sell it off for a good price...”

The general eye-opening experience obtained in the field was that a good machine/vehicle for the Arctic conditions was not the one that was unbreakable and could work endlessly, but the one, which was responsive, understandable, and – surprise! – constantly asked for the user’s attention and – for that – it paid back with (maybe short-term, but) proper functioning.

(Usenyuk, field notes and afterthoughts, 2009–2013.)

This case draws attention to the “voice” of a specific, in many regards “silent”, community of northern drivers, or, in a wider sense, of northern technology users (Figure 12). Through field encounters it was discovered how severe settings evoke people’s creativity: the proposed concept of “proximal design” (Usenyuk et al., 2016) encompassed not only users’ ability to adjust, repair and redesign their machines, but the very ability to create totally new kinds of technology and,

eventually, to come up with enduring design principles without the participation of design professionals.

While the emerging domain of Arctic design has recognized the significance of traditional artifacts, technologies and practices, this case has revealed the lack of professional awareness of, as Latour (2008) expressed it, many controversies as well as many contradicting stakeholders that appear with any designed object. To fill this gap within the design education framework, the toolkit of “technological aesthetics”⁴ was complemented with a sociological approach to the study of the interrelationships of producers and users of technology as well as technology and society, so-called “Biographies of Technologies and Practices” (BoTP) (Hyysalo, 2010). This represented the fruitful combination of historical and ethnographic investigation into technology design and related practices of making, using and maintaining. This turn has opened up a new perspective within the School’s research interests, with increased potential of international multidisciplinary cooperation. The lessons from the Russian North turned into valuable contribu-

Figure 12. Glimpses from fieldwork among northern drivers. Photos: S. Usenyuk-Kravchuk, 2006–2015.



tions to contemporary debates in related disciplines, particularly Science and Technology Studies (STS) and user innovation studies at the international level (Hyysalo & Usenyuk, 2015). In terms of practical implementation, these lessons yielded a significant design principle: geographical proximity of use and personalisation of meaning to ensure comprehensive usability of resulted design solutions.

Conclusion

In this chapter, the history of Arctic-oriented design education in Russia has unfolded along the lines of personal stories of field encounters and discoveries. First-hand inspirations from the field coupled with the creative nature of design education enabled critical reconsideration of the teaching and learning methods at the university level. While the model of the centralised education system implied the perception of knowledge as something possible to be captured and transmitted, rather than something to be co-created, the alternative formulation was developed and implemented at the School of Arctic Design incorporating four key principles or activities, as follows:

- *Discovering*: fieldwork experience, i.e. personal immersion into established living systems of Arctic inhabitants, to become a primary source of inspiration and hands-on training for design students;
- *Engaging*: situated teaching/mentoring practices to encourage collaboration and co-creation of knowledge with local communities and among students themselves;
- *Reflecting*: design solutions to envision radical and necessary alternatives for arctic (and global) technology futures, with attentiveness to geographical proximity of use and personalisation of meaning;
- *Validating*: involvement of multidisciplinary experts to guide design development processes, to ensure the quality of the project and to evaluate the results in terms of their

usefulness for design research and practice as well as policy and education.

Outlining the future perspectives, the suggested principles – discovering, engaging, reflecting and validating – can potentially broaden the understanding of the profession of design and provide an alternative basis for evaluating design work.

Overall, the chapter asserts that Arctic design is not separate from other domains of design theory and practice, and it certainly brings to the table of professional debates a novel sensitivity to the process of design and research. It puts forward a series of questions and concerns evoked by the extreme conditions of the Arctic but relevant to any design project. In conclusion, three sets of questions, directions for future research, are proposed:

1. How can we advance understanding of design as an adaptive strategy in the context of variable, extreme and uncertain environments? How have these adaptive strategies evolved within observable cycles of environmental change?
2. How can exploratory co-designed objects in the field and practice-based design research complement traditional scientific inquiry and contribute to understanding?
3. How can emerging forms of user-initiated innovations be sustained and supported in relation to a growing influx of people and technologies? How can ex-situ technologies be integrated into local knowledge networks, while respecting existing actors and patterns of use?

While the turn to appreciating field experiences in design is not generally new, in this chapter we emphasized its importance and importance of community-centeredness, with regard to design education. The ideas and concepts presented in this chapter, we believe, will be relevant to students and also to professional educators involved in developing research and teaching methodologies with emphasis on “indigenisation” or localisation of art and design programmes.

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Endnotes

- ¹ While the Arctic is widely acknowledged as vast international region and is mentioned in various contexts, for the purposes of this chapter and for describing our principles and practices, we use this term along with the terms “Far North”, “Arctic territories”, “The North” to refer to the geographical sites of Northern Russia, with particular focus on regions and communities we have experience with, i.e. in the Yamal Peninsula, Polar Urals, and Western Siberia.
- ² Indeed, the very concept of Arctic Design was officially introduced at the University of Lapland in 2012 in its in-house publication (Tahkokallio, 2012): it is an “open source” definition based on caring for the physical and socio-cultural wellbeing of a human as part of the fragile ecosystem of the circumpolar world. The community of Arctic designers has to date embraced a constantly growing number of design professionals, indigenous representatives, and business and public stakeholders.
- ³ One of the widely known examples from neighboring Finland is the movement “Dajii fake samegárvvuide – Say NO to fake Sámi costumes”, link to the Facebook page: <https://www.facebook.com/groups/19862103008/>.
- ⁴ A specific name for the theory of design given in the Soviet Union to replace the banned Western-originated term “design.”

References

- Alekseeva, T. (1977). *Geograficheskaya sreda i biologiya cheloveka* [The geographic environment and human biology]. Moscow: Mysl.
- Bergvall-Kareborn, B., Hoist, M., & Stahlbrost, A. (2009). Concept design with a living lab approach. In *2009 42nd Hawaii International Conference on System Sciences* (pp. 1–10). doi: 10.1109/HICSS.2009.123
- Bhabha, H. K. (1988). 1994 *The Location of culture*. Faber and Faber.
- Bhabha, H. K. (1996). Culture’s in-between. In S. Hall & P. Du Gay (Eds.), *Questions of cultural identity* (pp. 53–60). London: Sage.

- Bolotova, A. (2012). Loving and conquering nature: Shifting perceptions of the environment in the industrialised Russian north. *Europe-Asia Studies*, 64(4), 645–671. doi: 10.1080/09668136.2012.673248
- Casakin, H., & Goldschmidt, G. (1999). Expertise and the use of visual analogy: Implications for design education. *Design Studies*, 20(2), 153–175. doi: 10.1016/S0142-694X(98)00032-5
- Corser, R. (2008). Design in the public interest – The dilemma of professionalism. *Imagining America*, 14. Retrieved from <http://surface.syr.edu/ia/14>
- Fox, S. (1997). Situated learning theory versus traditional cognitive learning theory: why management education should not ignore management learning. *Systems Practice*, 10(6), 727–747.
- Garin, N., Usenyuk, S., Panova, M., & Kukanov, D. (2009). Design for extreme environment: Experience of Russian MD course. In A. Clarke, C. McMahon, W. Ion, P. Hogarth (Eds.), *DS 59: Proceedings of E&PDE 2009, the 11th Engineering and Product Design Education Conference - Creating a Better World, Brighton, UK, 10.–11.09.2009*, 564–569. Brighton: Design Society.
- Golovnev, A. V. (1995). *Govoriashchie kultury: Traditsii samodiitsev i ugrov* [Talkingcultures: Samoyed and Ugrian traditions]. Yekaterinburg: Rossiiskaia akademiia nauk, Uralskoe otd-nie, In-t istorii i arkhologii.
- Golovnev, A. V., Lezova, S., Abramov, I., Belorussova, S., & Babenkova, N. (2014). *Ethnoexpertiza na Yamale: nenetskie kochevia i gazovye mestorozhdeniya* [Ethnoexpertise on Yamal: Nenets routes and gas fields] (p. 232). Ekaterinburg: ABM Press: Russian Academy of Sciences, the Ural Branch.
- Golovnev, A. V., & Osherenko, G. (1999). *Siberian survival: The Nenets and their story*. Ithaca, USA: Cornell University Press.
- Hardt, M. (2012). The story of the frozen ice or the art of sustainable design in the Arctic. In P. Tahkokallio (Ed.), *Arctic design - Opening the discussion* (pp. 54–59). Rovaniemi: University of Lapland.
- Hasnulin, V. I., Voytik, I. M., Hasnulina, A. V., Ryabichenko, T. I., & Skosyreva, G. A. (2014). Some ethnic features of Northern Aborigines' psychophysiology as a base for survival in extreme natural conditions: A review. *Open Journal of Medical Psychology*, 3, 292–300. doi: 10.4236/ojmp.2014.34030
- Hyysalo, S. (2010). *Health technology development and use: From practice-bound imagination to evolving impacts*. New York: Routledge.
- Hyysalo, S., & Usenyuk, S. (2015). The user dominated technology era: Dynamics of dispersed peer-innovation. *Research Policy*, 44(3), 560–576. doi: 10.1016/j.res-pol.2015.01.002

- Irani, L., Vertesi, J., Dourish, P., Philip, K., & Grinter, R. E. (2010). Postcolonial computing: A lens on design and development. In *Proceedings of the 28th international conference on human factors in computing systems* (pp. 1311–1320). New York: ACM. doi: 10.1145/1753326.1753522
- Johnston, A. (2000). Indigenous peoples and ecotourism: Bringing indigenous knowledge and rights into the sustainability equation. *Tourism Recreation Research*, 25(2), 89–96.
- Josephson, P. R. (1995). Projects of the century in Soviet history: Large-scale technologies from Lenin to Gorbachev. *Technology and Culture*, 36(3), 519–559.
- Krippendorff, K. (2005). *The Semantic Turn: A New Foundation for Design*. Boca Raton, Fla: Taylor & Francis.
- Krupnik, I. (1993). *Arctic adaptations: Native whalers and reindeer herders of Northern Eurasia*. (M. Levenson, Ed. & Trans., expanded English edition.). Hanover: University Press of New England.
- Kvashnin, Y. (2010). Sovremennyye Etnopoliticheskiye Protsessy v Yamalo-Nenetskom Avtonomnom Okruge [Modern ethnopolitical processes in Yamal-Nenets autonomous Okrug]. *Izvestia AltGU Journal*, 4–3, 101–108.
- Latour, B. (2008). A cautious Prometheus? A few steps toward a philosophy of design. In *Proceedings of the 2008 annual international conference of the design history society* (pp. 2–10). University College Falmouth, Cornwall, United Kingdom: Universal Publishers. Retrieved from <https://hal-sciencespo.archives-ouvertes.fr/hal-00972919>
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge university press.
- Muller, M. J., & Druin, A. (2010). Participatory design: The third space in HCI. In J. Jacko and A. Sears (Eds.) *Handbook of HCI* (pp. 1050–1075). Mahway, NJ: Erlbaum.
- Naum, M. (2012). Difficult middles, hybridity and ambivalence of a medieval frontier: The cultural landscape of Lolland and Falster (Denmark). *Journal of Medieval History*, 38(1), 56–75. doi: 10.1080/13044184.2011.644755
- Pashkevich, A., & Keskitalo, E. C. H. (2017). Representations and uses of indigenous areas in tourism experiences in the Russian Arctic. *Polar Geography*, 40(2), 85–101. doi: 10.1080/1088937X.2017.1303753
- Pushkarev, V. M., & Goryachenko, E. E. (1996). Indigenous peoples of the Tyumen North under the conditions of industrial expansion. In L. Lyck & Boyko V. I. (Eds.), *Management, technology and human resources policy in the Arctic (The North)*. NATO ASI Series, Series 4: Science and technology Policy, 5. doi: 10.1007/978-94-009-0249-7_41
- Ruttikay-Miklían, E. (2001). Revival and survival in Iugra. *Nationalities Papers*, 29(1), 153–170. doi: 10.1080/00905990120036439

- Sokolova, Z. (1990). Narody Severa SSSR: proshloe, nastoyashchee i budushchee [Peoples of the north of the USSR: past, present and future]. *Sovetskaya Etnografiya*, 6, 17–32.
- Stammeler, F. (2005). *Reindeer nomads meet the market: culture, property and globalisation at the “end of the land”*. Münster: Lit.
- Suri, J. F. (2011). Poetic observation: What designers make of what they see. In A. J. Clarke (Ed.), *Design anthropology* (pp. 16–32). Vienna: Springer. doi: 10.1007/978-3-7091-0234-3_2
- Tahkokallio, P. (Ed.). (2012). *Arctic design - Opening the discussion*. Rovaniemi: University of Lapland.
- Usenyuk, S. (2008). The Russian North: Northern tourism through design professionals. *Tourism and Hospitality Planning & Development*, 5(2), 131–147. doi: 10.1080/14790530802252792
- Usenyuk, S., & Gostyaeva, M. (2017). Arctic tourism: the design approach with reference to the Russian North. In K. Latola, & H. Savela (Eds.), *The interconnected Arctic – UArctic Congress 2016* (pp. 231–241). Springer International Publishing.
- Usenyuk, S., Hyysalo, S., & Whalen, J. (2016). Proximal design: Users as designers of mobility in the Russian North. *Technology and Culture*, 57(4), 866–908. doi: 10.1353/tech.2016.0110



ARCTIC ART & DESIGN EDUCATION AND CULTURAL SUSTAINABILITY IN FINNISH LAPLAND

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Introduction

In this chapter we review the theory and practice of the international Arctic Art and Design master's programme (AAD) developed at the University of Lapland (UoL) which began in 2015. We will reflect on its contribution to regional development and cultural sustainability through the students' art and design pilot projects carried out in collaboration with local communities.

The economic, political and cultural interest in the Arctic has been growing rapidly as both business and public sectors are seeking for new opportunities within the areas of the Arctic (Nordic Council of Ministers, 2011). New livelihoods have been developed due to the growing international interest in the Arctic. The regional businesses, stakeholders and higher education institutions have all the possibilities and benefits of developing of the region and the focus of activities has gradually moved towards international demands. Local industries especially those concentrating on tourism, have been developing their services in response to these demands by building their brands based on local culture, traditions and stories in order to increase visibility and competitiveness in global markets.

Although globalisation has many possibilities, it has also increased concerns about standardisation of local and cultural features. As people move and travel more regularly, the definition of local becomes challenging. The students studying in the AAD come from various international backgrounds. Although some from Finland, most are facing a new cultural situation working in the Arctic context with intercultural student groups and local agencies. Thus introducing and working with the regional features and local materials, cultural aspects and traditional ways of living are seen as important principles in AAD to promote intercultural competence and cultural sustainability in the Arctic. This is achieved through educating professional applied visual artists and service designers who are familiar with the specific needs of the northern culture, environment and economy.

The chapter outlines the requirements and challenges of cultural understanding when developing the region in partnership with the Arctic communities. As artists and designers work more on a local level, the role of education as an enabler for understanding cultural aspects of the area becomes vital. We will

discuss these issues by explaining the background and basic principles of AAD and address the concept of cultural sustainability by examining it through place, people and intercultural competencies. Through two case studies of student pilot¹ projects, we will consider how the methods of Applied Visual Arts (AVA) and service design take into account cultural sustainability. We also reflect on the challenges and possibilities for intercultural students working with local communities in the environment and special conditions of the Arctic. We explore these aspects through the *My Stage* and *Tonttula (Elves Hideaway)* student projects implemented during 2016–2017. The *My Stage* project was arranged to offer theatre-based art workshops for immigrant women living in Rovaniemi to support their integration. The *Tonttula* project aimed to design a visitor experience concept for travellers in a tourism company *Taivaanvalkeat*, located in Kittilä, northern Lapland. These projects represent approaches that use both AVA and Service design techniques and have intercultural working teams.

The authors' backgrounds are in art education and service design and we have been developing the *project studies*² element of the AAD programme together. Data presented here were collected during the *projects studies*; workshop materials, group interviews and student field reports and subsequently analysed using a close-reading approach (Fisher & Frey, 2014). AAD is continuously evaluated using an action research paradigm (Anttila, 2006; Jokela, Hiltunen, & Härkönen, 2015) involving the teaching staff and students of the programme. This study formed the first cycle of action research and so informed the future development of the programme.

Applied Visual Art – a component in Arctic Art and Design

The AAD program is a continuation from a longer development of Applied Visual Art and Service Design in the University of Lapland (UoL). It is a three-year pilot funded by the *European Union Social Fund* and the *Finnish Centre of Economic Development, Transport and the Environment*. The aims of these funding bodies are to support regional development. The development of AAD has been part of UoL's strategy for Arctic and Northern research to focus on

people, societies, the environment and their interaction. In addition, the regional development strategy for Finnish Lapland has concentrated on the same issues and stressed the need for increasing expertise on Arctic conditions. Innovation in harsh conditions has been seen as one of the keys for success. This is thought to be gained through so called 'creative industries' and culture where service design, art and culture-based methods play a central role in creating new approaches for tourism and wellbeing services in the area. (Nikander, Jokiaarre, & Mäcklin, 2014)

The regional development needs have resulted in a rethinking of the artists' (and also designers') professional image and ways to increasing new opportunities for them to succeed in the labour market both at home and abroad (Opetusministeriö, 2008). These demands for regional expertise in creative industries have laid the foundations for the development work of the AAD.

The need for new kinds of knowledge in visual arts has influenced the development of AVA in particular, at UoL for the past decade or so. AVA aims to produce a new kind of artistic, functional and research-based expertise and integrate it with the development needs of the region; tourism, adventure industry and the social sector. The methods used in AVA are situated at the intersection of visual arts, visual culture and social engagement from which it draws themes, *modus operandi* and networks. The AVA activities are always conducted in close cooperation between people, place, future users, different sectors of business life and society. AVA requires open-mindedness and new kind of approaches from the artist.

The artist's goal in AVA is not so much to create works of art but to find new territories to utilise their skills and expertise that serve certain needs or purposes in society at large and to find new opportunities for employment. AVA uses contemporary art approaches and one prerequisite for contemporary art's dialogic, contextual and situated activity is that they are focused on the participants' own environment and are recognised in their framework (Kester, 2004). This means that the collaboration with local communities or other partners is built on the values, needs and perspectives (historical, narratives, traditions) that are recognised by the participating groups and companies involved. This

socially-engaged and place-specific approach to art requires the pre- and co-understanding of cultural identities, psychological and economic wellbeing that is gained only through ongoing dialogue between local people about their locality, traditions and aspirations. This notion of 'place-specificity' has deep roots in the development work of contemporary art education, in particular within community art and environmental art, at our University. When planning and developing the locations it can be a challenge to find methods that can be used to reconcile the culture-preserving aspects with contemporary art's potentially controversial effects (Jokela, 2013a; Coutts, 2013; Hiltunen, 2009).

Approaching the Arctic through systematic, empathic and creative service design

At about the same time (during the 1990s) the department of Industrial Design at the University started to develop *service design* studies and the *Service Innovation Corner* (SINCO) that, similarly to AVA, connected the areas of cultural, social and human interaction. In both of these disciplines the principles of practice and research were participatory in nature. As a developer of service design, the faculty started to create possibilities for effective service production in public services, the private sector and also in educational and cultural institutions (Miettinen, Rontti, Kuure & Lindström, 2011; Miettinen, Laivamaa, & Alhonsuo, 2014; Jokela, Coutts, Huhmarniemi, & Härkönen, 2013).

Service design with its human-centric approach, aims to observe, develop and test services by considering the perspectives of different persons. Service design's characteristics in systematic planning, empathy and creativity can promote innovative routes to participation. In the AAD programme, service design has been used to enable local actors to participate in the planning and development of service provision. This has been implemented through user-driven activities with representatives of the organisations in question. Co-operation between AAD and local agencies has been mainly in social and cultural services, cultural tourism and wellness tourism which have been long-term developmental goals in the Lapland region.

Another phenomena leading to development of the AAD programme has been the changing role of the designer. From the 1950s to the 21st century, the profession of designer has changed rapidly from the artist, industrial designer, design manager and strategist to facilitator, communicator and co-creator who is able to translate and communicate information through visualisations and act as a link between design, planning and policy (Valtonen, 2005; Tan, 2009). The design profession has developed towards the social and human-centric, the role of Service Designer is now to act as an equal participant with the skills of facilitation and empathy. Knowing the culture, history and place of the community, individual or environment is vital when selecting from the wide variety of service design tools and methods. This goes hand in hand with AVA's place-specific working approaches. Service designers are using various methods to produce data together with collaborators. That can support effective innovation processes through visualizations and prototypes and above all create engagement to development work. Usually methods are attached and categorized to different phases of the process. The participatory development process can increase a community's sense of empowerment and level of personal control and even define new roles for the members of communities and the broader socio-political environment (Miettinen & Vuontisjärvi, 2016).

The AAD programme also has objectives in contemporary design. Firstly, increased understanding of the effects of art and design in supporting wellbeing and secondly, the potential of visual artists and designers to find employment in multidisciplinary development projects and companies in the region are important goals in AAD education.

According to a wider interpretation of service design, it involves AVA complying with the societal paradigm of contemporary art. Artistic activity is considered to be a service as well as tool for service development. Art is understood as a social and communal process that produces values, symbols, meanings, and practices for the Arctic. Active participation and engagement of users and communities in the design processes are valued for both disciplines. The AVA and service design processes are usually evaluated through an action research approach to produce knowledge that benefits the cultural heritage of the

Arctic. (Jokela, 2013b; Miettinen et al., 2014) Even though the training concentrates strongly on cultural aspects and sustainability in the Arctic, the aim is to offer general strategies, values and thinking that the students are able to apply and use in their later professions in a more global context.

Towards authentic experience through project-based learning

Considering the nature of socially-engaged AVA and human-centric service design, learning is seen to take place through dynamic social interaction rather than only in individual processes. Knowledge is constructed in interaction between people in a creative dialogue. The AAD curriculum is built around the notion of *project-based learning*, that is connected to the constructivist learning theory where learner is seen as an active producer of knowledge. The new knowledge is based on previous knowledge and experiences. Also, the subjective meaning constructed by individuals is tied to the meaning systems that prevail in the community. This has its roots in social constructionism, that according to Berger and Luckmann (1994) understands reality as a *social construction* formed in the interaction between individuals. This reality is maintained and transformed in a dialogue between people (Tynjälä, 1999).

The *Arctic Art and Design Project* acts as a ‘backbone’ for the studies in the programme. The project is intended to form the basis for developing the students’ professional skills in a specific discipline of art and design. The other studies in the degree are planned to support the growth of specific skills needed in the project. The students are also encouraged to connect their projects studies with their thesis to approach the action from three different perspectives: artist (or designer), researcher and learner. Carrying out research alongside the practical work of the project helps students maintain the elements for well-designed processes. The principle behind this is that profound knowledge and understanding of the working context can yield permanent positive effects. Understanding the place’s multiple dimensions helps make culturally, environmentally and socially sustainable solutions. (Coutts, 2013; Jokela, 2013a; Jokela, Hiltunen, Huhmarniemi, & Valkonen, 2006.)

Figure 1. The AAD study structure. AAD Project STUDIES and Master's Thesis are planned to follow through the 2 year studies. Students are able to connect their other studies to these in order to benefit the project and thesis work.



During their project, the students regularly meet with their project stakeholders visiting the location and are in constant interaction with the people involved to plan the activities for their project. In order to understand the history, traditions, social contexts and ways of earning a living of their specific project location and to make sustainable decisions, the students are required to conduct thorough place-based research. This is based on the notion that through real investigation with local people and familiarisation with related literature, the students gain authentic understanding of the place and are better informed to carry out the work.

Place, people and cultural sustainability

In the socio-cultural context of AAD, Arctic well-being is a key objective of our work. Diverse lifestyles of indigenous cultures and other northern nationalities is a typical feature of the northern region. Life-determining characteristics of



Figure 2. The second project meeting in Tonttula, students presented their designs for the owner of the place. Lauri Pitkänen showing his handcrafted doll. Photo: Tanya Kravtsov.

the Arctic are the region's low population, long distances and the realities of geography: the Arctic Circle marks the boundary of a region that has harsh weather conditions and extreme variations in the length of the day. The Arctic is also a blender of extremely diverse living conditions, all currently in a period of transition (Heikkilä, & Laukkanen, 2013).

Intercultural competence, empathy and understanding local living conditions, traditions and place are important pre-requisites to survive as and artist or designer in the area. These elements can be seen to form a local culture which is considered as a holistic concept encapsulating the various dimensions of life. Culture in its broadest sense shapes society, governs our economic models and

ambitions and, through those, shapes our environment (Auclair & Fairclough, 2015). It is a living, local thing concerned with representations and identities and the stories that structure a sense of place, belonging and possibilities of living well (Stewart & Campbell 2008). Sustainability embodies pluralistic, community-based thinking where it represents both problem and possibility, form and process. It concerns issues, values and means whereby a society or community may continue to exist (Dessein, Soini, Fairclough, & Horlings, 2015).

When thinking of cultural aspects and regional features that influence people's everyday life, cultural sustainability is not necessarily about 'protecting the past' or 'saving and rescuing' it. Rather more importantly, it should be understood as a continual processes of remaking, rooted in social construction, in individual and collective perception and in their specificities of time and place. It is essential to perceive how lives are lived and the ways identities and relationships are formed in certain parts of the world. Cultural sustainability should no longer rely only on experts defining and researching the values of heritage and landscape, but rather should consist of a people-centric approach to analysis to create an inventory of the elements that inhabitants themselves value and how they want to express their sense of place (Auclair & Fairclough, 2015). By understanding a place as a layered location with human histories and memories, artists and designers can build a sustainable foundation to their planning and production (Lippard, 1997).

Being an international programme and operating in a very specific environment, cultural aspects come to fore perhaps more strongly than in other national training programmes. The students come from various nationalities and usually have some pre-knowledge of Finnish Lapland when they arrive. It is therefore crucial that before the students begin their fieldwork, they start with place-research. An essential aspect to the research is that it continues throughout the working process and the proposals are evaluated with the collaborative partners on a regular basis. The place-research consists of the following aspects: place as subjective (e.g. how they experience the place), as objective (characteristics of the place) and as textual entity (written and spoken stories, histories, communal conceptions of the place, interviews). To truly

understand the contexts and formulation of the place, several visits to the location are often required. Through a rigorous research process the students not only get better acquainted with the culture of the place, but also are able to design culturally sustainable proposals or outcomes.

Promoting cultural sustainability, intercultural competence and ability to support dialogue between groups of people with different ethnic and cultural backgrounds becomes important. Intercultural competence requires openness as a prerequisite and, while openness in itself is not the guarantee of intercultural understanding, it provides the conditions for it to develop. Intercultural competence means having the ability to think and act in culturally appropriate ways. This allows one's culture to be experienced in the context of other cultures and manifests itself in three different stages: acceptance, adaptation and integration (Wood, Landry, & Bloomfield, 2006; Hammer, Bennett, & Wiseman, 2003). Intercultural learning increases alertness in recognising the differences in human cultures. Thus it increases cultural sensitivity in the projects and production of proposals or artworks.

AVA and service design work as methods seeing of oneself holistically, in respect of community and environment. Understanding other cultures requires skill of empathy. However, intercultural learning is not just about acquiring new knowledge at the cognitive level, it requires participation in a social experience that involves the discovery of difference through authentic experience of cross-cultural interaction (Hernández, 1999; De Vita, 2005). In AAD, a valuable asset for creating meaningful encounters and true cultural understanding arise from the student's own intercultural competence. Being an intercultural student group the value of peer sharing cannot be underestimated in the process of integration.

Piloting AAD in real environments

The two selected student pilot projects here both aim to utilize AVA and service design principles in their working and both had intercultural and interdisciplinary working teams. A central AVA and service design principle is to start the process from the definition of the customers needs. The partners for AAD pilot

projects usually have ready development goals or challenges, but students bring their understanding of the human-centric aspect to the work through participatory process and methods.

The first case, *My Stage*, is part of the *ArtGear* project (2016–2019) run collaboratively by the faculties of Art and Design and Social Work at UoL, the Artists' Association of Lapland (AAL) and the cross-art collective *Piste*. It is funded by the *European Union Social Fund* and the *Finnish Centre of Economic Development, Transport and the Environment*. *ArtGear's* art-based activities focus on two-way integration among youth with Finnish and immigrant backgrounds to reduce discrimination. *My Stage* was arranged for immigrant women living in Rovaniemi in autumn 2016. It utilised theatre and art modes such as sketching, poetry, collage, play-back theatre and other theatre preparatory exercises to build up team spirit and open up dialogue about living in Finland as a foreigner. The project used research approaches using ethnographic analysis combined with art education, social work and service design as well as a theatre practitioner's and a participant's experiential knowledge, visual documentation and group discussions. Our student, Moira Douranou had a design background and she worked in collaboration with a professional artist Anne Niskala and a researcher from Social Work, Enni Mikkonen. Douranou's focus was on using both AVA and service design methods in her working. She documented the activities and participated in the workshop as a fieldwork researcher.

The second case *Tonttula/Elves Hideaway* is part of the *Environmental Art for Tourism* project (2016–2018) carried out in collaboration with UoL, AAL, and four local tourism companies. It is funded by the *European Regional Development Fund* and *Regional Council of Lapland* and it aims to support the participating companies' tourism environment development and introduction of new technologies. Its objectives are to increase the use of environmental art in nature tourism destinations and developing tourist services for high-quality nature tourism environments. The team working in *Tonttula/Elves Hideaway* project, is multidisciplinary. The AAD students Hanna-Elina Hämäläinen and Tanya Kravtsov have both art and design backgrounds and all of their interest is on using AVA and service design approaches to achieve high-quality outcomes

that serve the customers and the company *Taivaanvalkeat Ltd* in a culturally sustainable manner. They also have a professional scenographer Tuuli Seppälä working with them in the planning process. Students designed an experience concept for travellers in the tourism company *Taivaanvalkeat*. The design concept consists of a bridge leading the customers to the Magical Forest through the underground world of *Maahinen* (a creature from Finnish folklore) in the tunnel, to the most secret place of elves, the *Hidden Huts*. The concept design required extensive inquiry into the local culture, history, traditions, folklore, environment and natural materials that determined the planning. The service design point of view for this concept was on designing the customer journey and an experience. This project is ongoing at the time of writing (2017).

In both of these projects, the students had an opportunity to work in intercultural and interdisciplinary teams. The teams had students both from foreign and Finnish backgrounds and were formed based on knowledge, interest and former education experience. Students had an opportunity to use their previous education in the project which increased the professionalism of the project. Students often chose to do more specialist studies to increase their skills in particular fields. For example, in *My Stage*, Douranou took studies in intercultural competence and in Tonttula the students had the chance to consult an architect and engineers for designing the structural elements for the environment.

The two pilot projects had rather different approaches to human-centric working. Based on the collected data, in *My Stage* the team's active and equal participation in the workshop activities was considered a key for creating trust and confidential atmosphere. It was emphasised to successfully build the trust and acceptance in an multicultural group. This also laid the ground for open discussion about life in Finland as an immigrant. Cultural differences were brought up and the experience of comparison helped them to reflect their integration process in a candid approach.

As in *My Stage*, the group of participants were primarily immigrants together looking for a meaningful way to live in another country the living environment, Rovaniemi, had some but not the most significant influence on the activities. In principle, a similar setting could have been arranged

anywhere else since the focus was more on the dynamics of the group itself. In the case of *Tonttula*, the meaning of place laid foundation for all the operations. The basis for work was derived from its local culture, traditions, knowledge and materials. This required the students to conduct in-depth place research throughout their project.

The planning has continued from place research to collecting visual imagery and testing different construction materials, e.g. environmental-friendly geopolymer produced from industrial byproducts. Sketching of the structures



Figure 3. Samples of the visual place-research from the Tonttula-project. Identifying the local materials using sketches and physical mock-up. Testing the elements and experiences in the service design laboratory (SINCO). Images and Sketches: Tanya Kravtsov and Hanna-Elina Hämäläinen.

and building a mock-up helped test the usability. Bringing this to the customer level, the next phase is to build a prototype of the real physical experience of Tonttula environment in the SINCO laboratory. There service environment and user experience can be prototyped together with the company's employees and possibly potential customers.

Linguistic challenges arose several times in both pilot projects. To overcome them, efforts were made to find solutions through visual communication and body language interpretation. Observing and interpreting situations without knowing the spoken language, documentation was made systematically by sketching actions and emotions during the sessions. That also helped to pay attention to the non-verbal communication.

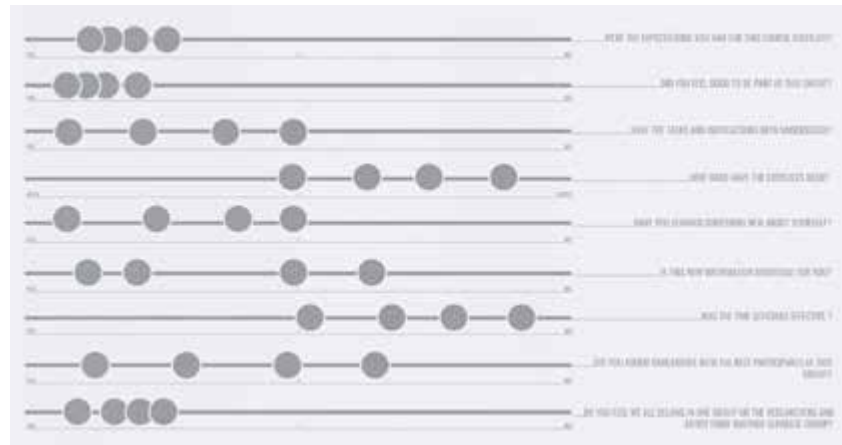
Often, in each of the projects, the background material and literature was only in Finnish and caused difficulties in finding adequate information about the local culture and history. Students also turned to their peer Finnish students or supervisors for interpretations. Despite the challenges, especially in *My Stage* project, Finnish used as a common language was seen as a bonding point with the participants.

Our experience in supervising these projects studies, was two-fold. We worked hard to bring together our knowledge from AVA and service design in



Figure 4. Extracts from Moira Douranou's visual diary where she found ways to collect not oral, but visual feedback.

Figures 5a & 5b. Migrant women participating in the physical inquiry of the My stage project in Rovaniemi. The upper picture shows the artist explaining the given exercise; giving physical feedback of each task carried out during the workshop. (Playback theatre, Poems, Theatre practises, Collage, Drawings). The graphic figures visualized the statements 'I like the most', 'I like the least', 'I learned a lot', 'I did not understand', 'Helpful for me', 'Interested for me'. The data was later visualized in a chart. December 2016. Photo and chart Moira Douranou.



meaningful and understandable ways. At times we worried that it would appear as confusing. The students feedback emphasised that having both approaches present in the exercises was seen to benefit their thinking about how to take into account the principles from both disciplines (AVA and service design) when planning sustainable activities.

Conclusion

In our experience of projects, where cultural aspects are an issue, comparing the differences or similarities of AVA and service design should not be the main issue rather, concentrating on the benefits these disciplines might bring to the visual and human-centric intercultural communication is more essential. Students have often struggled to draw a clear distinction between whether an activity is AVA or service design and so channel their energy and focus on more minor issues. Through these projects, we discovered that these disciplines can complement and merge together naturally.

Throughout the development of AVA and service design, respecting locality in a broad sense has been the main priority in creating culturally sustainable working methods. This has been accomplished through a model of in-depth place-research as a unifying theme throughout the students' project studies. Through these models we are able to support the dialogue between students integration and also enhancement of regional development.

Challenges however, often appear in different forms of communication. Without speaking the language, nuances may remain hidden and when the language used (normally English) is not the language of the locals, meaning constructions vary. Students are open and aware of the situations caused by language barriers and rather creatively approach the challenges by using visual tools for interpretation and communication. They also say that without the language they better pay attention to the non-verbal communication. One great advantage related to the language issues has been the presence of the Finnish students in the program which are usually teamed with the international students to their projects. Finnish students are seen as a bridge to understanding the context better and their help in the language is greatly appreciated by their international peers. In turn, the Finnish students mention that they have become more conscious of their own cultural aspects and behaviour when put into situation of an interpreter of the language and cultural phenomenon. The peer support and sharing knowledge was emphasized repeatedly in the student feedback. One valuable addition to the AAD programme in creating cultural sustainability lies in the intercultural competence of the students group.

It has also become clear that real, ‘working-life’, projects support intercultural learning. According to the students, participating in authentic social surroundings made learning more meaningful and working with real partners led to a better understanding of culture, language and behavioral models of the place. Due to the language barriers, they found interaction with real partners and project cases somewhat demanding at the beginning of their studies, but gradually they gained self-confidence and valued the challenge as a great learning opportunity. Thus, bringing the students into local cultural contexts right at the beginning of their studies appears to help them to develop their cultural understanding, give them strategies to navigate in the Arctic environment and should help apply these skills to other contexts later. Through these measures, the educational model of AAD aims to benefit regional development while supporting cultural sustainability in the Arctic.

Endnotes

¹The students projects are pilots as they very often seek new solutions and approaches through benchmarking, testing and designing. Or they are development projects, where new concepts for companies are tested. They can also be based on identified problems / needs from a particular community that the student project seeks solutions to.

²The development of the AAD project studies has focused on bringing AVA and service design tools together to benefit more thorough approach to the project locations. The students carry out exercises from both fields during the planning phase of their project and choose later what tools benefit the implementation.

References

- Anttila, P. (2006). *Tutkiva toiminta ja ilmaisu, teos, tekeminen*. [Exploring the activity and the expression, the work, the making.] Hamina: Akatiimi.
- Auclair, E., & Fairclough, G. (Eds.). (2015). *Theory and practice in heritage and sustainability. Between past and future*. Oxon & New York: Routledge.

- Dessein, J., Soini, K., Fairclough G., & Horlings, L. (Eds.). (2015). *Culture in, for and as sustainable development: Conclusions from the COST Action IS1007 investigating cultural sustainability*. Jyväskylä: University of Jyväskylä.
- De Vita, G. (2005). Fostering intercultural learning through multicultural group work. In J. Carroll & J. Ryan (Eds.), *Teaching international students – Improving learning for all*. London: Routledge.
- Coutts, G. (2013). Applied visual arts: Learning for the real world? In T. Jokela, G. Coutts, M. Huhmarniemi, & E. Härkönen (Eds.), *COOL – Applied visual arts in the North* (pp. 22–31). Rovaniemi: University of Lapland.
- Fisher, D., & Frey, N. (2014). *Close reading and writing from sources*. International Reading Association.
- Hammer, M. R., Bennett, M. J., & Wiseman, R. (2003). Measuring intercultural sensitivity: The intercultural development inventory. *International Journal of Intercultural Relations*, 27(4), 421–443.
- Heikkilä, M., & Laukkanen, M. (2013). *The Arctic calls*. Finland, the European Union and the Arctic Region. Rovaniemi: Arctic Centre.
- Hernández, F. (1999). Cultural diversity an art education. The Spanish experience. In D. Boughton, & R. Mason (Eds.), *Beyond multicultural art education: international perspectives*. *European Studies in Education*, 12, 103–113.
- Hiltunen, M. (2009). *Community-based art education: Through performativity in Northern sociocultural environments*. Rovaniemi: University of Lapland.
- Jokela, T. (2013a). Engaged art in the North – aims, methods, contexts. In T. Jokela, & G. Coutts, M. Huhmarniemi & E. Härkönen (Eds.), *COOL – Applied Visual Arts in the North* (pp. 10–21). Rovaniemi: University of Lapland.
- Jokela, T. (2013b). Art education in the North, and the rest of the world. *Public service review, Europe*, 2003(25), 1–3.
- Jokela, T., Coutts, G., Huhmarniemi, M., & Härkönen, E. (Eds.). (2013). *COOL – Applied visual arts in the North*. Rovaniemi: University of Lapland.
- Jokela, T., Hiltunen, M., Huhmarniemi, M., & Valkonen V. (2006). *Art, community and environment*. Rovaniemi: University of Lapland. Retrieved from <http://ace.ulapland.fi/ty/english.html?osio=3.3>
- Jokela, T., Hiltunen, M., & Härkönen, E. (2015). Art-based action research – participatory art for the North. *International Journal of Education Through Art*, 11(3), 433–448.
- Kester, G. (2004). *Conversation Pieces. Community + Communication in Modern Art*. California & London: University of California Press.
- Lippard, L. (1997). *The lure of the local – Senses of place in a multicentered society*. New York: New Press.

- Miettinen, S., Laivamaa, L., & Alhonsuo, M. (2014). Designing Arctic Products and Services. In T. Jokela & G. Coutts (Eds.), *Relate North: Engagement, art and representation* (pp. 104–127). Rovaniemi: Lapland University Press.
- Miettinen, S., Rontti, S., Kuure, E., & Lindström, A. (2011). Realizing design thinking through a service design process and innovative prototyping laboratory. Introducing Service Design Innovation Corner (SINCO). In P. Israsena, J. Tangsantikul & D. Durling (Eds.), *Design research society 2012. Conference proceedings. Research: Uncertainty, contradiction, value* (pp. 1202–1215). Bangkok: Chulalongkorn University.
- Miettinen, S., & Vuontisjärvi, H.-R. (2016). Rethinking the marginal – service design for development, in designing for the public good. In Y. Sotamaa & L. Yongqi (Eds.), *Design for all* (pp. 83–95). New Delhi: Design for All Institute of India. Retrieved from <http://www.designforall.in/newsletteraug2016.pdf>
- Nikander, M., Jokiaarre, P., & Mäcklin, K. (2014). *Lappi-sopimus. Maakuntaohjelma 2014–2017*. [The Lapland agreement. County agenda 2014–2017]. Rovaniemi: Lapin Liitto. Retrieved from: http://www.lappi.fi/lapinliitto/c/document_library/get_file?folderId=26465&name=DLFE-24375.pdf
- Nordic Council of Ministers. (2011). Megatrends. *TemaNord*, 527. Copenhagen: Nordic Council of Ministers. Retrieved from www.norden.org/en/publications/publications/2011-527
- Opetusministeriö. (2008). *Kuvataiteen koulutus ja tutkimus Suomessa 2007*. [The education and research of visual arts in Finland 2007]. Opetusministeriön työryhmämuistioita ja selvityksiä 2007:17.
- Stewart, R., & Campbell, C. (2008). Cultural brokerage and regional arts: Developing an enabler model for cultural and economic sustainability. An Update. In T. Eça & R. Mason (Eds.), *International dialogues about visual culture, education and art* (pp. 14–17). Chicago: Intellect.
- Tan, L. (2009). *Design methodology in the public and social sector: Seven roles of designers. Dott 07 public design commission projects and their relevance to sustainable development contexts*. London: PhD Abstract.
- Tynjälä, P. (1999). *Oppiminen tiedon rakentamisena. Konstruktivistisen oppimiskäsityksen perusteita*. [Learning as constructor of knowledge. The principles of Constructivist Learning Theory]. Tampere: Tammi.
- Valtonen, A. (2005). *Six decades – and six different roles for the industrial designer*. Conference proceedings of Nordic Design Research Conference.
- Wood, P., Landry, C., & Bloomfield, J. (2006). *Cultural diversity in Britain: a toolkit for cross-cultural co-operation*. York: Joseph Rowntree Foundation.



THE LURE OF ICELAND:
Place-making through
Wool and Wildness
at the Arctic Circle

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Introduction

I can remember precisely when I began to long to travel North: I was 15 years old and flying back to Canada from my first visit to England, when out the plane window, I saw the miraculous whiteness and open terrain of Greenland below. I'd just had two weeks of touristic culture in and around London, and as wonderful as that was, I was feeling choked by the residues of Empire and colonialism, the uncomfortable and obvious classism and the heavy hand of humanity on southern England's urban landscape. Seeing the uncultivated ground of Greenland below was like a gift of fresh air. With no actual knowledge of the complexities of the region, I inhaled deeply. The North Atlantic claimed me. Decades later, it was nearby Iceland that would win me.



Figure 1. Greenland seen from an Icelandair plane window, May 28/29, 2016. Photo: Kathleen Vaughan.

This chapter takes a personal look at place-making in the North – construed here as the imaginary and actual experience of Iceland at the Arctic Circle – with special reference to my visitor status and artistic practice, and to the cultural specifics of Iceland. I traveled to Iceland for a 6-week visit in the spring/summer of 2016, most of which was spent at the Icelandic Textile Center in Blönduós. In this text, I link my unexpected experience of ‘being-at-home’ in Iceland to the tactile delights of wool – the characteristically Icelandic material of the artwork I developed there – and to the North’s perceived wildness, in particular the thrilling and disorienting 24-hour daylight of midsummer. Throughout my visit and the continuing making of Iceland-based art since, I have faced a question: how could I, as a visitor to this extraordinary country, see and respond in ways that went beyond the limitations of the tourist gaze (Urry, 2002), and make artwork that honored this place and reflected my sudden, strong-as-steel feeling of connection to it? In addressing this concern, I consider the potential of the ‘strange encounter’ (Ahmed, 2000) and the artist’s reflective-aesthetic gaze (Whiting & Hannam, 2014) as models for relating across difference.

Of course, other artists from Europe and North America have also turned to Iceland as refuge and respite. One such was Englishman William Morris (1834–1896), poet, painter, innovator in decorative arts and embroidery, often associated with the British Arts and Crafts movement, who traveled to Iceland in 1871 and 1873 (MacCarthy, 1994, Greenlaw, 2011). At the time of Morris’s visit, travellers from Western Europe reportedly considered Iceland as an “exotic and unfamiliar wilderness,” “a wild and untamed North Atlantic frontier, filled with dangerous nature and unpredictable inhabitants” (Oslund, 2011, p. 7). Victorian Englishmen such as Lord Dufferin – whose *Letters from High Latitudes* (1940; originally published 1856) was a mid-century bestseller – promoted a ‘gentleman explorer’ attitude towards Iceland, “treat[ing] Iceland as a great adventure playground, watching the birds and shooting them, climbing the unclimbed mountains, mapping out the remote areas which were still virgin ground” (MacCarthy, 1994, p. 290).

Not the least outdoorsy, Morris’s approach to the northern country went beyond this colonizing model and was motivated largely by his professional

interests in the country's poetry. After studying the Icelandic language and collaborating on translations of the sagas¹, Morris became interested in seeing the places so colourfully evoked in the texts. Accompanied by friends and guides and riding an Icelandic pony named Mouse, Morris visited the south, site of the first European parliament and the best known Njáls saga, and then camped his way across the country en route to the remote Northern fjords, a substantial journey not without peril. Hospitably welcoming the English traveller to learned conversations and occasional overnight lodging, the Icelanders inspired socialist-in-the-making Morris with their compassion and care for each other, a contrast to his experience of England. He wrote, "I learned one lesson there, thoroughly, I hope, that the most grinding poverty [in Iceland] is a trifling evil compared with the inequality of classes [in England]" (quoted in Greenlaw, 2011, p. xvii). Between his love for Iceland, progressive politics, environmentalism and innovations in embroidery, Morris has real relevance for the 21st century (Bennett & Miles, 2010) and in particular for me, as I consider my own connections to Iceland – as an outsider, a leftist and an artist who loves textiles.

My own 2016 trip – almost 150 years after Morris's – was similarly prompted by professional impulses. I came for a month-long artist's residency at the Textilsetur Íslands or Icelandic Textile Centre² in Blönduós, a community of 800 people 250 kilometres northwest of Reykjavik. Choosing to visit at midsummer, I'd proposed to make an artwork that charted both space – my walks through the Icelandic terrain – and time – the circuit of the sun through the sky during the 24-hour summer daylight. I planned to bring earth and sky together through a textile map.

My practice as an artist is place-based, oriented to the exploration of a locale's meanings; histories, political ecologies and aesthetic lustre. My understanding of place is inflected with the thinking of feminist geographer Doreen Massey, who sees place as a "simultaneity of stories so far" (2005, p. 10), a product of interrelations, never finished, never closed. One of my favourite ways to consider the complexities of place is through textile mapping. I create wall-sized, bird's-eye portraits of a locale, basing my compositions on various external sources (Google Maps, surveyors' maps, historical maps, topographical



Figure 2. My first morning in Reykjavik, overcome by the glorious spectrum of silvery greys, into which Jón Gunnar Árnason's Sun Voyager – made of stainless steel and granite – fits perfectly. Photo: Kathleen Vaughan.

charts, informational maps posted on site, hand drawn neighborhood sketches, guidebooks, etc.). These I render to-scale and aestheticize, using combinations of textile piecing and digital and hand embroidery. With wool, silk, organza and other enticingly tactile cloth, I construct a version of the site whose stories I wish to tell; label the terrain and its features with digitally embroidered text; and hand-stitch the routes that I walk through the space. Each map is a showcase of multiple walks, their particular overlapping and diverging trajectories needled in embroidery thread. I work with textiles because of the multiple way that cloth speaks. Cultural theorist Mary Jane Jacob writes:

Paintings are paint turned into illusion, but in weaving [and other textile forms], cloth is actual – material and meaning in one. Cloth, in practical and metaphorical ways, has played a key role in both daily life and in establishing social structures for centuries. Cloth is a mode of communication within and between civilizations, hence it was at

the center of colonial trade. And, like language and art that have been records of history, cloth is a way of remembering. (2007, p. 299.)

In my layers of cloth and stitching, I embody the sedimented knowledge of place that comes from repeated walks. Regular revisiting of terrain over time is key to my process. Walking for me is both method and content, as it is for artists such as Hamish Fulton (Dal Lago, Di Pietrantonio, König, & Vettese, 1999) and researchers including Sarah Pink and Maggie O'Neill (Pink, Hubbard, O'Neill, & Radley, 2010).

Using the trope of the map, I necessarily take up the politics and cultural discourses of place. Cartographical historian Brad Harley (1989) reminds us that while maps are often seen to be “the mirror of nature” (he borrows philosopher Richard Rorty’s phrase, p. 4), they are in fact rhetorical devices, expressing the cartographer’s particular bias of a specific moment in time. “The steps in making a map – selection, omission, simplification, classification, the creation of hierarchies, and ‘symbolization’ – are all inherently rhetorical” (p. 10). I propose that the rhetorical (that is, politicized and arbitrary) nature of these steps is accentuated through the displacement effect and surprise of textile use.

Ultimately, I hope that my maps raise questions of identity and belonging, of social and environmental justice, of delight in and respect towards their nature-cultures (Haraway, 2003). Map-making is also an aspect of my own place-making. Through my work of walking, tracking, researching, relating and crafting, I aim to develop a feeling of belonging to place, of being ‘at home’ in place. Aligned with feminists such as Doreen Massey (1992) and Elizabeth St. Pierre (2008), I resist a nostalgic, rose-coloured version of ‘home,’ which I define instead as “an ever-shifting standpoint from which to learn, grow, understand oneself, relate to others and contribute to communal life” (Vaughan, 2006, p. 4). Thus, place-making is personal, relational, ongoing; embodied, affective and cognitive.

While I have a creative history of mapping sites I know well (Vaughan, 2006; 2014), *Iceland: Earth and Sky* would be my first about a place that I was coming to fresh, as a traveling stranger. I would use my developed practices –

walking, researching, stitching – in my consideration of this new context. My artmaking would very deliberately be my place-making. Further, I would accentuate Iceland's the signature fibre: wool.

Wool

It is a running joke in Iceland that the nation is home to more than twice the number of sheep (800,000) as people (325,000) (Fontaine, 2015), with the curly animals prized for their meat, milk and fleece. The Icelandic sheep is a short-tailed breed that was brought to the island by the Vikings in the 900s. These animals have a distinctive warm double-textured coat that comes in shades of white, brown, grey and black, meaning that multiple colours of yarn can be created without dyeing. Wool is so deeply embedded in Icelandic cultural history that, at one time, taxes could be paid in wool; and beggars and vagrants in workhouses and prisons were forced to work with wool to pay their keep (Róbertsdóttir, 2008, p. 19). Knitting came to Iceland in the 16th century and has remained popular – as both practice and product – ever since. In 1831, North Icelanders were described as “always working in some manner with wool, especially knitting, wherever in darkness or light, sitting or walking, outside or inside” (Halldórsdóttir, 2009, n.p.).

A recognizable Icelandic wool commodity is the signature handknit pull-over or cardigan with a circular yoke and patterned borders. Part of Icelandic branding, these sweaters are vaunted as “one of the top Icelandic souvenirs worth buying” (Eliason, 2014). I was surprised to learn that this signature sweater design was not, as one might expect of a culture that prides itself on medieval roots, handed down through many generations. Rather, the *lopapeysa* – or sweater, *peysa*, made from *lopi* yarn – is a product of the mid-20th century, emerging after Iceland had declared its independence from Denmark in 1944. “It is no coincidence that this was in the post-WWII era, when Iceland was a newly established nation state, nor that an everyday object such as a woolen sweater became a distinguishing national symbol,” writes craft historian Gudrun Helgadóttir (2011, p. 61). The second upsurge in the

lopapeysa's popularity came post-2008, after Iceland's financial collapse. For Icelanders at that time, "Knitting ... represented a return to the authenticity of hand production, heritage and national symbolism" (p. 62). Wonderfully, the Icelandic sweater serves both natives and tourists:

For young Icelandic consumers, their purchase of the label connotes an identification with a place, a home, a visualized imagined past, while for the foreign consumer, it suggests the possession of something "authentically" Icelandic, an intimate connection, via the act of consumption to another, foreign culture. (Sigurjónsdóttir, 2011, p. 251.)

It is particularly important to local and international buyers that, in this age of 'scaling up' and machine-made 'fast fashion' created off-shore, these sweaters are handknit in Iceland using Icelandic wool: news that some lopapeysa were in fact knit in Taiwan and China did not sit well with locals or tourists (*Iceland Review Online*, 2012). Icelandic knitting yarn is so much in demand that during the 2016 summer of my visit, Iceland faced a shortage, caused by an increase in popularity of over 15% from the previous year (*Iceland Magazine*, 2016).

After once again gawking at Greenland out the plane window, I landed in Reykjavik early on May 29, 2016. A bit like Morris, I fled north, seeking freedom and creative focus in substantial studio time – which I found. But first, I was transfixed by the silvery quality of the northern light, the wonderfully tart acid greens of the groundcover, the deep luxuriant blues of the sunlit sea and sky, and the subtle spectrum of shifting greys that blew in with clouds and the rapidly changing weather. A Morris biographer expresses dismay that he, "the professional colourist, was faced with a monotony of greyness: grey water; grey clouds; grey stone ledges, interspersed with grey grass" (MacCarthy, 1994, p. 283). In fact, the only thing monotonous about the quicksilver spectrum of an overcast Icelandic landscape is the single word 'grey' chosen here to describe it.

Walking the small hills of Reykjavik, Iceland's perpetual wind energizing me, I was finding my palette. Stopping at one of the city's premiere specialty handknitting stores, I bought wool, mohair and silk yarn in the colours I saw

around me, both familiar globally marketed brands and Icelandic wool that was new to me. Of course, international traders right from the very start, Icelanders had long integrated silk and other luxury fibres into their textiles. Excavations show that even in the 9th and 10th centuries, Scandinavian Viking ships were importing silk from as far away as Persia (Vedeler, 2014).

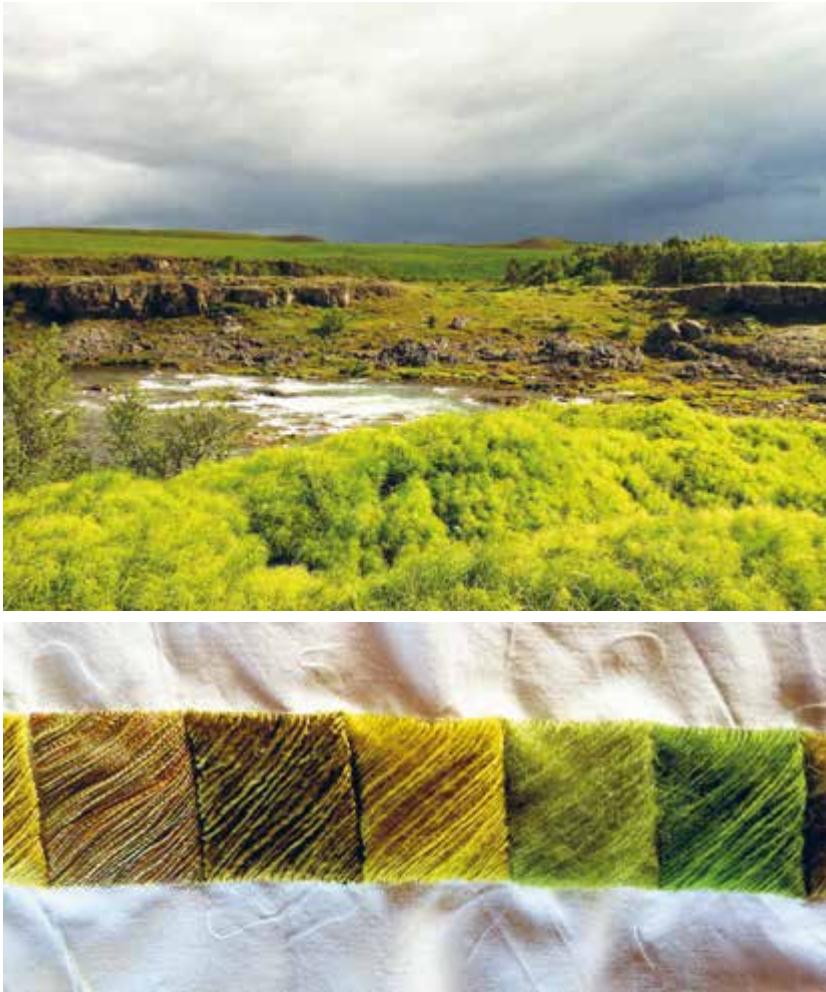


Figure 3. (above) shows the spectrum of spring colors of the fields and skies near Blönduós, June 2016, with Figure 4. (below) showing a color sample swatch of yarns for my textile map. Photos: Kathleen Vaughan.

On June 1, this trove of yarns came with me on the four-hour bus ride north to Blönduós, along with a handful of materials and tools I'd brought from Canada, my Iceland guide books, my camera and a poster size re-print of a 1963 topographical map of Iceland, beautifully and shrewdly retro, that I found in Reykjavik to serve as a pattern for my own map. The Icelandic Textile Centre has welcomed artists and researchers into residence since 2005, in a re-invention of a much-loved regional women's school, the Kvennaskólinn, that had served Northwest Iceland for almost 100 years (Textilsetur Íslands, 2017). That month, I was one of seven artists who'd traveled from Canada, Ireland, Estonia, the Netherlands and the United States: felters, dyers, weavers, stitchers in search of deep time with our own practice, a community of like-minded creators, and an historically and environmentally meaningful locale. The Icelandic Textile Center is linked to the Textile Museum next door, with its extraordinary permanent collection of 19th-to-mid-20th century textile tools and creations, including homemade wool and woven goods, examples of Icelandic national costumes as well as an annual exhibition of contemporary Icelandic textile artists (Heimilisíðnaðarsafnið – Textile Museum, 2012).

Figure 5. The red-roofed building to the right is the Kvennaskólinn or Women's School, now home to the Icelandic Textile Center. The building to the left is the Textile Museum. The lamppost is one of many throughout town that was decorated by local knitters, a version of yarn-bombing to celebrate that year's first ever Knitting Festival. Lampposts were dressed up like people, in dresses knit in Icelandic patterns. Photo: Kathleen Vaughan.



There, I saw the work of poet and embroiderer Guðriður Helgaðóttir (1921–), who uses silk and cotton to stitch meticulously pictorial representations of Icelandic landmarks and scenes of daily life (Helgaðóttir, 2010). Her embroideries reflected my own experience of the Icelandic spring colors – perhaps not surprisingly, since she lives in the North West quite close to Blönduós. The beauty and impact of Guðriður Helgaðóttir’s approach confirmed my intention to work my foreground entirely in stitching (foregoing small-scale textile piecing), while samples of old Icelandic needlework suggested particular stitches to add to my repertoire, specifically laid and couched work (or *refilsaumur*) and long-armed cross stitch (or *gamli krosssaumurinn*) (Guðjónsson, 2006, p. 9).

My plan became to create my background from the silks I’d brought from home, a last-minute addition prompted by a dream suggestion. In fact, the Textile Centre encourages its artists to bring what they think they will need, since specific art and textile supplies may not otherwise be accessible in Blönduós. My dreaming self’s suggestion of silk surprised me, but I have long since learned to heed these suggestions about artmaking.

A bright white piece of raw silk (80 by 60 inches) would serve as full ground; a smaller piece of ivory raw silk would be cut into the shape of the island of Iceland; and to version the contours of Blönduós, its river mouth and shores, I would use semi-transparent white silk organza, overlaid on the Iceland map. I’d position my two maps of different scales so that the Icelandic Textile Centre on the larger Blönduós map, above, would align with the location of Blönduós on the smaller scale Iceland map, beneath. I could thus play with and point to issues of scale and measurement in the mapping of space.

Since my plan was to bring earth and sky together in the same map (see also Vaughan, 2017), I decided to map not fixed constellations, but a version of the arcs of the sun through the midsummer skies, day by day. In this way, and of course with the inclusion of my daily walks, my Iceland map would become about time as much as about space. I would use the stitched line of the Arctic Circle as an anchor for a clock that would reflect Iceland’s long, long summer days. (I explain below.)



*Figure 6. Work in progress on **Iceland: Earth and Sky**, June 2016. The grid marks the lines of longitude and latitude, scaled to the ivory coloured map of Iceland. The paper pattern is an overlay of the map of Blönduós – with wide mouth of the Blanda River – that I have pinned into place. Photo: Kathleen Vaughan.*

This composition came to mind very soon after my arrival in Blönduós. I would spend the month literally laying the groundwork for my stitching, and mapping my daily walks through the streets and hills surrounding the small town. I looked forward to exploring the paved streets of the town, the beaten pathways along the river and more distant routes up into the pastures and hills around Blönduós. I'd follow my feet and also ask locals to suggest their favourites, as I walked and worked into a relative wild.

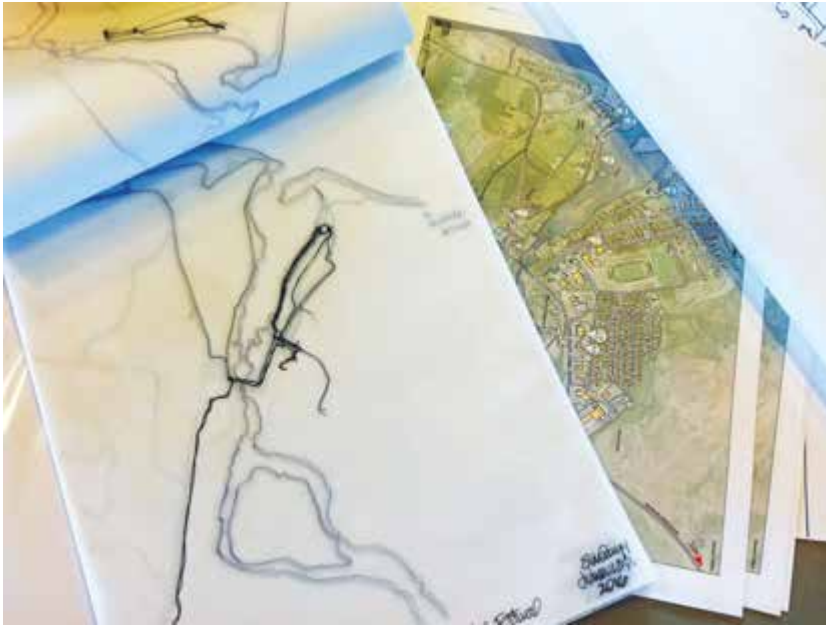


Figure 7. A record of my daily walks through Blönduós and environs, marked in black on tracing paper, so that the subsequent walks are visible below. I used as a template the printed hand-out map of the town, visible to the right of the pad. Photo: Kathleen Vaughan.

Wildness

Tourists agree, Iceland is “wild” – this attribute being a major part of its marketing positioning and travel appeal (Gudlaugsson & Magnusson, 2015, p. 171). A Google search turns up Icelandic companies such as “Into the Wild,” “Catching the Wild,” “Discover Wild Iceland,” “Wild Tracks,” “Wild West Tours” and “Wild Iceland” that capitalize on this image to sell travel packages to tourists. Indeed, Iceland has deliberately and successfully targeted tourism as an engine of economic recovery from the 2008 financial collapse (De Kruijf & Toppen, 2014).

In 2016, I was one of the many travelers taking advantage of new low-cost direct flights to Reykjavik from Montreal. Seats as low as CAD\$99 one way had prompted the travel deals website Travelzoo to name Iceland as one of 2016’s top value destinations for Canadian travelers (PostMedia, 2016). That year, 1.6 million visitors came to Iceland, up 35% from the previous year (Ferdamálstofa – Icelandic Tourist Board, 2017). In 2017, 2.4 million are expected (Moore, 2017) –

all this in a country of just 323,000 people. The six-week length of my stay, and my orientation to art-making more than to the natural world or adventure seeking, made me unusual among international visitors. In the summer of 2016, the mean length of a visitor's stay in Iceland was 1.5 weeks, with 83% of visitors naming Icelandic nature as their reason for coming (Ferdamálstofa – Icelandic Tourist Board, 2016, p. 70). This globally connected, “hot” travel destination is not an Iceland that William Morris would remotely recognize as the country he visited 150 years ago. It is also important to recognize that the growth in tourism to Iceland occurs in a context of significant overall increases in international tourism: in 2016, worldwide, 1,235 million tourists travelled across borders, representing 46 million more overnight international visitors than in 2015 and the seventh straight year of growth (UNWTO, 2017). In this context, Icelandic tourism numbers seem minor, while still vastly more than the country is used to receiving, and high compared to local residents.

For me, Iceland's wildness inheres in its the natural world and landforms, yes, but more specifically in the consequences of its northern location: the summer light. With the Arctic Circle (latitude 66°33'46.7" N) being the southernmost perimeter of 24-hour daylight, nearby Blönduós (latitude of 65°39'59.99" N) experiences virtually constant light through the solstice month of June. At 'night,' the sun would vanish behind the western hills, tinting the dome above with reds and pinks, but this false dusk is short: the sun soon re-emerges. Darkness does not descend. Around the solstice, just 38 minutes separates sunset at 1:04 a.m. and its rise at 1:42 a.m.

I map this movement of the sun, grafting a kind of clock onto my spatial coordinates, placed along the stitched horizontal line that denotes the Arctic Circle. I use the longitudinal dividers that cross this Circle in two ways. Conventionally, six of these verticals mark spatial dividers (24°, 22°, 20°, 18°, 16°, 14° W). But every other line I label with an hour from 11 p.m. to 5 a.m. These notations are precisely stitched with digital embroidery, white on white, a subtle code for those who care to consider it. Each day's time of sunset and sunrise (e.g. 1:04 a.m. and 1:42 a.m.) creates two markers on the timeline, markers I use as imaginary circumference points of a circle I inscribe large enough to contain most

of my map of Blönduós. I am stitching 30 of these circles, allusive of the sun's movements through the sky, in a spectrum of hues from warm silvered beige through bright canary to delicate apricot. The circles' position on the timeline vary with the times of sunrise and sunset, marking the change in the length of days through my month in the North.



Figure 8. Work in progress, June 2017. This detail shows the Arctic Circle latitude marker-cum-‘timeline’ with multiple map components: digitally stitched titling (ARCTIC CIRCLE, of which IC is visible here) and labeling of longitudinal markers (3 a.m., 20°, 2 a.m.), as well as six of the 30 stitched gold circles that reflect each day’s length and the loop the sun makes in the sky. Photo: Kathleen Vaughan.

I found these long Northern days remarkably energizing; as though I was a child again, resisting bedtime, not wanting to go to sleep in case I missed something wonderful. The North gave me both time and wonder. Within its continuous days, sleeping became more like napping – something to do when tired and only until refreshed. After all, whenever you woke the sun would be blazing, so it seemed perfectly reasonable to leap into happy action, even if it was only 3 a.m. William Morris had the same reaction during his 1871 visit: “I can’t say I had slept much, not that I was uncomfortable or cold, but the strangeness and excitement kept waking me up...” (2011, p. 41). Along these same lines, cultural

theorist Karen Oslund ascribes to the first-time visitor, “a sense of confusion, of disorientation bordering on illness” upon arrival “in the borderlands, a place that is just slightly off the edges of the map of the known world” (2011, p. 169). A place to the North.

In Canada, we tend to think of ourselves as a northern country, a place of white weather, wildness, and withdrawal from the world – the terrain of musician Glenn Gould’s iconic radio documentary, *The Idea of North* (see also Grace, 2001). Gould (1967) introduced his portrait of northern Canada, of our tundra and taiga, by admitting that he himself has no real experience of the North: “... the north has remained for me, a convenient place to dream about, spin tall tales about, and, in the end, avoid.” Indeed, the meaning of north for most Canadians is constructed through such artistic and cultural artifacts, without the benefit of direct experience. More than 80% of us live in large cities, most close to the American border (at the 49th parallel for much of the boundary). My home town of Montreal sits at latitude 45°28’59.37” N – roughly the same position as both Marseille and Milan, neither of which is considered globally ‘Northern.’ It was only in traveling to Iceland that I truly felt that I might be touching the North, the ‘wild’.

Of course, my challenge as an artist working short term in a foreign country is not to succumb to romantic notions of the ‘wild,’ nor to mistake my early impressions of the country and its people for a vaunted ‘authentic’ experience, but rather to work through the complexities of my positionality as privileged traveler-by-choice, using both material form and words. Research helps me contextualize my understanding. I read about the “tourist’s gaze,” described by tourism theorists John Urry and Jonas Larsen (2011) as a situated, socially patterned and learnt way of seeing places that are away from home. To Urry and Larsen, while definitely embodied, relational, and performative, vision – the gaze – remains the primary form of engagement for the tourist, and exists in a proliferation of discourses, forms and embodiments. The form perhaps the most relevant for contemporary Icelandic tourism is the ‘romantic gaze,’ which emphasizes “solitude, privacy and a personal, semi-spiritual relationship with the object of the gaze” (p. 19).

While supporting Urry's concept of the tourist gaze, Dean MacCannell (2001) suggests that those on a voyage also experience a second gaze, a rebounding 'gaze back' from the context that reveals the constructed aspects of the tourist experience. This second gaze purportedly

...turns back onto the gazing subject an ethical responsibility for the construction of its own existence. ... In possession of the second gaze, the human subject knows that it is a work in progress; knows that it can never fulfill the ego's demands for wholeness, completeness and self-sufficiency. On tour, the second gaze may be more interested in the ways attractions are presented than in the attractions themselves. It looks for openings and gaps in the cultural unconscious. It looks for the unexpected, not the extraordinary, objects and events that may open a window in structure, a chance to glimpse the real. (p. 36.)

It may be that my repeated walks over an extended terrain, engaging in the everyday activity of walking while observing and experiencing the shifts in places over time, is a way I access such a window in structure, to occasionally glimpse aspects of the 'real.' Admittedly, this is a romantic view, one that seems to pertain to other artists as well, according to the research of James Whiting and Kevin Hannam (2014). They found that through a process of aesthetic-reflection, artists of Newcastle-upon-Tyne had both developed a romanticized notion of authenticity about place, and held an 'anti-tourist' sentiment, particularly with respect to mass tourist activities that are socially or culturally disdained. Further, these artists reported that for them, the purpose of travel "was nearly always related back to artistic practice, learning new methods and/or gaining inspiration from new and different places" (p. 71). With MacCannell's 'second gaze' highlighting traveling artists' experiences away, their artistic practices might then be one of the "counter-intuitive and surprising methodologies" that Urry and Larsen suggest can "reveal aspects of normal practices that might otherwise remain opaque ... opening up the workings of the social world" (2011, p. 3). A window in a structure.

The best means I know to work against my limitations of gaze is to be as explicit as I can about my own positionality and creative choices, and as interested as possible in the Icelandic world I encounter. Part of my working process has always been to attend to my experience's very specific *notitia*, proposed by artist-scholar Iain Biggs as something between listening and noticing and part of his own deep mapping process (2016, p. 14). Like postcolonial theorist Sara Ahmed (2000), I value the 'strange encounter' that can occur through my embodied engagement – as visitor, as artist, as walker – with the proximate bodies of foreign-to-me humans and more-than-humans (Abrams, 1996) I meet. The Icelandic sociable horses at pasture; the new lambs; the darting Arctic terns with their special deep thrum as they hover into the wind high above the earth; the wildflowers, northern Angelica (which I first mistook for more familiar rhubarb), glowing Icelandic poppies, an exuberant profusion of dandelions. The earthforms are part of the encounter too: the black volcanic sand, the winds that speed over the ground, and the long hours of daylight that allow me to see, and see, and see again, the wild specifics of the Icelandic world. I learn something about each of these through repeated observation and occasional deliberate inquiry. Prompted by my experience, I read, ask questions, sketch, ponder these beings in context. The knowledge that I accrue is personal and embodied, only occasionally (as in this text) presented in linear form. Rather, the knowledge I generate through walking and mapping is, in philosopher Suzanne Langer's designation, 'non-discursive' or 'presentational' rather than 'propositional' (1942), and does not aim to prove through language. Even so, I believe that this knowledge imbues the handwork I develop, the projects I plan, and of course my ongoing connection with the Icelanders of Blönduós. And I believe that the knowledge is palpable to the viewer of my map, just as it is to the Icelandic viewer with whom I converse.

Currently, a year after my residency in Blönduós, my map *Iceland: Earth and Sky* is still in progress. Embroidery is slow, if immensely satisfying. I have worked up the ground and river and currently am stitching the rings that suggest the sun's timed movements. Next, I will add my own walked paths, the 30 days of routes to and from the local geothermically heated swimming pool, around



Figures 9–10. Iceland: Earth and Sky (detail), work in progress, June 2017. Photo: Kathleen Vaughan.

the small town, and up less-used roads and trails to a local lookout, farmlands, gravel pits, the airport, surprising dump sites and abandoned cars. Some pathways I discovered on my own; others were suggested to me by locals, who have their own favourites. I will mark my trajectories in silk of a vibrant purple, the colour of the Alaskan lupine flower or nootka. Introduced to Iceland in 1945 to counter soil erosion, the lupine is an invasive species whose spread is virtually unchecked across the island's arable lands. It is overtaking and shading out precious indigenous lichens and mosses, all of which grow closer to the ground, and threatening local biodiversity (Butler, 2006). I am hoping that the simple analogy between the galloping lupine and the tourist hordes does not apply; the comparison makes me heartsick, implicated as I am.³

The final stage of my work will be knitting its border, adapting the pointed openwork patterns of Icelandic lace and using the fine Icelandic wool they were



Figure 11. A glimpse of the far, southwest bank of the Blanda, seen through the ever-present lupine on this side of the river. Photo: Kathleen Vaughan.

designed for. In the 19th and early 20th century, knitted triangular shawls “made from so fine a yarn that *they could be drawn through an ordinary gold ring* [emphasis in original],” were especially popular (Halldórsdóttir, 2009, n.p.). I look forward to pleasure of the challenge of lace knitting, and to linking my textile map even more visibly to recognizably Icelandic heritage techniques, to the materiality of the North. I will weight my map with small pieces of volcanic rock I collected, fascinated by their distinctive, porous materiality. These will hang in crocheted snoods from the lace edging.

I will take my map back to Blönduós when it is done. I long to return, and for the magic of those endless northern summer days. But I confess that the flipside of ‘North’, the mysteries of long days of darkness, is increasingly enticing. Sailing home from Iceland in September, 1871, William Morris described the night sky off Thorshaven,

The sky had got quite clear by now; the stars were very bright, and the moon was rising from among some low fleecy clouds when I went into the cabin for a while: thence Magnússon called me out to look at some faint show of the northern lights: there was a broad double belt of luminous white cloud all over the middle of the sky, which as we looked at it was combed all out into long streamers that at first kept their arched shape over the sky, but gradually broke away into pieces, till the moon growing high and bright seemed to scatter them, and there was left only one long stripe like the tail of a great comet going from the horizon to the zenith: that faded too in a while, leaving nothing but moon and stars in a cloudless sky. (2011, p. 187.)

Indeed, my map of Iceland will include one final component, a circle that represents the passage of June’s full moon on June 20, 2016, the first summer solstice full moon since 1967. Moonrise occurred at 10:51 p.m., with moonset at 4:21, meaning that the moon ‘loop’ will intersect my timeline at those two points, inscribing a circle so large that it will encompass all other components of this Iceland map, joining earth and sky. *Tengja jörð og himinn.*

I return to the question that inflects my ongoing considerations of Iceland: how can I, as a visitor to this extraordinary country, see and respond in ways that go beyond the limitations of the tourist gaze, and make artwork that honors this place and reflects my feeling of connection to it? As an artist addressing the question through material practice in an ongoing way, I have no conclusive analysis – no propositional knowledge – to offer. Even so, I hope this discussion of my process begins to demonstrate my answer, which is an on-goingness. To summarize, I aim through a kind of *notitia* of place-making – that is to say, through walking, tracking, researching, relating and crafting – to develop in Iceland the kind of ‘being-at-home’ that Ahmed would describe as the “lived experience of locality.” This occurs as “the locality intrudes into the senses: it defines what one smells, hears, touches, feels, remembers. The lived experience of being-at-home involves the enveloping of subjects in a space which is not simply outside them: being-at-home suggests that the subject and space leak into each other, inhabit each other” (2000, p. 89).

From my experience of ‘being-at-home’ in Iceland, I hope to create work that feels ethical to both Icelanders and myself, that works across notions of translation and cultural difference. I am profoundly interested in how and whether one can relate well across difference, a question that seems particularly vital now. Now, more tourists than ever are traveling across borders for pleasure (Urry, & Larsen, 2011, p. 24); now, more people than since the displacements of World War Two are travelling as a result of conflict and violence (United Nations Development Programme, 2017). I am mindful that I am a privileged traveller in my relating North, and take on my travels by choice, unlike so many others. But perhaps in doing this work, in succumbing to the lure of Iceland and mapping *Iceland: Earth and Sky*, I can begin to model a process that may also be meaningful to others, no matter why they travel North. I hope so.

And of course, there is still Greenland to visit.

Endnotes

¹ The sagas are long tales of heroic figures of Iceland of the 10th and 11th centuries, which started being written down as of the 13th century. Any contemporary reader/viewer of the popular *Game of Thrones* series by George R.R. Martin will be familiar with the general action/honour/vengeance oriented dynamic of the sagas. According to MacCarthy (1994, p. 290), “Morris saw them as the verbal equivalent of folk art: demotic literature on its highest plane.”

² <http://textilsetur.com>

³ Interestingly, Icelanders are quite divided about the lupine (Benediktsson, 2015). Some appreciate its soil fixing and beauty – and, incidentally, its use as a natural dye by locals such as Guðrún Bjarnadóttir of Hesperia Studio. I have stitched her lupine-dyed, bright green wools into my Iceland map. Other Icelanders are just as vehement that the lupine is a *planta non grata* and must be eradicated.

References*

- Abrams, D. (1996). *The spell of the sensuous: Perception and language in a more-than human world*. New York: Pantheon Books.
- Ahmed, S. (2000). *Strange encounters: Embodied others in post-coloniality*. London & New York: Routledge.
- Benediktsson, K. (2015). Floral hazards: Nootka lupin in Iceland and the complex politics of invasive life. *Geografiska Annaler: Series B, Human Geography*, 97(2), 139–154.
- Bennett, P., & Miles, R. (2010). *William Morris in the twenty-first century*. Oxford: Peter Lang.
- Biggs, I. (2016). Revisioning “north” as an ecosophical context for creative practices. In T. Jokela & G. Coutts (Eds.), *Relate North: Culture, community and communication* (pp. 12–33). Rovaniemi: Lapland University Press.
- Butler, T. (2006, July 24). Invasive purple flower impacts Iceland’s biodiversity. Mongabay [environmental journalism site]. Retrieved from <https://news.mongabay.com/2006/07/invasive-purple-flower-impacts-icelands-biodiversity/>
- Dal Lago, A., Di Pietrantonio, G., König, K., & Vettese, A. (1999). *Hamish Fulton*. Milan: Charta.
- De Kruijf, J. G., & Toppen, A. (2014). Dollars and delusion: Global finance, cultural trauma and ethno-economic subjectivity in post-boom Iceland. *Journal of Contemporary European Studies*, 22(4), 377–394.
- Dufferin and Ava, F.T.T.B. (1940). *Letters from high latitudes by Lord Dufferin*. [Originally published by Dent, 1910. Original publication, 1856.] London: Dent.

- Eliason, M. (2014, July 14). An American in Reykjavik: A list of Icelandic souvenirs worth buying. *Iceland Magazine*. Retrieved from <http://icelandmag.visir.is/article/american-reykjavik-a-list-icelandic-souvenirs-worth-buying>
- Ferdamálstofa/Icelandic Tourism Board. (2016). *International Visitors in Iceland. Summer 2016*. Retrieved from <https://www.ferdamalastofa.is/static/files/ferdamalastofa/Frettamyndir/2017/januar/sunarkonnun/sumar-2016-islensk.pdf>
- Ferdamálstofa/Icelandic Tourism Board. (2017, March 23). *International visitors to Iceland 2016*. Retrieved from <https://www.ferdamalastofa.is/en/moya/news/international-visitors-to-iceland-2016>
- Fontaine, M. (2015, September 5). The sheep population of Iceland. *The Reykjavik Grapevine*. Retrieved from <https://grapevine.is/news/2015/09/05/sheep-population-of-iceland-more-than-double-human-population/>
- Gould, G. (Producer). (1967, December 28). *The idea of north*. [Radio documentary]. Toronto, Canada: Canadian Broadcasting Corporation. Retrieved from <http://www.cbc.ca/player/play/2110370208>
- Grace, S. E. (2001). *Canada and the idea of north*. Montreal, QC, & Kingston, ON: McGill-Queen's University Press.
- Greenlaw, L. (2011). *Questions of travel: William Morris in Iceland*. London: Notting Hill Editions.
- Guðjónsson, E. E. (2006). *Traditional Icelandic embroidery*. Kópavogur, Iceland: (n.p.).
- Gudlaugsson, T., & Magnusson, G. (2009/2015). North Atlantic islands' locations in tourists' minds: Iceland, Greenland and the Faroe Islands. In C. L. Campbell (Ed.), *Marketing in Transition: Scarcity, Globalism & Sustainability. Proceedings of the 2009 World Marketing Conference. Oslo, Norway, July 22–25, 2009*. Heidelberg: Springer.
- Halldórsdóttir, S. (2009). *Þríhyrnur og langsjöl / Triangular and long shawls*. (S. J. Ásgeirsdóttir, Trans. Sögubrot). Viðey, Iceland: (n.p.).
- Haraway, D. (2003). *The companion species manifesto: Dogs, people and significant otherness*. Chicago: Prickly Pear Press.
- Harley, J. B. (1989). Deconstructing the map. *Cartographica*, 26(2), 1–20.
- Heimilisiðnaðarsafnið – Textile Museum. (2012). *The Museum*. Retrieved from <http://textile.is/english-2/>
- Helgaðóttir, G. B. (2010). *Þessi kona: Í máli og myndum frá 1921– ?*. [This woman: In words and pictures from 1921– ?]. Reykjavik: (n.p.).
- Helgadóttir, G. (2011). Nation in a sheep's coat: The Icelandic sweater. *FORMakademisk*, 4(2), 59–68.
- Iceland Magazine*. (2016, May 18). Iceland facing a knitting wool shortage due to tourist boom. Retrieved from <http://icelandmag.visir.is/article/iceland-facing-a-knitting-wool-shortage-due-tourist-boom>

- Iceland Review Online*. (2012, July 5). Icelandic wool sweaters made abroad. Retrieved from <http://icelandreview.com/news/2012/07/05/icelandic-wool-sweaters-madeabroad>
- Jacob, M. J. (2007). Material with a memory. In J. Livingstone & J. Ploof (Eds.), *The object of labor: Art, cloth and cultural production* (pp. 299–314). Chicago, IL and Cambridge, MA: School of the Art Institute of Chicago Press and The MIT Press.
- Langer, S. K. (1942). *Philosophy in a new key*. Cambridge, MA: Harvard University Press.
- MacCannell, D. (2001). Tourist agency. *Tourist Studies*, 1(1), 23–37.
- MacCarthy, F. (1994). *William Morris: A life for our time*. London: Faber and Faber.
- Massey, D. (1992). A place called home? *New Formations*, 17, 3–15.
- Massey, D. (2005). *For space*. London: Sage Publications.
- Moore, T. (2017, March 18). Iceland's tourism boom – and backlash. *Financial Times*. Retrieved from <https://www.ft.com/content/44ebbf025e-11e7-aa5b-6bb07f5c8e12>
- Morris, W. (2011). A journal of travel in Iceland, 1871. In L. Greenlaw (Ed.), *Questions of travel: William Morris in Iceland* (pp. 1–193). London: Notting Hill Editions.
- Oslund, K. (2011). *Iceland imagined: Nature, culture and storytelling in the North Atlantic*. Seattle and London: University of Washington Press.
- Pink, S., Hubbard, P., O'Neill, M., & Radley, A. (2010). Walking across disciplines: From ethnography to arts practice [Guest editors' introduction]. *Visual Studies*, 25(1), 1–7.
- PostMedia. (2016, January 11). Top five value destinations for Canadians in 2016. *Toronto SUN*. Retrieved from <http://torontosun.com/2016/01/07/top-five-value-destinations-for-canadians-in-2016/wcm/f0989498-694d-4b46-bfaf-602683610ad8>
- Róbertsdóttir, H. (2008). *Wool and society: Manufacturing policy, economic thought and local production in 18th-century Iceland*. Göteborg, Sweden: Makadam Publishers.
- St. Pierre, E. A. (2008). Home as a site of theory: A fragment. *International Review of Qualitative Research*, 1(2), 119–124.
- Sigurdjónsdóttir, A. (2011). The new Nordic cool: Björk, Icelandic fashion and art today. *Fashion Theory*, 5(2), 239–258.
- Textilsetur Íslands. (2017). History. Textilsetur Íslands/Icelandic Textile Center. Retrieved from <http://textilsetur.com/about/history/>
- United Nations Development Programme. (2017). Migration, refugees and displacement. Retrieved from <https://goo.gl/vIrZJH>
- UNWTO, United Nations World Tourism Organization. (2017, January 17). Sustained growth in international tourism despite challenges. Retrieved from <http://www2.unwto.org/press-release/2017-01-17/sustained-growth-international-tourism-despite-challenges>

- Urry, J. (2002). *The tourist gaze* (2nd ed.). London: Sage.
- Urry, J., & Larsen, J. (2011). *The tourist gaze* 3.0. London: Sage.
- Vaughan, K. (2006). *Finding home: Knowledge, collage and the local environments* (Unpublished doctoral dissertation). York University, Toronto, Canada.
- Vaughan, K. (2014). Art, enchantment and the urban forest: A step, a stitch, a sense of self. In A Sandberg, A. Barkekjian, & S. Butt (Eds.), *Urban forests, trees and green-space: A political ecology perspective* (pp. 307–321). London: Earthscan/Routledge.
- Vaughan, K. (2017). My map of earth includes the sun. *Iceview: TI Online* [electronic journal]. Retrieved from <http://www.theiceview.com/tionline/february2017/kathleenvaughan>
- Vedeler, M. (2014). *Silk for Vikings*. Oxford: Oxbow Books.
- Whiting, J., & Hannam, K. (2014). Journeys of inspiration: Working artists' reflections on tourism. *Annals of Tourism Research*, 49, 65–75.

* A note on spelling: I have reproduced the orthographic styles of my sources, that is, I include Icelandic characters and accents when the sources do, and the adapted/Europeanized spelling when these are in the originals.



WALKING ON WATER,
LIVING ADVENTUROUSLY:
Travelling Laboratories
for Artistic Thinking

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Figure 1.
Walking on water.
Photo: Roger Hill.



There is a well-known story about three wise men who followed a star and left their valuable presents to a newborn baby somewhere in the Middle East over two thousand years ago. It is a strange story about looking for meaning and value in something that is unknown; a story about following your intuition and giving luxurious presents, gold, myrrh, frankincense to someone who might have needed more food and nappies. I see this story as a metaphor for an artist's way of travelling through the world: to follow a star to unknown destinations, to search for the miraculous and not to worry about the trouble it takes. A story about leaving your valuable presents without knowing how they will be used and returning home without too much fuss.

An artist's way through the world could be described as walking on water, believing in miracles, trusting on one's intuition. To voluntarily live in the geographic or social periphery and make one's living in the margins demands courage, faith and a certain kind of stubborn trust in a possibility to live a

sustainable life outside the centres and big masses. Throughout history there have been creative people who made a conscious decision to move back to nature, or actually never leave it in the first place. Henry Thoreau reflects on his own life and the choices he made in his essay “Where I lived and what I lived for” (1854/2005). Ideas about simple and authentic life along ethical principles are familiar among artists and some of the most famous writers on art and life have been Tolstoy and Ruskin.

My approach in this article is to present an idea of ‘artistic thinking’ as an approach to a more sustainable life in an increasingly complicated world. I draw from my experience as an artist and academic living in the Northern parts of Europe, where nature and the terms that it dictates are still an essential part of everyday life for better and worse. I see the artist’s way as an attitude and as such transformable into other areas of life and livelihood.

My aim is to re-visit old ways of thinking and to respond to future but currently unknown demands of a new era by walking on water, living adventurously. My focus is on contemporary art and how that could be expressed and implemented outside the traditional art world of museums, galleries, art educational organisations and institutions. I use the idea of Joseph Beuys, who declared that everyman is an artist. By that idea he did not mean that everyone was a painter or a producer of artefacts, but that everyone could become an active and critical thinker and learn to see the world from a different perspective. For Beuys art was social activism and critical thinking combined with aesthetic output.

My method in exploring artistic thinking and walking as an act of art and thinking has included gathering data in experiential knowledge by walking and using the act of writing and reading as research. The methods are widely used in the field of artistic and arts-based research. The language I use is metaphorical, sometimes poetic, often narrative, and all this is common in academic papers by artist-researchers and others in the field of humanist and sociological studies. Carolyn Ellis (1997, p. 116) wrote more than twenty years ago, that she wanted to speak differently in a research context, not only speak about using different voices. Patricia Leavy (2013) argues strongly for using fiction as research practice. Going back in time we can refer to Mircea Eliade and Edmund Husserl both of

whom have argued that fiction often reveals new knowledge from more unexpected angles than arguments based in so called hard evidence. Through fiction and artistic expression in its multiple forms we can reveal knowledge that would be hard, even impossible to reach by any other means.

I am writing as an artist-researcher and using the right to express my own observations and experiential knowledge in my argument. Since my concept of '*Travelling Laboratories for Artistic Thinking*' is a concept, not a physical unchangeable place or site, but rather something that happens in one's imagination, I am not including images that might mislead a reader towards fixed idea about this Lab. The images included are more metaphorical than representative of specific activities that have been experimented with in various cases. Even using the word "laboratory" has a flavor of irony because I see artistic thinking as something that cannot be measured and studied in laboratory circumstances.

Figure 2. Shoes worn out, carrying memories.
Photo: Jaana Erkkilä.



Artistic thinking and walking

Walking has been used as a medium by several artists in the past and also in the field of contemporary art. There is a long list especially of writers who have praised the benefits of walking throughout the centuries. Walking as a medium in the field of contemporary visual arts has enabled artists to articulate ideas about time and space. Walking gives freedom of movement and expression, it creates a personal engagement with environment and feeds imagination. A journey can be seen as a work of art. Cynthia Morrison-Bell (2013, p. 1) asks, what else is needed to make art than time, space and the body, the artist's own? The artist Richard Long has worked for decades on art about mobility, lightness and freedom. His art consists of simple creative acts of walking and marking about place, locality and time, distance and measurement.

Finnish author Pentti Haanpää (1905–1955) did long walks and later on he travelled by bicycle (see e.g. Haanpää, 1976). Reading his notes on those seemingly idle and aimless wanderings in cold and harsh circumstances one asks, why on earth would one walk such distances, to sleep in barns and empty sauna buildings? Why to walk in rain and early summer snow storm? What kind of inner calling makes you hit the road and spend weeks and sometimes months walking through endless roads that run by fields, lonely villages and forests? But when reading his short notes, observations on weather, sounds of wind, descriptions of coldness creeping over his bones in early June when snow is still falling and the birds have lost their voice, one feels at home, at home in a world that still exists here in the North. You need to experience the landscape, the environment and living conditions in the North in order to know through your bodily experience what the author is writing about.

From a farming community's point of view Haanpää might have looked like an idle traveler. Through my own experience as a practicing artist and according to his diaries I know that he was working seriously on observation, collecting material for writing, recording experiential knowledge from the environment, weather circumstances, about the human condition. Haanpää travelled an artist's way in exploring what it means to be a human being. Several authors around the world have turned their travelling into literature, but the journey can be taken by anyone and used purely for one's own understanding about the world, without necessarily any product that could be shared with a wider audience. The idea that an experience is valuable without its documentation and sharing in social media or other public context is alien to our contemporary world according to my view. Describing an experience afterwards is always risky, because memory is selective and drawn by a narrative mind. A crucial thing is what we want to achieve through fictive memorising. Are we interested in human experience or something else?

Peter Englund (2005) begins one of his essays, "About History of Silence", by describing how he heard snow falling down in a winter afternoon in Uppsala. He had been cycling through snow storm and when he stopped it happened: the wind stopped blowing, there were no cars in a street and it was all silent. And



Figure 3.
Hibernating in Slow lab.
Photo: Jaana Erkkilä.

suddenly he heard something that made quiet rattling sound and first he could not make sense what it was. He understood that it was the sound of quietly falling snow. I urge us to stop our running in order to hear the snowflakes falling. Snow does not tell stories to someone who is in a constant hurry. (Englund, 2005, p. 13.)

When I walk to my work in winter mornings I listen to the sounds of snow under my shoes, wind rattling in trees. I can see the sky behind the hills faraway, a silhouette of a forest in the distance. There is very little traffic anywhere and I don't meet many people on my way. Sometimes snow is crispy, sometimes like powder, soft, humid, heavy or light and it sounds different in different temperatures. What does it matter how snow sounds or what the wind says about the world?

Ole Henrik Magga claims that knowledge of one's own environment creates one's identity. Without knowledge of one's own landscape, a large portion of one's own identity disappears (Magga, 2010, p. 15). My feet know my history. I can recall the exact moment when I understood where part of me came from and where I would always belong to, even if I did not physically keep the contact with the land. It was a summer day and I was running along a path feeling the warmth of dry soil under my bare feet. Suddenly time stopped and I saw in a flash how I had run along the same path during every summer of my life and it felt like I was going to run the path until I die. Time and home had a different meaning for me after that and there was a new understanding about a possible loss that could not yet be named.

Walking as an act of art puts focus on awareness and presence. In the *Travelling Laboratories for Artistic Thinking* I combine an artistic way of being present with walking. A journey can have a break and stop for sketching, documenting, writing or working on land art using natural materials that happen to be available, or the stop can take place just for quiet observation. Through artistic thinking while walking we learn about observing and seeing what is around us and how to possibly use that awareness for making something out of it. In his book *A Philosophy of Walking* Frédéric Gros (2014) refers among others to Friedrich Nietzsche (1844–1900), who has written “We do not belong to those who have ideas only among books, when stimulated by books. It is our habit to think

outdoors – walking, leaping, climbing, dancing, preferably on lonely mountains or near sea where even the trails become thoughtful” (Gros, 2014, p. 11).

A simple act of walking seen in the context of the contemporary art world takes us into the realm of imagination and re-thinking of what art could be. Artistic thinking can be understood as abstract construction of imaginative worlds, but equally it can take a form of visual expression or a literal narrative that is based either on fact or fiction. What shifts or transforms our thinking and the act of walking from ordinary to artistic is the framework and purpose of the action. In the realms of art we deal with aims and goals that do not have to have anything to do with what so called reality is about, even if the art work itself was a document of what can be seen and observed.

An artist may have a spiritual dimension in her or his walking, but a pilgrimage is something different from walking as an act of art. A pilgrimage is a walk with a goal; its focus lies in the future (Ford, 2011, p. 125). Walking as artistic thinking is about the presence, here and now, whereas a pilgrimage is clearly heading towards a sacred place or a defined destiny. When you are on a pilgrimage you don't change your goal intuitively according to your inner callings.

Artistic thinking frees us from result orientated way of thinking (by this I mean that the nature of result has not been defined beforehand) and acting and enables us to enter a free space of seeing and listening the world around us. An artistic approach to the world is not so much about creating something out of one's imagination as about seeing and listening to signals that come from the world around us and then interpreting and giving a communicable form to those signals. Artistic thinking is about seeing the invisible and about listening to the inaudible in a world of multiple of sounds and visual noise.

Why combine artistic thinking with walking? To walk is to be on a journey and to be on a journey means that you are between two places on your way from A to B. The artistic or creative process is often seen as being on the threshold, in a state of transmission, being not yet there neither here; it is about liminality. Even if when walking you might know where you are aiming at, you cannot know all that you are going to face during your journey. There is a strong element of unpredictability. A real process of making art, of artistic thinking is thick with

unpredictable particles. And all real innovations by which I mean new unexpected findings, are about unpredictable obstacles, unexpected signals coming on your way and your capacity to be aware of what is given to you. Walking is an act of liminality. Walking symbolises and gives a framework for an artistic thinking process and it also enables the participants to take artistic actions during their walking.

Artists could be called the nomads of contemporary times, travelers who find home where their work takes them. Artists do travel between countries and continents, but also between identities, ways of making their everyday living. Artists travel between personal and common, from individual to community based existence; they rise from ashes over and over again like Phoenix. Travelling like an artist means travelling for better understanding, making sense of the world, hoping for enlightenment. *Travelling Laboratory* serves sustainable tourism likewise it has an emphasis on sustainable living and creative well-being. To travel like an artist means not to leave your brain behind and get rid of your everyday life. To travel like an artist means that you look at your life with new eyes, for new perspectives and find new meanings in old ways. *Artistic nomadism* means flexibility, being present where you are, being free to take an unexpected route and change your plans according to your intuition.

Artistic thinking could be seen as a form of resilience, a capacity to live in uncertainty and to remain in a state of creative presence. Art practice is about discipline and so is walking. To be on a road makes you continue even if you do not see the destination.

Travelling without going anywhere

Looking at life with new eyes can be done wherever and whenever. You can travel like an artist and go nowhere. American painter Agnes Martin (1912–2004) withdrew herself from art world and moved to New Mexico to live and paint in simplicity. In other words she continued her normal work, but on her own terms and conditions. Her texts about art, silence and disciplined work are rare gems in the rich literature on philosophy of art (see Martin, 1990.)

You can travel in your own environment without going anywhere longer than walking distance. Gertrude Emily Benham (1867–1938) was called “a very quiet and harmless traveler” (Howgego, 2009, p. 5). Although she walked extensively on every continent, I like the description of her as a very quiet and harmless traveler. I wish that more of us could be described as such and that is why I want to introduce a traveler who goes nowhere. You can travel even in your own room, through your imagination and entering the universe of other people’s imaginative worlds through works of art.

You might ask what good is it for tourism to encourage people not to travel and what kind of traveler is the one who never goes anywhere. I think that we have to change our ideas about travelling. The change might come by force through the current situation with millions of refugees being on the road, not all of them are in Europe yet, but approaching the gates of our back yard. I can see how our elitist tourism has to find new ways. We have soon, if we have not already, exploited every corner of the world: small islands, distant mountains, jungles, deserts, every continent. We have succeeded in destroying indigenous cultures and ways of living in the name of tourism and livelihood.

English and French explorers who traveled in Lapland 1800’s called the local people savages. Our culture and nature of people are often described as being silent and hard to communicate with. We can happily be silent in a company, if there is nothing to be said or shared. Speaking just to keep noise going on is looked upon as stupid and useless. We are not especially interested in small talk. There is a proverb saying “Hiljaa hyvä tulee” and you can understand it in two ways: making slowly – or making silently – makes it good. The word “hiljaa” can be understood both as silently and slowly. You could interpret the meaning as concentrating on what you do contributes the outcome. To have a focus results in quality.

Seitsemän veljestä (1873) by Aleksis Kivi is considered to be the first novel ever written in Finnish (the novel has been published in English with the name *Seven Brothers*). It was originally published in 1873 and it is a story about seven brothers living in Southern Finland in the county called Häme. The novel is a mixture of social analyses of Finnish society during the time when the book

came out, descriptions of experiences in nature, dreams and religious experiences. A plot runs through the novel, the story about the brothers who found it too hard to learn to read and fled into deep forest called Impivaara where they lived as outlaws until their sauna burned down in a cold winter night and they had to return to their home village and integrate back to the norms of the society. Their process of growing up was slow and painful and they were truly fighting against modern ideas, such as education. When we in Finland want to refer to someone as a slow person in action or in understanding we say that she or he is 'slow' like someone from Häme.

Silence and slowness have something in common in Finnish culture and I find it rather amusing that while being silent and slow we have managed to develop one of the world's largest network of broadband connections less than 150 years after the first Finnish novel, *Seitsemän veljestä*, was published. In January 2015 Jaakko Nousiainen was defending his doctoral thesis in University of Lapland on *Expanding Opera into Mobile Media* (Nousiainen, 2015). One might ask, if you have to become civilized, why not to do it properly and for all at the same time?

In Finland, there is an extraordinary situation for a technologically developed country: there is plenty of silence, lots of space, one of the most advanced digital communication systems in the world and a nation that values self-sufficiency, privacy and solitude. There is a strange longing for silence and not doing anything, although sounds of silence are the dominant sounds everywhere if we forget about couple of larger cities in the country. The demand for silent retreats has grown in recent years and participants come also from countryside and places where you are literally all the time in the middle of nowhere. You want to be even more silent. Broadband connections are advertised by showing a single laptop looking into landscape with no person in sight. What does this mean, this need for withdrawing from the world, taking a refuge to Impivaara?

In spite of a new kind of global nomadism, we tend to be very site-specific when it comes to our favorite working and living environments. There is a strange need to return home and the home can be in many places and for many purposes at the same time. There are certain landscapes, places and sites we

want to visit over and over again perhaps just to get a glimpse of something that puts our thoughts or emotions in the right place. We want to see in order to remember. We want to have our view whether it is an open field, a forest or a busy heart of a metropolitan area. We want to take our walks in the manner of Nietzsche, Thoreau, Emerson, Kant, Haanpää and the rest of the crew.

Perhaps moving from a site-specific agenda of observation and perception towards a mind-specific way of working through action in the physical world and in one's own mind can open up new possibilities for sustainable ways of working in depth and travelling without going anywhere and without a feeling of longing to a specific place. Mircea Eliade (2003, pp. 35–37) writes about a human need for getting to another space and time from the physical reality where we find ourselves. Not so long ago religious ceremonies offered both individual and corporate possibilities to reach other realities. Today, artistic thinking and action are some of the possible methods replacing religious rites on our journey looking for the miraculous.

People could once again become quiet and harmless travelers who do not need an intercontinental flight in order to experience something out of the ordinary. Through artistic thinking the ordinary can be transformed to extraordinary. If we are seriously concerned about cultural and ecological sustainability, we should not encourage building new tourist resorts or routes for transportation. Walking and cycling or plain mind travelling at home should be made such a fashionable brand that people would hesitate to book a holiday anywhere further than walking distance. Art can reach millions of people all around the world through contemporary digital technology. Even to read an old fashion printed book about distant and imaginative worlds is more sustainable than transporting millions of people all the time on tourist journeys to places where nature and local culture is in danger of being destroyed.

Art is about immaterial ideas expressed in forms that can be approached through senses or just ideas and concepts that never need to become objects, sounds or even smells. The magic is to see the invisible and to believe that it is enough. There is no need to go anywhere. A moment in the present is all we need.

From abstract concepts of artistic thinking into practical cases of activities

Travelling Laboratories for Slow Thinking is an ongoing cross-disciplinary research project led by professor Jaana Erkkilä-Hill in the University of Lapland. A research period 2016–2017 has been funded by TEKES (Finnish Funding Agency for Innovations). The project is international and multidisciplinary including two research groups, one from the Faculty of Art and Design led by Erkkilä-Hill working with Dr Janne Sinisammal, and other one from Multidimensional Tourism Institute MTI, Faculty of Social Sciences, led by professor of Cultural Studies of Tourism Soile Veijola working with Dr Emily Höckert, Dr Noora Vikman, Ma Janne Honkasilta and Ma Janne Säynäjäkangas. Our international experts come from UK, professor Paul Dieppe, Dr Sarah Goldingay and Dr Ann Light and Australia, professor David Carlin. We have been working together with five business partners who represent tourism and field of health & well-being. *Travelling Laboratories for Slow Thinking* combines artistic thinking, walking and silence for well-being.

All our business partners have been interested in the idea of using what you have in your natural environment: nature, silence and possibilities of using artistic and creative methods in promoting sustainable tourism and well-being. We have run pilots studies and tests in different circumstances using participatory methods to engage our partners in a process of finding their specific focus and ideas that could work just for their enterprise.

In the planning process of the activities that could be possible and innovative for a new kind of sustainable tourism Soile Veijola (see e.g. Veijola, 2014, 2016) and Jaana Erkkilä-Hill tried to identify such activities that have traditionally been part of community building all around the world and especially in a Finnish context. One example is voluntary work, or rather a neighbourhood coming together and making something useful and constructive, like helping someone to build their house, harvest or clean outdoor playgrounds. A holiday could include working for a good cause, or just actively participating in creating an inviting environment. Making and doing something together creates possibilities to talk and get to know one another in a different way from usual recrea-



*Figure 4. Connecting people,
Tromsö–Rovaniemi.
Photo: Tuija Hautala-Hirvioja.*

tional activities. There were such plans as getting an old and abandoned house and reconstructing it into an art work with holiday makers. That one is still waiting for to be conducted in a “real world” situation.

Soile Veijola invited the whole research group and the business partners for a two day gathering in an old and nearly abandoned village between Rovaniemi and Kemijärvi in Finnish Lapland. We stayed in a simple guesthouse that was partly occupied by migrant workers picking blueberries in Lapland. The gathering took place in a community house within a walking distance from where we stayed overnight. There were young chefs preparing local food and the menu was based on what was available. The program included workshops and brainstorming, but also experiencing silence, meditating and going for a listening walk led by Noora Vikman. The walk was a simple act of walking silently one after another, listening to sounds of a forest, making stops and paying attention to what was around us. Eventually we were invited to sit down and just be quiet. The walk could have taken place everywhere and one of the business partners later on included it into their services in a slightly modified form. The program

included cleaning an old sauna-building that had been out of use for quite a while, and afterwards heating the sauna and bathing in it. Feedback from the business partners and all participants was really positive and the idea of using a simple place for the gathering was appreciated. The lack of internet access was also received as positive and freed everybody from being mentally in several places at the same time. Logging-off is a luxury today!

Jaana Erkkilä-Hill has led several workshops for one of the business partners, Kitinkannus, a rehabilitation centre for war veterans. The goal was to create new ways of interaction between clients, their families and the staff working in the centre. The leading idea was to promote situations where all could meet on an equal platform and how a rehabilitation centre could turn into wider concept of sustainable well-being tourism using what there is already available. Because of the physical limitations that many of the clients have in Kitinkannus we took the forest indoors: there were boxes filled with sand and others filled with all kind of natural materials that could be found just outside of the center that is located in a forest. The participants created small still lifes using the materials and while playing with trees, moss, grass, stones and mushrooms. they shared their memories from a forest. For some of the clients it was a moving experience of being able to feel the smell of a forest and put your face in a soft piece of under vegetation, inhale and to feel natural materials in your hands. The experience was shared by the staff, clients and their visitors, and all were equals in the moment of making a journey without going anywhere. (See e.g. Erkkilä-Hill, 2013a, 2013b.)

Travelling Laboratories for Slow Thinking emphasises that there is time in the world. Even a short time is enough if we do not try to do too many things at once. And our possibilities are endless in the realm of artistic thinking. The research goes on in different forms. We are moving between theory and praxis and letting each to be nourished by the other.

Conclusions

Creative wellbeing could be defined as something achieved through intuitive knowledge that is a private awareness of one's innermost being. According to

Chuang-yuan Chang in the sphere of intuitive knowledge there is no separation between the knower and the known; the subject and object are identified (2011, p. 68). Intuitive knowledge cannot be transmitted and explained in ordinary intellectual and reasoning ways. This is a question of artistic thinking and the experiential knowledge that is gained through arts based activities, through walking as artistic thinking.

Artistic thinking is not about making money. Creative wellbeing is not a business. Still we need both money and business to live in a contemporary society. As an artist-researcher I am able to show examples of how to approach creative wellbeing, but the way cannot be framed in a model or a form that would work for every individual in the same way. As soon as something is nailed and put into a form that can be repeated over and over again we are not dealing with art or creativity. It is a question of a concept, and good as such, but let's call it industry, not art. Anyhow I do hope that there are other people who can turn activities driven by artistic thinking into livelihood and businesses in the field of well-being and sustainable tourism.

References

- Chuang-yuan, Chang. (2011). *Creativity and Taoism: A study of Chinese philosophy, art and poetry*. London: Singing Dragon.
- Eliade, M. (2003). *Pyhä ja profaani* [Sacred and Profane]. Helsinki: Loki-kirjat.
- Ellis, C. (1997). Evocative autoethnography: Writing emotionally about our lives. In Denzin N. K., & Lincoln Y. S. (Eds.), *Representation and the text: Re-framing the narrative voice* (pp. 115–139). Albany: State Univ. of New York Press.
- Englund, P. (2005). *Hiljaisuuden historia* [History of Silence]. (T. Hämäläinen, Trans.). Helsinki: WSOY.
- Erkkilä, J. (2013a). Art in carehome environment. *Artworks – the Arts & Business Journal*, 1(1), 136–139.
- Erkkilä, J. (2013b). Should the arts work? *Artworks – the Arts & Business Journal*, 1(3), 48–49.
- Ford, A. (2011). *The art of mindful walking: Meditations on the path*. Lewes: Leaping Hare.

- Gros, F. (2014). *A philosophy of walking*. London: Verso.
- Haanpää, P. (1976). *Muistiinmerkintöjä vuosilta 1925–1939* [Notes from years 1925–1939]. Helsinki: Otava.
- Howego, R. J. (2009). *Gertrude Emily Benham, 1867–1938: a ‘very quiet and harmless traveller’: a biography*. Plymouth: Plymouth City Museum & Art Gallery.
- Kivi, A. (1873). *Seitsemän veljestä*. Helsinki: Suomalaisen Kirjallisuuden Seura.
- Leavy, P. (2013). *Fiction as research practice: Short stories, novellas and novels*. New York: Routledge.
- Magga, O. H. (2010). In realms of belonging by Patrick Huse. *Publications of the Regional Museum of Lapland*, 16.
- Martin A. (1990). *Hiljaisuus taloni lattialla / The silence on the floor of my house*. (T. Arne, C. Enckell & J. Pallasmaa, Eds.; K. Pasanen & P. Saaritsa, Trans.). Helsinki: Vapaa Taidekoulu.
- Morrison-Bell, C. (2013). Foreword. In Morrison-Bell, C., Collar, M., Ingold, T., & Robinson A. (Eds.), *Walk on, 40 years of art walking*. Manchester: Cornerhouse Publications.
- Nousiainen, J. (2015). Expanding opera into mobile media. *Acta Universitatis Lapponiensis*, 294. Rovaniemi: University of Lapland.
- Thoreau, D. (1854/2005). *Where I lived and what I lived for*. London: Penguin Books.
- Veijola, S. (2014). Towards silent communities. In S. Veijola, J. Germann Molz, O. Pyyhtinen, E. Höckert & A. Grit (Eds.), *Tourism and its untidy guests: Alternative ontologies for future hospitalities* (pp. 68–95). London: Palgrave.
- Veijola, S. (2016). *Silences of undressed places: Further tourist experiments on slowness and stillness*. 25th Nordic Symposium of Hospitality and Tourism, Turku, 30 September 2016. Authenticity – Productive dichotomies, creative discourses. Retrieved from <http://www.utu.fi/25thnordicsymposium>



SHETLAND'S LITTORAL ZONES: An Art-Science Project Revealing the Legacies of Plastic Pollution on Beaches in the North of Scotland

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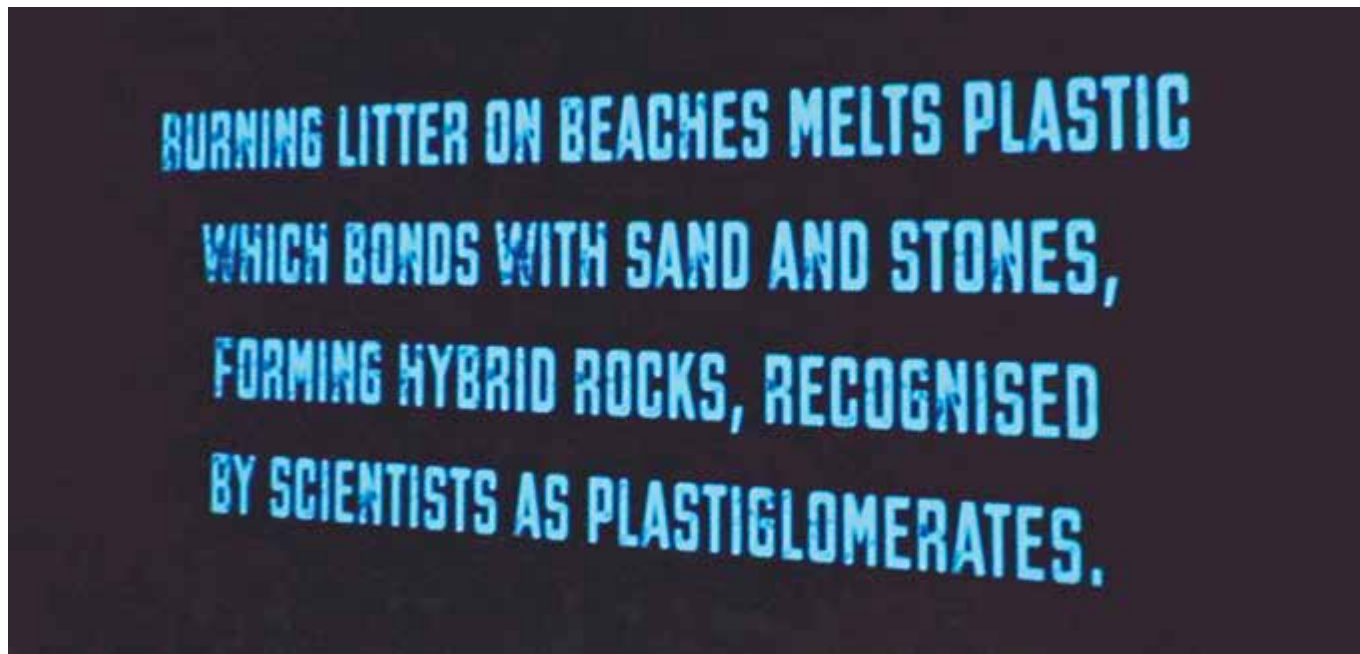


Figure 1. Terra Nova, animation still. Artists: Julia Barton in collaboration with JJ Jamieson.¹

Introduction

Every year on the average 8 million metric tons of plastic enters the oceans, effectively leaking out of the world's productive economy, causing unquantifiable ecological damage. (See e.g. Jambeck et al., 2015.)

We have become familiar with plastic pollution on the beaches of the Pacific Isles where ocean currents coalesce, transporting components from global manufacturers and plastic drinks bottles from every continent, smothering pacific island beaches. However, recent scientific work has highlighted that microplastic pollution in the Northern and Arctic regions is even higher, a fact that remains largely invisible.



In 2014 the paper ‘Global warming releases microplastics legacy frozen in the Arctic Sea Ice’ by Rachel W. Obbard and her colleagues hit the headlines. They showed that “Arctic Sea ice from remote locations contains concentrations of micro-plastics that are several orders of magnitude greater than those that have been previously reported in highly contaminated surface waters, such as those of the Pacific Gyre”(Obbard et al., 2014, p. 315).

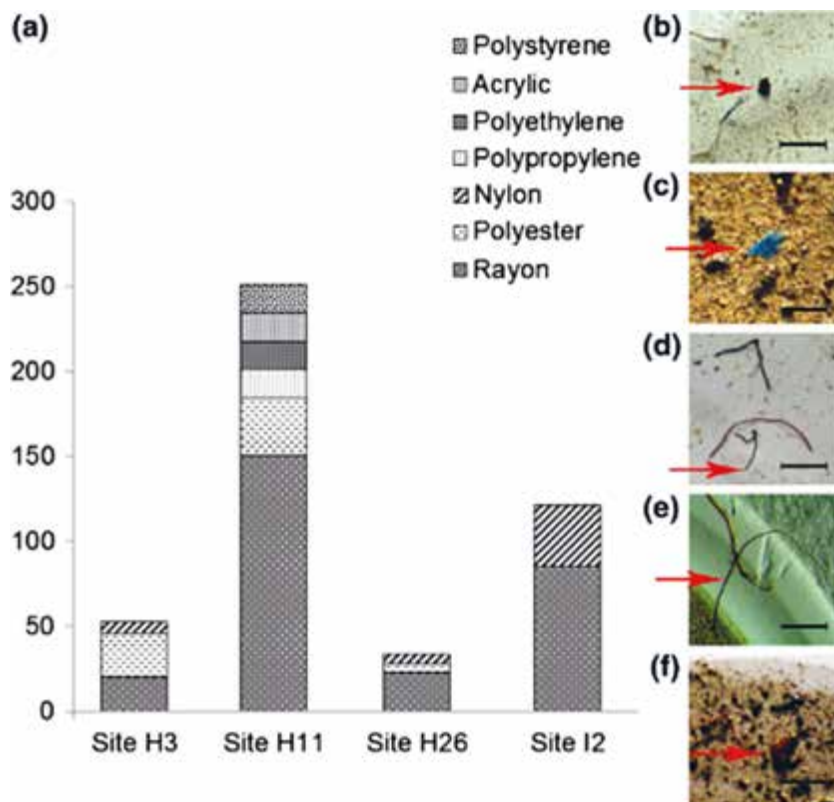
They conclude that ‘Arctic Sea Ice is a historical sink for man-made particulates’ and ‘the potential for substantial quantities of legacy microplastics to be released to the ocean as the ice melts needs to be evaluated.’ (Obbard et al., 2014, p. 315.)

Beaches are familiar places for local communities and also places that invite us to visit pause and think, offering the potential for creative engagement with the leakage of plastic into the environment.

Disturbed by encountering knee-deep plastic debris in all its forms on the remotest of northern Scottish Beaches, I set up the Littoral Art Project in 2013 as an art-science project to investigate the extent of plastic pollution and to activate the creative community in regards to the Littoral Zones² of Northern Scotland.

*Figure 2. Shetland beach
(upper littoral zone).
Photo: Julia Barton.*

Figure 3. “Total number of microplastic pieces presented as values per litre of seawater (scaled up from sample volumes examined which were typically 50–100 cm³), by polymer type, according to the location of sea ice cores. Photographs of microplastic fragments identified using FTIR: (b) HOTRAX Site 3, polyethylene terephthalate (polyester), (c) HOTRAX Site 11, polypropylene, (d) HOTRAX Site 26, polyester, (e) ICESCAPE Site 2, nylon, and (f) HOTRAX Site 11, polyethylene. Scale bars represent 1 mm” (Obbard et al., 2014, p. 317, CC BY-NC-ND).³



Obbard et al's powerful findings underlined my own surveys of Littoral Zones. Furthermore, Scottish marine biologists have agreed that the ingestion of micro-plastics by marine organisms pose a threat to the food chain. (Obbard et al. 2014, p. 319.)

Creative community

In 2016, I was invited to begin a site specific creative educational programme in Shetland, dovetailing with Shetland's Voar Redd Up annual community spring clean events which often taken place on beaches. Da Voar Redd Up is the UK's

most successful community litter pick. The Shetland Amenity Trust concerned with the ever increasing amounts of beach litter organise these events. Shetland Amenity Trust “strives to preserve and enhance everything that is distinctive about Shetland’s cultural and natural heritage, promoting access to it whether physical or intellectual” (Shetland Amenity Trust, 2017).

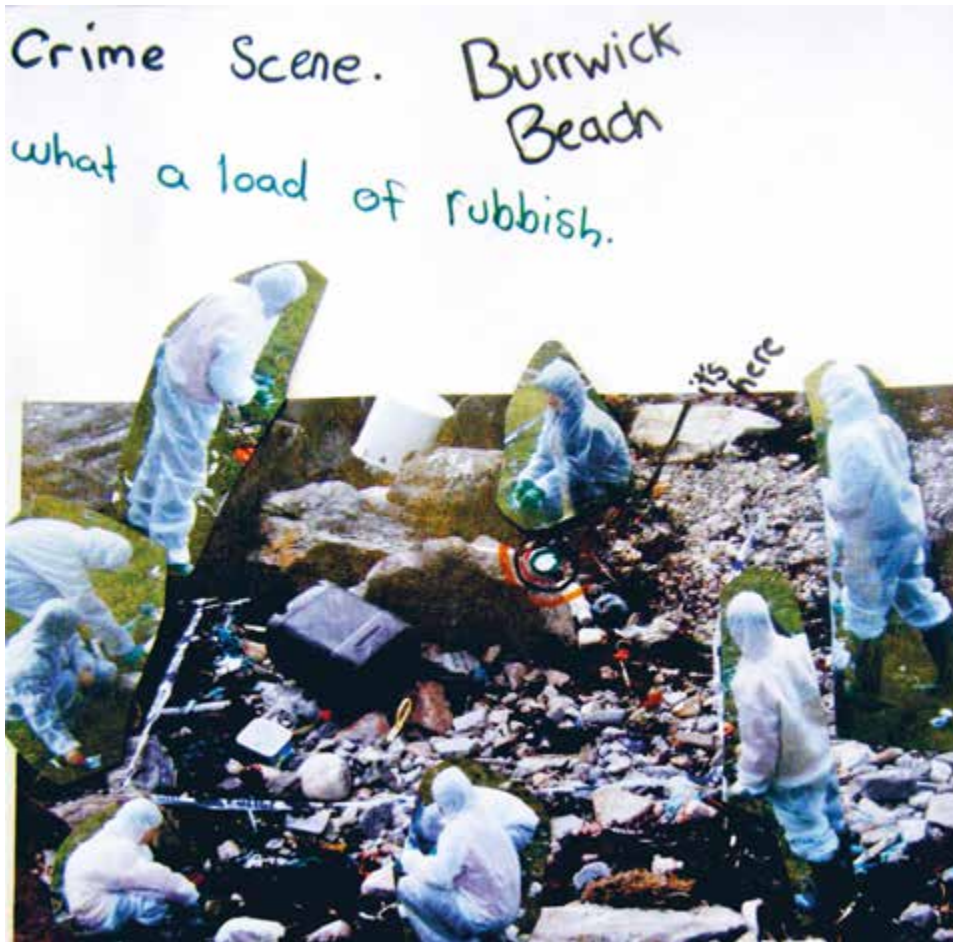


Figure 4. Crime Scene Investigation, Burwick Beach. Artwork: Scalloway Primary School pupils.

I joined beach cleans and delivered educational workshops to young people across the islands. This collaborative programme reached 20 schools, and 150 pupils took part as citizen scientists; one particularly successful strategy was to invite them to consider examining their local shorelines as a Crime Investigation.

Pupils collected and interrogated the familiar domestic and commercial plastic Bruck [litter] found on their beaches, in order to creatively consider degradation rates and to tackle manufacturers about their commitment to more sustainable policies. Information gathered has been compiled and published in a *'Guide to Beach Litter'*⁴.



Figure 5. Plastiglomerate collection. Artist: Julia Barton.

Participants soon learnt to see the less obvious plastic, such as tiny fibres and fragments in the sand, and to identify lumps of Plastiglomerate commonly present on Shetland beaches. Each school kept reference samples of the materials collected.

Plastiglomerate was proposed by Patricia L. Corcoran, Charles J. Moore, and Kelly Jazvac (2015) as a term for a stone that contains mixtures of sedimentary grains and natural debris (e.g. shells, wood) and is held together by hardened molten plastic, first identified in Hawaii but now found on every continent. In 2012 Corcoran et al proposed that Plastiglomerate could be considered a potential marker of the Anthropocene.



Figure 6. NEO Terra: plastiglomerate archipelago installation. Artist: Julia Barton.

Exhibition

I collected thousands of Plastiglomerate specimens and 60 substrate samples to assemble my NEO Terra exhibition in the Shetland Museum & Archives Gallery, in Da Gadderie exhibition space, in Lerwick. This installation aimed to engage audiences in examining and questioning the plastic pollution along our northern coastlines and the implication that plastic pollution has become part of our future environmental and geological heritage, as well as stimulating dialogue for change.

Visitors encountered and navigated their way around the extensive floor map of an imaginary archipelago NEO Terra constructed out of Plastiglomerate collected off 42 beaches and echoing the layout of Shetland Isles.

Place-naming was a strategy – using the predominant material fused together after the litter burning: CORD, PIPE, STRAPPING, BOTTLE, GUN WAD, ROPE, WRAPPER. Close-looking revealed fragments of these materials. Littering actions were also named, such as ‘Throw away Point’, or ‘Burn Beach’. Descriptive Norse names were devised in collaborative sessions with audience members such as ‘Smoking Holm’ (small smoking island).

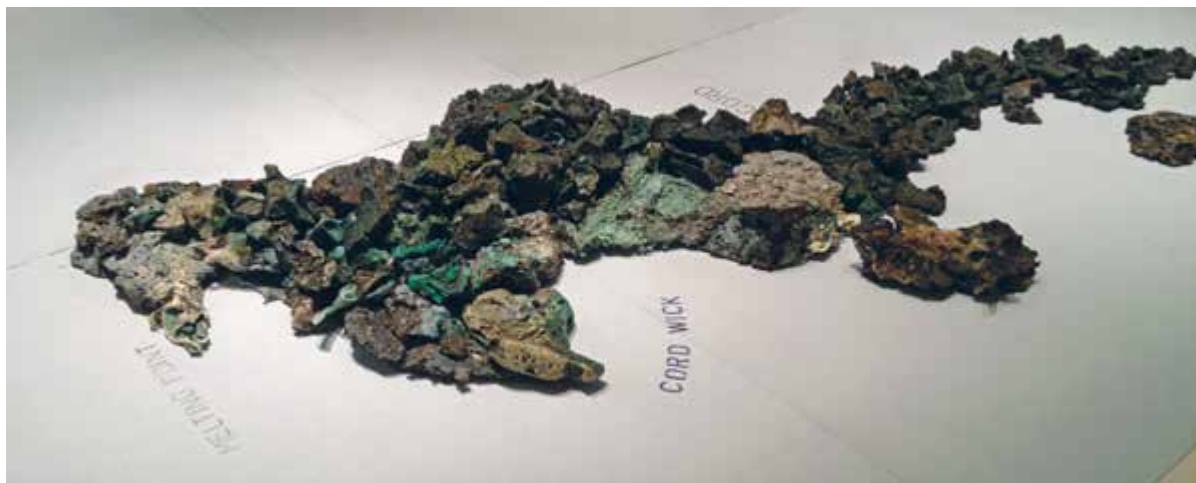


Figure 7. NEO Terra: CORD island. Artist: Julia Barton.

Fascinated adults and children watched 'Terra Nova' a docu-drama made in collaboration with Shetland filmmaker JJ Jamieson. This animation explores an imagined legacy for the future that our current consumption of plastics will leave, a barren 'NEO Terra'. Explored through the eyes of a plastic toy commando it reveals the dangerous burning process by which Plastiglomerate is made.

Interactive space



Figure 8. NEO Terra: interactive examination of samples. Artist: Julia Barton.

Exhibition goers who entered the interactive space were keen to handle the Plastiglomerate specimens, and to examine them under hand lenses. Many chose to become creative citizen-scientists and helped to examine the substrate



Figure 9. NEO Terra: collaborative results showing presence of plastic. Artist: Julia Barton.

samples from their local beaches displayed in glass vials. Results notated throughout the exhibition revealed that 52 of the 60 beach samples contained plastic particles.



Figure 10. #LitterCUBE; Plastic fibres and particles.⁵ Artist: Julia Barton.

A timeline extended along the gallery wall and halted visitors' progress with plastic degradation facts: disposable nappies 500 years, plastic bottles 450–1,000 years, fishing line 600 years etc. The timeline led to a series of Litter Cubes⁶, constructed from specific items of litter, such as plastic mussel pegs and cotton bud sticks: the smallest was made from compressed plastic fibres and particles.

David Farrier (2016) commenting on one of the Cubes in the series said 'it's a kind of ghostly monument to the future we are creating – an uncanny marker of what is to come'.

Conclusion

This project demonstrates that it is possible to engage a wide range of people creatively in this issue and has succeeded in finding new audiences. It plays a part in making visible a major problem of plastic pollution in the waters of Northern Scotland that is otherwise too big to understand.

Endnotes

¹Text from Terra Nova exhibition animation: "Plastic in all its forms is weaving itself into the fabric of the earth's ecosystems and the earth itself, silently burying within because little is being done to prevent or manage it".

²Littoral Zone: defined as the area between the low and the high tide marks.

³Obbard, R. W., S. Sadri, Y. Q. Wong, A. A. Khitun, I. Baker, and R. C. Thompson (2014), Global warming releases microplastic legacy frozen in Arctic Sea ice, *Earth's Future*, 2, 315–320, doi: 10.1002/2014EF000240 Wiley. This is an open access article under the terms of the Creative Commons Attribution-Non Commercial-No Derivs License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made. 2014 © The Authors.

⁴Guide to Beach Litter is an identification guide of litter found on beaches around the UK - discusses questions raised by the increasing volume of litter in the marine environment and actions we can take. See More information about the Guide to Beach Litter is in from Littoral: Sci-art project website (2017).

⁵ #LitterCUBE, Polyethylene. Dimensions: 5 x 5 x 5 cm. Material: mixed micro fibres from ropes, strapping, plastic bags etc. Commercial & domestic sources. Produced from Polyethylene terephthalate PET or PETE. Weight: 14g. Embodied energy content: 0.022 litres petrol or 0.753 MJ/Kg. Location: collected Mavis Grind, Shetland

⁶ Litter Cubes; a series of artworks, made from beach litter. The Embodied Energy Content for each cube has been calculated.

References

Barton, J. (2016). *Guide to beach litter* [Pamflet].

Corcoran, P. L., Moore, C. J., & Jazvac, K. (2014). An anthropogenic marker horizon in the future rock record. *GSA Today*, 24(6), 4–8. doi: 10.1130/GSAT-G198A.1

Farrier, D. (2016). Unexpected encounters with deep time: Haunting. Talk in Edinburgh University, Environmental Humanities Network. 19th April 2016.

Jambeck, J. R., Andrady, A., Geyer, R., Narayan, R., Perryman, M., Siegler, T., Wilcox, C., & Lavender Law, K. (2015). Plastic waste inputs from land into the ocean. *Science*, 347(6223), 768–771. doi: 10.1126/science.1260352

Littoral: Sci-art project. (2017). Guide to Beach Litter. Retrieved from <https://littoralartproject.com/2017/02/16/guide-to-beach-litter/>

Obbard, R. W., Sadri, S., Wong, Y. Q., Khitun, A. A., Baker, I., & Thompson, R. C. (2014), Global warming releases microplastic legacy frozen in Arctic Sea ice. *Earth's Future*, 2, 315–320. doi: 10.1002/2014EF000240

Shetland Amenity Trust. (2017). Retrieved from <https://www.shetlandamenity.org/>



TAKE ME SOMEWHERE:
A Timeless Sense of Place
in the Shetland Islands

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Figure 1. A visitor takes part in the installation. Photo: Ásthildur Björg Jónsdóttir.

Introduction: Place and participation

How might the visual arts represent a northern sense of place in the Shetland Islands from the perspective of scholars from Iceland?

This photo essay aims to consider how collaboration and artistic practice can enhance understanding of a place through a participatory art-based approach. In 2016, a group of scholars from Iceland with backgrounds in art, philosophy, teacher education, educational and natural sciences collaborated on a participatory art project aiming to make connection with Shetlanders through letters. Icelanders have a strong tie with the Shetland Islands. We are not only connected by the sea but also with joint cultural inheritance.

The group members reflected on the letters with an installation in the Shetland islands called *Take me somewhere*. The artistic reflections show connections

based on our mutual isolation and low population;. We discovered we have many similarities in spite of the distances. By getting to know people in the Shetlands, we had the opportunity to get to know ourselves better. The project was a part of the 2016 Arctic Sustainable Arts and Design (ASAD) exhibition and conference that took place at Shetland College (part of the University of the Highland and Islands), in Scotland, in November 2016.

The work consisted of a cross-media participatory installation that was produced in collaboration with invited guests. The installation was composed of diverse artefacts; letters, physiographical records, works on paper, photo-images, archival documents, knitting, maps and oral history. The project represented a collaborative approach, based on an invitation to selected local people to share some experiences with the researchers.

Theory

All art is participatory in a certain sense (Leavy, 2015). Meaning is created through the interplay between the expressive gestures of the artist and receptive onlookers which bring their personal world-view and experiences into play, creating an event. Hence, the artwork has a true being and becomes an experience in itself (Gadamer, 2013). The event is a process that is fundamentally dynamic, grounded in back and forth movements between the artist and the audience (Vilhauer, 2009). Although these processes are ongoing in artistic appreciation, the dynamics are limited to the subjective sphere of the artist which resides within his or her initiative. Participatory art, however, opens this sphere; there is a fundamental change in the dynamics between the artist and the audience through the process of co-creativity (Leavy, 2015). Participatory art practices are fundamentally “other” aiming for transformative experiences. By including the inhabitants of the Shetland Islands, *Take me somewhere* was a communal artistic process and acted as a catalyst to trigger the exhibition visitors to look at their local surroundings in a new way. That way the work stimulated a contextual learning about local places and culture through art.

The Goethean method

Johann Wolfgang von Goethe (1749–1832) is known for poetry and plays. He also produced scientific work that focused on topics as diverse as plants, colour, clouds, weather, morphology, and geology. The Goethean method is phenomenological; it is the exploration and description of a phenomena: things and experiences as human beings apprehend them. Phenomenological description is not an end, but a means to locate deeper patterns, structures, and meanings. Goethe sought a way to open himself to the things of nature.

Opening moves

Based on Goethe's idea of opening up to nature we asked the participants through letters to explore and share with us their experience of places within the Shetland islands.

In the letters, we asked the participants to express their feelings at a favourite site and send descriptions to us (Figure 2). When reading the replies, we felt like we were getting to know Shetland, the inhabitants, their great hospitality and openness. Similar places in Iceland sprang to mind.

Portrayals of the seaside evoked our connections to the ocean; waves coming in one after another, watching them in fascination; smelling them, breathing them. A letter about walking near the sea brought up the feeling of pebbles and stones under our feet, the touch of the sand; running it through our fingers. Receiving the first reply was a magical moment, full of potentials and possibilities. The first impression we all had was of warmth, integrity and trust.

A level of trust

What happened next was unplanned and interesting. These opening pieces of personal recollections and experiences established an unexpected level of trust. The physical experiences noted in the letters moved quickly into personal experiences of Shetland and the sharing of personal details of daily life, values and community. As we took our minds to the places being shared, it was a special

I am asking you to tell me about a place that has significant meaning to you. It can be any place outdoors; by the sea in your garden, in a town, on top of a hill, anywhere you relate to and find it to be a meaningful place. If you agree on sharing this with me, I ask you to go to the place that you choose and describe it with words in a letter that you send back to me. In particular we ask you to visit the place where you will:

look
listen
smell
touch
move around or
sit down
for a moment

and then write to me about what it is that you experience.

Figure 2. Excerpt from handwritten letter about the task. Photo: Ásthildur Björg Jónsdóttir.



We are
very lucky indeed
to live in
a wonderful community,
very safe and
very close

It makes me think
of the generations
of people that have lived
here...

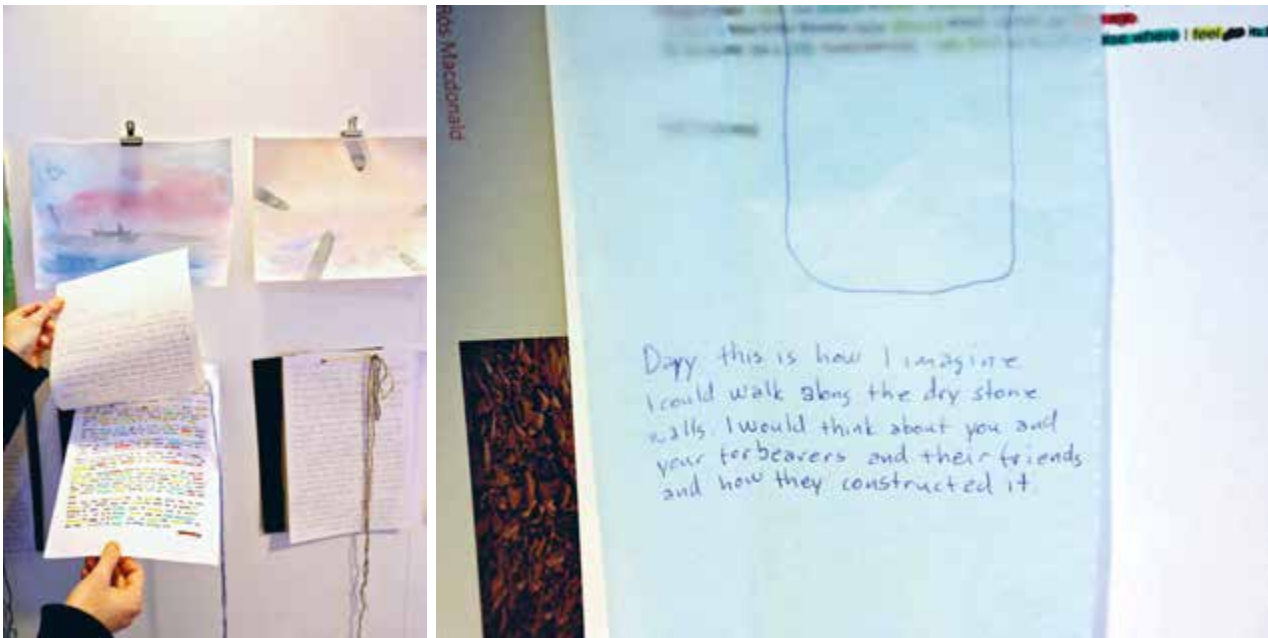
Like me
living
off the land

Figure 3. "I read each letter carefully and [...] I found myself doing two things: pairing phrases in the texts from Shetland with my own photographs, and identifying themes and issues in the experiences of the participants in the Shetlands." Photo: Allyson Macdonald.

feeling, we projected ourselves to places we have been and to imagined places, that we see in distance and want to visit: “I’m there, and there, and there” said one from the view from his hill. Others portrayed an expansive view – over the ocean, to other islands, to Scotland; invoking connections and the feeling of freedom.

Getting to know people through letters and then meeting them after installing the artefacts extended the project. The concept of beauty was discussed; it was used to describe a special kind of relation through our senses and the meaning of our existence. Beauty is about being somewhere, breathing the landscape - allowing the mind to wander. In such places the participants could gather their thoughts – enjoying a walk can fill your senses with meaning, it is a quality of life enjoyed in the north.

Figures 4–5. We responded to the letters in diverse ways, by writing return letters, with watercolours, through coding the letters through simples, colours and drawings, and comparing the descriptions to Icelandic settings. Photos: Ásthildur Björg Jónsdóttir.



Experience was enhanced by knowing that it was to be shared. Sharing also enhanced the experience of being an islander in the north and being able to relate to others far away, yet so close.



Figure 6. Different responses to the letters.
Photo: Ásthildur Björg Jónsdóttir.

Places inhabited by ancestors were a source of pride; seeing and touching the same things. Newcomers too were proud of their adopted community and the kindness shown to them. The landscape had seen fresh footprints or long weathered paths. Invisible stories became visible and alive in our imagination.



Figure 7. One of the participants explains the location of his chosen place. Photo: Ásthildur Björg Jónsdóttir.



Figure 8. An exhibition visitor takes part in the work as she watches a video showing members of the local knitting club reflecting on the project. Photo: Ásthildur Björg Jónsdóttir.



Figure 9. Participants reading the response letters and looking at the installation. Photo: Ásthildur Björg Jónsdóttir.

Collective efficacy

Through the participatory nature of the project we appreciated the role of artistic experience in our development and understanding of place, an important tool of Education for Sustainability. That includes working with others with shared motivation.

Being part of a group has been empowering; sharing experiences of others, having access to more resources than the individuals would have. The ideal structure for this kind of power is not the hierarchy, but the network, the central metaphor of the ecological paradigm. This allows people to be “...empowered by the social network. Such power facilitates connectedness”. (Capra & Luisi, 2014, p. 35).



Figure 10. When traveling around the Shetland Islands, the surroundings, we felt as if we had been there before. Photo: Gunndís Ýr Finnbogadóttir.

Collective efficacy in carrying out a task is strengthened by mastery, vicarious experience, persuasion and social affect (Goddard, Hoy, & Woolfolk Hoy, 2004). In sharing, we had a unique vicarious opportunity to learn about community and place. This project supported our understanding of the notion of place but also the related concept of community and how we learn how to care for others and ourselves, collectively and vicariously (Bandura, 1997).

We are still reading the letters we received, they are still inspiring us. Each letter has the potential for a whole exhibition, a whole archive of paintings, a whole world was opened up to our sight.

References

- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W. H. Freeman.
- Capra, F., & Luisi P. L. (2014). *The systems view of life: A unifying vision*. Cambridge UK: Cambridge University Press.
- Gadamer, H.-G. (2013). *Truth and method* (2nd ed.). (J. Weinsheimer, & D. J. Marshall, Transl.). London: Bloomsbury Academic.
- Goddard, R. G., Hoy, W. K., & Woolfolk Hoy, A. (2004). Collective efficacy: Theoretical development, empirical evidence, and future directions. *Educational Researchers*, 33, 2–13.
- Leavy, P. (2015). *Method meets art: Arts-based research practice* (2nd ed.). New York, NY: The Guilford Press.
- Vilhauer, M. (2009). Beyond the “Fusion of horizons”: Gadamer’s notion of understanding as “play”. *Philosophy Today*, 53(4), 359–364.



ORGANISMS, LAND ART AND IN-DEPTH LEARNING

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Introduction

This visual essay investigates a teaching activity using the shoreline as an interdisciplinary learning arena within both arts and crafts and natural science. The focus was on anatomy, physiology and adaptations of organisms in this challenging ecosystem. In the exploratory and creative part, students were assigned to find, observe and get to know an organism, which they reproduced in a larger scale using indigenous materials. Empirical material was analyzed phenomenologically to capture what teacher students express and experience through participation in the project. Photos from the process and products, student's poems and narratives, document their collaborative learning experiences and how they collectively express artwork that focuses attention on being an organism in the tidal zone. Synergy between Land Art as an aesthetical approach and natural science facilitates in-depth learning.



Research methodological considerations

A phenomenological case study forms the basis for the visual essay and Interpretive Phenomenological Analysis (IPA) is used in the analytical process of the empirical material. The data material consists of seven group logs (3–4 students per group) and semistructured interviews with three students. It is the participants' perspective and their "lived experience" that is emphasized in the survey and is interpreted across the material in dialogue with the theory. The article authors participate both as teachers and researchers in the project and this will affect the interpretation process to the essence of the phenomenon "Participation in the interdisciplinary project". The interpretation can be seen as a double hermeneutics whereby participant's interpretations of their own experiences are then interpreted by us as researchers (Smith, Flowers, & Larkin, 2009). The narratives of the participants are used as examples of common experiences, that is, the essence of the phenomenon. The context is described in the essay's image material.





In-depth learning is about the students' gradual development of understanding of concepts, methods and contexts within a field of study. It is also about understanding topics and issues that cross knowledge areas. In-depth learning means that students use their skills to analyze, solve problems and reflect on their own learning to construct lasting understanding. Learning something thoroughly and with good understanding requires active participation in their own learning processes, the use of learning strategies and the ability to assess their own mastery and progress" (NOU, 2015, p. 8). In Dewey's "Art as Experience" (2005), the focus is on "the act of aesthetic experience beyond a conventional focus on art object and its aesthetic experience".

With our interdisciplinary concept, we seek to achieve in-depth learning about the ecology of the tidal zone and challenges for organisms living there. Throughout the creative process of building organisms with Land Art, we want the students to document the choices they make along the way with regard to the place, materials and colors to make the sculpture as similar to the original organism as possible.

What experiences do teacher students have through participation in a project where art and science meet?

Here it becomes aesthetic, not only related to art but also to students' ability of enriched experience and opinion formation in natural science. Students get the opportunity to experience the phenomenon through different senses, and thus get an individual ownership of it and, simultaneously, they get the opportunity to be creative and solution orientated (Østergaard, 2017).

Both the moss and the seaweed had a color similar to the color of the louse. It was a bit difficult to find the right color for the moss, but we ended up with a greenish color. The seaweed we found had the perfect yellow color.
Student blog D.



We found several interesting organisms in the tidal zone, some known, but also some unknown. After studying the organisms for a while, we chose the seaweed louse. This was an organism none of us knew, but everyone wanted to learn more about.
Student blog D.





And looking for organisms, it was very exciting and fun. It was exciting to see what we found and to rebuild it in a larger scale. Interview, Student C.



*The seaweed louse **Idotea balthica** is a marine isopod which lives on seaweed in the subtidal zone of rocky shores.*

Working with the subject outdoors offers other possibilities than would be found indoors. The students meet other materials and various weather phenomena and seasons. The outdoors offers more space, giving other opportunities to work in larger formats than in the classroom. The students also have the opportunity to use their body in a more active and variate way (Østergaard, 2017; Moe & Øien, 2014).

Interdisciplinary practice...has been important from the holistic perspective, and it is exciting to see how much all subjects are interrelated and that one can collaborate across disciplines to make teaching more relevant. In this way, teaching is better tailored to the individual and works for everyone regardless of conditions and prerequisite knowledge (Stoll, Gårdvik, & Sørmo, 2017).



I'm even more excited to be out, more curious about new ways to see and experience nature. ...and excited to learn fun ways to do things. Interview, Student A.



... and working with your hands versus watching movies or learning from books, it's totally invaluable. Interview, Student B.



The Shore crab *Carcinus maenas* is a common littoral crab, native to the north-east Atlantic Ocean and Baltic Sea.

As Lars the crab knew so well
The oysters catchers come at low tide
and then it is best that he hide.
With the sun on his back he cried,
As he praised the arriving high tide,
He then came from under his stone,
With his eight legs he danced 'round
his home.

Should one choose to carry out the project at school, it is easy to call it an interdisciplinary project. We can see that both Norwegian, food and health, arts and crafts, natural science and gymnastics are relevant for academic cooperation. **Student blog G.**



Personally, I acquired an experience wider than just theoretical and practical, a deeper understanding of the mechanisms and factors that are at work in an ecosystem, as well as learning through informal conversations. **Interview, Student C.**

It was very exciting and fun to make this Land Art taken from the arts and crafts perspective of making the animal. So I learned extra about the animal and combined learning about the animal with learning about forming. **Interview, Student A.**

For my learning, it's the social aspects in which I know I'm growing the most with these tasks. Cohesion, withholding and having tolerance with the others, it's like a big win for me in such a project.
Interview, Student C.



We could have been better by planning who would take care of what tasks so we used the time better. **Student blog B.**





I didn't know anyone, but we became acquainted in a particularly good way. This was important in terms of how you thrive in a class; that you have experienced so much.
Interview, Student A.

Learning requires active, constructive involvement of the student as well as taking into account individual differences. Learning for the individual student assumes social activity and participation in school social life, and students learn best when they participate in activities that are culturally relevant, are considered significant to a young person's life and related to situations from real life (Wals & Dillon, 2013). In addition, it requires students to interact and help each other to master the materials and solve tasks (Johnson, Johnson, Haugaløkken, & Aakervik, 2006).

Conclusion

This visual essay shows how students see their participation in the teaching activity as meaningful. The feeling of mastery they get while being outdoors

seems to be an invaluable experience for their learning. We have especially noticed a mental/physical fluidity that happens to students through their careful observation of an organism and the construction of the same organism with indigenous materials. This fluidity becomes a space where in-depth learning takes place and the students acquire knowledge about the specific organism by recreating it as a physical artistic sculpture. The subjects of Natural Science and Arts and Crafts complement each other and students perceive the interdisciplinary assembly holistically, whereby they can use their abilities to observe and participate in the creative process, work with the body and trigger their curiosity through exploration and creativity.

References

- Dewey, J. (2005). *Art as Experience*. London, GB: Penguin Books.
- Johnson, D. W., Johnson, R. T., Haugaløkken, O. K., & Aakervik, A. O. (2006). *Samarbeid i skolen. Pedagogisk utviklingsarbeid-samspill mellom mennesker*. [Collaboration at School Education Development Work - Interaction between People] Namsos, Norway: Pedagogisk Psykologisk Forlag.
- Moe, J., & Øien, V. D. (2014). Kunst og håndverk og kreativ bruk av uterommet. [Arts and Crafts and Creative Use of the Outdoors]. In M. Sæther & T. L. Hagen (Eds.), *Kreativ ute. Barnehagepedagogikk med uterommet som læringsarena*. Bergen, Norway: Fagbokforlaget.
- NOU. (2015). The School of the Future – Renewal of subjects and competences. *Official Norwegian Reports NOU 2015:8*. Retrieved from <https://www.regjeringen.no/en/dokumenter/nou-2015-8/id2417001/>
- Smith, J. A., Flowers, P., & Larkin, M. (2009). *Interpretative phenomenological analysis: theory, method and research*. Los Angeles, USA: Sage.
- Stoll, K., Gårdvik, M., & Sørmo, W. (2017). Sea monsters conquer the beaches: Community art as an educational resource. A Marine Debris project. In P. Leavy (Ed.), *The handbook of art-based research* (pp. 455–476). New York: Guilford Press.
- Wals, A., & Dillon, J. (2013). Conventional and Emerging Learning Theories: Implications and Choices for Educational Researchers with a Planetary Consciousness. In R. B. Stevenson, M. Broady, J. Dillon & A. E. Wals (Eds.), *International handbook of research on environmental education* (pp. 74–86). New York, USA: Routledge.
- Østergaard, E. (2017). Den estetiske erfaringens plass i naturfag. [The Aesthetic Experience's Place in Natural Science]. *Kunst og naturfag, Naturfag, 2017* (1), 18–21.

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